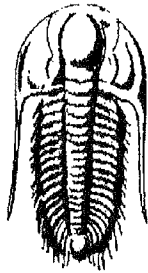


15-051-25469

23-14s-16w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson-Al Downing

23-14s-16w-Ellis

Steele #1-23

Start Date: 2005.11.19 @ 07:27:15

End Date: 2005.11.19 @ 14:18:15

Job Ticket #: 23656 DST #: 1

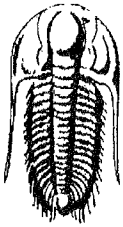
15-051-25469-00-00

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Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23656

DST#: 1

ATTN: Ron Nelson-AI Dow ning7601

Test Start: 2005.11.19 @ 07:27:15

GENERAL INFORMATION:

Formation: **LKC**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 09:29:15

Time Test Ended: 14:18:15

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **32**

Interval: **3099.00 ft (KB) To 3158.00 ft (KB) (TVD)**

Total Depth: **3158.00 ft (KB) (TVD)**

Hole Diameter: **7.80 inches** Hole Condition: **Good**

Reference Elevations: **1884.00 ft (KB)**

1876.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 6741

Inside

Press@RunDepth: **59.42 psig @ 3103.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.11.19**

End Date: **2005.11.19**

Last Calib.: **2005.11.19**

Start Time: **07:27:17**

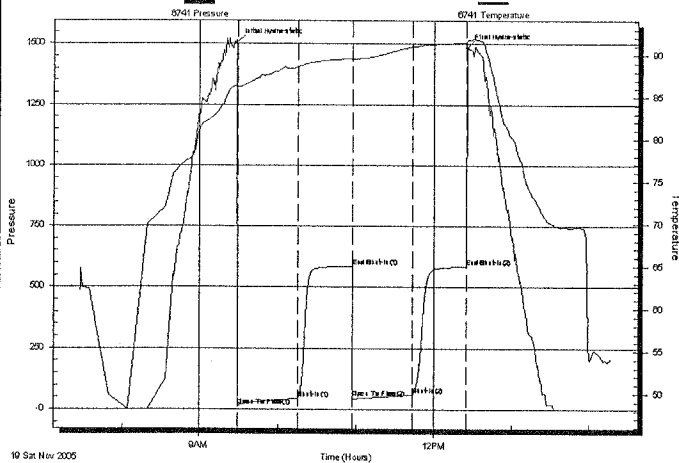
End Time: **14:18:15**

Time On Btm: **2005.11.19 @ 09:29:00**

Time Off Btm: **2005.11.19 @ 12:25:30**

TEST COMMENT: IFP-Fair Blow ,Built to 5-1/2"
IS-Dead
FFP-Weak Blow ,Built to 4"
FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

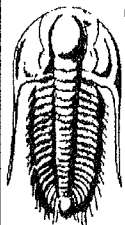
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1505.73	86.49	Initial Hydro-static
1	12.09	86.16	Open To Flow (1)
46	42.64	88.62	Shut-In(1)
88	585.91	89.60	End Shut-In(1)
89	47.96	89.37	Open To Flow (2)
135	59.42	91.00	Shut-In(2)
176	584.81	91.53	End Shut-In(2)
177	1483.66	91.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Muddy Water-10%W-90%M	1.12

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23656

DST#: 1

ATTN: Ron Nelson-AI Dow ning7601

Test Start: 2005.11.19 @ 07:27:15

Tool Information

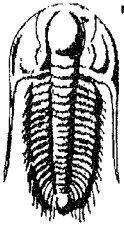
Drill Pipe:	Length: 3081.00 ft	Diameter: 3.80 inches	Volume: 43.22 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 42000.00 lb
			<u>Total Volume: 43.37 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3099.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	59.00 ft			
Tool Length:	80.00 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			3079.00	
Shut In Tool	5.00			3084.00	
Hydraulic tool	5.00			3089.00	
Packer	5.00			3094.00	21.00 Bottom Of Top Packer
Packer	5.00			3099.00	
Stubb	1.00			3100.00	
Perforations	2.00			3102.00	
Change Over Sub	1.00			3103.00	
Recorder	0.00	6741	Inside	3103.00	
Blank Spacing	31.00			3134.00	
Change Over Sub	1.00			3135.00	
Perforations	20.00			3155.00	
Recorder	0.00	13221	Outside	3155.00	
Bullnose	3.00			3158.00	59.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23656

DST#: 1

ATTN: Ron Nelson-AI Downing7601

Test Start: 2005.11.19 @ 07:27:15

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:

21000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	Muddy Water-10%W-90%M	1.120

