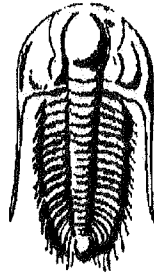


15-065-23618

22-9s-24w

IND



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601-0372

ATTN: Ron Nelson

22-9s-24w Graham KS

R&B#1-22

Start Date: 2010.02.11 @ 06:53:04

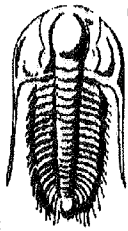
End Date: 2010.02.11 @ 12:42:28

Job Ticket #: 37167 DST #: 1

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 Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

ATTN: Ron Nelson

Job Ticket: 37167

DST#: 1

Test Start: 2010.02.11 @ 06:53:04

GENERAL INFORMATION:

Formation: **LKC C&D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:33:59

Time Test Ended: 12:42:28

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3820.00 ft (KB) To 3865.00 ft (KB) (TVD)**

Total Depth: 3865.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2456.00 ft (KB)

2448.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: 228.33 psig @ 3830.01 ft (KB)

Start Date: 2010.02.11

End Date: 2010.02.11

Start Time: 06:53:04

End Time: 12:42:28

Capacity: 8000.00 psig

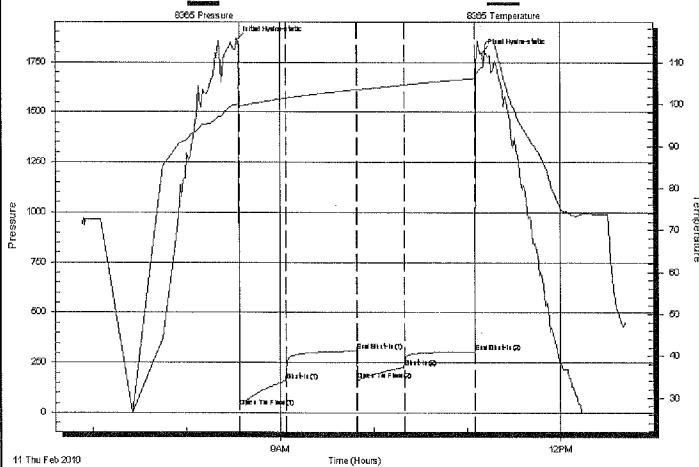
Last Calib.: 2010.02.11

Time On Btm: 2010.02.11 @ 08:32:29

Time Off Btm: 2010.02.11 @ 11:08:59

TEST COMMENT: IFF-w k to strg in 11min
FFP-w k to a gd bl 1/4"to 6 1/2"bl
Times 30-45-30-45
no bl on shut-in

Pressure vs. Time



PRESSURE SUMMARY

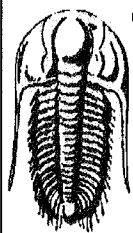
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1859.30	99.85	Initial Hydro-static
2	31.17	99.41	Open To Flow (1)
31	160.12	101.45	Shut-In(1)
77	307.54	103.52	End Shut-In(1)
77	163.06	103.48	Open To Flow (2)
107	228.33	104.65	Shut-In(2)
153	305.96	106.19	End Shut-In(2)
157	1794.10	108.76	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	MV 20%M80%W w/show of oil	0.85
375.00	Water	5.26

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

Job Ticket: 37167

DST#: 1

ATTN: Ron Nelson

Test Start: 2010.02.11 @ 06:53:04

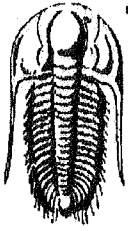
Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.80 inches	Volume: 53.30 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: 75000.00 lb
			<u>Total Volume: 53.45 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3820.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.02 ft			
Tool Length:	66.02 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			3800.00	
Shut In Tool	5.00			3805.00	
Hydraulic tool	5.00			3810.00	
Packer	5.00			3815.00	21.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Stubb	1.00			3821.00	
Perforations	9.00			3830.00	
Recorder	0.01	8365	Inside	3830.01	
Recorder	0.01	6625	Outside	3830.02	
Blank Spacing	32.00			3862.02	
Bullnose	3.00			3865.02	45.02 Bottom Packers & Anchor

Total Tool Length: 66.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

Job Ticket: 37167 **DST#: 1**

ATTN: Ron Nelson

Test Start: 2010.02.11 @ 06:53:04

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:	80000 ppm
Viscosity: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	MW 20% M80%W w/show of oil	0.849
375.00	Water	5.260

