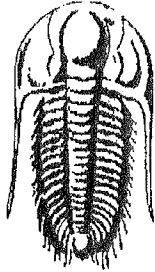


15-195-22476

36-14s-21w



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Al Downing

36 14 21 Trego KS

Milberger-Waggoner Unit #1-36

Start Date: 2007.07.29 @ 01:27:20

End Date: 2007.07.29 @ 08:17:20

Job Ticket #: 28325 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing Nelson Oil Co Inc

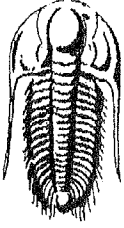
Milberger-Waggoner Unit #1-36

36 14 21 Trego KS

DST # 1

"H-I-J"

2007.07.29



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28325

DST#: 1

ATTN: Al Downing

Test Start: 2007.07.29 @ 01:27:20

GENERAL INFORMATION:

Formation: **"H-I-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:29:05

Time Test Ended: 08:17:20

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **3500.00 ft (KB) To 3586.00 ft (KB) (TVD)**

Total Depth: 3586.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2057.00 ft (KB)

2049.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6719

Inside

Press@RunDepth: 45.55 psig @ 3505.00 ft (KB)

Start Date: 2007.07.29 End Date: 2007.07.29

Start Time: 01:27:22 End Time: 08:17:20

Capacity: 7000.00 psig

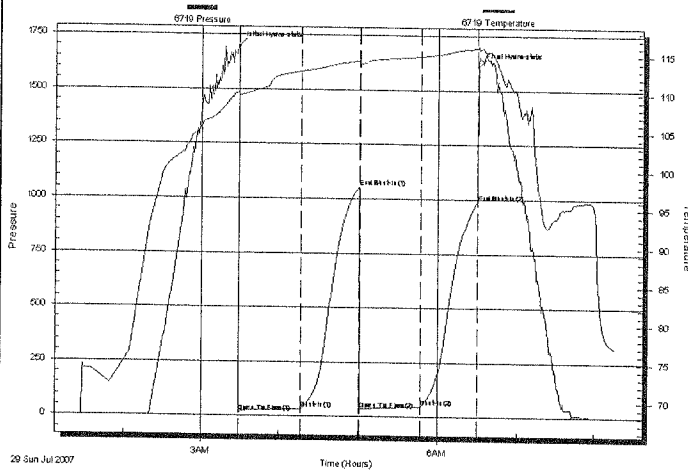
Last Calib.: 2007.07.29

Time On Btm: 2007.07.29 @ 03:28:50

Time Off Btm: 2007.07.29 @ 06:30:05

TEST COMMENT: IFP Good Blow BOB in 36 Min
ISI Dead
FFP Good Blow BOB in 14 Min
FSI Dead

Pressure vs. Time



PRESSURE SUMMARY

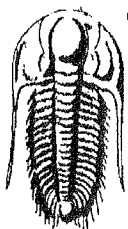
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.75	110.10	Initial Hydro-static
1	16.33	109.77	Open To Flow (1)
48	33.45	112.87	Shut-In(1)
92	1052.02	114.24	End Shut-In(1)
93	32.46	113.96	Open To Flow (2)
139	45.55	114.88	Shut-In(2)
181	986.85	116.00	End Shut-In(2)
182	1608.67	116.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	MCO 10%G 60%O 30%M	0.99
0.00	270 Gas In Pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28325

DST#: 1

ATTN: Al Downing

Test Start: 2007.07.29 @ 01:27:20

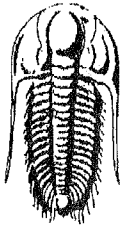
Tool Information

Drill Pipe:	Length: 3463.00 ft	Diameter: 3.80 inches	Volume: 48.58 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: 40000.00 lb
		Total Volume: 48.73 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3500.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	86.00 ft			
Tool Length:	107.00 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			3480.00	
Shut In Tool	5.00			3485.00	
Hydraulic tool	5.00			3490.00	
Packer	5.00			3495.00	21.00 Bottom Of Top Packer
Packer	5.00			3500.00	
Stubb	1.00			3501.00	
Perforations	3.00			3504.00	
Change Over Sub	1.00			3505.00	
Recorder	0.00	6719	Inside	3505.00	
Blank Spacing	62.00			3567.00	
Change Over Sub	1.00			3568.00	
Perforations	15.00			3583.00	
Recorder	0.00	13221	Outside	3583.00	
Bullnose	3.00			3586.00	86.00 Bottom Packers & Anchor

Total Tool Length: 107.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28325

