



## DRILL STEM TEST REPORT

Prepared For: **CMX, Inc**

150 N Main, Suite 1026  
Wichita, KS 67202

ATTN: Doug McGinness

**9-30s-14w Barber**

**Stannard # 1-9**

Start Date: 2004.05.05 @ 12:05:39

End Date: 2004.05.05 @ 19:03:09

Job Ticket #: 19652                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc

Stannard # 1-9

9-30s-14w Barber

DST # 1

Lansing H

2004.05.05



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

CMX, Inc  
 150 N Main, Suite 1026  
 Wichita, KS 67202  
 ATTN: Doug McGinness

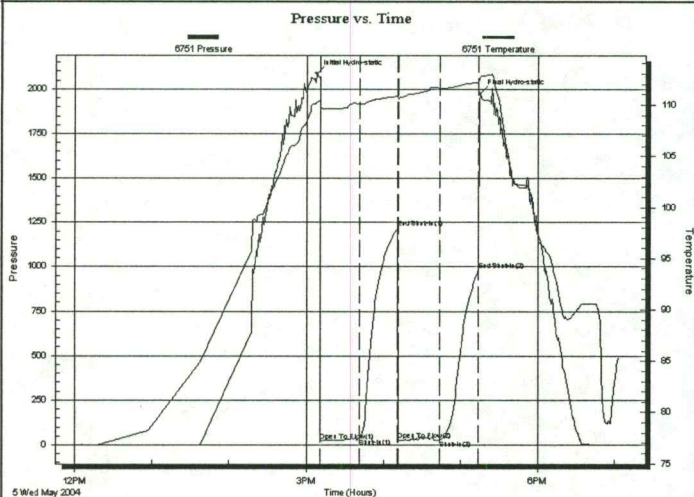
**Stannard # 1-9**  
**9-30s-14w Barber**  
 Job Ticket: 19652      **DST#: 1**  
 Test Start: 2004.05.05 @ 12:05:39

## GENERAL INFORMATION:

Formation: **Lansing H**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 15:10:39  
 Time Test Ended: 19:03:09  
 Interval: **4200.00 ft (KB) To 4220.00 ft (KB) (TVD)**  
 Total Depth: 4220.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Nathan  
 Unit No: 20  
 Reference Elevations: 1960.00 ft (KB)  
 1949.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 6751**      **Inside**  
 Press@RunDepth: 28.36 psig @ 4201.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2004.05.05      End Date: 2004.05.05      Last Calib.: 1899.12.30  
 Start Time: 12:05:49      End Time: 19:03:09      Time On Btm: 2004.05.05 @ 15:07:39  
 Time Off Btm: 2004.05.05 @ 17:14:59

TEST COMMENT: IF- Weak blow building to 2 inches  
 IS- No blow  
 FF- Weak surface blow dead in 3 minutes  
 FS- No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2086.53	110.32	Initial Hydro-static
3	21.80	109.88	Open To Flow (1)
33	36.54	110.07	Shut-In(1)
63	1218.33	110.85	End Shut-In(1)
64	27.16	110.58	Open To Flow (2)
97	28.36	111.63	Shut-In(2)
126	978.54	112.20	End Shut-In(2)
128	1975.73	112.74	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	Drig Mud	0.56

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

CMX, Inc

150 N Main, Suite 1026  
Wichita, KS 67202

ATTN: Doug McGinness

**Stannard # 1-9**

**9-30s-14w Barber**

Job Ticket: 19652

**DST#: 1**

Test Start: 2004.05.05 @ 12:05:39

### Tool Information

Drill Pipe:	Length: 4206.00 ft	Diameter: 3.80 inches	Volume: 59.00 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: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 59.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	4200.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	42.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4179.00	
Shut In Tool	5.00			4184.00	
Hydraulic tool	5.00			4189.00	
Safety Joint	2.00			4191.00	
Packer	4.00			4195.00	22.00 Bottom Of Top Packer
Packer	5.00			4200.00	
Stubb	1.00			4201.00	
Recorder	0.00	6751	Inside	4201.00	
Perforations	16.00			4217.00	
Recorder	0.00	13630	Outside	4217.00	
Bullnose	3.00			4220.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 42.00**



