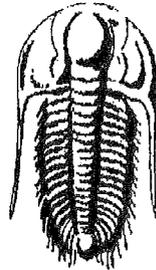


15-007-23116

31-34s-11w



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Molz Oil Co**

19159 SW Clairmont  
Kiowa KS 67070

ATTN: Arden Ratzlaff

**31 34S 11W Barber KS**

**Molz #9**

Start Date: 2007.05.24 @ 20:26:15

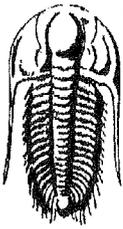
End Date: 2007.05.25 @ 07:05:15

Job Ticket #: 27915                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070  
ATTN: Arden Ratzlaff

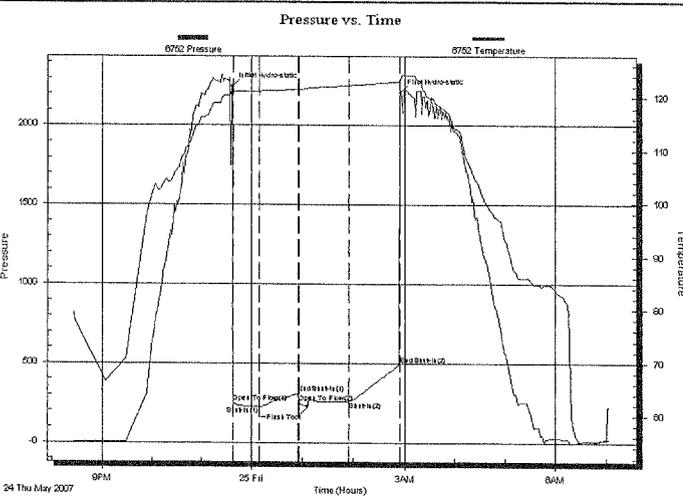
**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 27915      **DST#: 1**  
Test Start: 2007.05.24 @ 20:26:15

## GENERAL INFORMATION:

Formation: **Mississippi**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 23:39:15  
Time Test Ended: 07:05:15  
Interval: **4770.00 ft (KB) To 4800.00 ft (KB) (TVD)**  
Total Depth: 4800.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Leal Cason  
Unit No: 24  
Reference Elevations: 1393.00 ft (KB)  
1386.00 ft (CF)  
KB to GR/CF: 7.00 ft

**Serial #: 6752      Inside**  
Press@RunDepth: 257.08 psig @ 4771.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.05.24      End Date: 2007.05.25      Last Calib.: 2007.05.25  
Start Time: 20:26:20      End Time: 07:05:15      Time On Btm: 2007.05.24 @ 23:37:45  
Time Off Btm: 2007.05.25 @ 02:55:14

**TEST COMMENT:** IF Slid 15 Feet To Bottom Slight Packer Failure Weak Blow 2 inches died back to 1/2 inch by 25 minutes  
ISI No Blow back  
FF No Blow Flushed Tool After 10 minutes Slight Packer Failure Weak 1 inch Blow



## PRESSURE SUMMARY

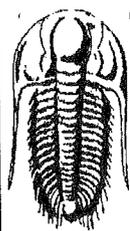
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2243.99	121.54	Initial Hydro-static
2	249.52	121.18	Open To Flow (1)
32	225.27	121.25	Shut-In (1)
78	311.04	121.60	End Shut-In (1)
79	249.39	121.60	Open To Flow (2)
89	227.73	121.69	--Flush Tool
137	257.08	122.31	Shut-In (2)
197	492.96	123.04	End Shut-In (2)
198	2206.17	123.35	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
480.00	Drig Mud	4.29

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070  
ATTN: Arden Ratzlaff

**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 27915      **DST#: 1**  
Test Start: 2007.05.24 @ 20:26:15

### Tool Information

Drill Pipe:	Length: 4490.00 ft	Diameter: 3.80 inches	Volume: 62.98 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.80 inches	Volume: 0.00 bbl	Weight set on Packer: 35000.00 lb
Drill Collar:	Length: 268.00 ft	Diameter: 2.25 inches	Volume: 1.32 bbl	Weight to Pull Loose: 100000.0 lb
			Total Volume: 64.30 bbl	Tool Chased 15.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4770.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	54.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:  
Both Packers Ruined