Total Length: 100.00 ft Total Volume: 1.120 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 1

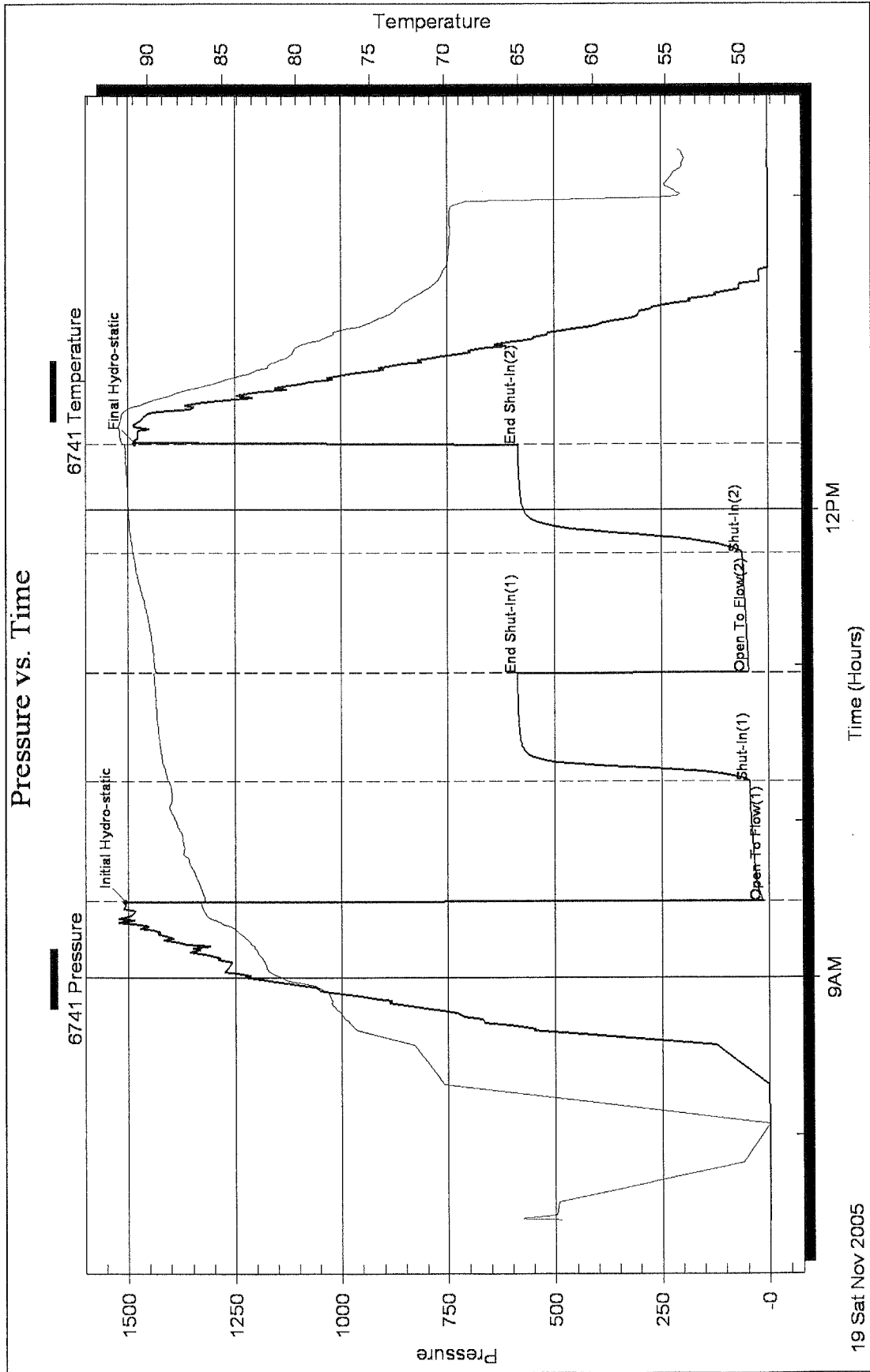
23-14s-16w-Ellis

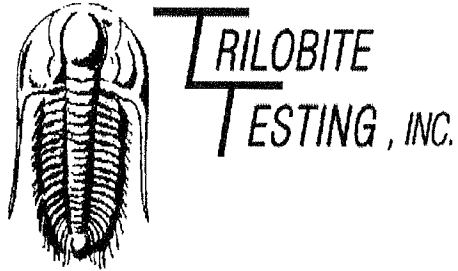
Dow nung - Nelson Oil Co.

