

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

P O Box 372
Hays KS 67601

ATTN: Ron Nelson

12 13 21 Trego KS

Egger #7

Start Date: 2008.03.08 @ 14:04:53

End Date: 2008.03.08 @ 19:24:47

Job Ticket #: 30452 DST #: 1

15-195-22533

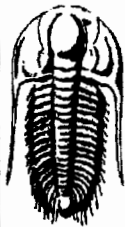
NW SE SESW

600 FSL 2040 FWL

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 30452

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.03.08 @ 14:04:53

GENERAL INFORMATION:

Formation: **Topeka**

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

Time Tool Opened: 15:59:48

Time Test Ended: 19:24:47

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **42**

Interval: **3203.00 ft (KB) To 3225.00 ft (KB) (TVD)**

Reference Elevations: **2160.00 ft (KB)**

Total Depth: **3225.00 ft (KB) (TVD)**

2152.00 ft (CF)

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: **20.44 psig @ 3204.01 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2008.03.08**

End Date:

2008.03.08

Last Calib.: **2008.03.08**

Start Time: **14:04:53**

End Time:

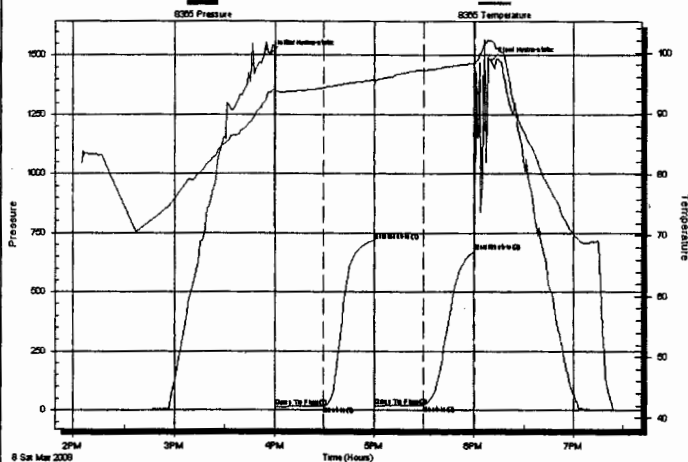
19:24:47

Time On Btm: **2008.03.08 @ 15:56:48**

Time Off Btm: **2008.03.08 @ 18:10:18**

TEST COMMENT: IFP Wk bl thru-out 1/4 " bl
FFP Surface bl thru-out
Times 30 30 30 30

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1506.89	93.51	Initial Hydro-static
3	12.27	93.60	Open To Flow (1)
33	16.90	94.16	Shut-In(1)
64	718.17	95.51	End Shut-In(1)
64	17.33	95.30	Open To Flow (2)
94	20.44	97.12	Shut-In(2)
124	672.07	98.24	End Shut-In(2)
134	1478.38	101.95	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mw/show of Oil	0.05

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 30452

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.03.08 @ 14:04:53

Tool Information

Drill Pipe:	Length: 3177.00 ft	Diameter: 3.80 inches	Volume: 44.56 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 85000.00 lb
			Total Volume: 44.71 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3203.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.02 ft			
Tool Length:	43.02 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			3183.00	
Shut In Tool	5.00			3188.00	
Hydraulic tool	5.00			3193.00	
Packer	5.00			3198.00	21.00 Bottom Of Top Packer
Packer	5.00			3203.00	
Stubb	1.00			3204.00	
Recorder	0.01	8365	Inside	3204.01	
Recorder	0.01	8371	Outside	3204.02	
Perforations	18.00			3222.02	
Bullnose	3.00			3225.02	22.02 Bottom Packers & Anchor
Total Tool Length:	43.02				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 30452

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.03.08 @ 14:04:53

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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mw/show of Oil	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8365