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Circulating sub	1.00			4747.00	
Change Over Sub	1.00			4748.00	
Shut In Tool	5.00			4753.00	
Hydraulic tool	5.00			4758.00	
Safety Joint	3.00			4761.00	
Packer	5.00			4766.00	24.00      Bottom Of Top Packer
Packer	4.00			4770.00	
Stubb	1.00			4771.00	
Recorder	0.00	6752	Inside	4771.00	
Perforations	26.00			4797.00	
Recorder	0.00	6704	Outside	4797.00	
Bullnose	3.00			4800.00	30.00      Bottom Packers & Anchor

**Total Tool Length: 54.00**



**TRILOBITE**  
**TESTING, INC**

# DRILL STEM TEST REPORT

FLUID SUMMARY

Molz Oil Co

**Molz #9**

19159 SW Clairmont  
Kiowa KS 67070

**31 34S 11W Barber KS**

Job Ticket: 27915

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2007.05.24 @ 20:26:15

## 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: 10.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
480.00	Drig Mud	4.292

Total Length: 480.00 ft

Total Volume: 4.292 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

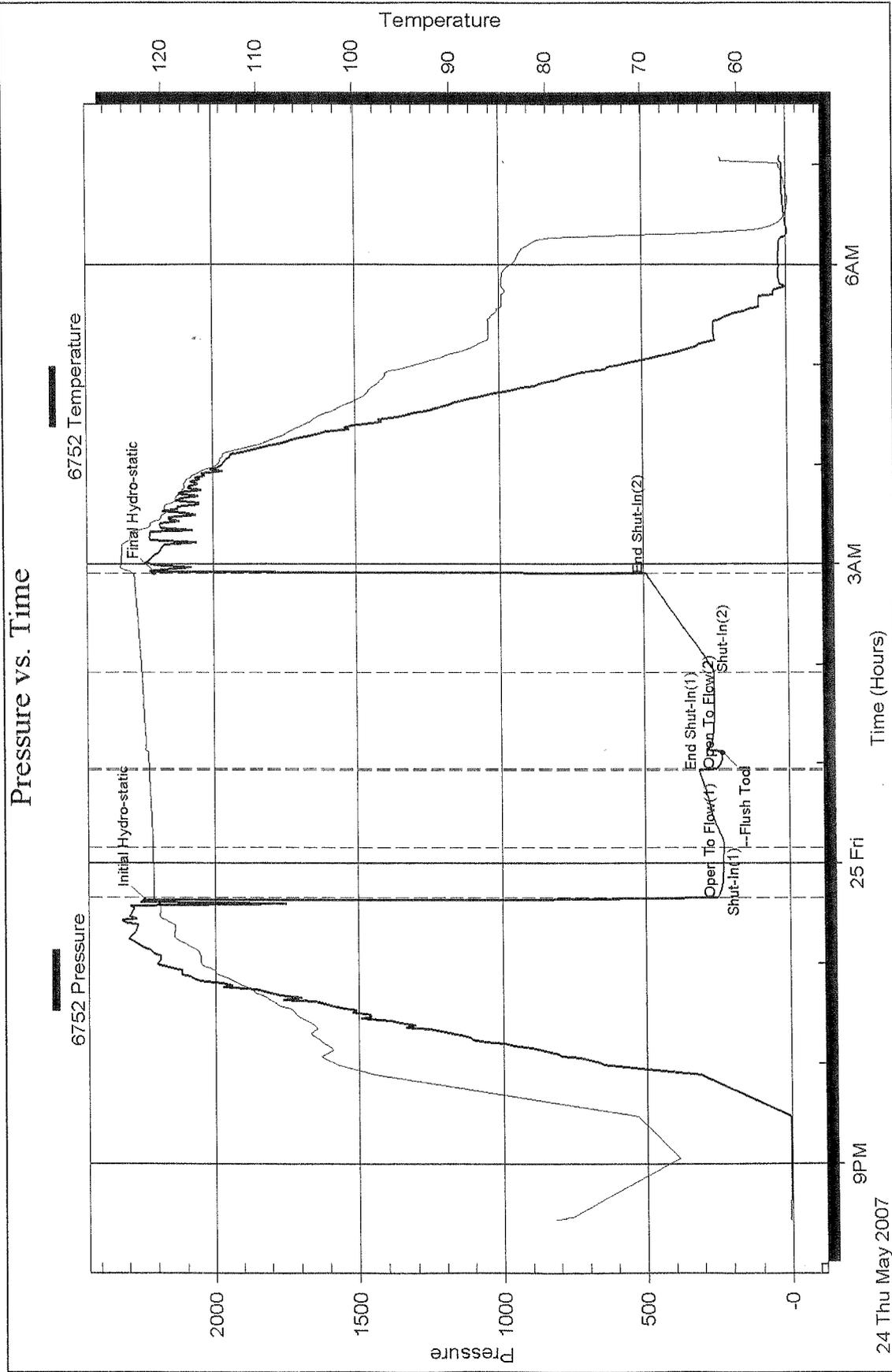
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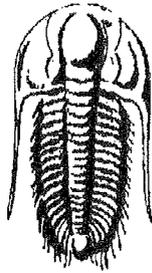
Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Molz Oil Co**

