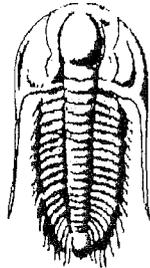


7-135-21w



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Al Downing

7-13-21-Trego-Ks

Morton # 1-7

Start Date: 2005.06.21 @ 12:05:43

End Date: 2005.06.21 @ 17:28:28

Job Ticket #: 21661 DST #: 1

15-195-22296-00-00

SW SE NW

2500 FNL 950 FEL

RECEIVED
AUG 15 2005
KCC WICHITA

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing/Nelson Oil Company

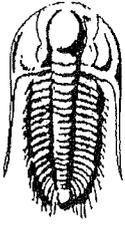
Morton # 1-7

7-13-21-Trego-Ks

DST # 1

Toronto/A-D

2005.06.21



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21661

DST#: 1

ATTN: Al Dow ning

Test Start: 2005.06.21 @ 12:05:43

GENERAL INFORMATION:

Formation: **Toronto/A-D**

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

Time Tool Opened: 13:52:43

Time Test Ended: 17:28:28

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3555.00 ft (KB) To 3673.00 ft (KB) (TVD)**

Reference Elevations: **2260.00 ft (KB)**

Total Depth: **3673.00 ft (KB) (TVD)**

2252.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Good**

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

Serial #: 6672

Inside

Press@RunDepth: **38.90 psig @ 3558.00 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2005.06.21** End Date: **2005.06.21**

Last Calib.: **2005.06.21**

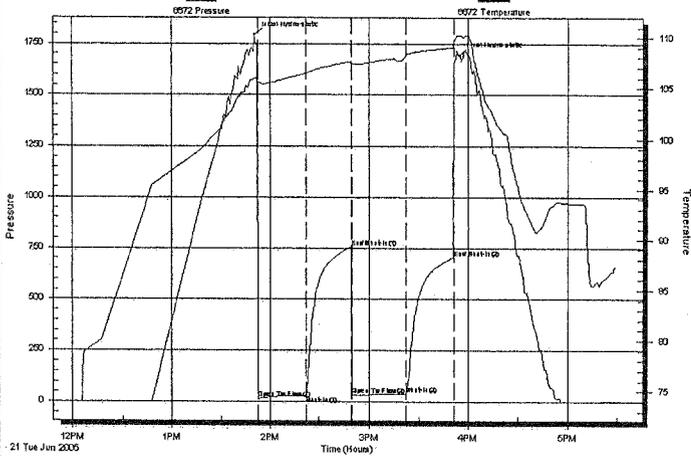
Start Time: **12:05:44** End Time: **17:28:28**

Time On Btm: **2005.06.21 @ 13:50:43**

Time Off Btm: **2005.06.21 @ 15:54:28**

TEST COMMENT: IF-Weak steady surface blow
FF-Weak steady surface blow
Times-30-30-30-30

Pressure vs. Time



PRESSURE SUMMARY

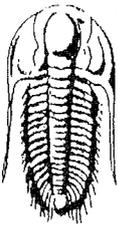
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1791.10	105.98	Initial Hydro-static
2	12.73	105.05	Open To Flow (1)
31	29.69	106.45	Shut-In(1)
59	755.01	107.62	End Shut-In(1)
59	32.09	107.36	Open To Flow (2)
92	38.90	108.18	Shut-In(2)
121	703.78	109.01	End Shut-In(2)
124	1693.97	110.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	DM	0.43

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21661

DST#: 1

ATTN: Al Downing

Test Start: 2005.06.21 @ 12:05:43

Tool Information

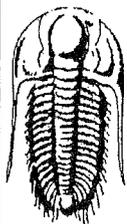
Drill Pipe:	Length: 3511.00 ft	Diameter: 3.80 inches	Volume: 49.25 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 49.40 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3555.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	118.00 ft			
Tool Length:	139.00 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			3535.00	
Shut In Tool	5.00			3540.00	
Hydraulic tool	5.00			3545.00	
Packer	5.00			3550.00	21.00 Bottom Of Top Packer
Packer	5.00			3555.00	
Stubb	1.00			3556.00	
Perforations	1.00			3557.00	
Change Over Sub	1.00			3558.00	
Recorder	0.00	6672	Inside	3558.00	
Drill Pipe	93.00			3651.00	
Change Over Sub	1.00			3652.00	
Recorder	0.00	13254	Outside	3652.00	
Perforations	18.00			3670.00	
Bullnose	3.00			3673.00	118.00 Bottom Packers & Anchor