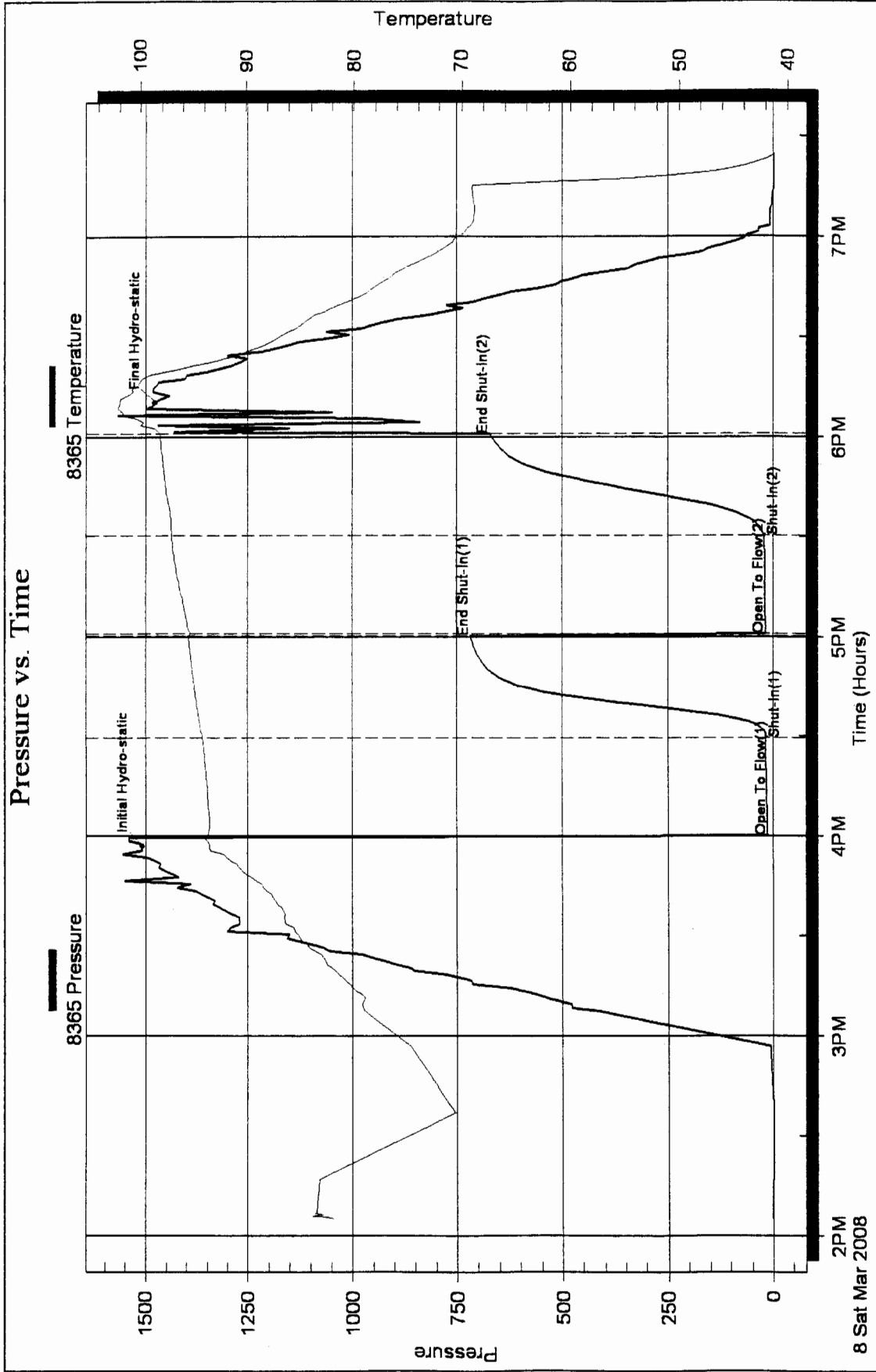
Inside

Downing-Nelson Oil Co Inc

12 13 21 Trego KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

P O Box 372
Hays KS 67601

ATTN: Ron Nelson

12 13 21 Trego KS

Egger #7

Start Date: 2008.03.09 @ 13:32:00

End Date: 2008.03.09 @ 20:44:30

Job Ticket #: 31786 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Downing-Nelson Oil Co Inc

Egger #7

12 13 21 Trego KS

DST # 2

LKC "A-D"

2008.03.09



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 31786

DST#: 2

ATTN: Ron Nelson

Test Start: 2008.03.09 @ 13:32:00

GENERAL INFORMATION:

Formation: **LKC "A-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:16:30

Time Test Ended: 20:44:30

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 42

Interval: **3436.00 ft (KB) To 3513.00 ft (KB) (TVD)**

Total Depth: 3513.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2160.00 ft (KB)

