



## DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil Co Inc**

PO Box 1019  
Hays KS 67601

ATTN: Ron Nelson, Marc Dow

### **Fabrizius #2-2**

#### **2-14s-22w Trego,KS**

Start Date: 2017.02.19 @ 21:20:20

End Date: 2017.02.20 @ 05:21:59

Job Ticket #: 64093                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

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**DST#: 1**

ATTN: Ron Nelson, Marc Dow

Test Start: 2017.02.19 @ 21:20:20

## GENERAL INFORMATION:

Formation: **Conglomerate Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:33:45

Time Test Ended: 05:21:59

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 77

**Interval: 4080.00 ft (KB) To 4148.00 ft (KB) (TVD)**

Reference Elevations: 2303.00 ft (KB)

Total Depth: 4148.00 ft (KB) (TVD)

2295.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8360**

**Inside**

Press@RunDepth: 391.87 psig @ 4087.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.19

End Date:

2017.02.20

Last Calib.:

2017.02.20

Start Time: 21:20:20

End Time:

05:21:59

Time On Btm:

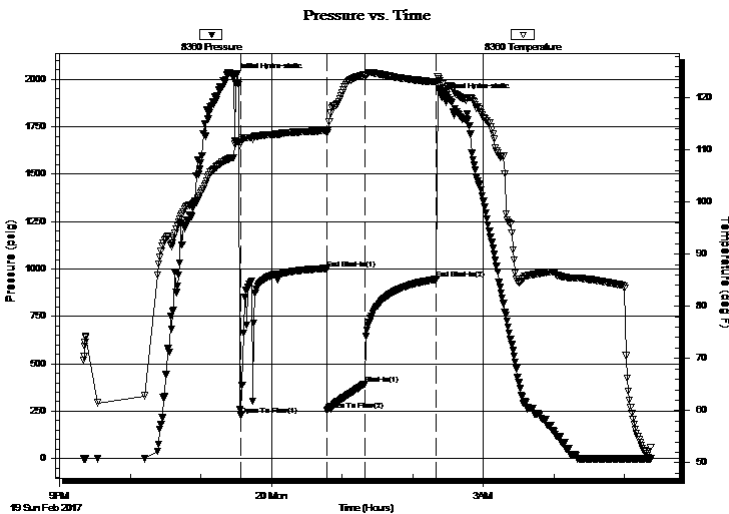
2017.02.19 @ 23:28:00

Time Off Btm:

2017.02.20 @ 02:24:59

**TEST COMMENT:** 30-IFP-w eak to a gd bl 1/2" to 7" bl - plugging  
45-ISIP-no bl  
30-FFP-w k to BOB in 8 min  
60-FSIP-no bl

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2008.22	108.55	Initial Hydro-static
6	228.45	111.31	Open To Flow (1)
79	1002.63	113.76	End Shut-In(1)
80	253.79	113.36	Open To Flow (2)
111	391.87	124.38	Shut-In(1)
172	945.70	123.08	End Shut-In(2)
177	1903.33	122.70	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	SOCW 2%O98%W	0.88
372.00	HO&GCW 25%G35%O40%W	3.93
335.00	O&GCM 20%G10%O70%M	4.70
0.00	210' GIP	0.00

## Gas Rates

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





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**TOOL DIAGRAM**

Dow ning-Nelson Oil Co Inc

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## Tool Information

Drill Pipe:	Length: 3771.00 ft	Diameter: 3.80 inches	Volume: 52.90 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 310.00 ft	Diameter: 2.70 inches	Volume: 2.20 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 55.10 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	4080.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	97.00 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			4052.00	
Shut In Tool	5.00			4057.00	
Hydraulic tool	5.00			4062.00	
Jars	5.00			4067.00	
Safety Joint	3.00			4070.00	
Packer	5.00			4075.00	29.00 Bottom Of Top Packer
Packer	5.00			4080.00	
Stubb	1.00			4081.00	
Perforations	6.00			4087.00	
Recorder	0.00	8360	Inside	4087.00	
Recorder	0.00	6751	Outside	4087.00	
Blank Spacing	33.00			4120.00	
Perforations	25.00			4145.00	
Bullnose	3.00			4148.00	68.00 Bottom Packers & Anchor

**Total Tool Length: 97.00**



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## FLUID SUMMARY

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Hays KS 67601

**Fabrizius #2-2**

Job Ticket: 64093

**DST#: 1**

ATTN: Ron Nelson, Marc Dow

Test Start: 2017.02.19 @ 21:20:20

### 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:

28000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
124.00	SOCW 2%O98%W	0.878
372.00	HO&GCW 25%G35%O40%W	3.926
335.00	O&GCM 20%G10%O70%M	4.699
0.00	210' GIP	0.000

