

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

P.O. Box 372
Hays, KS 67601

ATTN: Gator

36-12-20 Ellis, KS

Charlie 1-36

Start Date: 2010.05.03 @ 00:25:49

End Date: 2010.05.03 @ 07:52:28

Job Ticket #: 37847 DST #: 1

RECEIVED
SEP 13 2010
KCC WICHITA

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Downing- Nelson Oil Co

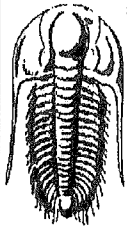
Charlie 1-36

36-12-20 Ellis, KS

DST # 1

Topeka

2010.05.03



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 37847

DST#: 1

ATTN: Gator

Test Start: 2010.05.03 @ 00:25:49

GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:58:29

Time Test Ended: 07:52:28

Test Type: Conventional Bottom Hole

Tester: Brandon Turley

Unit No: 35

Interval: **3430.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Reference Elevations: 2199.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

2190.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8373 Inside

Press@RunDepth: 83.54 psig @ 3431.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.03

End Date: 2010.05.03

Last Calib.: 2010.05.03

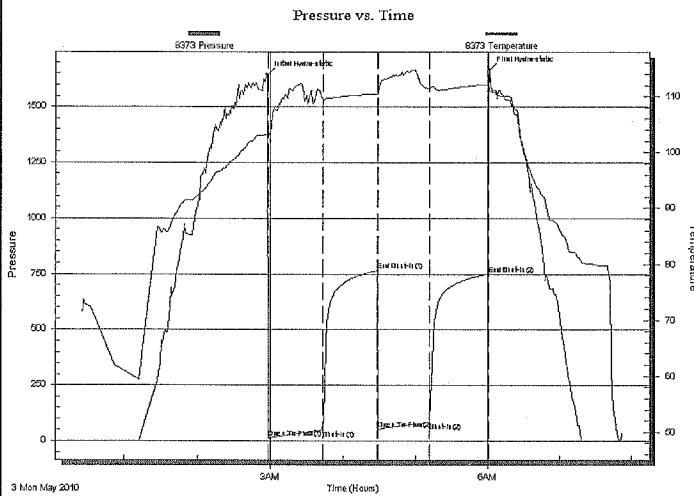
Start Time: 00:25:49

End Time: 07:52:28

Time On Btm: 2010.05.03 @ 02:57:29

Time Off Btm: 2010.05.03 @ 06:01:28

TEST COMMENT: IF: 1/4 blow built to 9 in 45 min.
IS: No return.
FF: Surface blow built to 6 in 45 min.
FS: No return.



PRESSURE SUMMARY

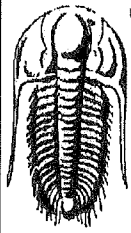
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1644.86	103.17	Initial Hydro-static
1	11.63	102.57	Open To Flow (1)
46	49.80	109.55	Shut-In(1)
91	763.82	110.42	End Shut-In(1)
92	51.87	110.50	Open To Flow (2)
135	83.54	111.40	Shut-In(2)
183	749.83	112.20	End Shut-In(2)
184	1665.56	111.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
134.00	mcw 95%w 5%m	1.88

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 37847

DST#: 1

ATTN: Gator

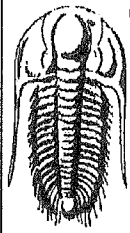
Test Start: 2010.05.03 @ 00:25:49

Tool Information

Drill Pipe:	Length: 3440.00 ft	Diameter: 3.80 inches	Volume: 48.25 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:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 48.25 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3430.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	20.00 ft				
Tool Length:	40.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			3411.00	
Shut In Tool	5.00			3416.00	
Hydraulic tool	5.00			3421.00	
Packer *	5.00			3426.00	20.00 * Bottom Of Top Packer
Packer	4.00			3430.00	
Stubb	1.00			3431.00	
Recorder	0.00	8373	Inside	3431.00	
Recorder	0.00	6772	Outside	3431.00	
Perforations	14.00			3445.00	
Bullnose	5.00			3450.00	20.00 Bottom Packers & Anchor
Total Tool Length:	40.00				



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 37847

DST#: 1

ATTN: Gator

Test Start: 2010.05.03 @ 00:25:49

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 65000 ppm
Viscosity: 72.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.95 in ³	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 700.00 ppm		
Filter Cake: 1.00 inches		

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
134.00	mcw 95%w 5%m	1.880

Total Length: 134.00 ft Total Volume: 1.880 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .12@70=65000