2152.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8371

Outside

Press@RunDepth: 701.80 psig @ 3439.02 ft (KB)

Start Date: 2008.03.09

End Date:

2008.03.09

Start Time: 13:32:05

End Time:

20:44:29

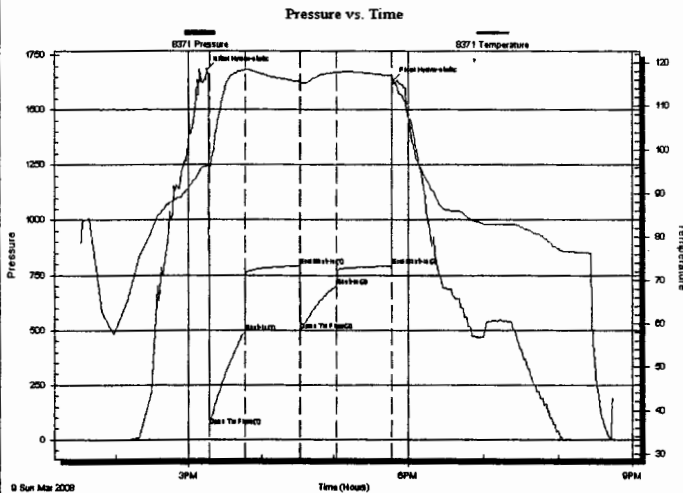
Capacity: 7000.00 psig

Last Calib.: 2008.03.09

Time On Btm: 2008.03.09 @ 15:14:30

Time Off Btm: 2008.03.09 @ 17:48:00

TEST COMMENT: IF BOB 1 1/2 min
ISI Weak Surface died 30 min
FF BOB 2 1/2 min
FSI Weak Surface 20-30 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1682.19	96.16	Initial Hydro-static
2	60.72	95.66	Open To Flow (1)
32	491.10	118.40	Shut-In(1)
77	792.33	115.69	End Shut-In(1)
78	498.46	115.45	Open To Flow (2)
108	701.80	117.83	Shut-In(2)
153	791.49	117.04	End Shut-In(2)
154	1632.02	115.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1200.00	GsyMW	16.56
120.00	GsyOMCW 20%G 2%O 43%W 35%M	1.68
200.00	GsyOWCM 5%G 10%O 35%W 15%M	2.81

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 31786

DST#: 2

ATTN: Ron Nelson

Test Start: 2008.03.09 @ 13:32:00

Tool Information

Drill Pipe:	Length: 3397.00 ft	Diameter: 3.80 inches	Volume: 47.65 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 47.80 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3436.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.02 ft			
Tool Length:	98.02 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			3416.00	
Shut In Tool	5.00			3421.00	
Hydraulic tool	5.00			3426.00	
Packer	5.00			3431.00	21.00 Bottom Of Top Packer
Packer	5.00			3436.00	
Stubb	1.00			3437.00	
Perforations	1.00			3438.00	
Change Over Sub	1.00			3439.00	
Recorder	0.01	8365	Inside	3439.01	
Recorder	0.01	8371	Outside	3439.02	
Blank Spacing	62.00			3501.02	
Change Over Sub	1.00			3502.02	
Perforations	8.00			3510.02	
Bullnose	3.00			3513.02	77.02 Bottom Packers & Anchor

Total Tool Length: 98.02



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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 31786

DST#: 2

ATTN: Ron Nelson

Test Start: 2008.03.09 @ 13:32:00

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:

75000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1200.00	GsyMW	16.560
120.00	GsyOMCW 20%G 2%O 43%W 35%M	1.683
200.00	GsyOWCM 5%G 10%O 35%W 15%M	2.805

Total Length: 1520.00 ft Total Volume: 21.048 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

