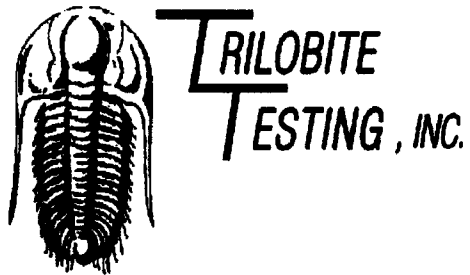


15-051-25726



## DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Company**

PO Box 372  
Hays KS 67601

ATTN: Marc Downing

**19 13S 20W Ellis KS**

**Augustine #2-19**

Start Date: 2008.01.24 @ 11:50:05

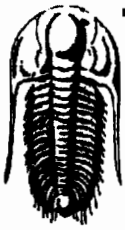
End Date: 2008.01.24 @ 19:46:05

Job Ticket #: 30274                      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

Downing-Nelson Oil Company

**Augustine #2-19**

PO Box 372  
Hays KS 67601

**19 13S 20W Ellis KS**

Job Ticket: 30274

DST#: 1

ATTN: Marc Downing

Test Start: 2008.01.24 @ 11:50:05

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:33:35

Time Test Ended: 19:46:05

Test Type: Conventional Straddle

Tester: Tyson Flax

Unit No: 21

Interval: **3934.00 ft (KB) To 3994.00 ft (KB) (TVD)**

Total Depth: 4082.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2332.00 ft (KB)

2324.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8367 Inside**

Press@RunDepth: 138.30 psig @ 3950.00 ft (KB)

Start Date: 2008.01.24

End Date:

2008.01.24

Start Time: 11:50:06

End Time:

19:46:05

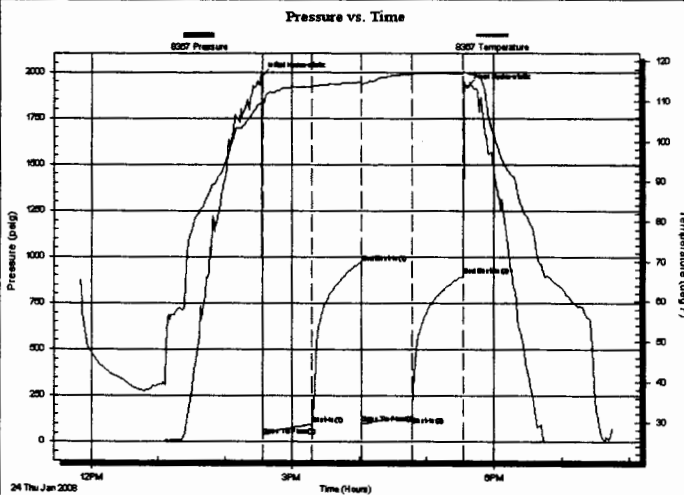
Capacity: 7000.00 psig

Last Calib.: 2008.01.24

Time On Btm: 2008.01.24 @ 14:33:05

Time Off Btm: 2008.01.24 @ 17:36:05

**TEST COMMENT:** IFF BOB in 16 min  
ISI Weak surface blow back died in 15 min  
FFP BOB in 17 min  
FSI Weak surface blow back died in 12 min



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1978.83	109.74	Initial Hydro-static
1	31.96	109.21	Open To Flow (1)
45	95.22	113.68	Shut-In(1)
89	970.95	114.76	End Shut-In(1)
89	98.19	114.43	Open To Flow (2)
134	138.30	116.78	Shut-In(2)
180	898.87	117.00	End Shut-In(2)
183	1917.73	117.14	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCM 20%O 80%M	0.57
120.00	MCO 50%O 50%M	1.70
60.00	MCO 70%O 3%M	0.85
45.00	CO	0.64
0.00	255' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Company

**Augustine #2-19**

PO Box 372  
Hays KS 67601

**19 13S 20W Ellis KS**

Job Ticket: 30274

**DST#: 1**

ATTN: Marc Downing

Test Start: 2008.01.24 @ 11:50:05

### Tool Information

Drill Pipe:	Length: 3896.00 ft	Diameter: 3.82 inches	Volume: 55.23 bbl	Tool Weight: 2500.00 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: 60000.00 lb
			<u>Total Volume: 55.38 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3934.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	3994.00 ft			
Interval between Packers:	60.00 ft			
Tool Length:	170.00 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			3914.00	
Shut In Tool	5.00			3919.00	
Hydraulic tool	5.00			3924.00	
Packer	5.00			3929.00	21.00 Bottom Of Top Packer
Packer	5.00			3934.00	
Stubb	1.00			3935.00	
Perforations	14.00			3949.00	
Change Over Sub	1.00			3950.00	
Recorder	0.00	8367	Inside	3950.00	
Blank Spacing	32.00			3982.00	
Change Over Sub	1.00			3983.00	
Perforations	7.00			3990.00	
Recorder	0.00	3351	Inside	3990.00	
Blank Off Sub	1.00			3991.00	
Stubb	3.00			3994.00	60.00 Tool Interval
Packer	1.00			3995.00	
Stubb	1.00			3996.00	
Perforations	19.00			4015.00	
Change Over Sub	1.00			4016.00	
Recorder	0.00	8320	Outside	4016.00	
Blank Spacing	63.00			4079.00	
Change Over Sub	1.00			4080.00	
Bullnose	3.00			4083.00	89.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>170.00</b>				