Serial #: 8373

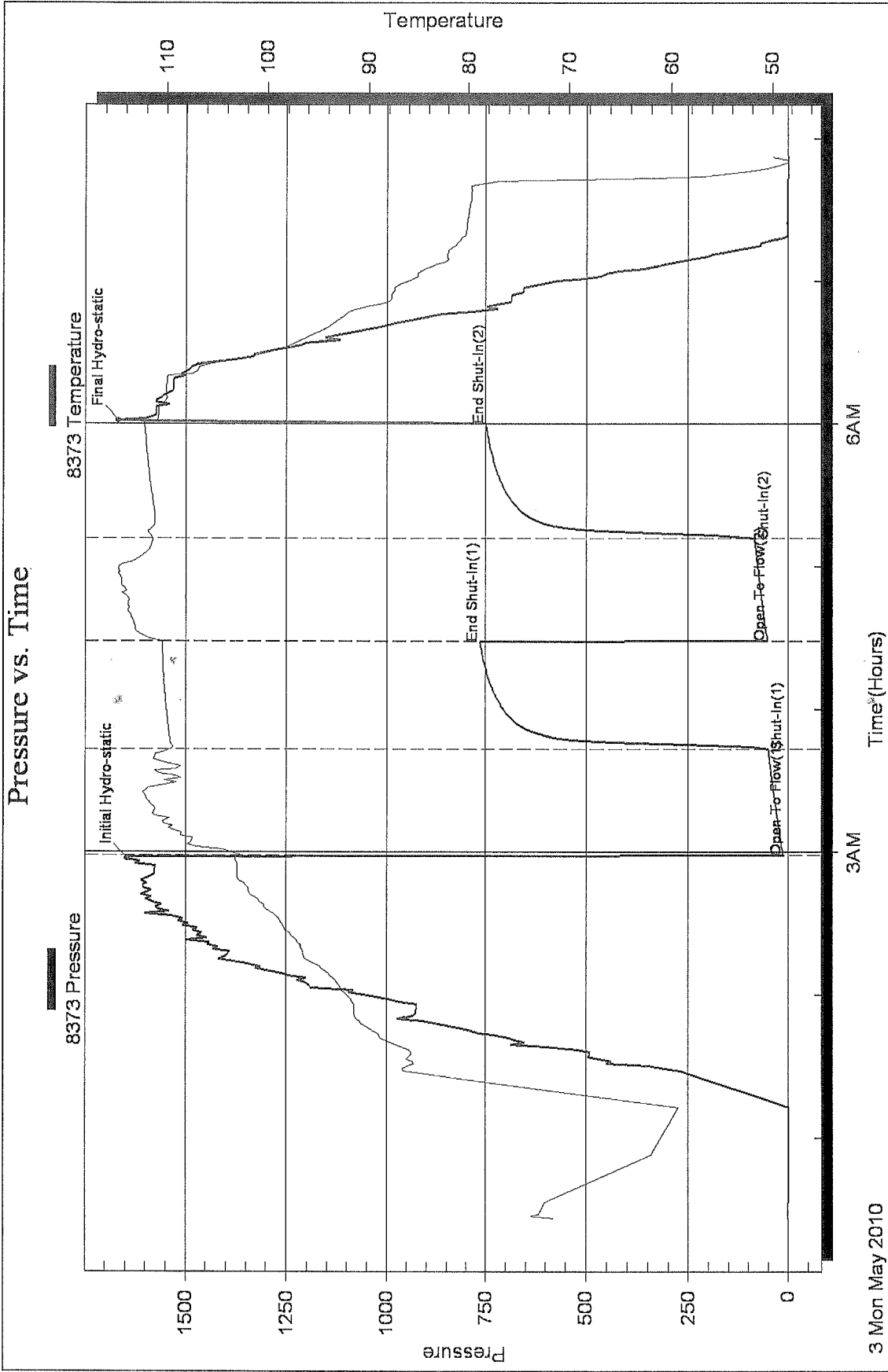
Inside

Dowling- Nelson Oil Co

36-12-20 Ellis, KS

DST Test Number: 1

Pressure vs. Time

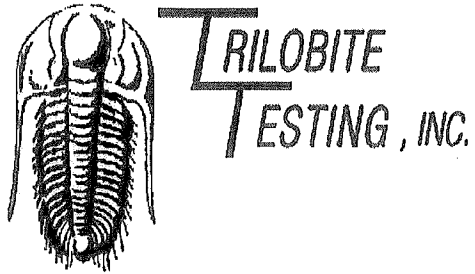


3 Mon May 2010

6AM

3AM

Time*(Hours)



DRILL STEM TEST REPORT

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

P.O. Box 372
Hays, KS 67601

ATTN: Gator

36-12-20 Ellis, KS

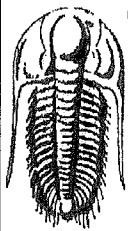
Charlie 1-36

Start Date: 2010.05.03 @ 17:23:21

End Date: 2010.05.04 @ 00:57:51

Job Ticket #: 38578 DST #: 2

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



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TESTING, INC**

DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38578

DST#: 2

ATTN: Gator

Test Start: 2010.05.03 @ 17:23:21

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:14:51

Time Test Ended: 00:57:51

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: 3472.00 ft (KB) To 3540.00 ft (KB) (TVD)

Reference Elevations: 2199.00 ft (KB)

Total Depth: 3540.00 ft (KB) (TVD)

2190.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 9.00 ft

Serial #: 8319

Inside

Press@RunDepth: 17.06 psig @ 3475.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.03 End Date: 2010.05.04