Inside

Serial #: 6741

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson-AI Downing

23-14s-16w-Ellis

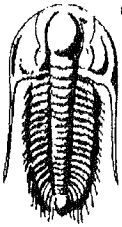
Steele #1-23

Start Date: 2005.11.20 @ 09:44:26

End Date: 2005.11.20 @ 17:10:56

Job Ticket #: 23657 DST #: 2

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23657

DST#: 2

ATTN: Ron Nelson-AI Dow ning7601

Test Start: 2005.11.20 @ 09:44:26

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 11:21:11

Time Test Ended: 17:10:56

Test Type: **Conventional Bottom Hole**

Tester: **Jason McLemore**

Unit No: **32**

Interval: **3340.00 ft (KB) To 3419.00 ft (KB) (TVD)**

Total Depth: **3419.00 ft (KB) (TVD)**

Hole Diameter: **7.80 inches** Hole Condition: **Good**

Reference Elevations: **1884.00 ft (KB)**

1876.00 ft (CF)

KB to GR/CF: **8.00 ft**

Serial #: 6741

Inside

Press@RunDepth: **104.07 psig @ 3344.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.11.20** End Date: **2005.11.20**

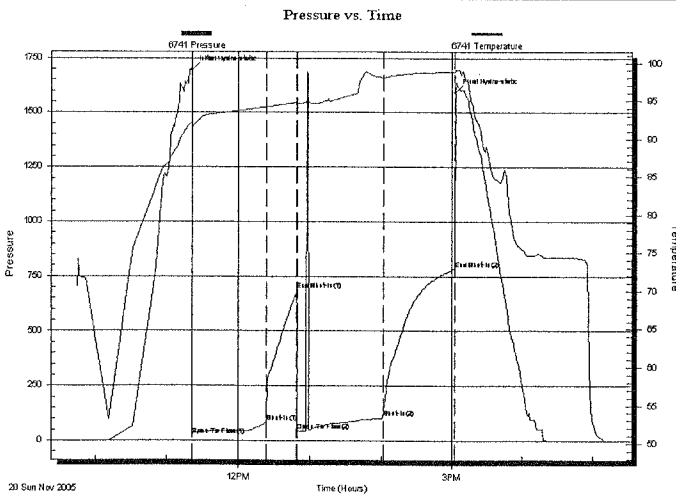
Last Calib.: **2005.11.20**

Start Time: **09:44:28** End Time: **17:10:56**

Time On Btm: **2005.11.20 @ 11:20:56**

Time Off Btm: **2005.11.20 @ 15:02:56**

TEST COMMENT: IFP-Built 1" per Min., First 4 ", Plugging Action, Built to 5-1/2"
IS-Dead
FFP-Weak Surface Blow, Flush Tool, Built to BOB in 17 Min.
FSI-Weak Blow back After 20 Min, Built to 1/8", Dead in 15 Min.



PRESSURE SUMMARY

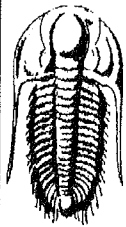
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.78	92.17	Initial Hydro-static
1	22.08	91.74	Open To Flow (1)
63	83.81	94.19	Shut-In(1)
88	685.49	94.76	End Shut-In(1)
89	44.54	94.64	Open To Flow (2)
161	104.07	98.10	Shut-In(2)
222	785.73	98.77	End Shut-In(2)
222	1594.36	98.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	HOCM-30%O-70%M	1.82
60.00	Free Oil	0.84

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23657

DST#: 2

ATTN: Ron Nelson-AI Dow ning7601

Test Start: 2005.11.20 @ 09:44:26

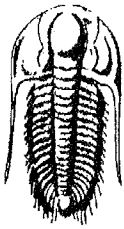
Tool Information

Drill Pipe:	Length: 3298.00 ft	Diameter: 3.80 inches	Volume: 46.26 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: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 42000.00 lb
			<u>Total Volume: 46.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3340.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	79.00 ft			
Tool Length:	100.00 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			3320.00	
Shut In Tool	5.00			3325.00	
Hydraulic tool	5.00			3330.00	
Packer	5.00			3335.00	21.00 Bottom Of Top Packer
Packer	5.00			3340.00	
Stubb	1.00			3341.00	
Perforations	2.00			3343.00	
Change Over Sub	1.00			3344.00	
Recorder	0.00	6741	Inside	3344.00	
Blank Spacing	63.00			3407.00	
Change Over Sub	1.00			3408.00	
Perforations	8.00			3416.00	
Recorder	0.00	13221	Outside	3416.00	
Bullnose	3.00			3419.00	79.00 Bottom Packers & Anchor

Total Tool Length: 100.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing - Nelson Oil Co.

