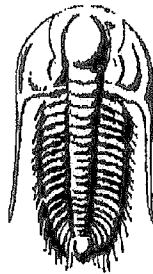


15-051-25969

36-12s-20w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

36-12-20-Ellis KS

Schuster # 1-36

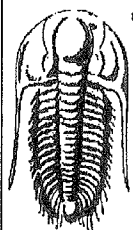
Start Date: 2010.05.11 @ 12:50:58

End Date: 2010.05.11 @ 19:54:13

Job Ticket #: 38681 DST #: 1

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Downing Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38681

DST#: 1

ATTN: Ron Nelson

Test Start: 2010.05.11 @ 12:50:58

GENERAL INFORMATION:

Formation: **C-D LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:40:28

Time Test Ended: 19:54:13

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **3513.00 ft (KB) To 3558.00 ft (KB) (TVD)**

Reference Elevations: 2176.00 ft (KB)

Total Depth: 3558.00 ft (KB) (TVD)

2168.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press@RunDepth: 171.15 psig @ 3518.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.11

End Date:

2010.05.11

Last Calib.: 2010.05.11

Start Time: 12:50:59

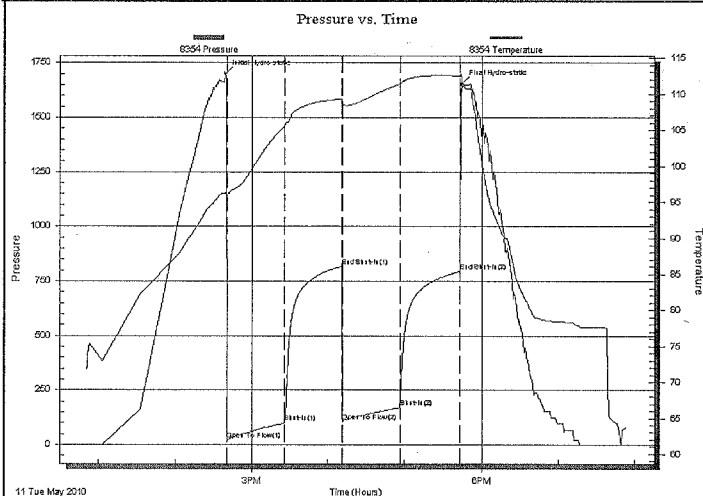
End Time:

19:54:13

Time On Btm: 2010.05.11 @ 14:39:13

Time Off Btm: 2010.05.11 @ 17:44:28

TEST COMMENT: IF-Strong B-B in 6 min
ISI-Weak building to 1"
FF-Strong B-B in 8 min
FSI-Weak building to 1 1/4"



PRESSURE SUMMARY

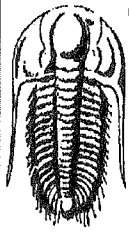
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1699.78	96.29	Initial Hydro-static
2	23.07	95.94	Open To Flow (1)
47	100.74	105.66	Shut-In(1)
92	817.39	109.30	End Shut-In(1)
93	108.41	108.78	Open To Flow (2)
138	171.15	111.41	Shut-In(2)
184	795.74	112.56	End Shut-In(2)
186	1653.40	111.75	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
160.00	Mdy Wtr	2.24
200.00	MCGsyO 20%g 60%o 20%m	2.81
0.00	640 GIP	0.00

Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38681

DST#: 1

ATTN: Ron Nelson

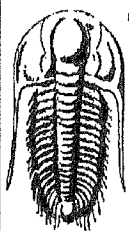
Test Start: 2010.05.11 @ 12:50:58

Tool Information

Drill Pipe:	Length: 3503.00 ft	Diameter: 3.80 inches	Volume: 49.14 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 49.14 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3513.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	65.00 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			3494.00	
Shut In Tool	5.00			3499.00	
Hydraulic tool	5.00			3504.00	
Packer	5.00			3509.00	20.00 Bottom Of Top Packer
Packer	4.00			3513.00	
Stubb	1.00			3514.00	
Perforations	3.00			3517.00	
Change Over Sub	1.00			3518.00	
Recorder	0.00	8354	Inside	3518.00	
Recorder	0.00	8520	Outside	3518.00	
Drill Pipe	31.00			3549.00	
Change Over Sub	1.00			3550.00	
Perforations	5.00			3555.00	
Bullnose	3.00			3558.00	45.00 Bottom Packers & Anchor