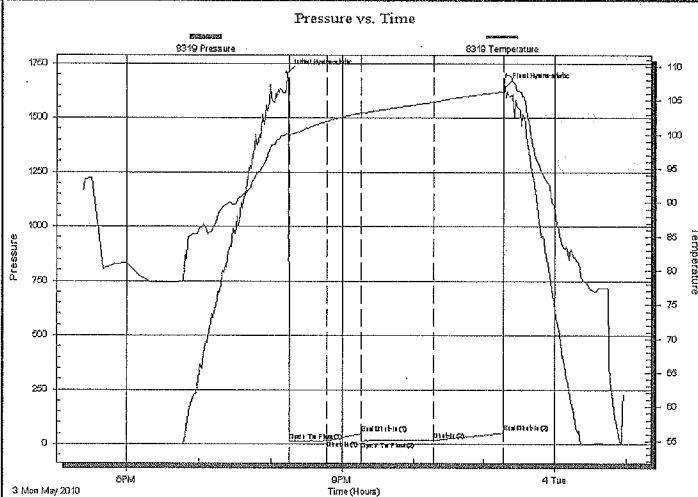
Last Calib.: 2010.05.04

Start Time: 17:23:26 End Time: 00:57:50

Time On Btm: 2010.05.03 @ 20:13:21

Time Off Btm: 2010.05.03 @ 23:17:50

TEST COMMENT: IF-No blow
ISI-No blow
FF-1.5in blow
FSI-No blow



PRESSURE SUMMARY

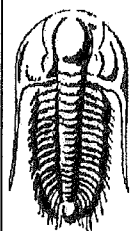
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1704.60	100.17	Initial Hydro-static
2	14.39	100.03	Open To Flow (1)
34	15.93	102.00	Shut-In(1)
63	47.99	103.18	End Shut-In(1)
63	14.41	103.18	Open To Flow (2)
124	17.06	104.78	Shut-In(2)
183	51.61	106.36	End Shut-In(2)
185	1642.22	108.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	ocm 20%O 80%M	0.21

Gas Rates

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



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38578

DST#: 2

ATTN: Gator

Test Start: 2010.05.03 @ 17:23:21

Tool Information

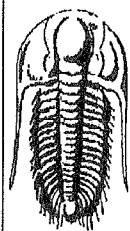
Drill Pipe:	Length: 3476.00 ft	Diameter: 3.80 inches	Volume: 48.76 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume:	48.76 bbl	Tool Chased ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3472.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	88.00 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			3453.00	
Shut In Tool	5.00			3458.00	
Hydraulic tool	5.00			3463.00	
Packer	4.00			3467.00	20.00 Bottom Of Top Packer
Packer	5.00			3472.00	
Stubb	1.00			3473.00	
Perforations	2.00			3475.00	
Recorder	0.00	8319	Inside	3475.00	
Recorder	0.00	8369	Outside	3475.00	
Change Over Sub	1.00			3476.00	
Blank Spacing	60.00			3536.00	
Change Over Sub	1.00			3537.00	
Bullnose	3.00			3540.00	68.00 Bottom Packers & Anchor

Total Tool Length: 88.00



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FLUID SUMMARY

Downing- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38578

DST#: 2

ATTN: Gator

Test Start: 2010.05.03 @ 17:23:21

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 8.97 in³
Resistivity: ohm.m
Salinity: 4400.00 ppm
Filter Cake: inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	ocm 20%O 80%M	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

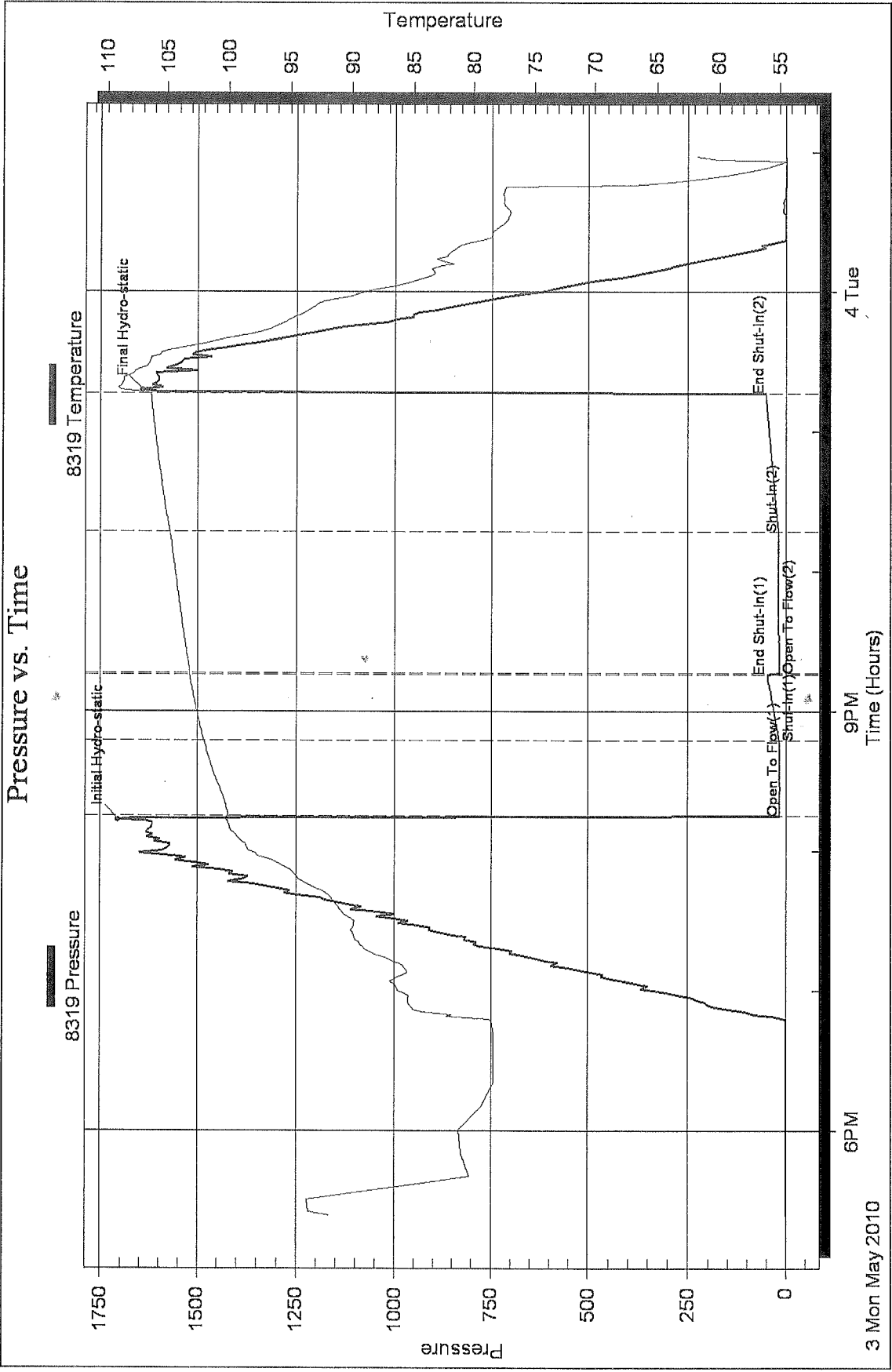
Serial #:

