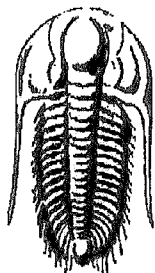


15-165-21889

2-18s-18w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

Po Box 372
Hays KS 67601

ATTN: Ron Nelson

2-18s-18 Rush KS

Schwartzkopf trust #1-2

Start Date: 2010.06.25 @ 22:04:41

End Date: 2010.06.26 @ 04:03:11

Job Ticket #: 37235 DST #: 1

RECEIVED

SEP 13 2010

KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Downing-Nelson Oil Co INC

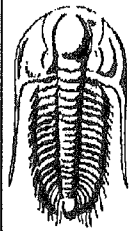
Schwartzkopf trust #1-2

2-18s-18 Rush KS

DST # 1

Arbuckle

2010.06.25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co INC

Schwartzkopf trust #1-2

Po Box 372
Hays KS 67601

2-18s-18 Rush KS

Job Ticket: 37235

DST#: 1

ATTN: Ron Nelson

Test Start: 2010.06.25 @ 22:04:41

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:12:41

Time Test Ended: 04:03:11

Test Type: Conventional Bottom Hole

Tester: Jeff Brown

Unit No: 31

Interval: **3764.00 ft (KB) To 3841.00 ft (KB) (TVD)**

Total Depth: 3841.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2057.00 ft (KB)

2049.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: **8017**

Inside

Press@RunDepth: 35.20 psig @ 3771.00 ft (KB)

Start Date: 2010.06.25

End Date:

2010.06.26

Start Time: 22:04:46

End Time:

04:03:10

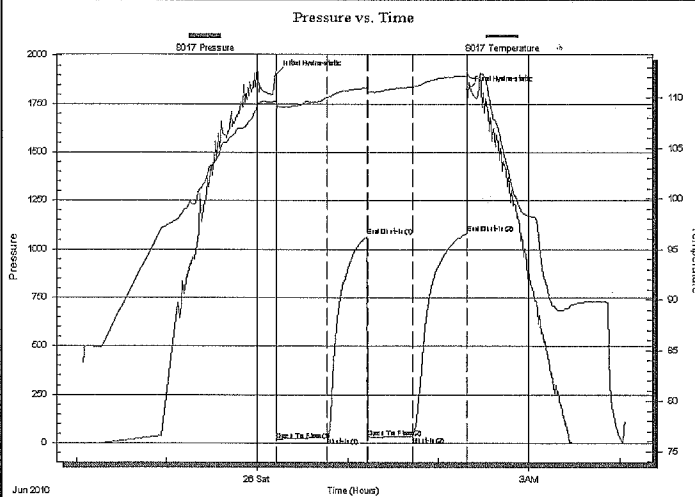
Capacity: 8000.00 psig

Last Calib.: 2010.06.26

Time On Btm: 2010.06.26 @ 00:12:31

Time Off Btm: 2010.06.26 @ 02:19:31

TEST COMMENT: IFP-Weak blow built to 1 in
ISI-Dead no blow back
FFP-Weak blow built to 1/4 in
FSI-Dead no blow back



PRESSURE SUMMARY

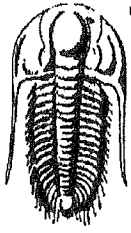
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1900.86	109.68	Initial Hydro-static
1	16.33	108.67	Open To Flow (1)
34	29.14	110.03	Shut-In(1)
61	1066.20	110.98	End Shut-In(1)
61	31.98	110.42	Open To Flow (2)
91	35.20	111.11	Shut-In(2)
127	1082.61	112.17	End Shut-In(2)
127	1823.67	112.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
53.00	HOCM 25%O75%M	0.47

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co INC
Po Box 372
Hays KS 67601
ATTN: Ron Nelson

Schwartzkopf trust #1-2
2-18s-18 Rush KS
Job Ticket: 37235 **DST#: 1**
Test Start: 2010.06.25 @ 22:04:41

Tool Information

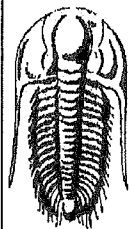
Drill Pipe:	Length: 3727.00 ft	Diameter: 3.80 inches	Volume: 52.28 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 52.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3764.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	98.00 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			3744.00	
Shut In Tool	5.00			3749.00	
Hydraulic tool	5.00			3754.00	
Packer	5.00			3759.00	21.00 Bottom Of Top Packer
Packer	5.00			3764.00	
Stubb	1.00			3765.00	
Perforations	5.00			3770.00	
Change Over Sub	1.00			3771.00	
Recorder	0.00	8017	Inside	3771.00	
Recorder	0.00	8352	Outside	3771.00	
Blank Spacing	62.00			3833.00	
Change Over Sub	1.00			3834.00	
Perforations	4.00			3838.00	
Bullnose	3.00			3841.00	77.00 Bottom Packers & Anchor

Total Tool Length: 98.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co INC

