



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Dow ning-Nelson  
P.O. Box 1019 113 W. 13th  
Hays, KS. 67601  
ATTN: Al Dow ning

**Sunley #1-13**  
**13/14/19/Ellis-KS**  
Job Ticket: 041107 **DST#: 2**  
Test Start: 2011.05.03 @ 11:08:00

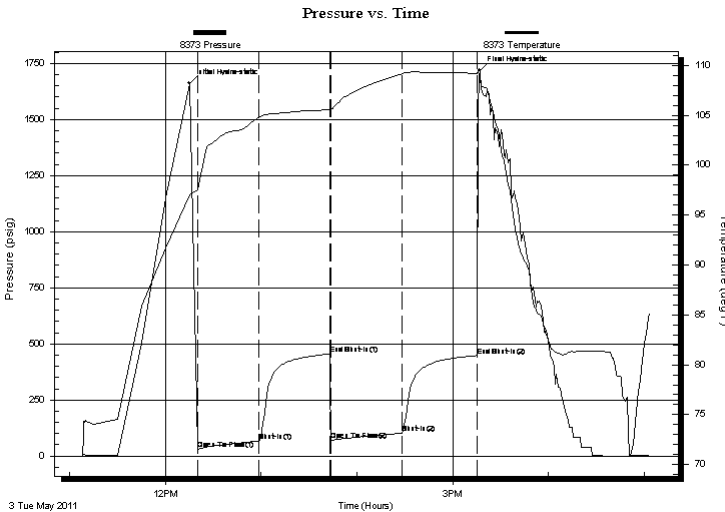
## GENERAL INFORMATION:

Formation: **Lansing "C,D"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 12:20:00  
Time Test Ended: 17:03:45  
Interval: **3456.00 ft (KB) To 3510.00 ft (KB) (TVD)**  
Total Depth: 3510.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Test Type: Conventional Bottom Hole  
Tester: Kevin Mack  
Unit No: 35  
Reference Elevations: 2160.00 ft (KB)  
2154.00 ft (CF)  
KB to GR/CF: 6.00 ft

**Serial #: 8373 Inside**  
Press @ Run Depth: 101.13 psig @ 3457.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2011.05.03 End Date: 2011.05.03 Last Calib.: 2011.05.03  
Start Time: 11:08:05 End Time: 17:03:44 Time On Btm: 2011.05.03 @ 12:15:00  
Time Off Btm: 2011.05.03 @ 15:17:00

**TEST COMMENT:** IF: BoB in 33 min.  
IS: Surface return started at 10 min built to 1/2"  
FF: BoB in 20 min  
FS: Surface return started at 5 min built to 2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1662.27	97.02	Initial Hydro-static
5	29.07	97.54	Open To Flow (1)
44	67.21	104.82	Shut-In(1)
88	456.06	105.58	End Shut-In(1)
89	71.56	105.37	Open To Flow (2)
134	101.13	109.15	Shut-In(2)
181	447.85	109.22	End Shut-In(2)
182	1719.26	108.39	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP	0.00
62.00	WM 70M 30W	0.60
62.00	OCMW 30M 65W 5o	0.87
52.00	OCWM 40M 25W 35o	0.73
20.00	Oil 100o	0.28

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**FLUID SUMMARY**

Downing-Nelson

**Sunley #1-13**

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Hays, KS. 67601

**13/14/19/Ellis-KS**

Job Ticket: 041107

**DST#: 2**

ATTN: Al Downing

Test Start: 2011.05.03 @ 11:08:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

40000 ppm

Viscosity: 80.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	GIP	0.000
62.00	WM 70M 30W	0.596
62.00	OCMW 30M 65W 5o	0.870
52.00	OCWM 40M 25W 35o	0.729
20.00	Oil 100o	0.281

Total Length: 196.00 ft      Total Volume: 2.476 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Oil API 37 @90 degrees = 34

RW .15 @ 79 degrees = 40000 ppm

### Pressure vs. Time