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19652      **DST#: 1**  
Test Start: 2004.05.05 @ 12:05:39

### 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:	9500 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.91 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 0.02 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	Drig Mud	0.561

Total Length: 40.00 ft      Total Volume: 0.561 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

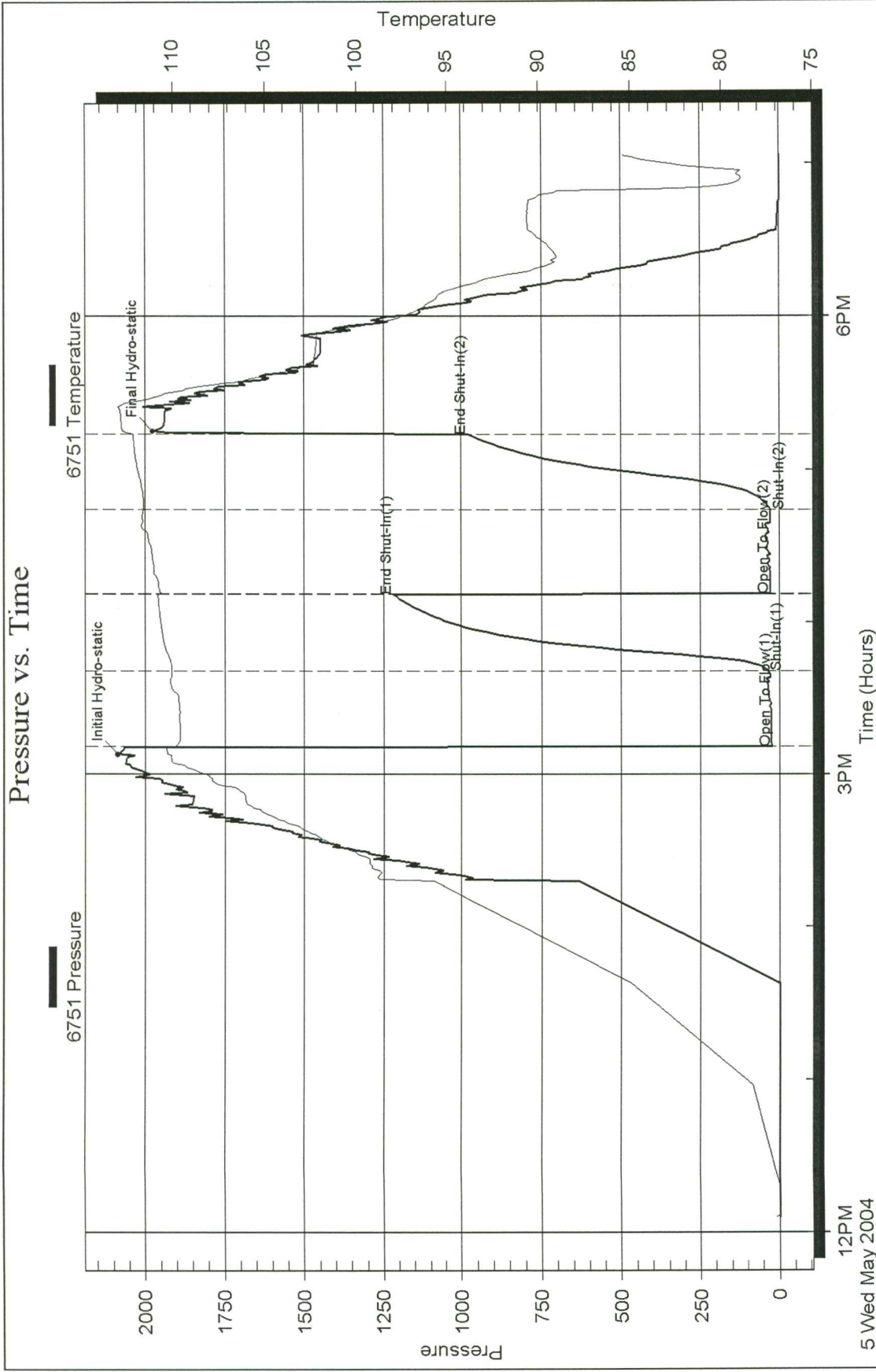
Serial #: 6751

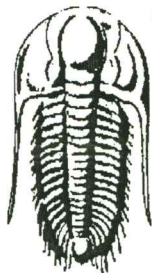
Inside

CMX, Inc

9-30s-14w Barber

DST Test Number: 1





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

## DRILL STEM TEST REPORT

Prepared For: **CMX, Inc**

150 N Main, Suite 1026  
Wichita, KS 67202

ATTN: Doug McGinness

**9-30s-14w Barber**

**Stannard # 1-9**

Start Date: 2004.05.06 @ 12:45:19

End Date: 2004.05.06 @ 20:21:28

Job Ticket #: 19653                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc

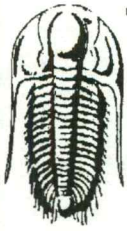
Stannard # 1-9