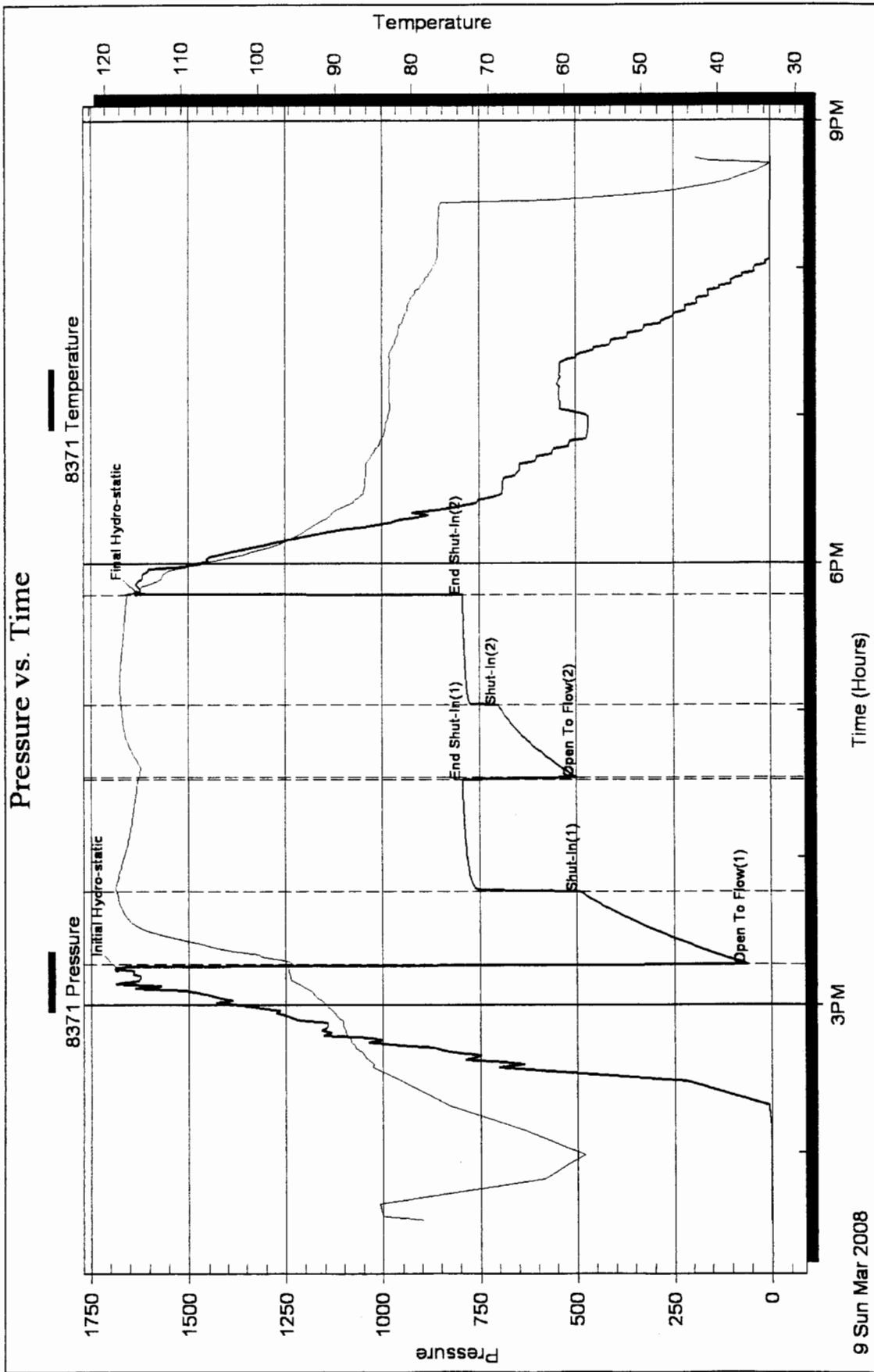
Serial #:

Laboratory Name:

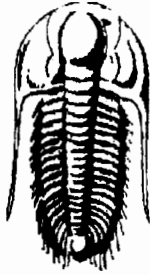
Laboratory Location:

Recovery Comments: RW .15@50 deg

Pressure vs. Time



9 Sun Mar 2008



TRILOBITE
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DRILL STEM TEST REPORT

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

P O Box 372
Hays KS 67601

ATTN: Ron Nelson

12 13 21 Trego KS

Egger #7

Start Date: 2008.03.10 @ 05:57:30

End Date: 2008.03.10 @ 12:29:30

Job Ticket #: 31787 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Downing-Nelson Oil Co Inc

Egger #7

12 13 21 Trego KS

DST # 3

LKC "H-I"

2008.03.10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dowling-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

