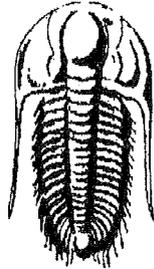


4-1s-27w

KGS ✓



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **H & M Petroleum**

731 N Weber Ste 200  
Colorado Springs CO 80903

ATTN: Rick Hall

15-039-21051-0000

**4 1S 27W Decatur KS**

**Van Fleet #1**

Start Date: 2008.03.16 @ 02:10:00

End Date: 2008.03.16 @ 08:00:00

Job Ticket #: 31604      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

H & M Petroleum

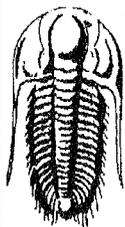
Van Fleet #1

4 1S 27W Decatur KS

DST # 1

Lansing "A"

2008.03.16



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

H & M Petroleum  
 731 N Weber Ste 200  
 Colorado Springs CO 80903  
 ATTN: Rick Hall

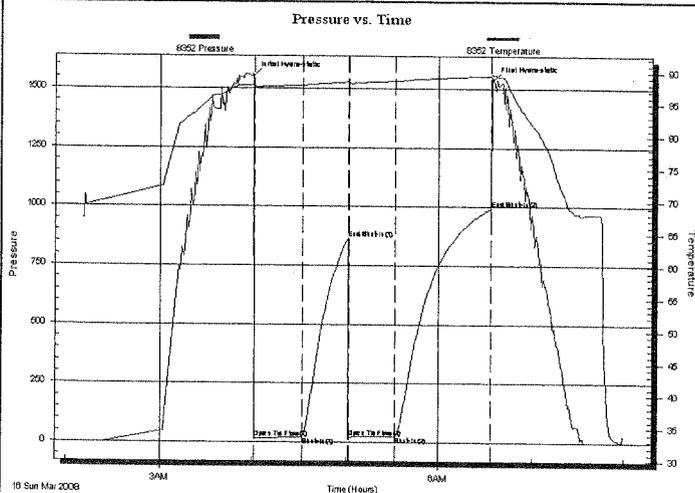
**Van Fleet #1**  
**4 1S 27W Decatur KS**  
 Job Ticket: 31604 **DST#: 1**  
 Test Start: 2008.03.16 @ 02:10:00

## GENERAL INFORMATION:

Formation: **Lansing "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:01:10  
 Time Test Ended: 08:00:00  
 Interval: **3259.00 ft (KB) To 3315.00 ft (KB) (TVD)**  
 Total Depth: 3315.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jake Fahrenbruch  
 Unit No: 43  
 Reference Elevations: 2604.00 ft (KB)  
 2599.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8352** **Inside**  
 Press@RunDepth: 26.18 psig @ 3260.00 ft (KB) Capacity: 7000.00 psig  
 Start Date: 2008.03.16 End Date: 2008.03.16 Last Calib.: 2008.03.16  
 Start Time: 02:10:02 End Time: 08:00:00 Time On Btm: 2008.03.16 @ 04:00:40  
 Time Off Btm: 2008.03.16 @ 06:35:09

**TEST COMMENT:** IF Very weak blow built to .75 " in bucket  
 ISI Bled off no blow back.  
 FF No blow  
 FSI No blowback



## PRESSURE SUMMARY

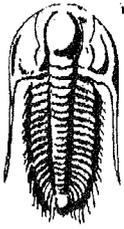
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1554.28	87.93	Initial Hydro-static
1	15.96	87.47	Open To Flow (1)
32	20.53	87.90	Shut-In(1)
61	865.17	88.40	End Shut-In(1)
61	22.09	88.14	Open To Flow (2)
92	26.18	88.56	Shut-In(2)
153	992.15	89.40	End Shut-In(2)
155	1536.66	89.53	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	DM 100%M	0.02

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

H & M Petroleum  
731 N Weber Ste 200  
Colorado Springs CO 80903  
ATTN: Rick Hall

**Van Fleet #1**  
**4 1S 27W Decatur KS**  
Job Ticket: 31604      **DST#: 1**  
Test Start: 2008.03.16 @ 02:10:00

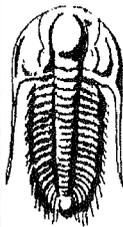
**Tool Information**

Drill Pipe:	Length: 3123.00 ft	Diameter: 3.80 inches	Volume: 43.81 bbl	Tool Weight: 2900.00 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 60000.00 lb
		<u>Total Volume:</u>	<u>44.42 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3259.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	56.00 ft			
Tool Length:	84.00 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			3236.00	
Hydraulic tool	5.00			3241.00	
Jars	5.00			3246.00	
Safety Joint	3.00			3249.00	
Packer	5.00			3254.00	28.00      Bottom Of Top Packer
Packer	5.00			3259.00	
Stubb	1.00			3260.00	
Recorder	0.00	8352	Inside	3260.00	
Recorder	0.00	6799	Inside	3260.00	
Perforations	18.00			3278.00	
Blank Spacing	34.00			3312.00	
Bullnose	3.00			3315.00	56.00      Bottom Packers & Anchor