19159 SW Clairmont  
Kiowa KS 67070

ATTN: Arden Ratzlaff

**31 34S 11W Barber KS**

**Molz #9**

Start Date: 2007.05.28 @ 19:09:29

End Date: 2007.05.29 @ 06:18:59

Job Ticket #: 25873                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Molz Oil Co

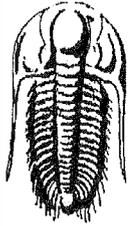
Molz #9

31 34S 11W Barber KS

DST # 2

Lower Simpson

2007.05.28



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070  
ATTN: Arden Ratzlaff

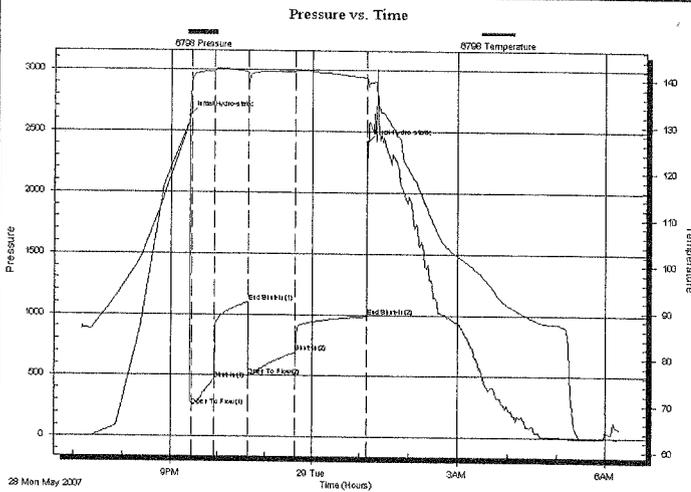
**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 25873      **DST#: 2**  
Test Start: 2007.05.28 @ 19:09:29

## GENERAL INFORMATION:

Formation: **Lower Simpson**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 21:26:29  
Time Test Ended: 06:18:59  
Interval: **5395.00 ft (KB) To 5409.00 ft (KB) (TVD)**  
Total Depth: 5504.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Straddle  
Tester: Jerry Adams  
Unit No: 36  
Reference Elevations: 1393.00 ft (KB)  
1386.00 ft (CF)  
KB to GR/CF: 7.00 ft

**Serial #: 6798**      **Inside**  
Press@RunDepth: 691.45 psig @ 5400.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2007.05.28      End Date: 2007.05.29      Last Calib.: 2007.05.29  
Start Time: 19:09:34      End Time: 06:18:59      Time On Btm: 2007.05.28 @ 21:23:59  
Time Off Btm: 2007.05.29 @ 01:08:58

**TEST COMMENT:** IF Strong blow BOB in 20 secs. GTS in 6 mins. (see gas flow report)  
ISI Strong blow BOB through out  
FF Strong blow BOB immediately  
FSI Strong blow BOB through out