DST#: 1

ATTN: Al Downing

Test Start: 2007.07.29 @ 01:27:20

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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	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 bbl
90.00	MCO 10%G 60%O 30%M	0.989
0.00	270 Gas In Pipe	0.000

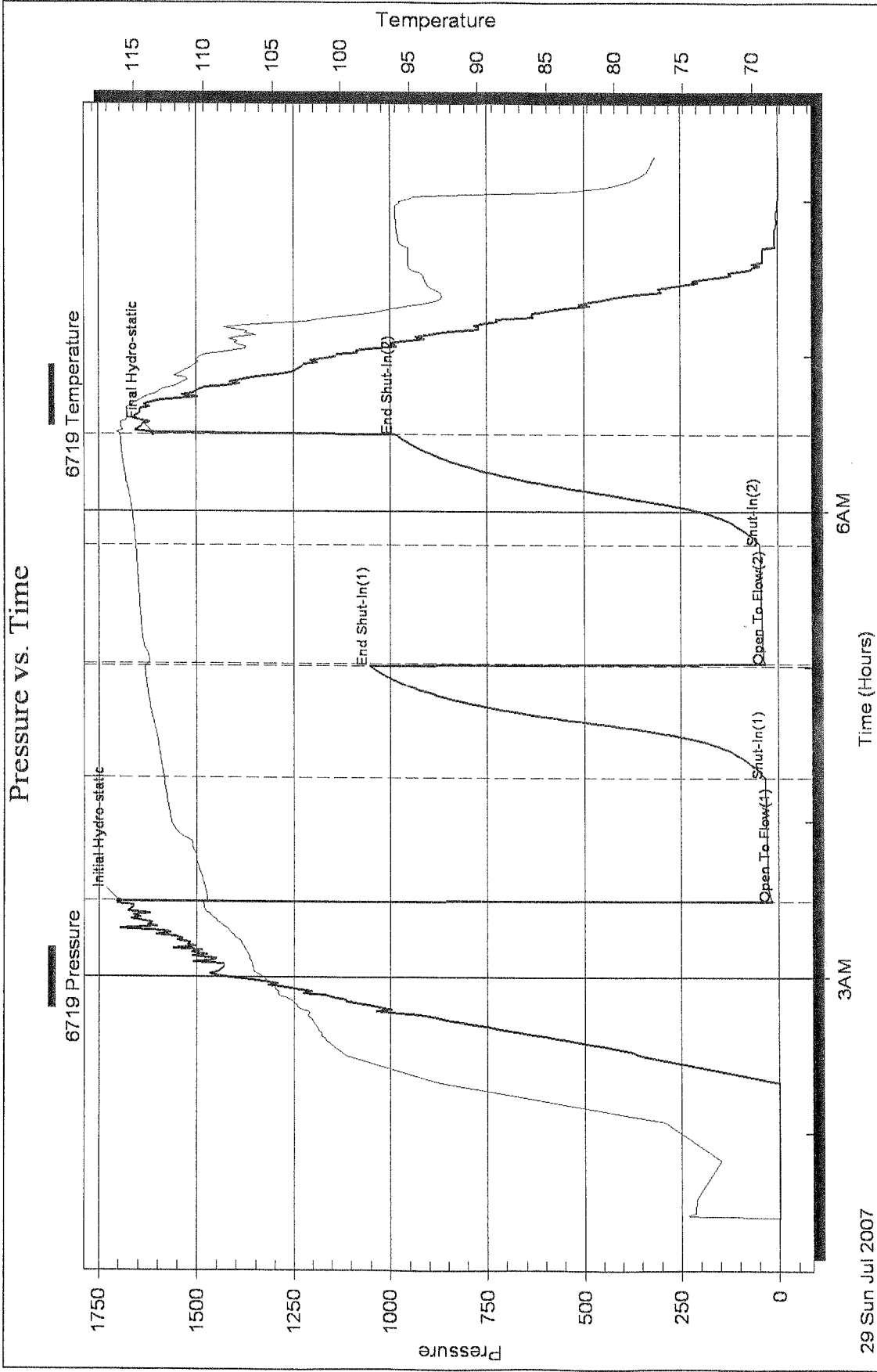
Total Length: 90.00 ft Total Volume: 0.989 bbl

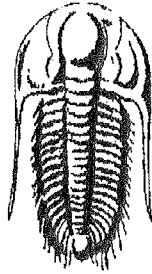
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Al Downing

36 14 21 Trego KS

Milberger-Waggoner Unit #1-36

Start Date: 2007.07.29 @ 22:40:45

End Date: 2007.07.30 @ 05:06:00

Job Ticket #: 28876 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing Nelson Oil Co Inc