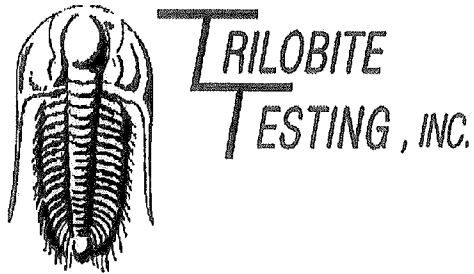
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

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

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36-12-20 Ellis, KS

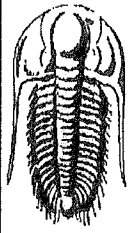
Charlie 1-36

Start Date: 2010.05.04 @ 08:44:53

End Date: 2010.05.04 @ 14:19:53

Job Ticket #: 38579 DST #: 3

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



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DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38579

DST#: 3

ATTN: Gator

Test Start: 2010.05.04 @ 08:44:53

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:55:53

Time Test Ended: 14:19:53

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: 3535.00 ft (KB) To 3595.00 ft (KB) (TVD)

Reference Elevations: 2199.00 ft (KB)

Total Depth: 3595.00 ft (KB) (TVD)

2190.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 9.00 ft

Serial #: 8319

Inside

Press@RunDepth: 30.00 psig @ 3538.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.04

End Date: 2010.05.04

Last Calib.: 2010.05.04

Start Time: 08:44:58

End Time: 14:19:52

Time On Btm: 2010.05.04 @ 10:54:53

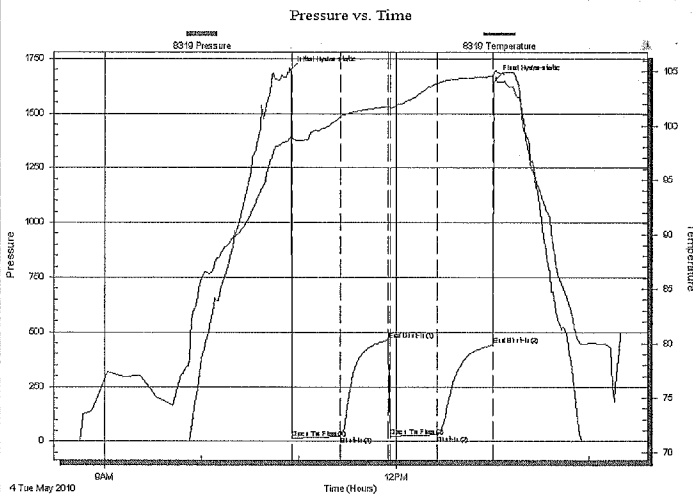
Time Off Btm: 2010.05.04 @ 13:01:53

TEST COMMENT: IF-3/4in blow

ISI-No blow

FF-weak surface blow

FSI-No blow



PRESSURE SUMMARY

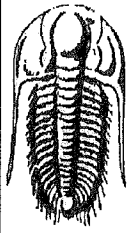
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1696.81	98.91	Initial Hydro-static
1	13.43	98.78	Open To Flow (1)
31	22.46	100.79	Shut-In(1)
61	465.30	101.78	End Shut-In(1)
62	23.83	101.66	Open To Flow (2)
91	30.00	103.89	Shut-In(2)
125	441.71	104.56	End Shut-In(2)
127	1657.97	105.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
35.00	oilspotted mud	0.49

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38579

DST#: 3

ATTN: Gator

Test Start: 2010.05.04 @ 08:44:53

Tool Information

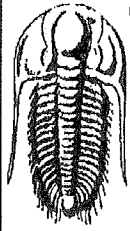
Drill Pipe:	Length: 3534.00 ft	Diameter: 3.80 inches	Volume: 49.57 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 49000.00 lb
		Total Volume:	49.57 bbl	Tool Chased: ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3535.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	80.00 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			3516.00	
Shut In Tool	5.00			3521.00	
Hydraulic tool	5.00			3526.00	
Packer	4.00			3530.00	20.00 Bottom Of Top Packer
Packer	5.00			3535.00	
Stubb	1.00			3536.00	
Perforations	1.00			3537.00	
Change Over Sub	1.00			3538.00	
Recorder	0.00	8319	Inside	3538.00	
Recorder	0.00	8369	Inside	3538.00	
Blank Spacing	31.00			3569.00	
Change Over Sub	1.00			3570.00	
Perforations	22.00			3592.00	
Bullnose	3.00			3595.00	60.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38579