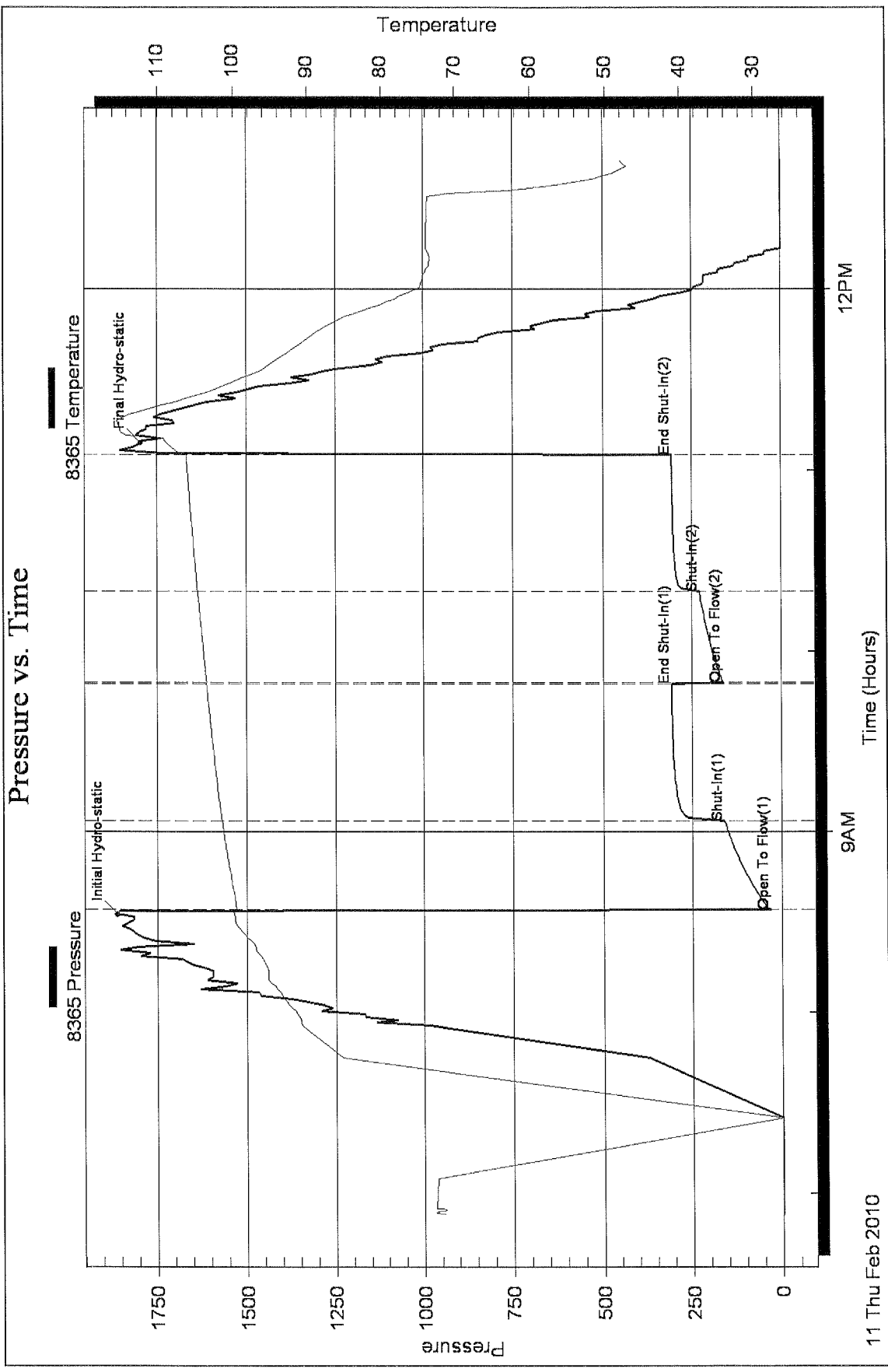
Total Length: 455.00 ft Total Volume: 6.109 bbl

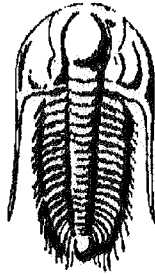
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW .13 @ 55F