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing-Nelson Oil Company

**Augustine #2-19**

PO Box 372  
Hays KS 67601

**19 13S 20W Ellis KS**

Job Ticket: 30274

**DST#: 1**

ATTN: Marc Downing

Test Start: 2008.01.24 @ 11:50:05

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.79 in<sup>2</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCM 20%O 80%M	0.573
120.00	MCO 50%O 50%M	1.701
60.00	MCO 70%O 3%M	0.851
45.00	CO	0.638
0.00	255' GP	0.000

Total Length: 285.00 ft

Total Volume: 3.763 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

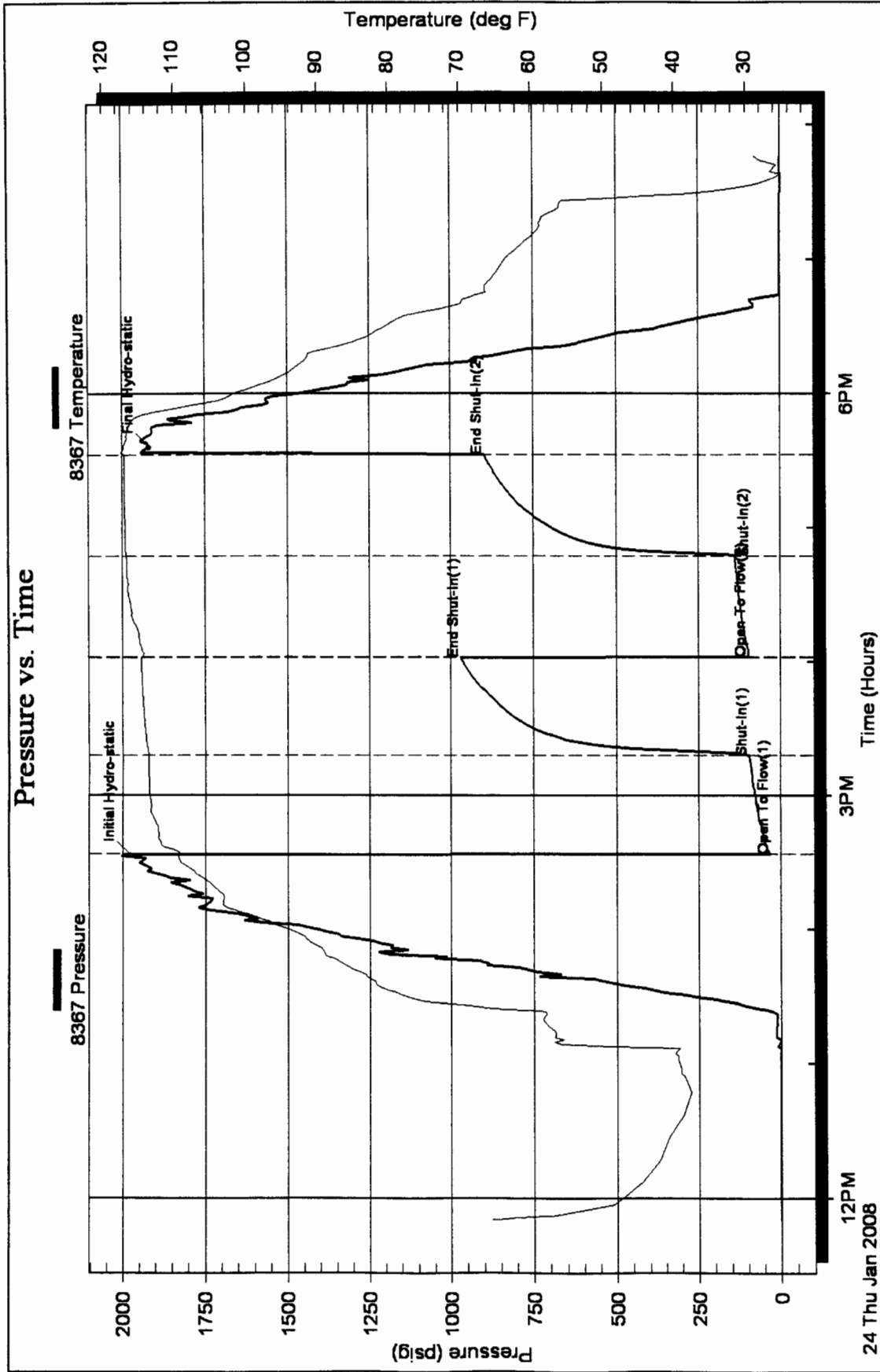
Recovery Comments:

August 16<sup>th</sup> 8-19  
19 13S 20W Ellis KS

DST Test Number: 1

Serial #: 8367  
Inside  
Downing-Nelson Oil Company

### Pressure vs. Time



8367 Pressure

8367 Temperature

12PM

3PM

6PM

Time (Hours)

24 Thu Jan 2008