DST#: 3

ATTN: Gator

Test Start: 2010.05.04 @ 08:44:53

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: 42.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
35.00	oilspotted mud	0.491

Total Length: 35.00 ft Total Volume: 0.491 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

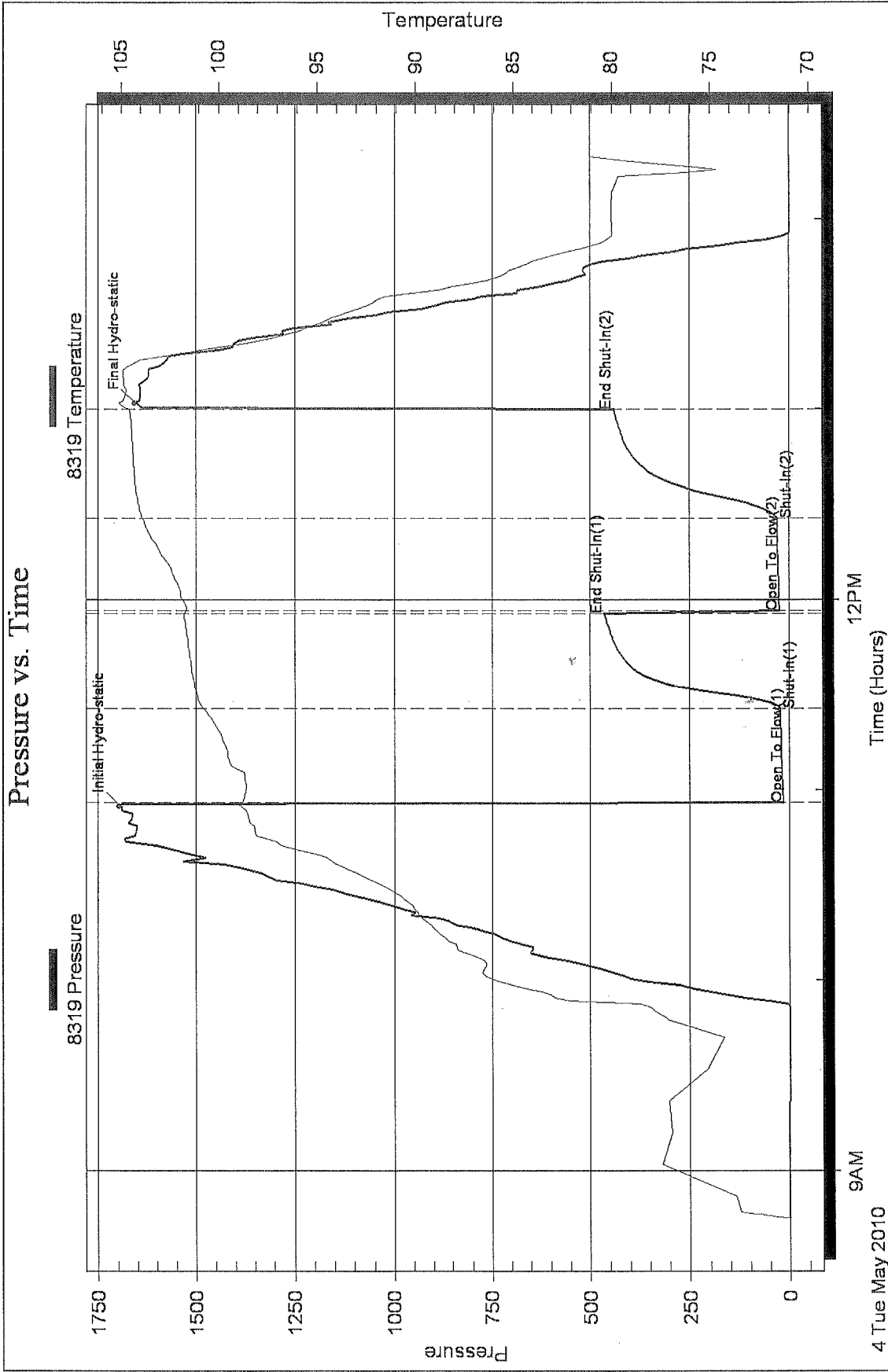
Inside

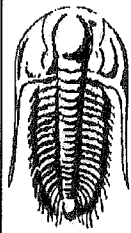
Dow ning- Nelson Oil Co

36-12-20 Ellis, KS

DST Test Number: 3

Pressure vs. Time





TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38580

DST#: 4

ATTN: Gator

Test Start: 2010.05.05 @ 01:25:48

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:07:48

Time Test Ended: 09:08:18

Test Type: Conventional Bottom Hole

Tester: Brett Dickinson

Unit No: 47

Interval: **3686.00 ft (KB) To 3726.00 ft (KB) (TVD)**

Reference Elevations: 2199.00 ft (KB)

Total Depth: 3726.00 ft (KB) (TVD)