## PRESSURE SUMMARY

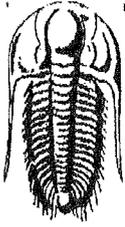
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2624.73	130.46	Initial Hydro-static
3	242.86	139.04	Open To Flow (1)
31	465.26	141.68	Shut-In(1)
75	1100.03	141.58	End Shut-In(1)
75	496.16	139.84	Open To Flow (2)
135	691.45	141.70	Shut-In(2)
225	986.63	140.51	End Shut-In(2)
225	2408.88	141.16	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
790.00	HG&MCO 25%G 10%O 65%M	9.17
1285.00	Clean Gassy Oil 5%G 95%O	18.03
0.00	3325' GIP	0.00
0.00	Gravity = 47 API @ 65 deg. 46.5 Corr.	0.00
0.00		0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	7.00	34.11
Last Gas Rate	0.13	1.50	5.99
Max. Gas Rate	0.25	15.00	46.80



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070  
  
ATTN: Arden Ratzlaff

**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 25873      **DST#: 2**  
Test Start: 2007.05.28 @ 19:09:29

**Tool Information**

Drill Pipe:	Length: 5189.00 ft	Diameter: 3.80 inches	Volume: 72.79 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: 20000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 105000.0 lb
			<u>Total Volume: 73.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	5395.00 ft			Final 73000.00 lb
Depth to Bottom Packer:	5409.00 ft			
Interval between Packers:	14.00 ft			
Tool Length:	134.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			5377.00	
Hydraulic tool	5.00			5382.00	
Safety Joint	3.00			5385.00	
Packer	5.00			5390.00	23.00      Bottom Of Top Packer
Packer	5.00			5395.00	
Stubb	1.00			5396.00	
Perforations	4.00			5400.00	
Recorder	0.00	6798	Inside	5400.00	
Perforations	6.00			5406.00	
Recorder	0.00	13400	Outside	5406.00	
Blank Off Sub	3.00			5409.00	14.00      Tool Interval
Packer	2.00			5411.00	
Stubb	1.00			5412.00	
Perforations	25.00			5437.00	
Blank Spacing	63.00			5500.00	
Perforations	3.00			5503.00	
Recorder	0.00	13249	Below	5503.00	
Bullnose	3.00			5506.00	97.00      Bottom Packers & Anchor

**Total Tool Length: 134.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070  
ATTN: Arden Ratzlaff

**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 25873      **DST#: 2**  
Test Start: 2007.05.28 @ 19:09:29

## Mud and Cushion Information

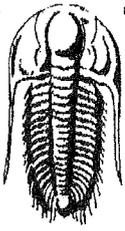
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 68.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.56 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.02 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
790.00	HG&MCO 25%G 10%O 65%M	9.169
1285.00	Clean Gassy Oil 5%G 95%O	18.025
0.00	3325' GIP	0.000
0.00	Gravity = 47 API @ 65 deg. 46.5 Corr.	0.000
0.00		0.000

Total Length: 2075.00 ft      Total Volume: 27.194 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 1      Serial #: GA-2  
 Laboratory Name: Caraway      Laboratory Location: Liberal, KS  
 Recovery Comments:



**TRILOBITE**  
**TESTING, INC.**

# DRILL STEM TEST REPORT

**GAS RATES**

Molz Oil Co  
19159 SW Clairmont  
Kiowa KS 67070

**Molz #9**  
**31 34S 11W Barber KS**  
Job Ticket: 25873      **DST#: 2**  
Test Start: 2007.05.28 @ 19:09:29

ATTN: Arden Ratzlaff

## Gas Rates Information

Temperature: 59 deg C  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m <sup>3</sup> /d)
1	10	0.25	7.00	34.11
1	10	0.25	7.00	34.11
1	10	0.25	7.00	34.11
1	20	0.25	12.00	42.04
1	30	0.25	15.00	46.80
2	20	0.13	1.00	5.80
2	30	0.13	1.00	5.80
2	40	0.13	1.00	5.80
2	50	0.13	1.50	5.99

234444

DST Test Number: 2

31 34S 11W Barber KS

Molz Oil Co

Inside

Serial #: 6798

### Pressure vs. Time