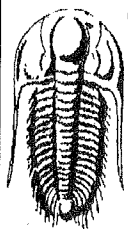
Milberger-Waggoner Unit #1-36

36 14 21 Trego KS

DST # 2

Marmaton

2007.07.29



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28876 **DST#: 2**

ATTN: Al Downing

Test Start: 2007.07.29 @ 22:40:45

GENERAL INFORMATION:

Formation: **Marmaton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:40:30
Time Test Ended: 05:06:00

Test Type: Conventional Bottom Hole
Tester: Jason McLemore
Unit No: 32

Interval: **3729.00 ft (KB) To 3760.00 ft (KB) (TVD)**
Total Depth: 3760.00 ft (KB) (TVD)
Hole Diameter: 7.80 inches Hole Condition: Good

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

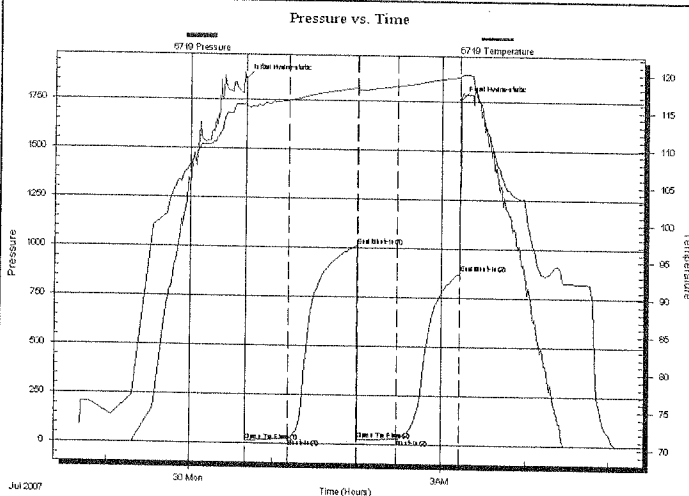
Serial #: 6719

Inside

Press@RunDepth: 29.62 psig @ 3733.00 ft (KB)
Start Date: 2007.07.29 End Date: 2007.07.30
Start Time: 22:40:47 End Time: 05:06:00

Capacity: 7000.00 psig
Last Calib.: 2007.07.30
Time On Btm: 2007.07.30 @ 00:40:15
Time Off Btm: 2007.07.30 @ 03:13:45

TEST COMMENT: IFP Weak Blow Built to 1 "
ISI Dead
FFP Weak Surface Blow
FSI Dead



PRESSURE SUMMARY

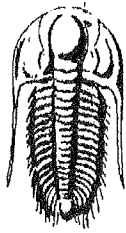
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1861.33	115.85	Initial Hydro-static
1	14.30	115.48	Open To Flow (1)
31	25.64	116.35	Shut-In(1)
80	1012.15	118.04	End Shut-In(1)
80	27.35	117.79	Open To Flow (2)
108	29.62	118.34	Shut-In(2)
153	877.59	119.58	End Shut-In(2)
154	1762.25	119.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Free Oil	0.07
15.00	OCM 20%O 80%M	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28876

DST#: 2

ATTN: Al Downing

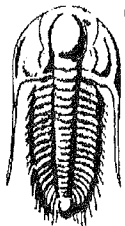
Test Start: 2007.07.29 @ 22:40:45

Tool Information

Drill Pipe:	Length: 3684.00 ft	Diameter: 3.80 inches	Volume: 51.68 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:	20000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	40000.00 lb
			<u>Total Volume: 51.83 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3729.00 ft			Final	36000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	31.00 ft				
Tool Length:	52.00 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			3709.00	
Shut In Tool	5.00			3714.00	
Hydraulic tool	5.00			3719.00	
Packer	5.00			3724.00	21.00 Bottom Of Top Packer
Packer	5.00			3729.00	
Stubb	1.00			3730.00	
Perforations	3.00			3733.00	
Recorder	0.00	6719	Inside	3733.00	
Perforations	24.00			3757.00	
Recorder	0.00	13221	Outside	3757.00	
Bullnose	3.00			3760.00	31.00 Bottom Packers & Anchor
Total Tool Length:	52.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28876

DST#: 2

ATTN: Al Downing

Test Start: 2007.07.29 @ 22:40:45

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
15.00	Free Oil	0.074
15.00	OCM 20%O 80%M	0.074