2190.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 9.00 ft

Serial #: 8319

Inside

Press@RunDepth: 675.10 psig @ 3689.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.05

End Date: 2010.05.05

Last Calib.: 2010.05.05

Start Time: 01:25:53

End Time: 09:08:17

Time On Btm: 2010.05.05 @ 04:06:18

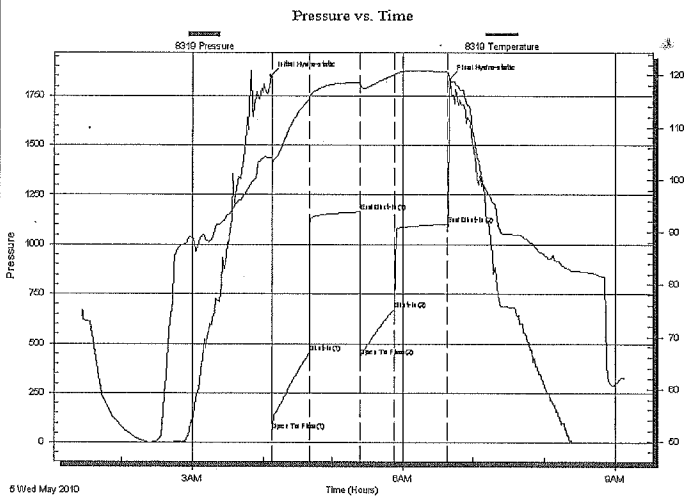
Time Off Btm: 2010.05.05 @ 06:40:17

TEST COMMENT: IF-BOB in 4min

ISI-No blow

FF-BOB in 4.5min

FSI-No blow



PRESSURE SUMMARY

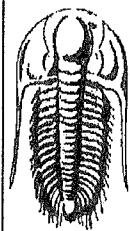
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1851.20	104.19	Initial Hydro-static
2	61.21	103.02	Open To Flow (1)
34	453.63	115.46	Shut-In(1)
77	1163.43	118.52	End Shut-In(1)
78	436.31	118.16	Open To Flow (2)
107	675.10	120.06	Shut-In(2)
152	1103.31	120.53	End Shut-In(2)
154	1836.15	118.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	OCMW 10%G 10%O 40%W 40%M	1.68
240.00	SMCW 15%G 75%W 10%M	3.37
1040.00	Water 5%G 95%W	14.59

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38580

DST#: 4

ATTN: Gator

Test Start: 2010.05.05 @ 01:25:48

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:

95000 ppm

Viscosity: 42.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	OCMW 10%G 10%O 40%W 40%M	1.683
240.00	SMCW 15%G 75%W 10%M	3.367
1040.00	Water 5%G 95%W	14.588

Total Length: 1400.00 ft Total Volume: 19.638 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

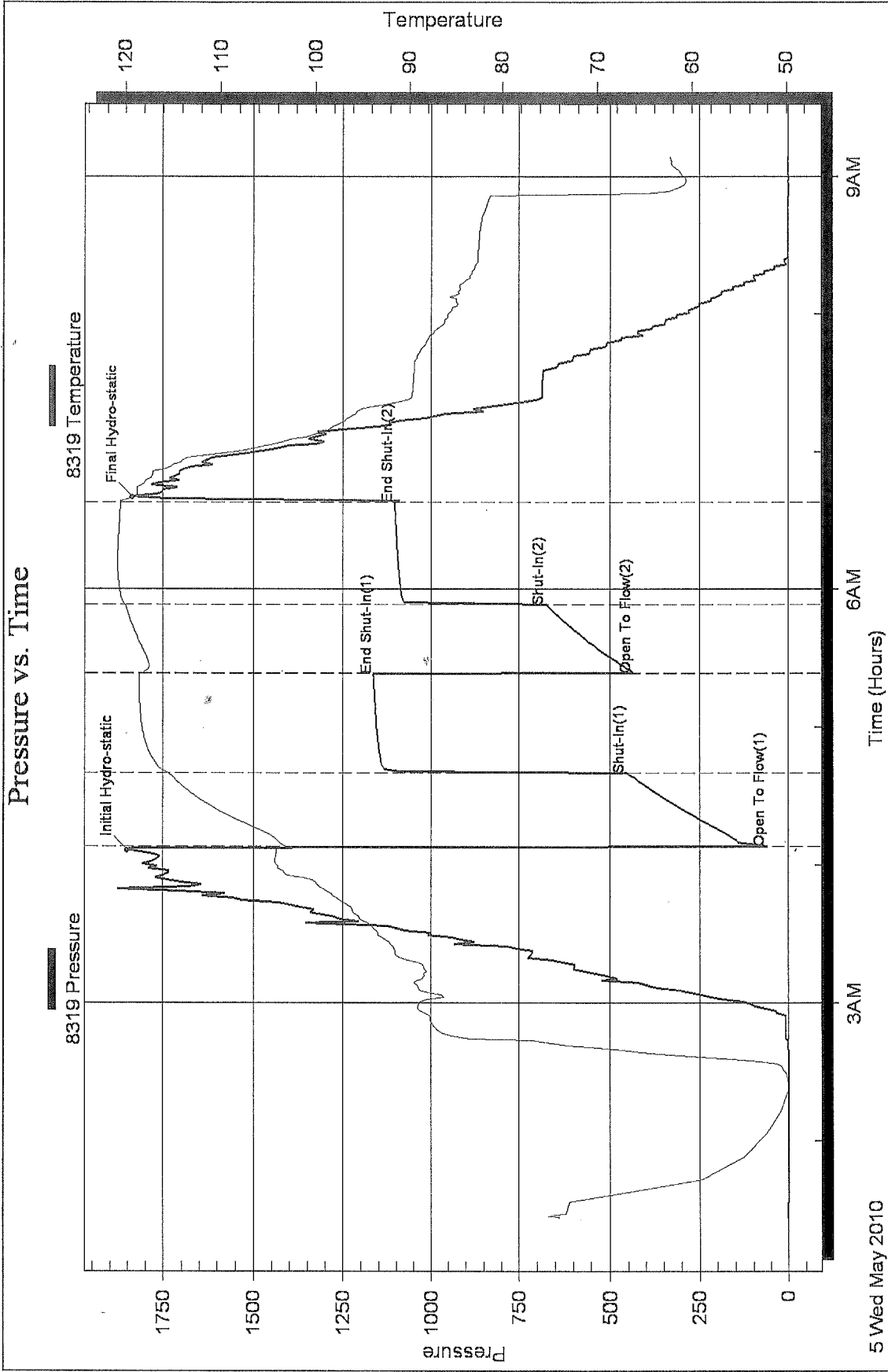
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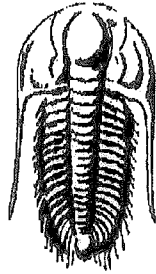
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