**Total Tool Length: 84.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

H & M Petroleum  
731 N Weber Ste 200  
Colorado Springs CO 80903  
ATTN: Rick Hall

**Van Fleet #1**  
**4 1S 27W Decatur KS**  
Job Ticket: 31604      **DST#: 1**  
Test Start: 2008.03.16 @ 02:10:00

## 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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	600.00 ppm				
Filter Cake:	inches				

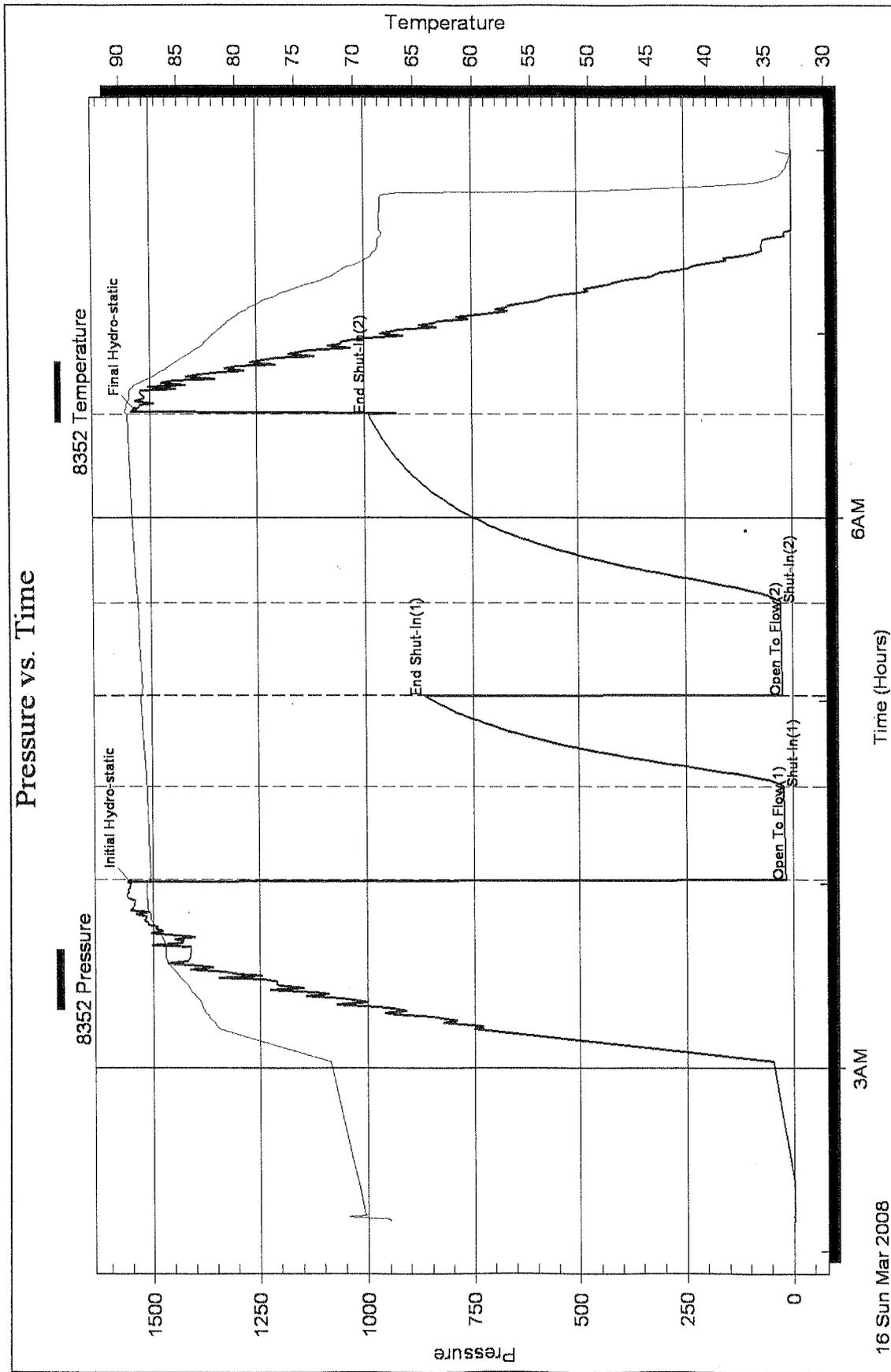
## Recovery Information

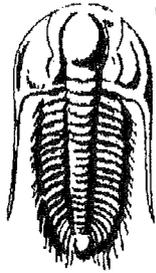
Recovery Table

Length ft	Description	Volume bbl
5.00	DM 100%M	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: **H & M Petroleum**

731 N Weber Ste 200  
Colorado Springs CO 80903

ATTN: Rick Hall

**4 1S 27W Decatur KS**

**Van Fleet #1**

Start Date: 2008.03.17 @ 00:10:00

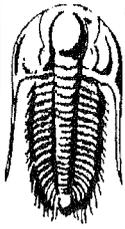
End Date: 2008.03.17 @ 08:32:00

Job Ticket #: 31605                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