Total Tool Length: 65.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38681

DST#: 1

ATTN: Ron Nelson

Test Start: 2010.05.11 @ 12:50:58

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:

40000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.78 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
160.00	Mdy Wtr	2.244
200.00	MCGsyO 20%g 60%o 20%m	2.805
0.00	640 GIP	0.000

Total Length: 360.00 ft Total Volume: 5.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

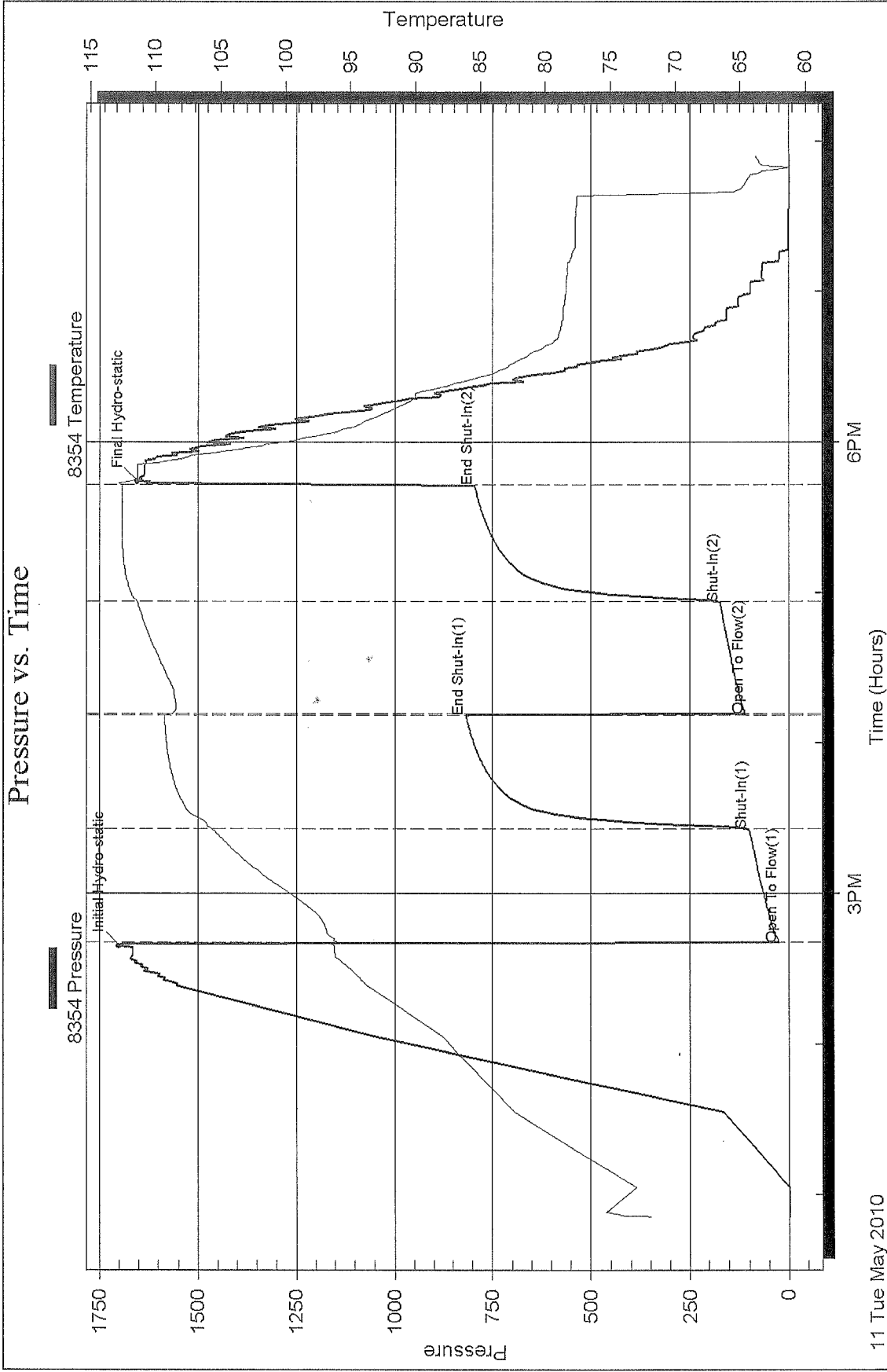
Serial #:

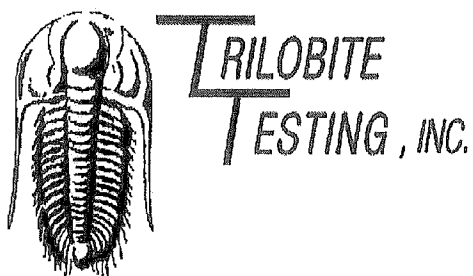
Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .15 @ 80 = 40000ppm

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

36-12-20-Ellis KS

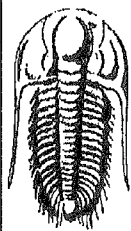
Schuster # 1-36

Start Date: 2010.05.12 @ 02:55:18

End Date: 2010.05.12 @ 08:34:03

Job Ticket #: 38682 DST #: 2

Trilobite Testing, Inc
PO Box 1733 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow n ing Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38682

DST#: 2

ATTN: Ron Nelson

Test Start: 2010.05.12 @ 02:55:18

GENERAL INFORMATION:

Formation: **E LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:59:48

Time Test Ended: 08:34:03

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **3550.00 ft (KB) To 3572.00 ft (KB) (TVD)**

Total Depth: 3572.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2176.00 ft (KB)

2168.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press@RunDepth: 14.88 psig @ 3551.00 ft (KB)

Start Date: 2010.05.12

End Date:

2010.05.12

Start Time: 02:55:19

End Time:

08:34:03

Capacity: 8000.00 psig

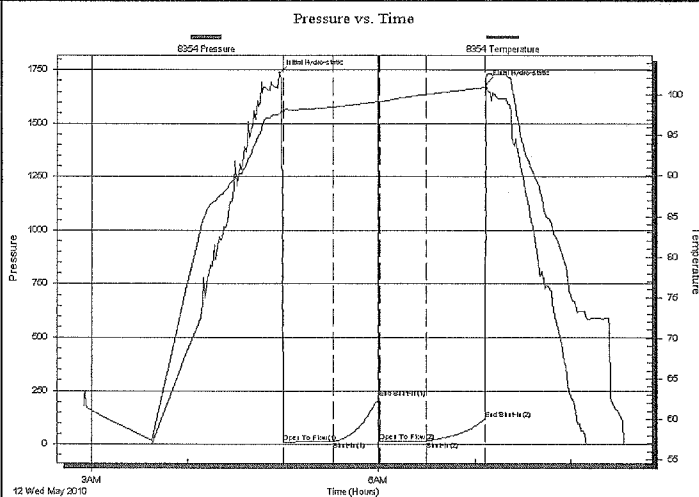
Last Calib.: 2010.05.12

Time On Btm: 2010.05.12 @ 04:57:48

Time Off Btm: 2010.05.12 @ 07:07:03

TEST COMMENT: IF-Weak steady surface blow

FF-Weak steady surface blow



PRESSURE SUMMARY

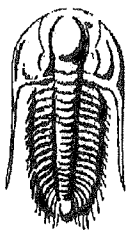
Time [±] (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1734.25	97.63	Initial Hydro-static
2	9.54	97.74	Open To Flow (1)
34	12.48	98.51	Shut-In(1)
63	216.86	99.21	End Shut-In(1)
63	13.57	99.15	Open To Flow (2)
92	14.88	100.10	Shut-In(2)
129	119.11	100.98	End Shut-In(2)
130	1683.92	102.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud	0.07

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38682

DST#: 2

ATTN: Ron Nelson

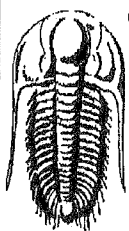
Test Start: 2010.05.12 @ 02:55:18

Tool Information

Drill Pipe:	Length: 3534.00 ft	Diameter: 3.80 inches	Volume: 49.57 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: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume:	49.57 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	3550.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	42.00 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			3531.00	
Shut In Tool	5.00			3536.00	
Hydraulic tool	5.00			3541.00	
Packer	5.00			3546.00	20.00 Bottom Of Top Packer
Packer	4.00			3550.00	
Stubb	1.00			3551.00	
Recorder	0.00	8354	Inside	3551.00	
Recorder	0.00	8520	Outside	3551.00	
Perforations	18.00			3569.00	
Bullnose	3.00			3572.00	22.00 Bottom Packers & Anchor
Total Tool Length:	42.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38682

DST#: 2

ATTN: Ron Nelson

Test Start: 2010.05.12 @ 02:55:18

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: 8.77 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
5.00	Mud	0.070

