



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

**5/21S/20W-Pawnee**

P.O. Box 1019  
Hays, KS 67601

**Snodgrass Steffen1-5**

ATTN: Ron Nelson

Job Ticket: 51693

**DST#: 1**

Test Start: 2013.03.20 @ 02:51:45

## GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:48:05

Time Test Ended: 10:10:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 66

**Interval: 4274.00 ft (KB) To 4329.00 ft (KB) (TVD)**

Reference Elevations: 2154.00 ft (KB)

Total Depth: 4329.00 ft (KB) (TVD)

2146.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8520 Outside**

Press @ Run Depth: 193.05 psig @ 4314.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.20

End Date: 2013.03.20

Last Calib.: 2013.03.20

Start Time: 03:01:45

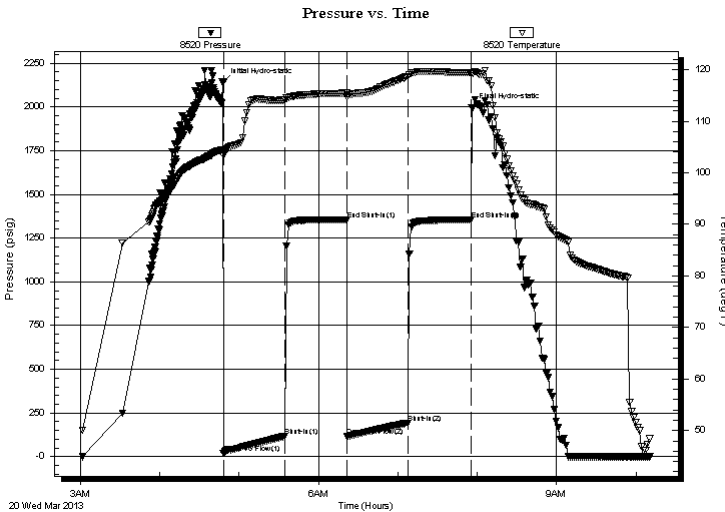
End Time: 10:10:15

Time On Btm: 2013.03.20 @ 04:47:55

Time Off Btm: 2013.03.20 @ 07:55:45

**TEST COMMENT:** IF-Weak building blow . BOB @ 34 minutes.  
ISI-No Return.  
FF-Weak building blow . BOB @ 38 minutes 30 seconds.  
FSI-No Return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.43	104.47	Initial Hydro-static
1	18.23	103.34	Open To Flow (1)
47	116.04	114.09	Shut-In(1)
94	1355.74	115.47	End Shut-In(1)
94	117.35	114.78	Open To Flow (2)
140	193.05	118.66	Shut-In(2)
188	1354.28	119.18	End Shut-In(2)
188	1996.75	119.49	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
248.00	85%Water/15%Mud	3.21
124.00	20%Water/80%Mud	1.74
15.00	2%Oil/18%Water/80%Mud	0.21

## Gas Rates

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



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**FLUID SUMMARY**

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Job Ticket: 51693

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Test Start: 2013.03.20 @ 02:51:45

## 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:

17000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.65 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
248.00	85%Water/15%Mud	3.206
124.00	20%Water/80%Mud	1.739
15.00	2%Oil/18%Water/80%Mud	0.210

Total Length: 387.00 ft

Total Volume: 5.155 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8520

Outside Dow nging-Nelson Oil Co., Inc.

Snodgrass Steffen 1-5

DST Test Number: 1