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

P.O. Box 372
Hays, KS 67601

ATTN: Gator

36-12-20 Ellis, KS

Charlie 1-36

Start Date: 2010.05.06 @ 03:05:58

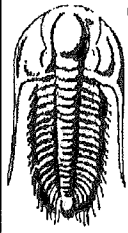
End Date: 2010.05.06 @ 10:37:58

Job Ticket #: 38581 DST #: 5

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 ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

ATTN: Gator

Job Ticket: 38581

DST#: 5

Test Start: 2010.05.06 @ 03:05:58

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:46:58

Time Test Ended: 10:37:58

Test Type: Conventional Straddle

Tester: Brett Dickinson

Unit No: 47

Interval: 3813.00 ft (KB) To 3873.00 ft (KB) (TVD)

Reference Elevations: 2199.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2190.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 9.00 ft

Serial #: 8319

Inside

Press@RunDepth: 74.02 psig @ 3814.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.05.06

End Date: 2010.05.06

Last Calib.: 2010.05.06

Start Time: 03:06:03

End Time: 10:37:57

Time On Btm: 2010.05.06 @ 05:45:28

Time Off Btm: 2010.05.06 @ 08:49:27

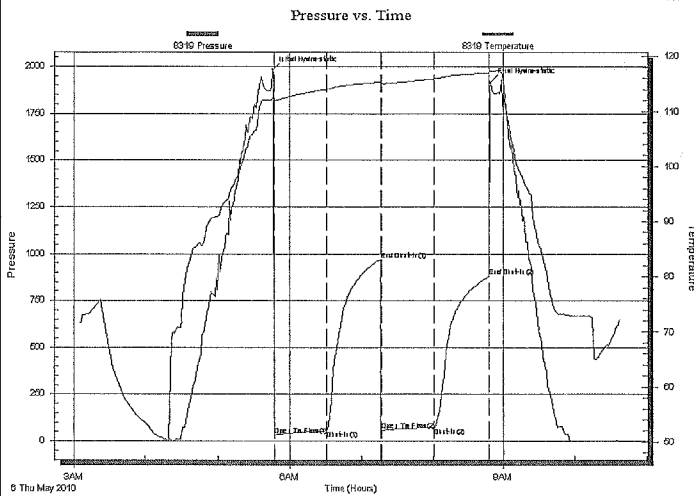
TEST COMMENT:

IF-6in blow

ISI-No blow

FF-2.5in blow

FSI-No blow



PRESSURE SUMMARY

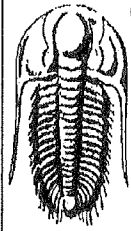
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1980.33	112.41	Initial Hydro-static
2	32.14	112.10	Open To Flow (1)
45	54.96	114.03	Shut-In(1)
91	969.59	115.36	End Shut-In(1)
92	58.58	115.12	Open To Flow (2)
136	74.02	115.96	Shut-In(2)
183	880.40	116.97	End Shut-In(2)
184	1917.74	117.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	VSOCM 5%O 95%M	0.42
60.00	MCO 40%M 60%O	0.84
40.00	Free Oil	0.56