Total Length: 831.00 ft

Total Volume: 9.503 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .24@68F

Serial #: 8360

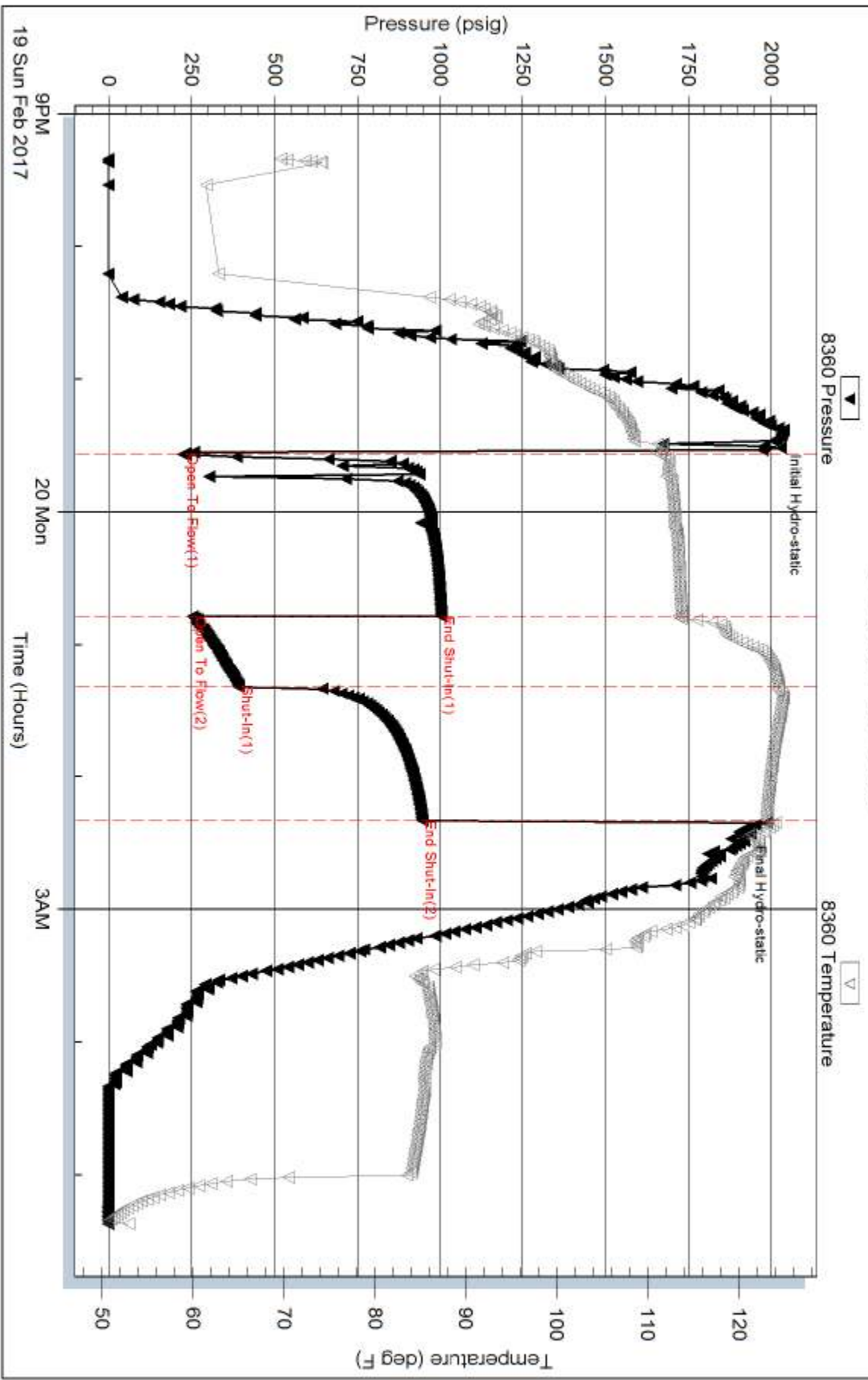
Inside

Dow nting-Nelson Oil Co Inc

Fabrizius #2-2

DST Test Number: 1

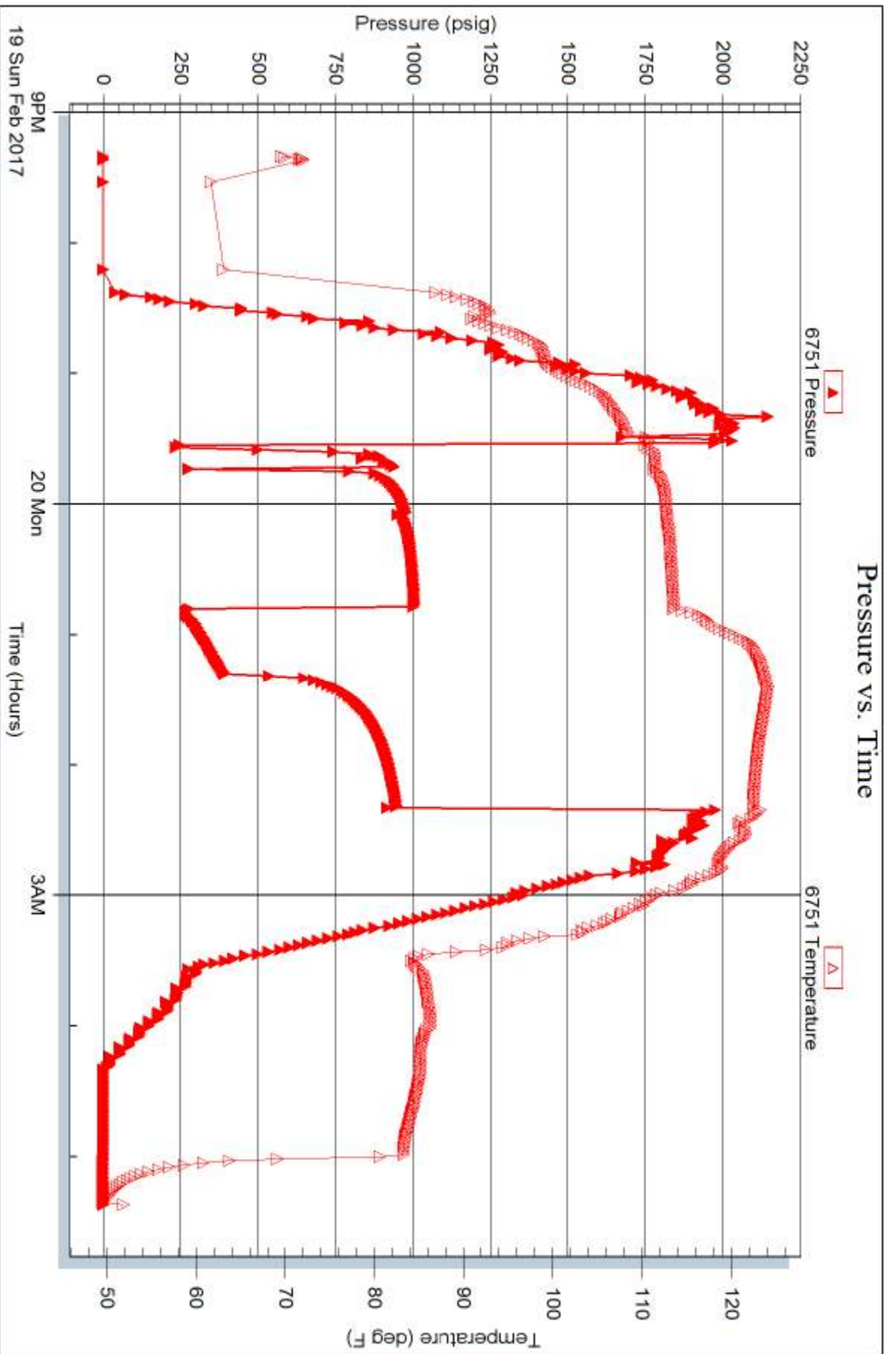
### Pressure vs. Time

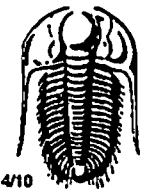


Trilobite Testing, Inc

Ref. No: 64093

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64093

Well Name & No. FABRIZIUS #2-2 Test No. 1 Date 2-19-17  
 Company Downing-Nelson Oil Co Inc Elevation 2303 KB 2295 GL  
 Address PO Box 1019 HAYS, Ks 67601  
 Co. Rep / Geo. MARC DOWNING Rig DISCOVERY RIG 2  
 Location: Sec. 2 Twp. 14<sup>th</sup> Rge. 22<sup>nd</sup> Co. Trego State Ks

Interval Tested 4080-4148 Zone Tested Cond 5d.  
 Anchor Length 68 Drill Pipe Run 3771 Mud Wt. 9.1  
 Top Packer Depth 4075 Drill Collars Run - Vis 58  
 Bottom Packer Depth 4080 Wt. Pipe Run 310 WL 8.8  
 Total Depth 4148 Chlorides 5000 ppm System LCM 1/2#  
 Blow Description I/FP - WEAK TO A GOOD BLOW 1/2" TO 7" BLOW  
ISIP - NO BLOW  
FFP - WEAK TO BOB IN 8 MIN  
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
210	6TP				
335	0+6CM	20	10		70
372	H0+6CW	25	35	40	
124	50CW		2	98	

Rec Total 831 BHT 123 Gravity - API RW .24 @ 68 °F Chlorides 28000 ppm

(A) Initial Hydrostatic 2008  Test 1150 T-On Location 1940  
 (B) First Initial Flow -  Jars 250 T-Started 2120  
 (C) First Final Flow -  Safety Joint 75 T-Open 2335  
 (D) Initial Shut-In 1002  Circ Sub \_\_\_\_\_ T-Pulled 0220  
 (E) Second Initial Flow 253  Hourly Standby \_\_\_\_\_ T-Out 0521  
 (F) Second Final Flow 391  Mileage 70 RT 52.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 945  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1903  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1527.50

Initial Open 30  
 Initial Shut-In 45  
 Final Flow 30  
 Final Shut-In 60

Sub Total 1527.50 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Ray Schwagn **THANK YOU**

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