

**DRILL STEM TEST REPORT**

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

P O Box 372  
Hays Ks 67601

**ORIGINAL**

ATTN: Ron Nelson

**19-6s-19w Rooks Ks**

**Buss #1-19**

Start Date: 2003.05.09 @ 17:23:42

End Date: 2003.05.10 @ 00:21:11

Job Ticket #: 17152                      DST #: 1

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SEP 11 2003  
KCC WICHITA

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Downing-Nelson Oil Co Inc

Buss #1-19

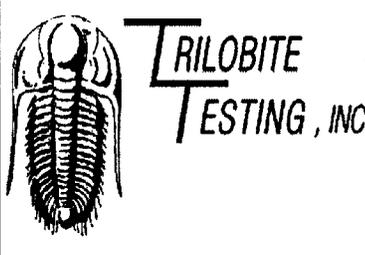
19-6s-19w Rooks Ks

DST # 1

Toronto

2003.05.09

99414



# DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc  
 P O Box 372  
 Hays Ks 67601  
 ATTN: Ron Nelson

**Buss #1-19**  
**19-6s-19w Rooks Ks**  
 Job Ticket: 17152      DST#: 1  
 Test Start: 2003.05.09 @ 17:23:42

**GENERAL INFORMATION:**

Formation: **Toronto** (LWS)  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 19:28:41  
 Time Test Ended: 00:21:11  
 Interval: **3309.00 ft (KB) To 3350.00 ft (KB) (TVD)**  
 Total Depth: 3350.00 ft (KB) (TVD)  
 Hole Diameter: 7.85 inches Hole Condition: Poor

Test Type: Conventional Bottom Hole  
 Tester: Ray Schwager  
 Unit No: 16  
 Reference Elevations: 2099.00 ft (KB)  
 2090.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 6668**

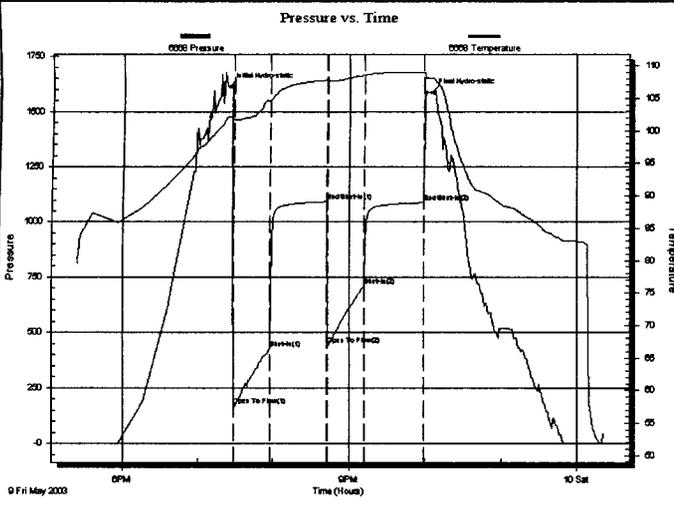
Inside

Press@RunDepth: 712.49 psig @ 3310.01 ft (KB)  
 Start Date: 2003.05.09      End Date: 2003.05.10  
 Start Time: 17:23:42      End Time: 00:21:11

Capacity: 7000.00 psig  
 Last Calib.: 2003.05.10  
 Time On Btrm: 2003.05.09 @ 19:24:41  
 Time Off Btrm: 2003.05.09 @ 22:04:41

**TEST COMMENT:** FFP-strg bl in 2 min  
 FFP-strg bl in 2 min  
 Times 30-45-30-45  
 no bl on shut-in

**ORIGINAL**



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1610.80	102.15	Initial Hydro-static
4	171.23	101.73	Open To Flow (1)
33	425.78	104.66	Shut-In(1)
78	1091.66	107.77	End Shut-In(1)
79	444.26	107.67	Open To Flow (2)
108	712.49	108.55	Shut-In(2)
155	1087.96	108.99	End Shut-In(2)
160	1584.02	108.09	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
775.00	SOCW 2%oil 98%w ater	10.87
750.00	Water RW .21@59F	10.52

**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

**Buss #1-19**

P O Box 372  
Hays Ks 67601

**19-6s-19w Rooks Ks**

Job Ticket: 17152

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2003.05.09 @ 17:23:42

### Tool Information

Drill Pipe:	Length: 3318.00 ft	Diameter: 3.80 inches	Volume: 46.54 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 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: 50000.00 lb
		<b>Total Volume:</b>	<b>46.54 bbl</b>	Tool Chased 2.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3309.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.02 ft			
Tool Length:	62.02 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			3289.00	
Shut In Tool	5.00			3294.00	
Hydraulic tool	5.00			3299.00	
Packer	5.00			3304.00	21.00 Bottom Of Top Packer
Packer	5.00			3309.00	
Stubb	1.00			3310.00	
Recorder	0.01	6668	Inside	3310.01	
Perforations	37.00			3347.01	
Recorder	0.01	11085	Outside	3347.02	
Bullnose	3.00			3350.02	41.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>62.02</b>				

