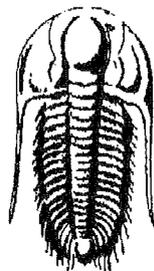


15-195-22504

13-13s-22w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

13 13S 22W Trego KS

Ralph #1-13

Start Date: 2008.01.16 @ 05:00:25

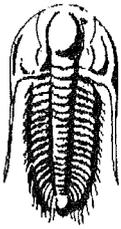
End Date: 2008.01.16 @ 10:24:25

Job Ticket #: 30270 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

Ralph #1-13

PO Box 372
Hays KS 67601

13 13S 22W Trego KS

ATTN: Ron Nelson

Job Ticket: 30270

DST#: 1

Test Start: 2008.01.16 @ 05:00:25

GENERAL INFORMATION:

Formation: **LKC "C -E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:51:55

Time Test Ended: 10:24:25

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 21

Interval: 3607.00 ft (KB) To 3665.00 ft (KB) (TVD)

Total Depth: 3665.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2245.00 ft (KB)

2238.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8320

Inside

Press@RunDepth: 26.05 psig @ 3610.00 ft (KB)

Start Date: 2008.01.16

End Date:

2008.01.16

Start Time: 05:00:26

End Time:

10:24:25

Capacity: 7000.00 psig

Last Calib.: 2008.01.16

Time On Btm: 2008.01.16 @ 06:51:25

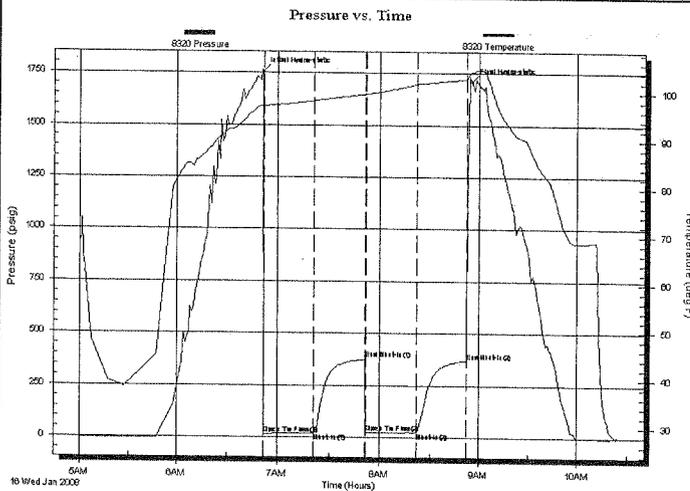
Time Off Btm: 2008.01.16 @ 08:55:25

TEST COMMENT: IFP Weak surface blow built to 1/2 "

ISI No blow back

FFP Very weak surface blow died in 3 min

FSI No blow back



PRESSURE SUMMARY

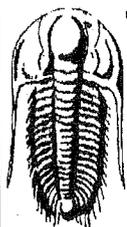
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1754.11	97.18	Initial Hydro-static
1	15.85	97.07	Open To Flow (1)
30	20.70	98.23	Shut-In(1)
60	375.38	99.63	End Shut-In(1)
61	23.09	99.66	Open To Flow (2)
91	26.05	101.69	Shut-In(2)
121	369.44	102.81	End Shut-In(2)
124	1707.64	104.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w/scum of Oil	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Company

Ralph #1-13

PO Box 372
Hays KS 67601

13 13S 22W Trego KS

Job Ticket: 30270

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.01.16 @ 05:00:25

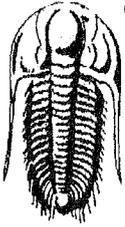
Tool Information

Drill Pipe:	Length: 3585.00 ft	Diameter: 3.82 inches	Volume: 50.82 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 50.97 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3607.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	79.00 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			3587.00	
Shut In Tool	5.00			3592.00	
Hydraulic tool	5.00			3597.00	
Packer	5.00			3602.00	21.00 Bottom Of Top Packer
Packer	5.00			3607.00	
Stubb	1.00			3608.00	
Perforations	1.00			3609.00	
Change Over Sub	1.00			3610.00	
Recorder	0.00	8367	Inside	3610.00	
Recorder	0.00	8320	Inside	3610.00	
Blank Spacing	31.00			3641.00	
Change Over Sub	1.00			3642.00	
Perforations	20.00			3662.00	
Bullnose	3.00			3665.00	58.00 Bottom Packers & Anchor

Total Tool Length: 79.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Company

Ralph #1-13

PO Box 372
Hays KS 67601

13 13S 22W Trego KS

Job Ticket: 30270

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.01.16 @ 05:00:25

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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	Mud w/scum of Oil	0.049

Total Length:

10.00 ft

Total Volume:

0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8320

Inside

Dow ning-Nelson Oil Company

13 13S 22W Trego KS

DST Test Number: 1

Pressure vs. Time