Total Length: 5.00 ft

Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

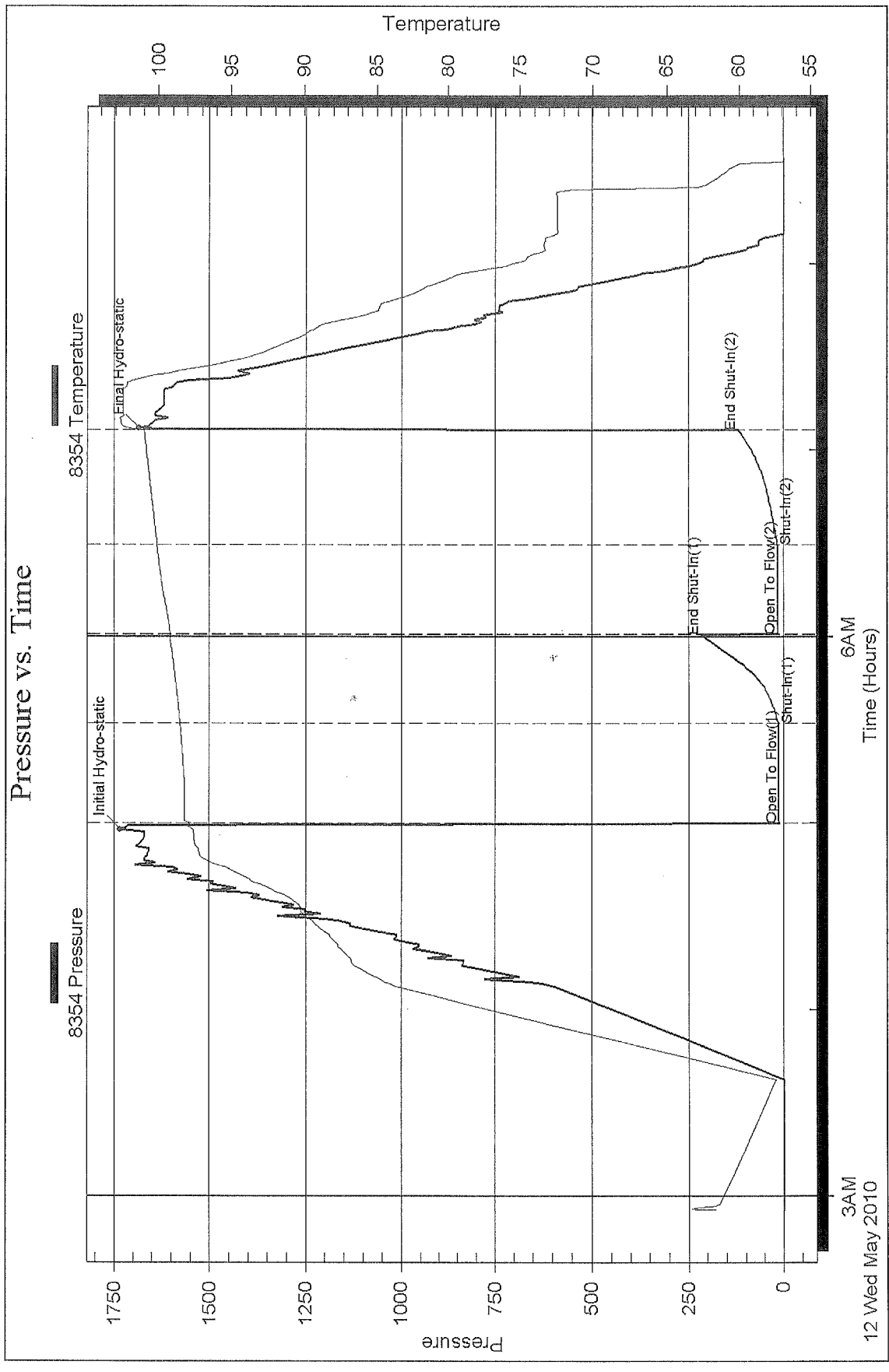
Serial #:

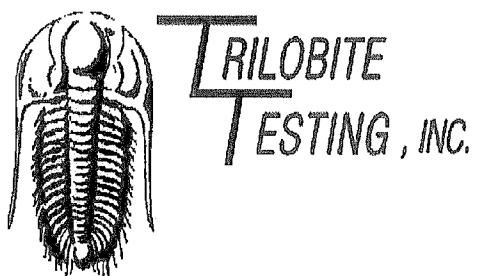
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