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601-0372

ATTN: Ron Nelson

22-9s-24w Graham KS

R&B#1-22

Start Date: 2010.02.11 @ 23:15:08

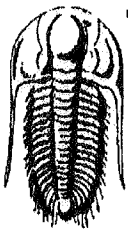
End Date: 2010.02.12 @ 05:31:32

Job Ticket #: 37168 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 ning-Nelson Oil Co Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

Job Ticket: 37168

DST#: 2

ATTN: Ron Nelson

Test Start: 2010.02.11 @ 23:15:08

GENERAL INFORMATION:

Formation: LKC H,I,J

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:53:03

Time Test Ended: 05:31:32

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: 3911.00 ft (KB) To 3990.00 ft (KB) (TVD)

Total Depth: 3990.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2456.00 ft (KB)

2448.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8365

Inside

Press@RunDepth: 43.85 psig @ 3924.01 ft (KB)

Start Date: 2010.02.11

End Date:

2010.02.12

Start Time: 23:15:08

End Time:

05:31:32

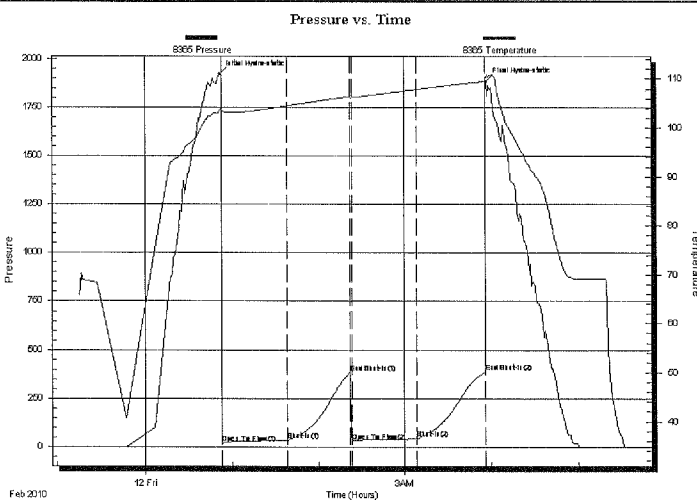
Capacity: 8000.00 psig

Last Calib.: 2010.02.12

Time On Btm: 2010.02.12 @ 00:51:33

Time Off Btm: 2010.02.12 @ 03:57:03

TEST COMMENT: IFP-w k bl thru-out 1/4"to 2"bl
FFP-w k bl thru-out 2"to 3"bl
Times 45-45-45-45
no bl on shut-in



PRESSURE SUMMARY

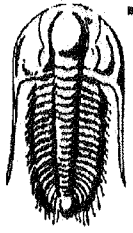
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1919.35	103.61	Initial Hydro-static
2	20.22	103.29	Open To Flow (1)
47	34.39	104.45	Shut-In(1)
91	385.34	106.38	End Shut-In(1)
92	29.58	106.28	Open To Flow (2)
137	43.85	107.88	Shut-In(2)
185	387.86	109.51	End Shut-In(2)
186	1883.38	110.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	250'GIP	0.00
65.00	HO&GCM 10%G40%O50%M	0.64

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

Job Ticket: 37168

DST#: 2

ATTN: Ron Nelson

Test Start: 2010.02.11 @ 23:15:08

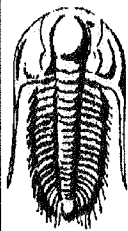
Tool Information

Drill Pipe:	Length: 3864.00 ft	Diameter: 3.80 inches	Volume: 54.20 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: 75000.00 lb
			<u>Total Volume: 54.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	3911.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	79.02 ft			
Tool Length:	100.02 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			3891.00	
Shut In Tool	5.00			3896.00	
Hydraulic tool	5.00			3901.00	
Packer	5.00			3906.00	21.00 Bottom Of Top Packer
Packer	5.00			3911.00	
Stubb	1.00			3912.00	
Perforations	12.00			3924.00	
Recorder	0.01	8365	Inside	3924.01	
Recorder	0.01	6625	Outside	3924.02	
Blank Spacing	63.00			3987.02	
Bullnose	3.00			3990.02	79.02 Bottom Packers & Anchor