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**TRILOBITE TESTING, INC.**

### DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dow ning-Nelson Oil Co Inc

**Buss #1-19**

P O Box 372  
Hays Ks 67601

**19-6s-19w Rooks Ks**

Job Ticket: 17152

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2003.05.09 @ 17:23:42

#### 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:

45000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
775.00	SOCW 2%oil 98%w ater	10.871
750.00	Water RW .21@59F	10.521

Total Length: 1525.00 ft      Total Volume: 21.392 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6668

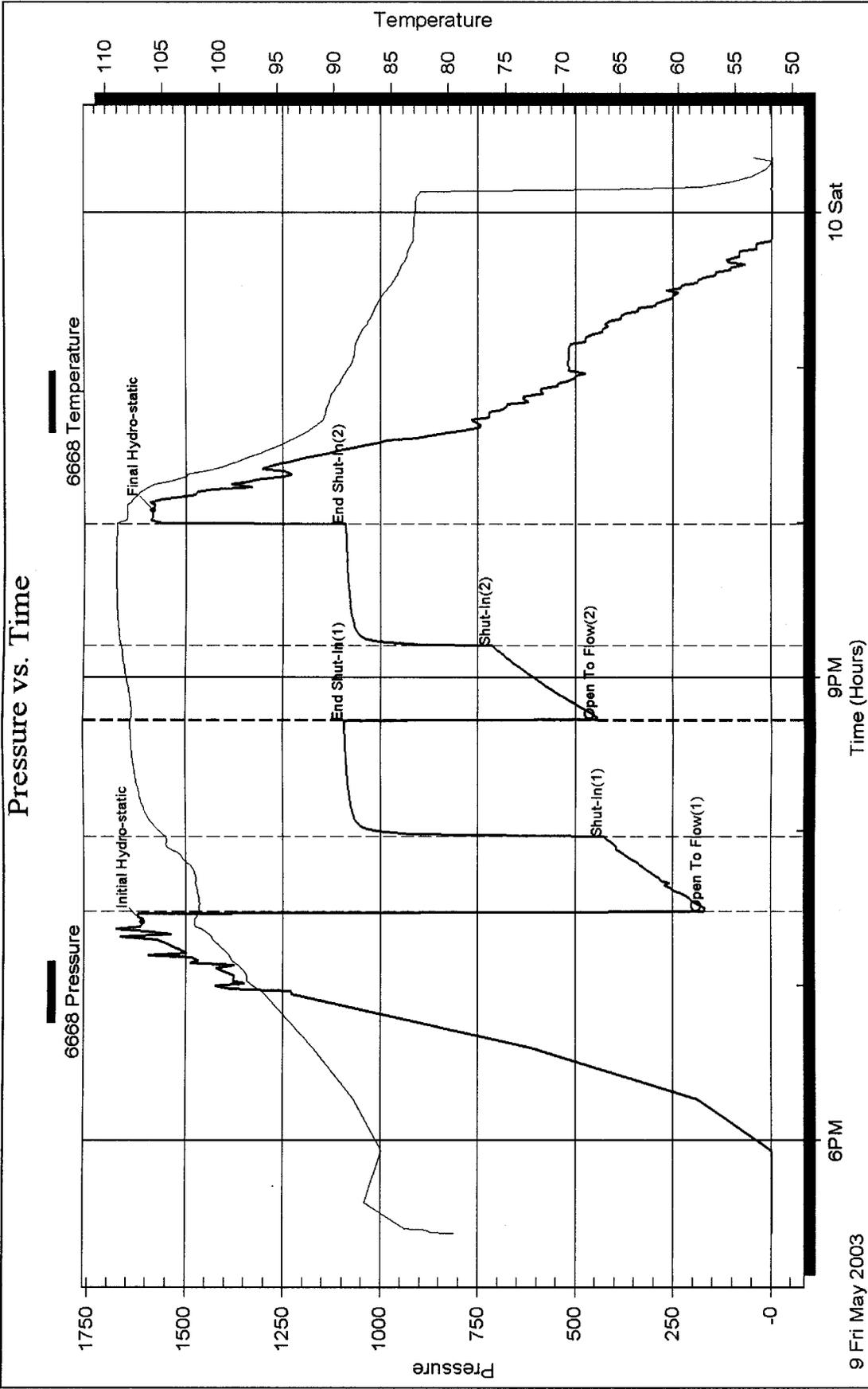
Inside

Downing-Nelson Oil Co Inc

19-6s-19w Rooks Ks

DST Test Number: 1

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

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**DRILL STEM TEST REPORT**

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

P O Box 372  
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ATTN: Ron Nelson