Total Tool Length: 139.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21661

DST#: 1

ATTN: Al Dow ning

Test Start: 2005.06.21 @ 12:05:43

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	DM	0.428

Total Length: 50.00 ft Total Volume: 0.428 bbl

Num Fluid Samples: 0

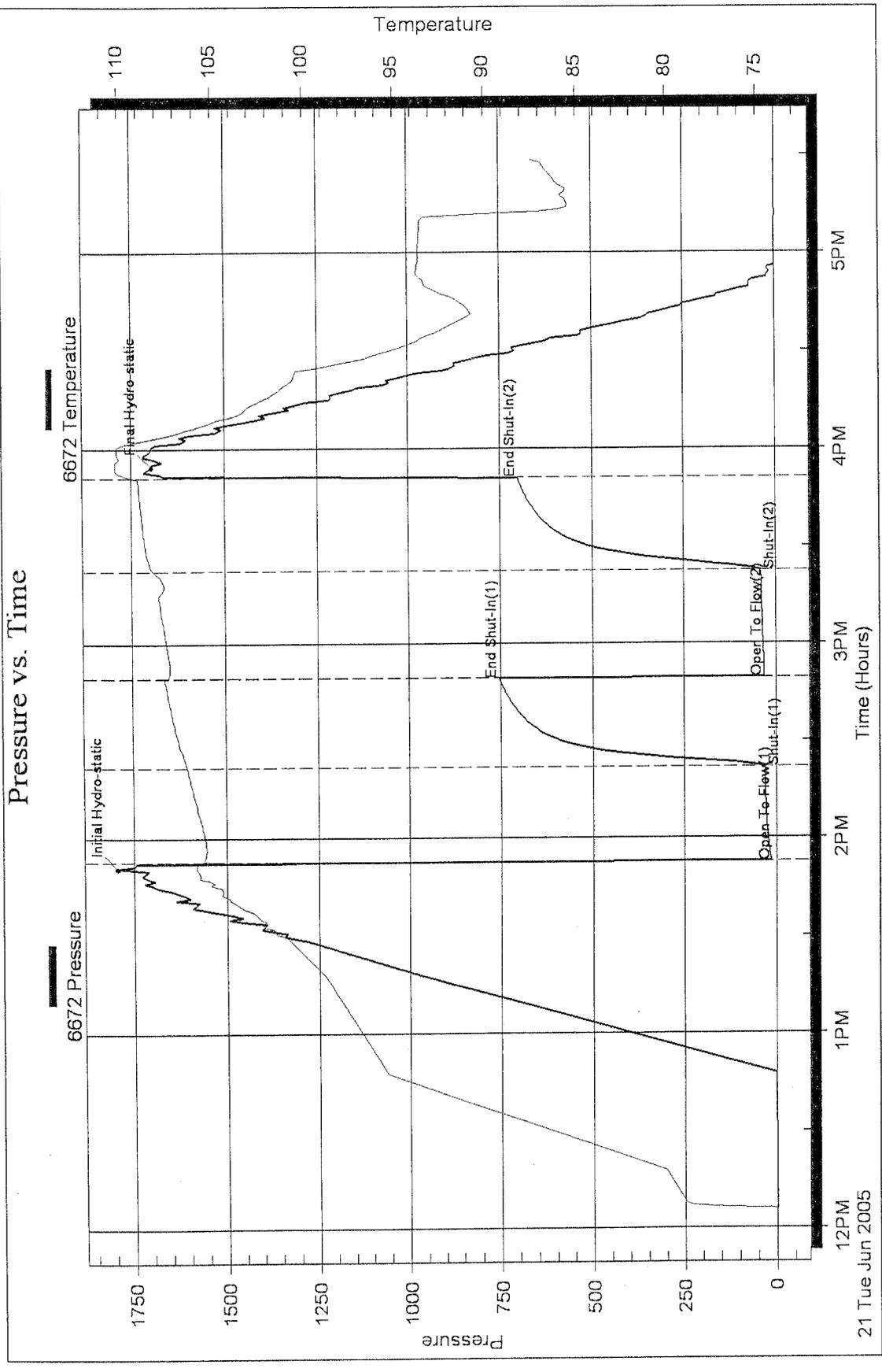
Num Gas Bombs: 0

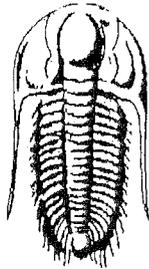
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Al Downing