ATTN: Ron Nelson

Job Ticket: 31787

DST#: 3

Test Start: 2008.03.10 @ 05:57:30

GENERAL INFORMATION:

Formation: **LKC "H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:38:30

Time Test Ended: 12:29:30

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 42

Interval: **3567.00 ft (KB) To 3620.00 ft (KB) (TVD)**

Total Depth: 3620.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2160.00 ft (KB)

2152.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: 231.59 psig @ 3570.01 ft (KB)

Start Date: 2008.03.10

End Date: 2008.03.10

Start Time: 05:57:35

End Time: 12:29:29

Capacity: 7000.00 psig

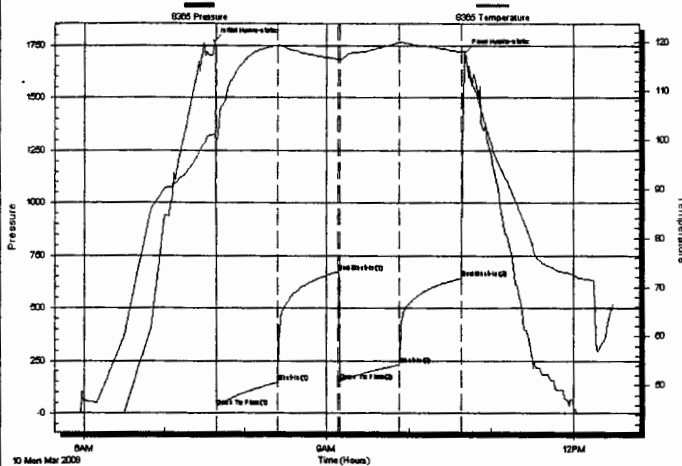
Last Calib.: 2008.03.10

Time On Btm: 2008.03.10 @ 07:37:00

Time Off Btm: 2008.03.10 @ 10:41:00

TEST COMMENT: IF BOB 7 min
ISI 1/2 "
FF BOB 9 min
FSI 2 "

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1767.92	101.09	Initial Hydro-static
2	28.50	99.53	Open To Flow (1)
47	146.37	119.24	Shut-In(1)
92	672.95	116.51	End Shut-In(1)
93	149.96	116.26	Open To Flow (2)
137	231.59	119.95	Shut-In(2)
182	642.07	117.99	End Shut-In(2)
184	1717.08	115.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
310.00	OWCM 1%O 89%W 10%M	4.08
125.00	Gsy OWCM 5%G 44%W 50%M	1.75
155.00	OWCM 1%O 49%W 50%M	2.17
10.00	Gsy Free Oil	0.14
200.00	GIP	2.81

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 31787

DST#: 3

ATTN: Ron Nelson

Test Start: 2008.03.10 @ 05:57:30

Tool Information

Drill Pipe:	Length: 3522.00 ft	Diameter: 3.80 inches	Volume: 49.40 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 46000.00 lb
			<u>Total Volume: 49.55 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3567.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.02 ft			
Tool Length:	74.02 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			3547.00	
Shut In Tool	5.00			3552.00	
Hydraulic tool	5.00			3557.00	
Packer	5.00			3562.00	21.00 Bottom Of Top Packer
Packer	5.00			3567.00	
Stubb	1.00			3568.00	
Perforations	1.00			3569.00	
Change Over Sub	1.00			3570.00	
Recorder	0.01	8365	Inside	3570.01	
Recorder	0.01	8371	Outside	3570.02	
Blank Spacing	31.00			3601.02	
Change Over Sub	1.00			3602.02	
Perforations	15.00			3617.02	
Bullnose	3.00			3620.02	53.02 Bottom Packers & Anchor

Total Tool Length: 74.02



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Egger #7

P O Box 372
Hays KS 67601

12 13 21 Trego KS

Job Ticket: 31787

DST#: 3

ATTN: Ron Nelson

Test Start: 2008.03.10 @ 05:57:30

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:

14000 ppm

Viscosity: 68.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
310.00	OWCM 1%O 89%W 10%M	4.075
125.00	Gsy OWCM 5%G 44%W 50%M	1.753
155.00	OWCM 1%O 49%W 50%M	2.174
10.00	Gsy Free Oil	0.140
200.00	GIP	2.805

Total Length: 800.00 ft Total Volume: 10.947 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .71@51 deg.

Pressure vs. Time