**19-6s-19w Rooks Ks**

**Buss #1-19**

Start Date: 2003.05.10 @ 23:10:09

End Date: 2003.05.11 @ 03:28:08

Job Ticket #: 17153                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

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# DRILL STEM TEST REPORT

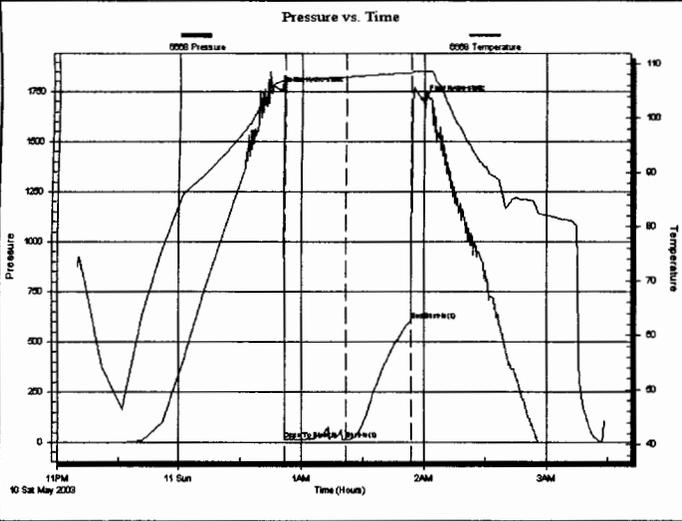
Dow ning-Nelson Oil Co Inc	Buss #1-19
P O Box 372 Hays Ks 67601	<b>19-6s-19w Rooks Ks</b>
ATTN: Ron Nelson	Job Ticket: 17153      DST#: 2
	Test Start: 2003.05.10 @ 23:10:09

## GENERAL INFORMATION:

<b>Formation:</b> Granite Wash <b>Deviated:</b> No Whipstock: ft (KB) <b>Time Tool Opened:</b> 00:51:38 <b>Time Test Ended:</b> 03:28:08  <b>Interval:</b> 3571.00 ft (KB) To 3610.00 ft (KB) (TVD) <b>Total Depth:</b> 3610.00 ft (KB) (TVD) <b>Hole Diameter:</b> 7.85 inches <b>Hole Condition:</b> Poor	<b>Test Type:</b> Conventional Bottom Hole <b>Tester:</b> Ray Schwager <b>Unit No:</b> 16  <b>Reference Elevations:</b> 2099.00 ft (KB) 2090.00 ft (CF) <b>KB to GR/CF:</b> 9.00 ft
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<b>Serial #: 6668</b> <b>Inside</b> <b>Press@RunDepth:</b> 16.76 psig @ 3572.01 ft (KB) <b>Start Date:</b> 2003.05.10 <b>End Date:</b> 2003.05.11 <b>Start Time:</b> 23:10:09 <b>End Time:</b> 03:28:08	<b>Capacity:</b> 7000.00 psig <b>Last Calib.:</b> 2003.05.11 <b>Time On Btm:</b> 2003.05.11 @ 00:49:08 <b>Time Off Btm:</b> 2003.05.11 @ 01:59:08
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**TEST COMMENT:** IFP-w k bl 1/4" died in 25 min  
 Times 30-30-pulled tool



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1755.65	106.69	Initial Hydro-static
3	15.42	106.79	Open To Flow (1)
33	16.76	107.58	Shut-in(1)
65	608.05	108.32	End Shut-in(1)
70	1710.75	108.58	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
2.00	mud	0.03

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



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TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Dow ning-Nelson Oil Co Inc

**Buss #1-19**

P O Box 372  
Hays Ks 67601

**19-6s-19w Rooks Ks**

Job Ticket: 17153

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2003.05.10 @ 23:10:09

**Tool Information**

Drill Pipe:	Length: 3568.00 ft	Diameter: 3.80 inches	Volume: 50.05 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 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: 50000.00 lb
			<u>Total Volume: 50.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3571.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	39.02 ft			
Tool Length:	60.02 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			3551.00	
Shut In Tool	5.00			3556.00	
Hydraulic tool	5.00			3561.00	
Packer	5.00			3566.00	21.00 Bottom Of Top Packer
Packer	5.00			3571.00	
Stubb	1.00			3572.00	
Recorder	0.01	6668	Inside	3572.01	
Perforations	35.00			3607.01	
Recorder	0.01	11085	Outside	3607.02	
Bullnose	3.00			3610.02	39.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>60.02</b>				