7-13-21-Trego-Ks

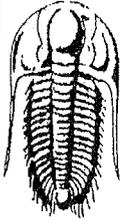
Morton # 1-7

Start Date: 2005.06.22 @ 04:27:26

End Date: 2005.06.22 @ 08:39:26

Job Ticket #: 21662 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 Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21662

DST#: 2

ATTN: Al Dow ning

Test Start: 2005.06.22 @ 04:27:26

GENERAL INFORMATION:

Formation: **I-J LKC**

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

Time Tool Opened: 06:14:56

Time Test Ended: 08:39:26

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3739.00 ft (KB) To 3785.00 ft (KB) (TVD)**

Total Depth: 3785.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2260.00 ft (KB)

2252.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6672

Inside

Press@RunDepth: 30.93 psig @ 3742.00 ft (KB)

Start Date: 2005.06.22

End Date:

2005.06.22

Capacity:

7000.00 psig

Last Calib.:

2005.06.22

Start Time: 04:27:27

End Time:

08:39:26

Time On Btm:

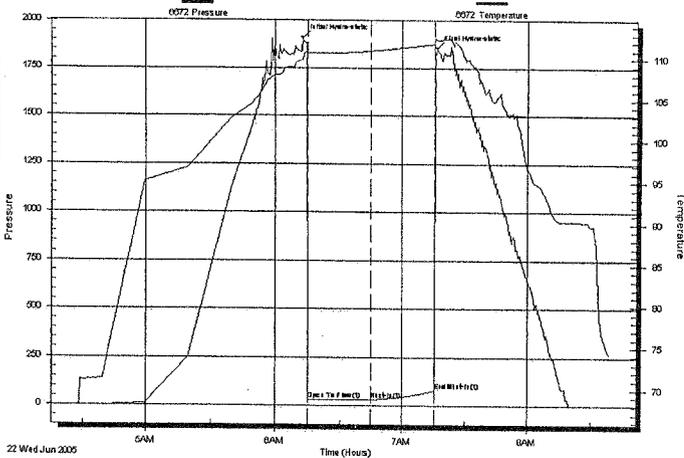
2005.06.22 @ 06:12:41

Time Off Btm:

2005.06.22 @ 07:16:41

TEST COMMENT: IF-Weak died in 10 min
Times-30-30-0-0

Pressure vs. Time



PRESSURE SUMMARY

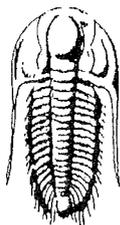
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1909.21	109.95	Initial Hydro-static
3	27.62	110.18	Open To Flow (1)
32	30.93	111.00	Shut-In(1)
63	78.24	111.87	End Shut-In(1)
64	1855.54	112.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DM	0.02

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21662

DST#: 2

ATTN: Al Dow ning

Test Start: 2005.06.22 @ 04:27:26

Tool Information

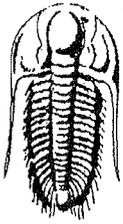
Drill Pipe:	Length: 3700.00 ft	Diameter: 3.80 inches	Volume: 51.90 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 52.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	3739.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	67.00 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			3719.00	
Shut In Tool	5.00			3724.00	
Hydraulic tool	5.00			3729.00	
Packer	5.00			3734.00	21.00 Bottom Of Top Packer
Packer	5.00			3739.00	
Stubb	1.00			3740.00	
Perforations	1.00			3741.00	
Change Over Sub	1.00			3742.00	
Recorder	0.00	6672	Inside	3742.00	
Drill Pipe	31.00			3773.00	
Change Over Sub	1.00			3774.00	
Recorder	0.00	13254	Outside	3774.00	
Perforations	8.00			3782.00	
Bullnose	3.00			3785.00	46.00 Bottom Packers & Anchor