Steele #1-23

PO Box 372
Hays KS 67601

23-14s-16w-Ellis

Job Ticket: 23657

DST#: 2

ATTN: Ron Nelson-AI Downing7601

Test Start: 2005.11.20 @ 09:44:26

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 29 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.38 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 2000.00 ppm		
Filter Cake: 2.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
150.00	HOCM-30%O-70%M	1.822
60.00	Free Oil	0.842

Total Length: 210.00 ft Total Volume: 2.664 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 60' GIP

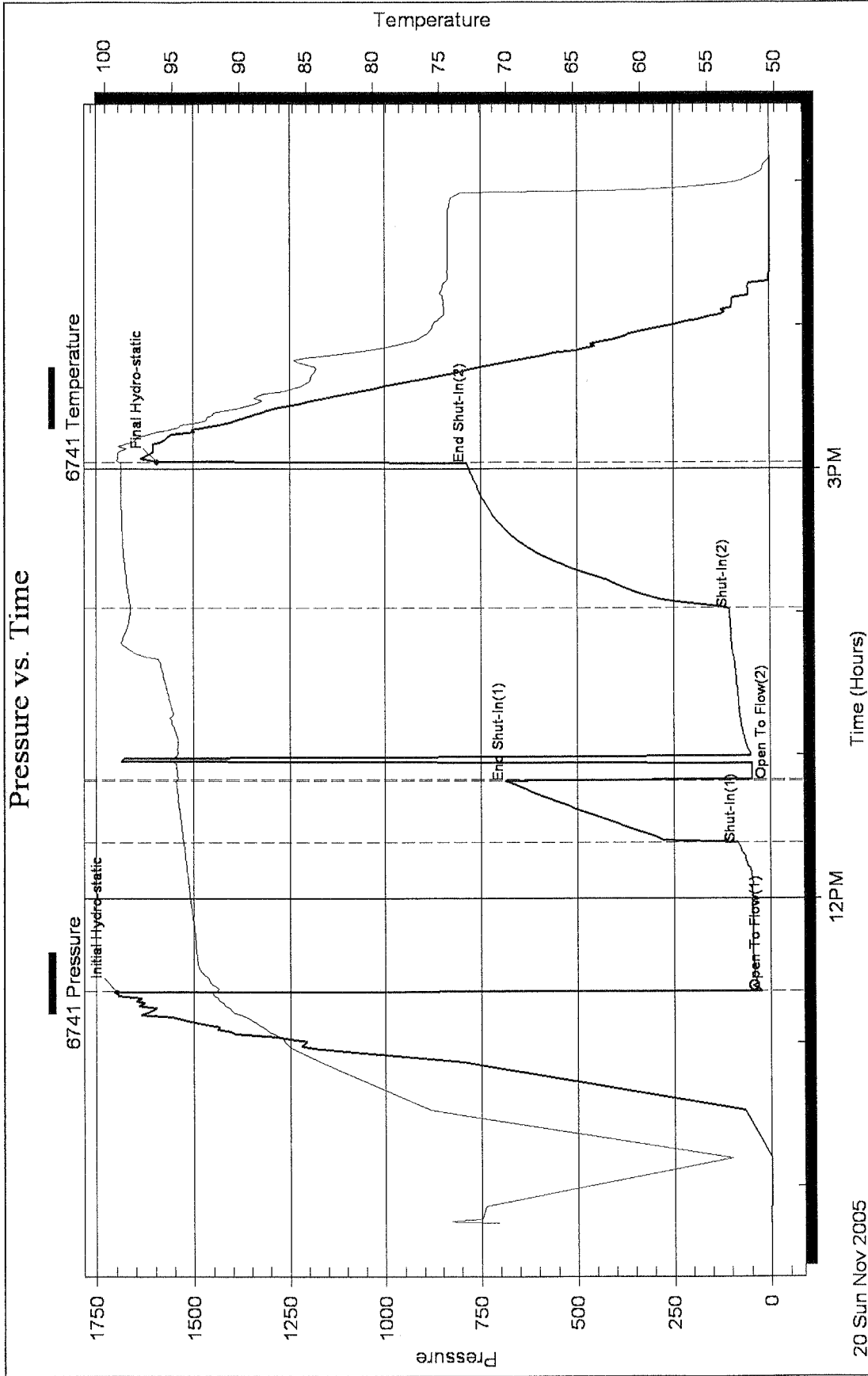
Serial #: 6741

Inside

Downing - Nelson Oil Co.

23-14s-16w -Ellis

DST Test Number: 2



20 Sun Nov 2005

Trilobite Testing, Inc

Ref. No: 23657

Printed: 2005.12.09 @ 09:50:14 Page 5