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### FLUID SUMMARY

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**19-6s-19w Rooks Ks**

Job Ticket: 17153

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2003.05.10 @ 23:10:09

#### 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: 57.00 sec/qt	Cushion Volume: bbl		
Water Loss: 5.58 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

#### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	mud	0.028

Total Length: 2.00 ft      Total Volume: 0.028 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

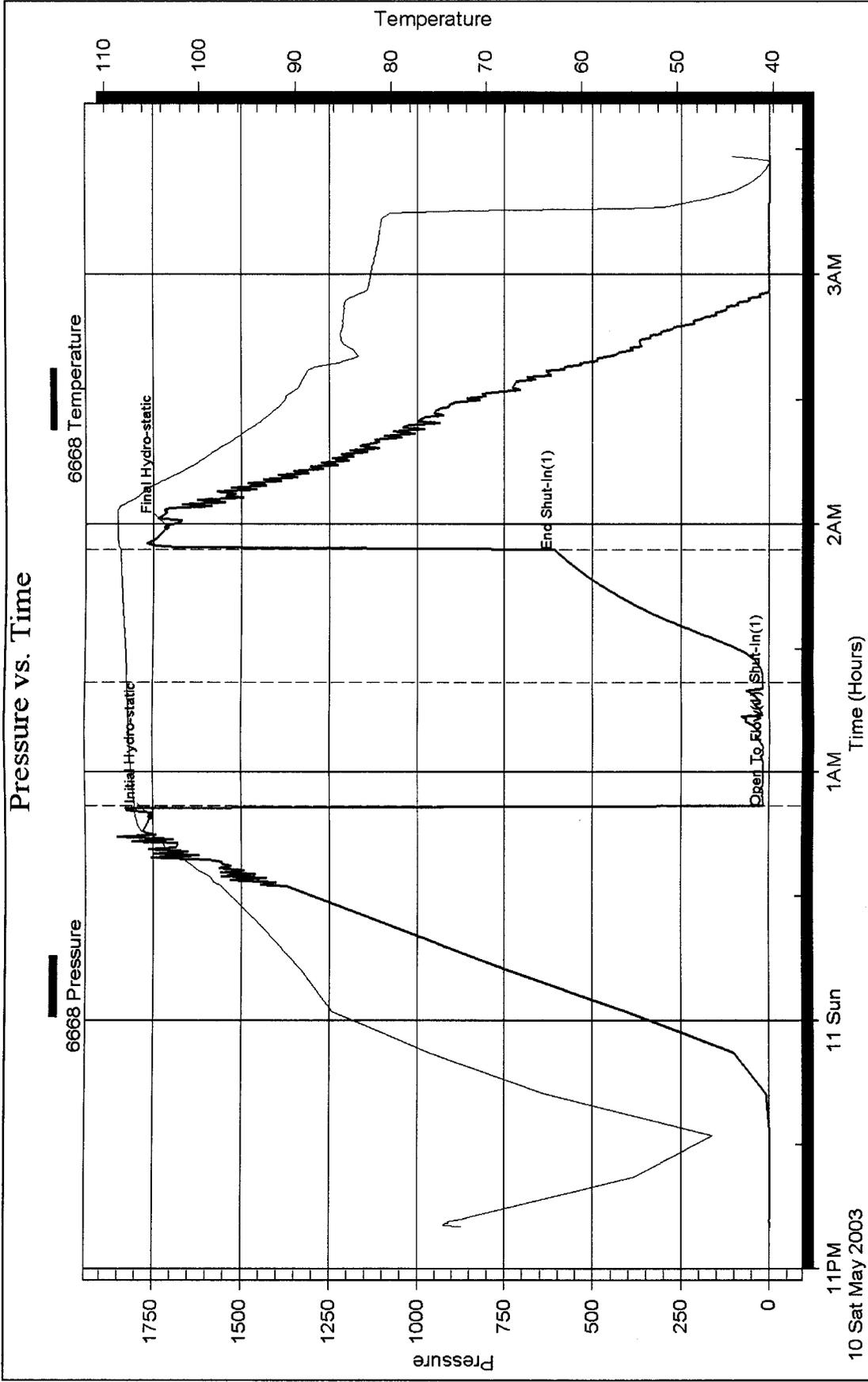
Serial #: 6668

Inside

Dow nung-Nelson Oil Co Inc

19-6s-19w Rooks Ks

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 17153

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