Schwartzkopf trust #1-2

Po Box 372
Hays KS 67601

2-18s-18 Rush KS

Job Ticket: 37235

DST#: 1

ATTN: Ron Nelson

Test Start: 2010.06.25 @ 22:04:41

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: 43.00 sec/qt

Cushion Volume:

bbf

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
53.00	HOCM 25%O75%M	0.470

Total Length: 53.00 ft

Total Volume: 0.470 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8017

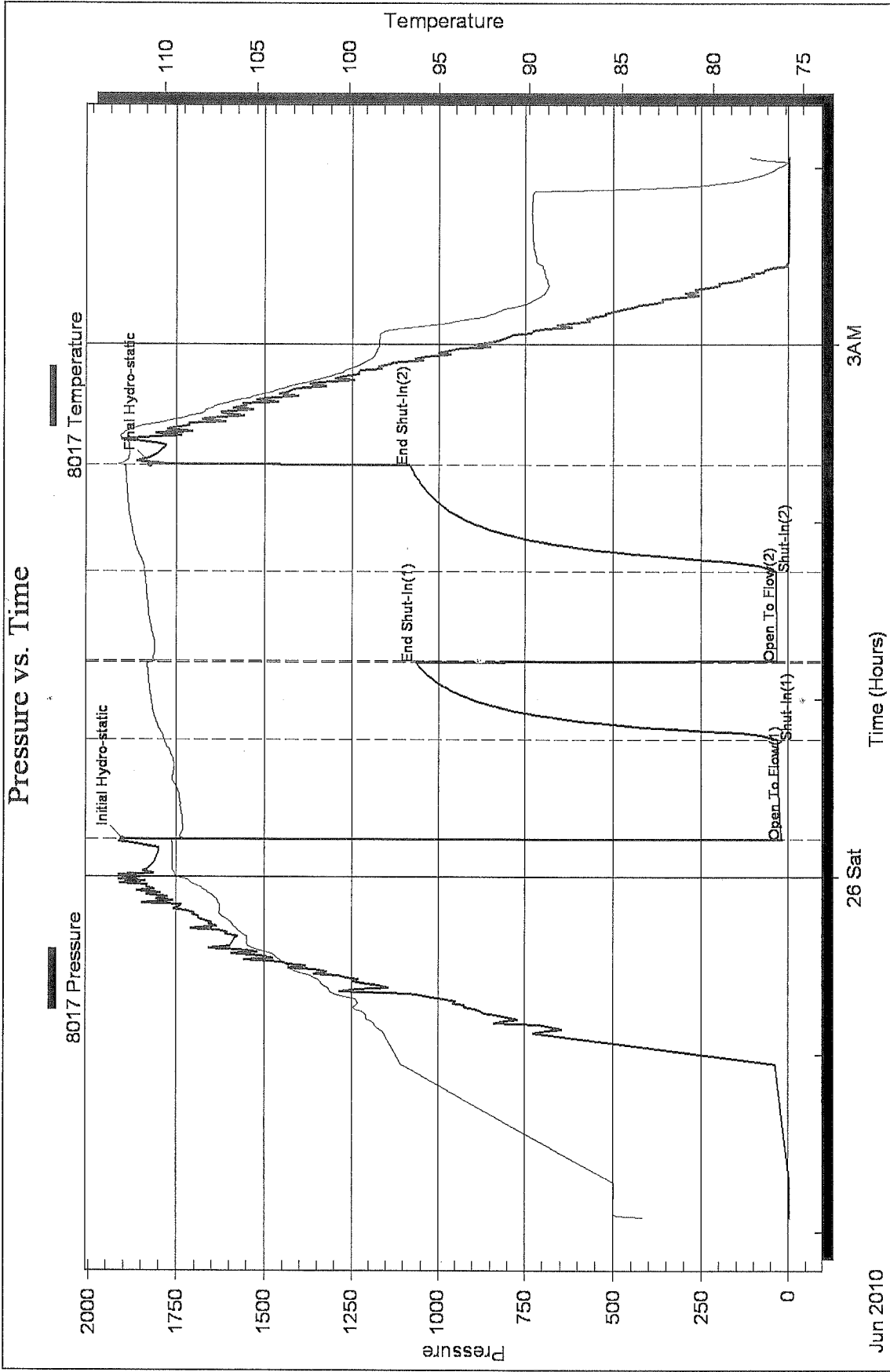
Inside

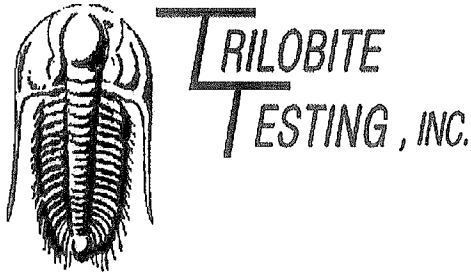
Downing-Nelson Oil Co INC

2-18s-18 Rush KS

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

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

Po Box 372
Hays KS 67601

ATTN: Ron Nelson

2-18s-18 Rush KS

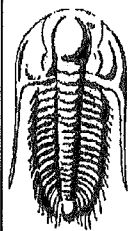
Schwartzkopf trust #1-2

Start Date: 2010.06.26 @ 09:22:41

End Date: 2010.06.26 @ 16:55:11

Job Ticket #: 37235 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co INC

Schwartzkopf trust #1-2

Po Box 372
Hays KS 67601

2-18s-18 Rush KS

Job Ticket: 37235

DST#: 2

ATTN: Ron Nelson

Test Start: 2010.06.26 @ 09:22:41

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:54:41
Time Test Ended: 16:55:11