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

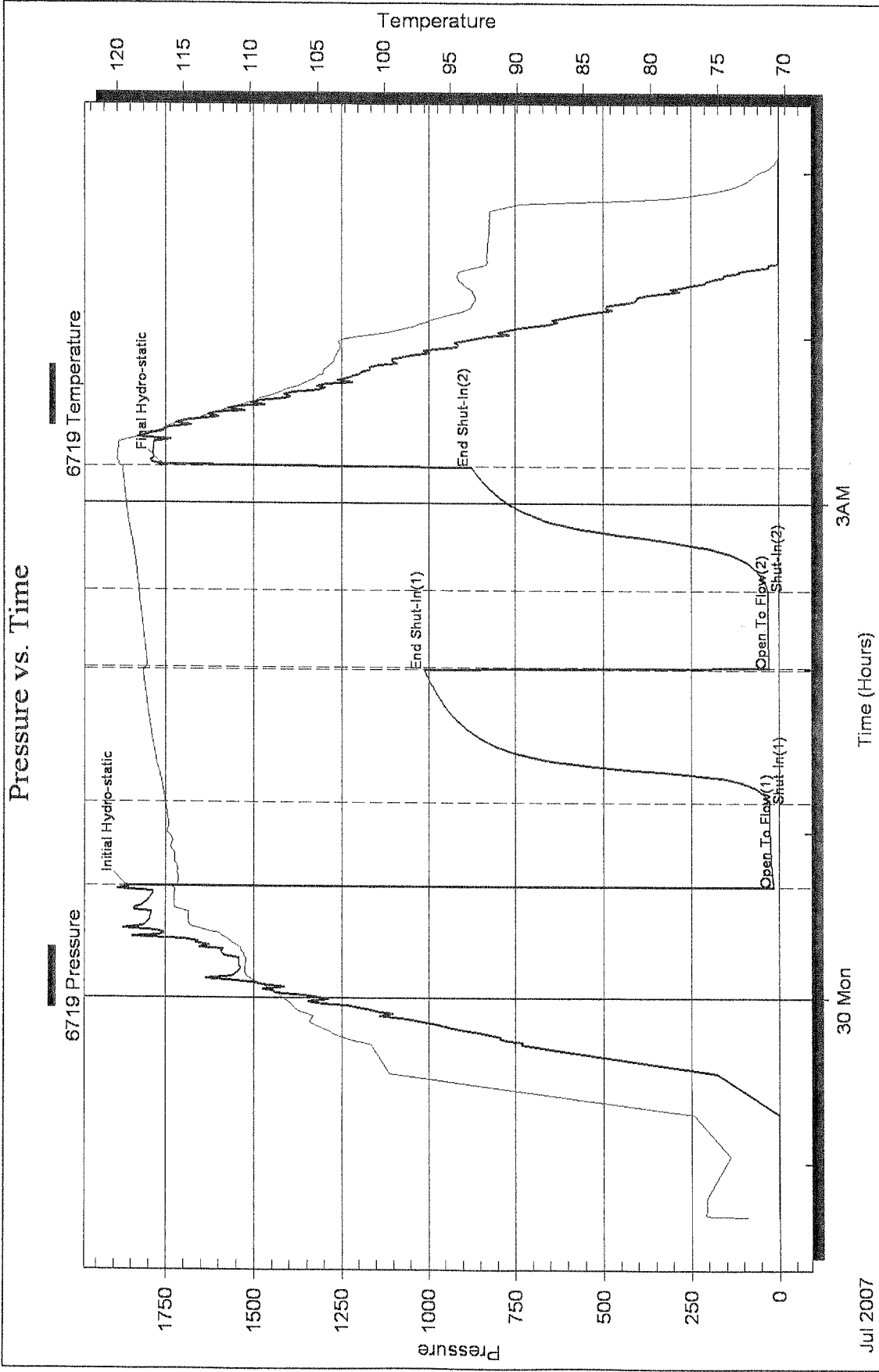
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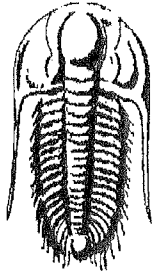
Dowling Nelson Oil Co Inc

36 14 21 Trego KS

DST Test Number: 2

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Al Downing

36 14 21 Trego KS

Milberger-Waggoner Unit #1-36

Start Date: 2007.07.30 @ 12:51:06

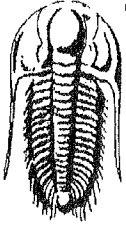
End Date: 2007.07.30 @ 19:24:06

Job Ticket #: 28877 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

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28877

DST#: 3

ATTN: Al Downing

Test Start: 2007.07.30 @ 12:51:06

GENERAL INFORMATION:

Formation: **Cherokee Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:30:21
 Time Test Ended: 19:24:06

Test Type: Conventional Bottom Hole
 Tester: Jason McLemore
 Unit No: 32

Interval: **3749.00 ft (KB) To 3800.00 ft (KB) (TVD)**
 Total Depth: 3800.00 ft (KB) (TVD)
 Hole Diameter: 7.80 inches Hole Condition: Good

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

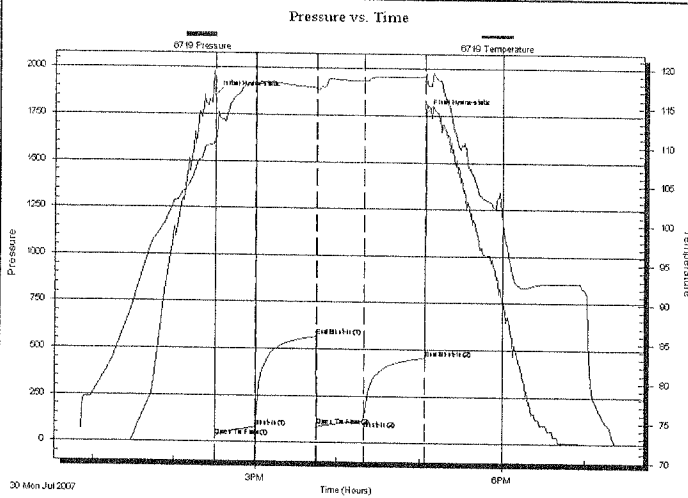
Serial #: 6719

Inside

Press@RunDepth: 118.20 psig @ 3754.00 ft (KB)
 Start Date: 2007.07.30 End Date: 2007.07.30
 Start Time: 12:51:08 End Time: 19:24:06

Capacity: 7000.00 psig
 Last Calib.: 2007.07.30
 Time On Btm: 2007.07.30 @ 14:30:06
 Time Off Btm: 2007.07.30 @ 17:04:06

TEST COMMENT: IFP Good Blow BOB in 14 Min
 ISI Dead
 FFP Good Blow BOB in 19 Min
 FSI Dead



PRESSURE SUMMARY

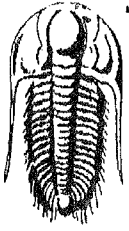
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1850.42	110.90	Initial Hydro-static
1	27.74	110.60	Open To Flow (1)
30	80.51	118.01	Shut-In(1)
75	565.91	117.44	End Shut-In(1)
75	87.04	117.36	Open To Flow (2)
110	118.20	118.36	Shut-In(2)
154	456.50	118.94	End Shut-In(2)
154	1764.38	119.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	HOCM 60%O 40%M	0.99
180.00	Clean Oil	2.52
0.00	150' Gas In Pipe	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28877

DST#: 3

ATTN: Al Downing

Test Start: 2007.07.30 @ 12:51:06

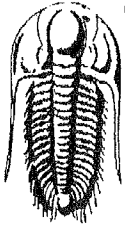
Tool Information

Drill Pipe:	Length: 3714.00 ft	Diameter: 3.80 inches	Volume: 52.10 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: 20000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 42000.00 lb
			<u>Total Volume: 52.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3749.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	72.00 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			3729.00	
Shut In Tool	5.00			3734.00	
Hydraulic tool	5.00			3739.00	
Packer	5.00			3744.00	21.00 Bottom Of Top Packer
Packer	5.00			3749.00	
Stubb	1.00			3750.00	
Perforations	3.00			3753.00	
Change Over Sub	1.00			3754.00	
Recorder	0.00	6719	Inside	3754.00	
Blank Spacing	32.00			3786.00	
Change Over Sub	1.00			3787.00	
Perforations	10.00			3797.00	
Recorder	0.00	13221	Outside	3797.00	
Bullnose	3.00			3800.00	51.00 Bottom Packers & Anchor

Total Tool Length: 72.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co Inc

Milberger-Waggoner Unit #1-36

PO Box 372
Hays KS 67601

36 14 21 Trego KS

Job Ticket: 28877

DST#: 3

ATTN: Al Downing

Test Start: 2007.07.30 @ 12:51:06

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	HOCM 60%O 40%M	0.989
180.00	Clean Oil	2.525
0.00	150' Gas In Pipe	0.000

Total Length: 270.00 ft

Total Volume: 3.514 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6719

Inside

Downing Nelson Oil Co Inc

36 14 21 Trego KS

DST Test Number: 3

Pressure vs. Time