9-30s-14w Barber

DST # 2

Pleasanton

2004.05.06



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19653      **DST#: 2**  
Test Start: 2004.05.06 @ 12:45:19

## GENERAL INFORMATION:

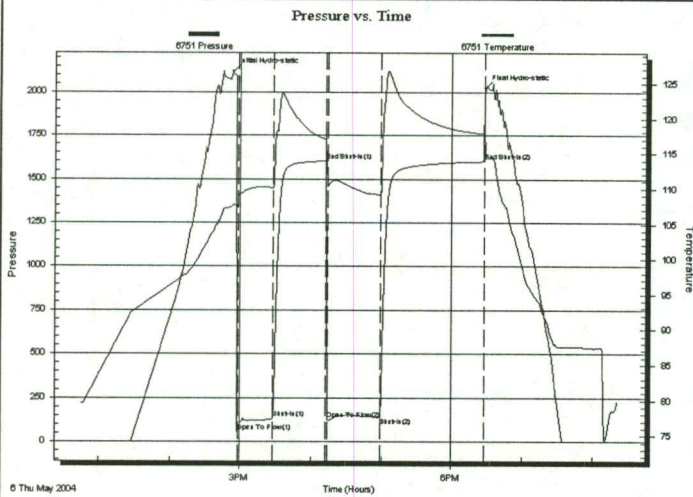
Formation: **Pleasanton**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 14:57:39  
Time Test Ended: 20:21:28  
Test Type: Conventional Bottom Hole  
Tester: Nathan  
Unit No: 20  
Interval: **4368.00 ft (KB) To 4400.00 ft (KB) (TVD)**  
Reference Elevations: 1960.00 ft (KB)  
Total Depth: 4400.00 ft (KB) (TVD) 1949.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 11.00 ft

## Serial #: 6751

Inside

Press@RunDepth: 140.10 psig @ 4369.00 ft (KB) Capacity: 7000.00 psig  
Start Date: 2004.05.06 End Date: 2004.05.06 Last Calib.: 1899.12.30  
Start Time: 12:45:29 End Time: 20:21:29 Time On Btm: 2004.05.06 @ 14:53:19  
Time Off Btm: 2004.05.06 @ 18:28:19

TEST COMMENT: IF- Strong blow O.B.B. in 65 seconds; GTS in 21 minutes  
IS- No blow  
FF- Strong blow O.B.B. ASAT opened; gas immediately  
FS- No blow