H & M Petroleum  
 731 N Weber Ste 200  
 Colorado Springs CO 80903  
 ATTN: Rick Hall

**Van Fleet #1**  
**4 1S 27W Decatur KS**  
 Job Ticket: 31605      **DST#: 2**  
 Test Start: 2008.03.17 @ 00:10:00

## GENERAL INFORMATION:

Formation: **Lansing "H-K"**  
 Deviated: No Whipstock:      ft (KB)  
 Time Tool Opened: 02:11:10  
 Time Test Ended: 08:32:00  
 Interval: **3386.00 ft (KB) To 3494.00 ft (KB) (TVD)**  
 Total Depth: 3494.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good

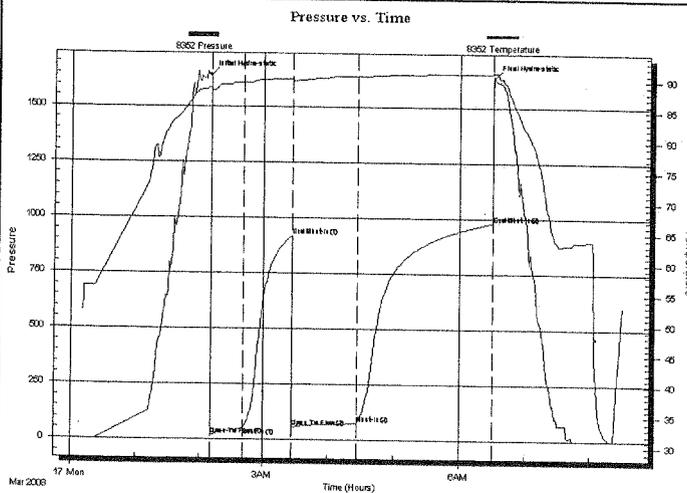
Test Type: Conventional Bottom Hole  
 Tester: Jake Fahrenbruch  
 Unit No: 43  
 Reference Elevations: 2604.00 ft (KB)  
 2599.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8352

Inside

Press@RunDepth: 73.11 psig @ 3387.00 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2008.03.17      End Date: 2008.03.17      Last Calib.: 2008.03.17  
 Start Time: 00:10:02      End Time: 08:32:00      Time On Btm: 2008.03.17 @ 02:10:40  
 Time Off Btm: 2008.03.17 @ 06:31:50

**TEST COMMENT:** IF Weak blow built to 5" in bucket  
 ISI Bled off no blow back  
 FF Fairly weak blow built to 11" in bucket  
 FSI Bled off no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1641.21	88.69	Initial Hydro-static
1	19.50	88.28	Open To Flow (1)
31	51.04	89.54	Shut-In (1)
76	918.06	90.15	End Shut-In (1)
76	54.75	89.96	Open To Flow (2)
137	73.11	90.60	Shut-In (2)
260	979.47	91.16	End Shut-In (2)
262	1633.44	91.27	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
145.00	OM 45%O 55%M	0.90

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

H & M Petroleum  
731 N Weber Ste 200  
Colorado Springs CO 80903  
ATTN: Rick Hall

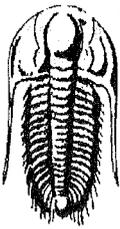
**Van Fleet #1**  
**4 1S 27W Decatur KS**  
Job Ticket: 31605      **DST#: 2**  
Test Start: 2008.03.17 @ 00:10:00

### Tool Information

Drill Pipe:	Length: 3249.00 ft	Diameter: 3.80 inches	Volume: 45.57 bbl	Tool Weight: 3700.00 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: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 46.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3386.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	108.00 ft			
Tool Length:	136.00 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			3363.00	
Hydraulic tool	5.00			3368.00	
Jars	5.00			3373.00	
Safety Joint	3.00			3376.00	
Packer	5.00			3381.00	28.00      Bottom Of Top Packer
Packer	5.00			3386.00	
Stubb	1.00			3387.00	
Recorder	0.00	8352	Inside	3387.00	
Recorder	0.00	6799	Inside	3387.00	
Perforations	39.00			3426.00	
Blank Spacing	65.00			3491.00	
Bullnose	3.00			3494.00	108.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>136.00</b>				



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

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

H & M Petroleum  
731 N Weber Ste 200  
Colorado Springs CO 80903  
ATTN: Rick Hall

**Van Fleet #1**  
**4 1S 27W Decatur KS**  
Job Ticket: 31605      DST#: 2  
Test Start: 2008.03.17 @ 00:10:00

## 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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.79 in <sup>3</sup>	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	600.00 ppm				
Filter Cake:	inches				

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
145.00	OM 45%O 55%M	0.895

Total Length: 145.00 ft      Total Volume: 0.895 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 8352

Inside

H & M Petroleum

4 1S 27W Decatur KS

DST Test Number: 2

### Pressure vs. Time