Total Tool Length: 67.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21662

DST#: 2

ATTN: Al Downing

Test Start: 2005.06.22 @ 04:27:26

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: 55.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.98 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	DM	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

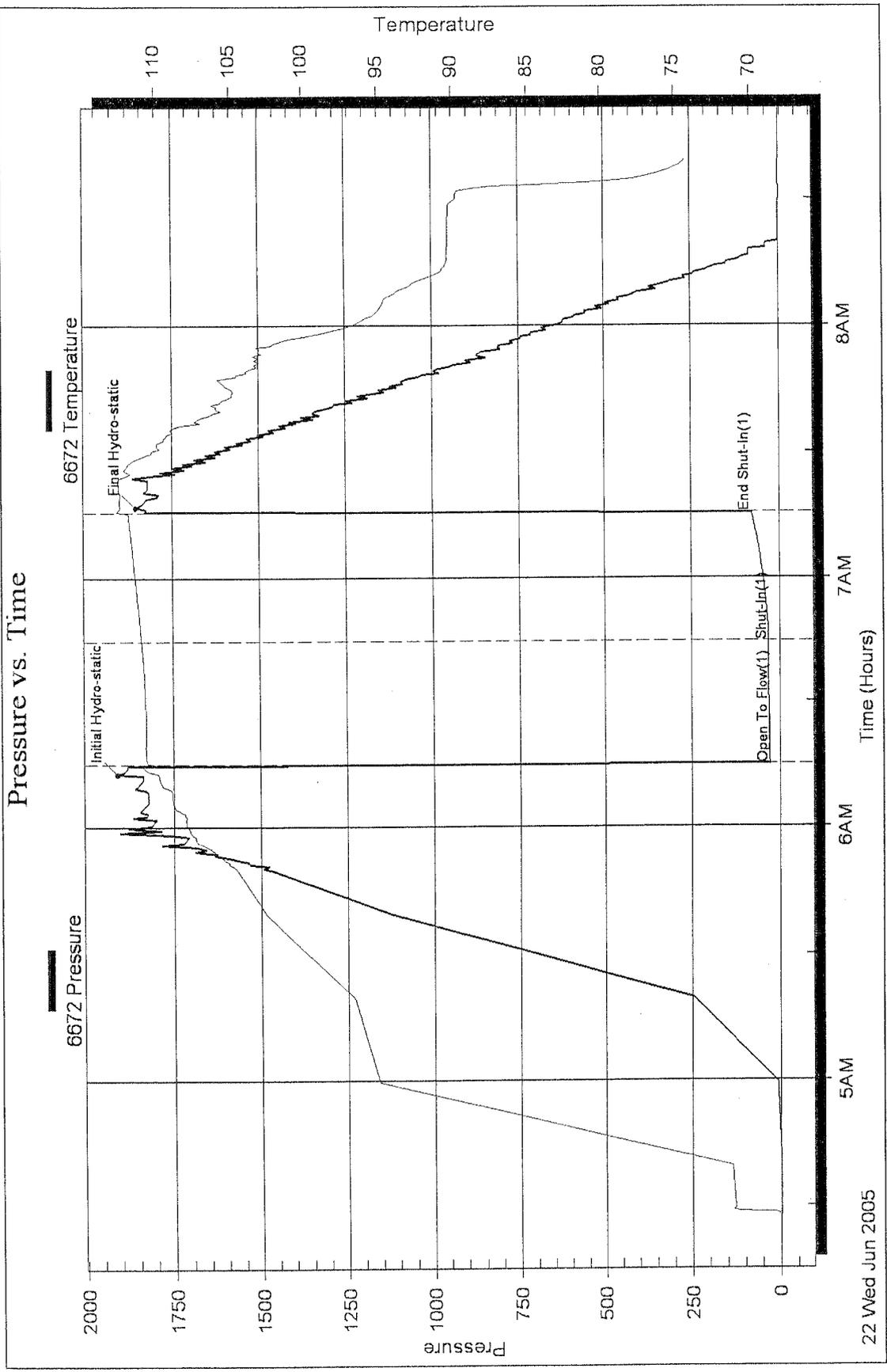
Num Gas Bombs: 0

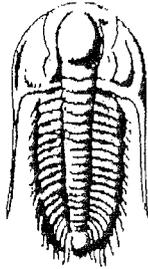
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Al Downing