## PRESSURE SUMMARY

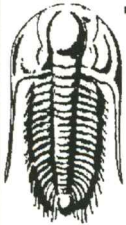
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2115.38	107.69	Initial Hydro-static
5	53.80	107.95	Open To Flow (1)
35	130.54	110.14	Shut-In(1)
79	1602.94	117.03	End Shut-In(1)
80	125.69	110.33	Open To Flow (2)
126	140.10	109.12	Shut-In(2)
215	1600.00	117.84	End Shut-In(2)
215	2022.81	118.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
288.00	GCM 98% mud 2% gas	4.04

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	2.50	26.81
Last Gas Rate	0.38	11.50	94.88
Max. Gas Rate	0.25	25.50	63.30



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19653      **DST#: 2**  
  
Test Start: 2004.05.06 @ 12:45:19

**Tool Information**

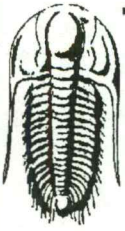
Drill Pipe:	Length: 4364.00 ft	Diameter: 3.80 inches	Volume: 61.22 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 61.22 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4368.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 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**

Change Over Sub	1.00			4347.00	
Shut In Tool	5.00			4352.00	
Hydraulic tool	5.00			4357.00	
Safety Joint	2.00			4359.00	
Packer	4.00			4363.00	22.00      Bottom Of Top Packer
Packer	5.00			4368.00	
Stubb	1.00			4369.00	
Recorder	0.00	6751	Inside	4369.00	
Perforations	28.00			4397.00	
Recorder	0.00	13630	Outside	4397.00	
Bullnose	3.00			4400.00	32.00      Bottom Packers & Anchor

**Total Tool Length:      54.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19653      **DST#: 2**  
Test Start: 2004.05.06 @ 12:45:19

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 51.00 sec/qt  
Water Loss: 11.96 in<sup>3</sup>  
Resistivity: 0.00 ohm.m  
Salinity: 3000.00 ppm  
Filter Cake: 0.02 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig  
Oil API: deg API  
Water Salinity: 7800 ppm