36-12-20-Ellis KS

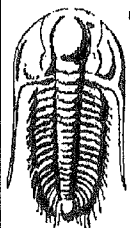
Schuster # 1-36

Start Date: 2010.05.12 @ 20:00:49

End Date: 2010.05.13 @ 03:10:19

Job Ticket #: 38683 DST #: 3

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.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38683

DST#: 3

ATTN: Ron Nelson

Test Start: 2010.05.12 @ 20:00:49

GENERAL INFORMATION:

Formation: J LKC

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:11:19

Time Test Ended: 03:10:19

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: 3664.00 ft (KB) To 3688.00 ft (KB) (TVD)

Total Depth: 3688.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2176.00 ft (KB)

2168.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press@RunDepth: 17.96 psig @ 3667.00 ft (KB)

Start Date: 2010.05.12

End Date:

2010.05.13

Start Time: 20:00:50

End Time:

02:10:19

Capacity: 8000.00 psig

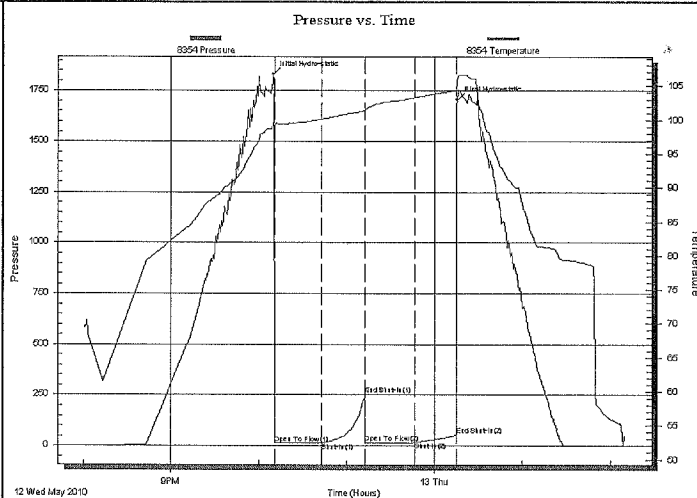
Last Calib.: 2010.05.13

Time On Btm: 2010.05.12 @ 22:10:04

Time Off Btm: 2010.05.13 @ 00:15:19

TEST COMMENT: IF-Weak steady surface blow

FF-Weak steady surface blow



PRESSURE SUMMARY

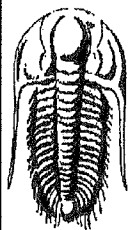
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1828.43	99.48	Initial Hydro-static
2	12.46	99.02	Open To Flow (1)
33	14.98	100.14	Shut-In (1)
63	251.02	101.37	End Shut-In (1)
63	15.60	101.29	Open To Flow (2)
96	17.96	103.29	Shut-In (2)
125	53.78	104.40	End Shut-In (2)
126	1705.40	105.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w / oil spots	0.07

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38683

DST#: 3

ATTN: Ron Nelson

Test Start: 2010.05.12 @ 20:00:49

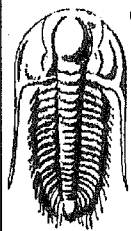
Tool Information

Drill Pipe:	Length: 3659.00 ft	Diameter: 3.80 inches	Volume: 51.33 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:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	50000.00 lb
			Total Volume: 51.33 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3664.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	24.00 ft				
Tool Length:	44.00 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			3645.00	
Shut In Tool	5.00			3650.00	
Hydraulic tool	5.00			3655.00	
Packer	5.00			3660.00	20.00 Bottom Of Top Packer
Packer	4.00			3664.00	
Stubb	1.00			3665.00	
Perforations	2.00			3667.00	
Recorder	0.00	8354	Inside	3667.00	
Recorder	0.00	8520	Outside	3667.00	
Perforations	18.00			3685.00	
Bullnose	3.00			3688.00	24.00 Bottom Packers & Anchor

Total Tool Length: 44.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co.

Schuster # 1-36

PO Box 372
Hays KS 67601

36-12-20-ELLIS KS

Job Ticket: 38683

DST#: 3

ATTN: Ron Nelson

Test Start: 2010.05.12 @ 20:00:49

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: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w / oil spots	0.070

Total Length:

5.00 ft

Total Volume:

0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