Test Type: Conventional Bottom Hole
Tester: Jeff Brown
Unit No: 31

Interval: **3764.00 ft (KB) To 3846.00 ft (KB) (TVD)**
Total Depth: 3846.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2057.00 ft (KB)
2049.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8017

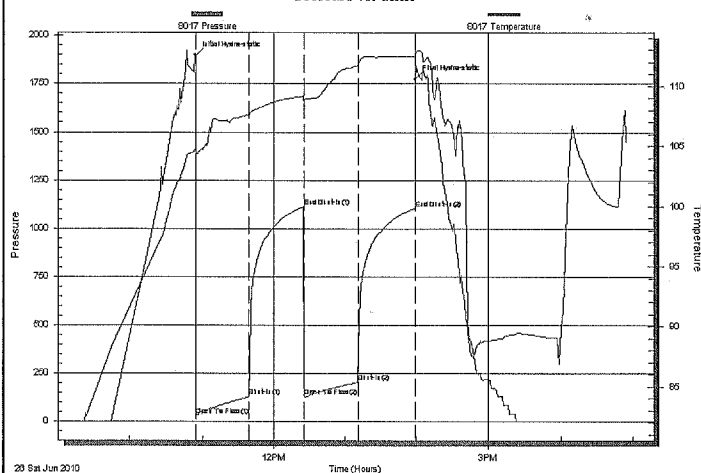
Inside

Press@RunDepth: 201.83 psig @ 3771.00 ft (KB)
Start Date: 2010.06.26 End Date: 2010.06.26
Start Time: 09:22:46 End Time: 16:55:10

Capacity: 8000.00 psig
Last Calib.: 2010.06.26
Time On Btm: 2010.06.26 @ 10:54:21
Time Off Btm: 2010.06.26 @ 13:58:50

TEST COMMENT: IFP-Strong blow BOBin 18 min
ISI-Weak blow back died out in 2 min
FFP-Strong blow BOB in 18 min
FSI-Weak surface blow back built to 1in

Pressure vs. Time



PRESSURE SUMMARY

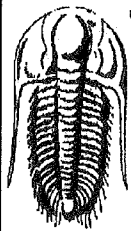
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1897.47	104.77	Initial Hydro-static
1	29.04	104.08	Open To Flow (1)
46	126.73	107.59	Shut-In(1)
91	1112.54	109.18	End Shut-In(1)
91	126.85	108.55	Open To Flow (2)
137	201.83	111.77	Shut-In(2)
185	1105.14	112.49	End Shut-In(2)
185	1776.81	112.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	HOCGM 45%O15%G40%M	0.61
43.00	MCO 30%M70%O	0.60
315.00	MCO 30%M 70%O	4.42
45.00	Free Oil	0.63

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co INC

Schwartzkopf trust #1-2

Po Box 372
Hays KS 67601

2-18s-18 Rush KS

Job Ticket: 37235

DST#: 2

ATTN: Ron Nelson

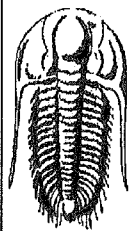
Test Start: 2010.06.26 @ 09:22:41

Tool Information

Drill Pipe:	Length: 3727.00 ft	Diameter: 3.80 inches	Volume: 52.28 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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: 54000.00 lb
			<u>Total Volume: 52.43 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3764.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	103.00 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			3744.00	
Shut In Tool	5.00			3749.00	
Hydraulic tool	5.00			3754.00	
Packer	5.00			3759.00	21.00 Bottom Of Top Packer
Packer	5.00			3764.00	
Stubb	1.00			3765.00	
Perforations	5.00			3770.00	
Change Over Sub	1.00			3771.00	
Recorder	0.00	8017	Inside	3771.00	
Recorder	0.00	8352	Outside	3771.00	
Blank Spacing	62.00			3833.00	
Change Over Sub	1.00			3834.00	
Perforations	9.00			3843.00	
Bullnose	3.00			3846.00	82.00 Bottom Packers & Anchor
Total Tool Length:	103.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co INC

Schwartzkopf trust #1-2

Po Box 372
Hays KS 67601

2-18s-18 Rush KS

Job Ticket: 37235 **DST#: 2**

ATTN: Ron Nelson

Test Start: 2010.06.26 @ 09:22:41

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 43.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.56 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	HOCGM 45%O15%G40%M	0.610
43.00	MCO 30%M70%O	0.603
315.00	MCO 30%M70%O	4.419
45.00	Free Oil	0.631

Total Length: 466.00 ft

Total Volume: 6.263 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