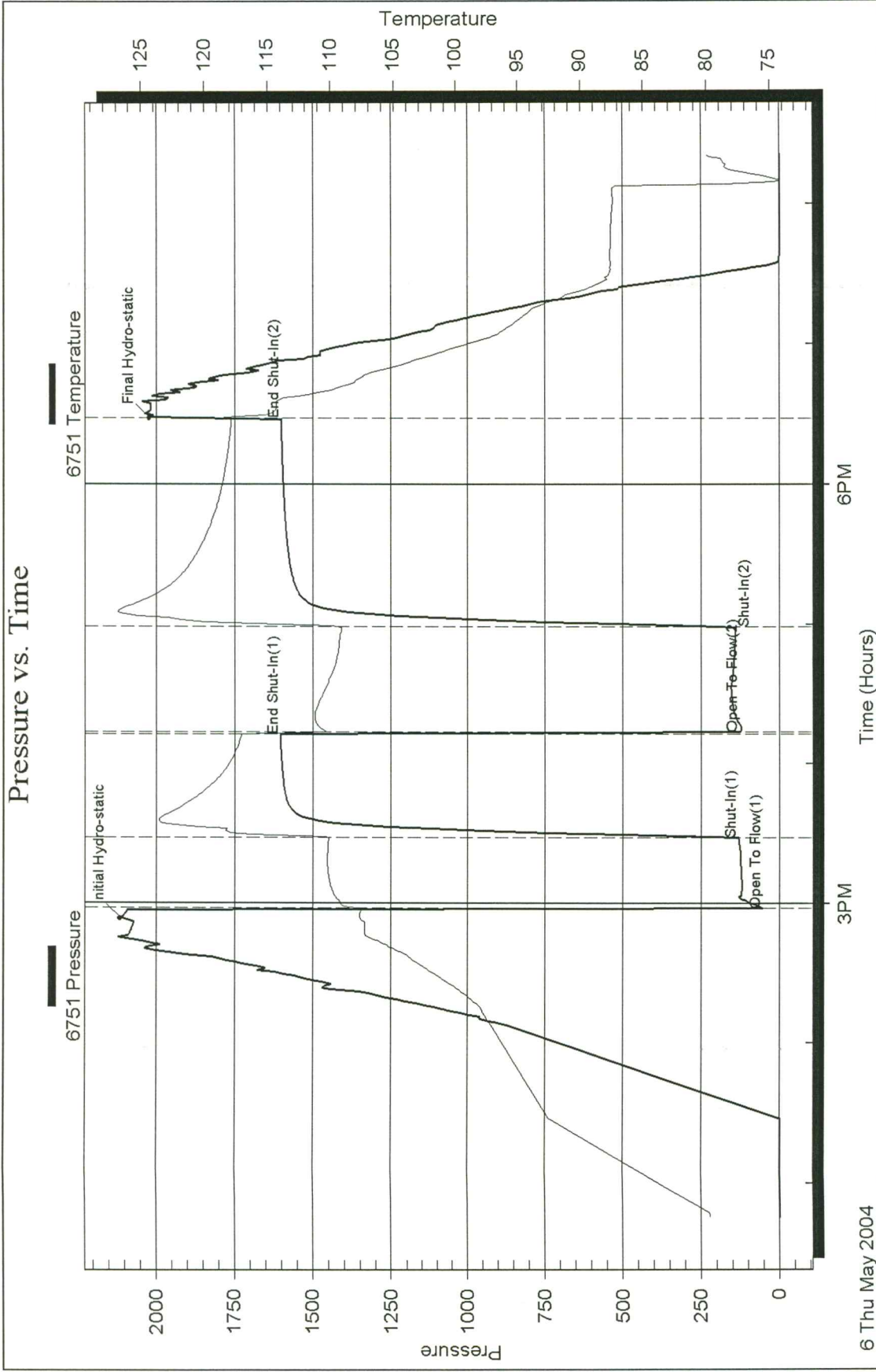
## Recovery Information

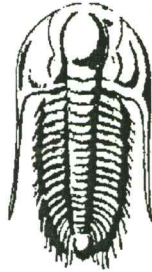
Recovery Table

Length ft	Description	Volume bbl
288.00	GCM 98% mud 2% gas	4.040

Total Length: 288.00 ft      Total Volume: 4.040 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: **CMX, Inc**

150 N Main, Suite 1026  
Wichita, KS 67202

ATTN: Doug McGinness

**9-30s-14w Barber**

**Stannard # 1-9**

Start Date: 2004.05.07 @ 11:39:01

End Date: 2004.05.07 @ 19:02:10

Job Ticket #: 19654                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

CMX, Inc

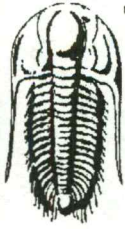
Stannard # 1-9

9-30s-14w Barber

DST # 3

Viola

2004.05.07



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

CMX, Inc  
 150 N Main, Suite 1026  
 Wichita, KS 67202  
 ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
 Job Ticket: 19654      **DST#: 3**  
 Test Start: 2004.05.07 @ 11:39:01