7-13-21-Trego-Ks

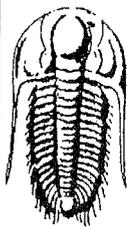
Morton # 1-7

Start Date: 2005.06.22 @ 23:18:29

End Date: 2005.06.23 @ 05:12:44

Job Ticket #: 21663 DST #: 3

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 Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21663

DST#: 3

ATTN: Al Dow ning

Test Start: 2005.06.22 @ 23:18:29

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:08:14

Time Test Ended: 05:12:44

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3924.00 ft (KB) To 3960.00 ft (KB) (TVD)**

Total Depth: 3960.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2260.00 ft (KB)

2252.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6672

Inside

Press@RunDepth: 23.63 psig @ 3925.00 ft (KB)

Start Date: 2005.06.22

End Date:

2005.06.23

Start Time: 23:18:30

End Time:

05:12:44

Capacity: 7000.00 psig

Last Calib.: 2005.06.23

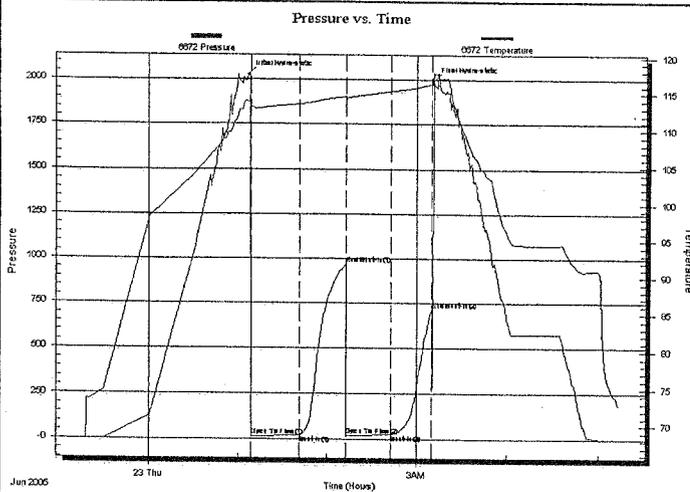
Time On Btm: 2005.06.23 @ 01:06:44

Time Off Btm: 2005.06.23 @ 03:10:59

TEST COMMENT: IF-Weak died in 10 min

FF No blow

Times-30-30-30-30



PRESSURE SUMMARY

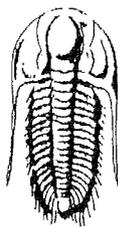
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2027.52	113.91	Initial Hydro-static
2	14.91	113.33	Open To Flow (1)
34	18.90	113.60	Shut-In(1)
66	965.90	114.65	End Shut-In(1)
66	20.52	114.15	Open To Flow (2)
96	23.63	115.34	Shut-In(2)
123	716.80	116.39	End Shut-In(2)
125	1997.24	117.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	DMw/oil spots	0.02

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing/Nelson Oil Company

Morton # 1-7

P O Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21663

DST#: 3

ATTN: Al Downing

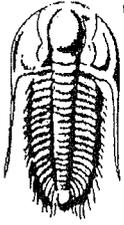
Test Start: 2005.06.22 @ 23:18:29

Tool Information

Drill Pipe:	Length: 3892.00 ft	Diameter: 3.80 inches	Volume: 54.59 bbl	Tool Weight: 2000.00 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 54.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3924.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	57.00 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			3904.00	
Shut In Tool	5.00			3909.00	
Hydraulic tool	5.00			3914.00	
Packer	5.00			3919.00	21.00 Bottom Of Top Packer
Packer	5.00			3924.00	
Stubb	1.00			3925.00	
Recorder	0.00	6672	Inside	3925.00	
Perforations	32.00			3957.00	
Recorder	0.00	13254	Outside	3957.00	
Bullnose	3.00			3960.00	36.00 Bottom Packers & Anchor
Total Tool Length:	57.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning/Nelson Oil Company

Morton # 1-7

P.O.Box 372
Hays Ks 67601

7-13-21-Trego-Ks

Job Ticket: 21663

DST#: 3

ATTN: Al Dow ning

Test Start: 2005.06.22 @ 23:18:29

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: 45.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	DM w/oil spots	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