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38581

DST#: 5

ATTN: Gator

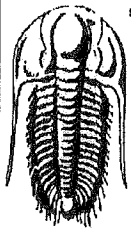
Test Start: 2010.05.06 @ 03:05:58

Tool Information

Drill Pipe:	Length: 3816.00 ft	Diameter: 3.80 inches	Volume: 53.53 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 53.53 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3813.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	3873.00 ft			
Interval betw een Packers:	60.00 ft			
Tool Length:	138.00 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			3794.00	
Shut In Tool	5.00			3799.00	
Hydraulic tool	5.00			3804.00	
Packer	4.00			3808.00	20.00 Bottom Of Top Packer
Packer	5.00			3813.00	
Stubb	1.00			3814.00	
Recorder	0.00	8319	Inside	3814.00	
Perforations	16.00			3830.00	
Change Over Sub	1.00			3831.00	
Blank Spacing	32.00			3863.00	
Change Over Sub	1.00			3864.00	
Perforations	5.00			3869.00	
Recorder	0.00	13308	Inside	3869.00	
Blank Off Sub	1.00			3870.00	
Blank Spacing	3.00			3873.00	60.00 Tool Interval
Packer	0.00			3873.00	
Stubb	1.00			3874.00	
Recorder	0.00	8369	Below	3874.00	
Perforations	19.00			3893.00	
Change Over Sub	1.00			3894.00	
Blank Spacing	32.00			3926.00	
Change Over Sub	1.00			3927.00	
Bullnose	4.00			3931.00	58.00 Bottom Packers & Anchor
Total Tool Length:	138.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning- Nelson Oil Co

Charlie 1-36

P.O. Box 372
Hays, KS 67601

36-12-20 Ellis, KS

Job Ticket: 38581

DST#: 5

ATTN: Gator

Test Start: 2010.05.06 @ 03:05:58

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:	ppm
Viscosity: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	VSOCM 5%O 95%M	0.421
60.00	MCO 40%M 60%O	0.842
40.00	Free Oil	0.561

Total Length: 130.00 ft Total Volume: 1.824 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

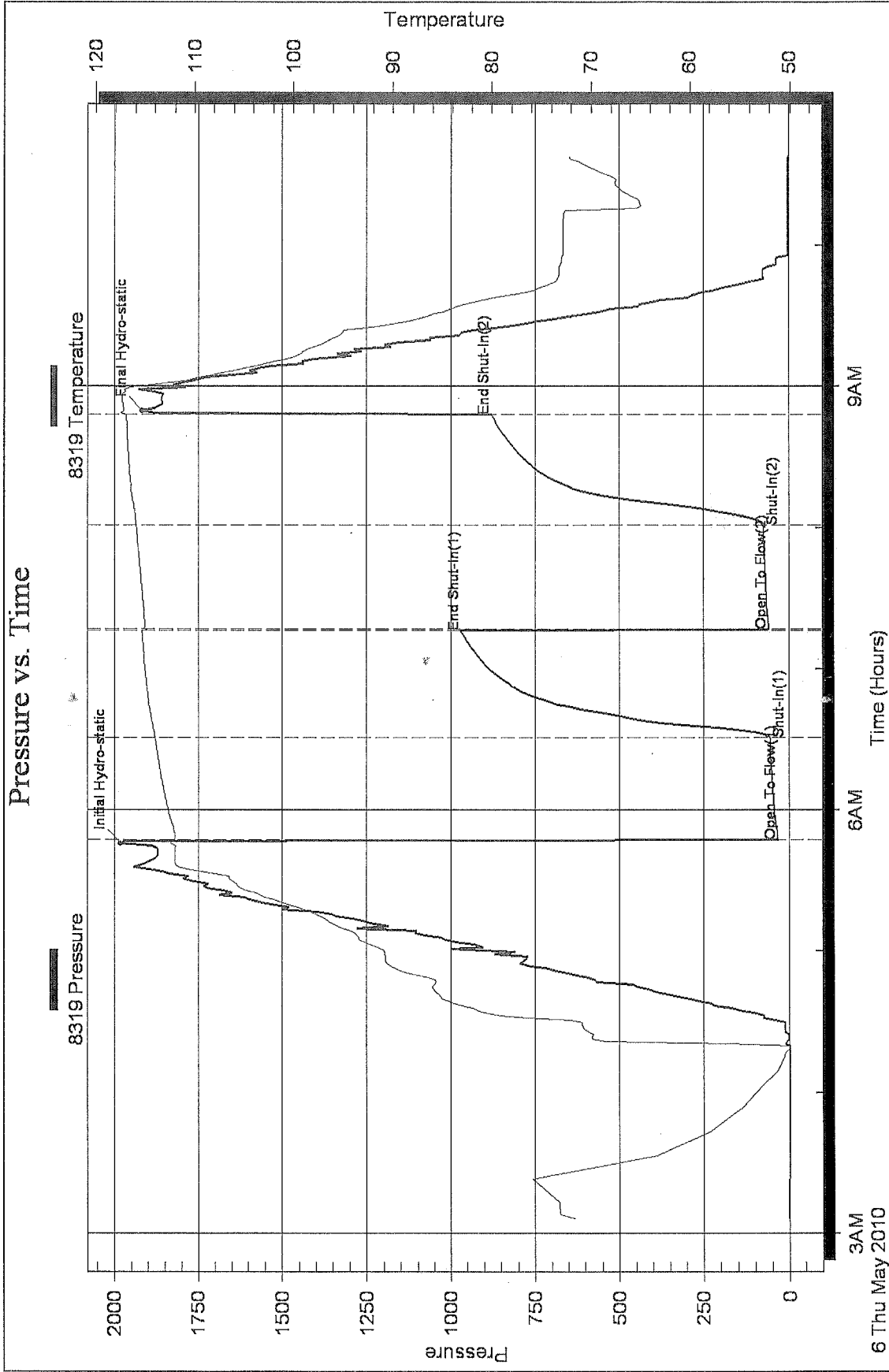
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Serial #: 8369

Dowling-Nelson Oil Co

36-12-20 Ellis, KS

DST Test Number: 5

Pressure vs. Time