## GENERAL INFORMATION:

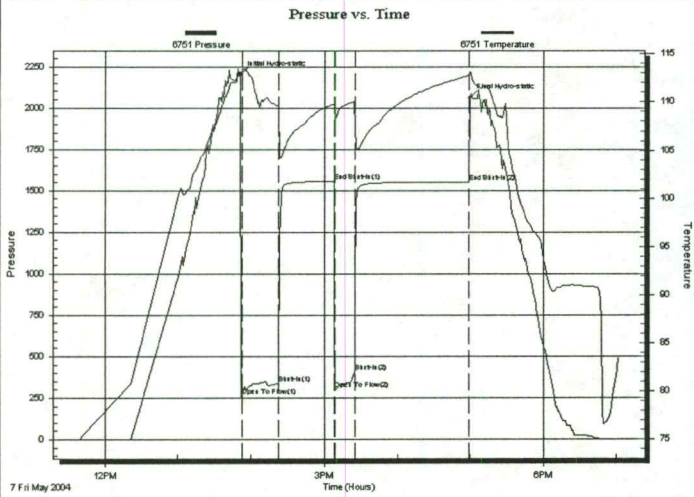
Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:52:51  
 Time Test Ended: 19:02:10  
 Interval: **4470.00 ft (KB) To 4545.00 ft (KB) (TVD)**  
 Total Depth: 4545.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole  
 Tester: Nathan  
 Unit No: 20  
 Reference Elevations: 1960.00 ft (KB)  
 1949.00 ft (CF)  
 KB to GR/CF: 11.00 ft

## Serial #: 6751

Inside

Press@RunDepth: 406.81 psig @ 4509.00 ft (KB) Capacity: 7000.00 psig  
 Start Date: 2004.05.07 End Date: 2004.05.07 Last Calib.: 1899.12.30  
 Start Time: 11:39:11 End Time: 19:02:11 Time On Btm: 2004.05.07 @ 13:51:11  
 Time Off Btm: 2004.05.07 @ 16:59:31

TEST COMMENT: IF- Strong blow O.B.B. in 30 seconds; GTS in 2 minutes 40 seconds  
 IS- No blow  
 FF- Strong blow O.B.B. ASAT opened; gas immediately  
 FS- Weak surface blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2201.72	113.14	Initial Hydro-static
2	259.18	113.41	Open To Flow (1)
32	339.89	109.66	Shut-In(1)
77	1557.58	109.81	End Shut-In(1)
78	301.43	108.17	Open To Flow (2)
94	406.81	110.09	Shut-In(2)
188	1553.96	112.74	End Shut-In(2)
189	2061.64	113.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
210.00	GCM 98% mud 2% gas	2.95

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	10.00	701.47
Last Gas Rate	1.00	34.00	1391.44
Max. Gas Rate	1.00	46.00	1736.43



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19654      **DST#: 3**  
Test Start: 2004.05.07 @ 11:39:01

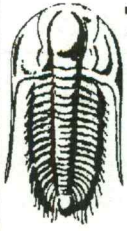
### Tool Information

Drill Pipe:	Length: 4456.00 ft	Diameter: 3.80 inches	Volume: 62.51 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: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 62.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4470.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	97.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4449.00	
Shut In Tool	5.00			4454.00	
Hydraulic tool	5.00			4459.00	
Safety Joint	2.00			4461.00	
Packer	4.00			4465.00	22.00      Bottom Of Top Packer
Packer	5.00			4470.00	
Stubb	1.00			4471.00	
Perforations	4.00			4475.00	
Change Over Sub	1.00			4476.00	
Blank Spacing	32.00			4508.00	
Change Over Sub	1.00			4509.00	
Recorder	0.00	6751	Inside	4509.00	
Perforations	33.00			4542.00	
Recorder	0.00	13630	Outside	4542.00	
Bullnose	3.00			4545.00	75.00      Bottom Packers & Anchor

**Total Tool Length: 97.00**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

CMX, Inc  
150 N Main, Suite 1026  
Wichita, KS 67202  
ATTN: Doug McGinness

**Stannard # 1-9**  
**9-30s-14w Barber**  
Job Ticket: 19654      **DST#: 3**  
Test Start: 2004.05.07 @ 11:39:01

**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:	9200 ppm
Viscosity: 53.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.19 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 0.02 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
210.00	GCM 98% mud 2% gas	2.946

Total Length: 210.00 ft      Total Volume: 2.946 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

Serial #: 6751

Inside

CWX, Inc

9-30s-14w Barber

DST Test Number: 3