Total Tool Length: 100.02



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

R&B#1-22

PO Box 372
Hays KS 67601-0372

22-9s-24w Graham KS

Job Ticket: 37168 **DST#: 2**

ATTN: Ron Nelson

Test Start: 2010.02.11 @ 23:15:08

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: 7.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	250'GIP	0.000
65.00	HO&GCM 10%G40%O50%M	0.638

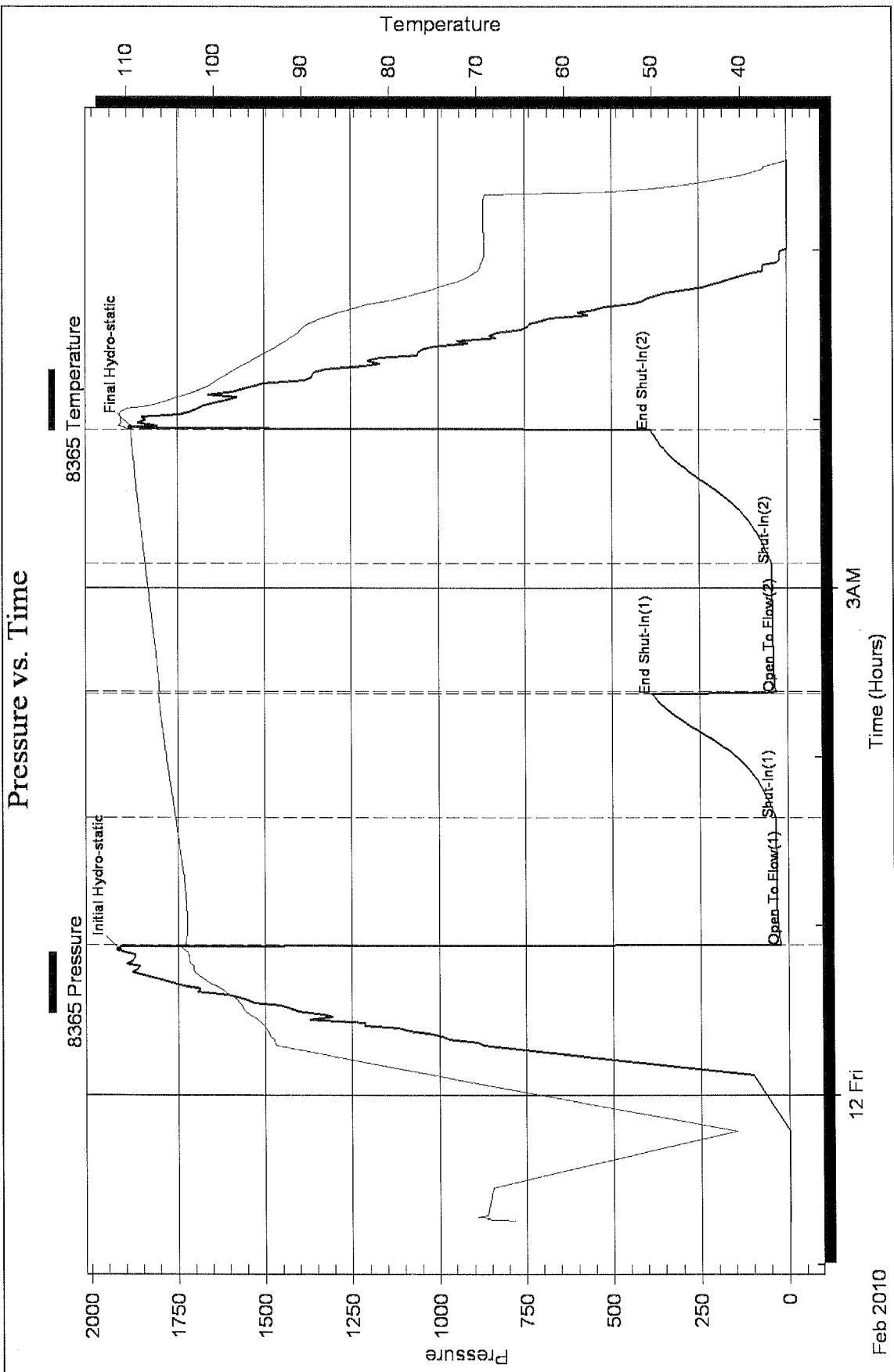
Total Length: 65.00 ft Total Volume: 0.638 bbl

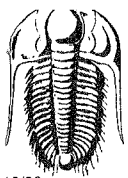
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 15 2010

Test Ticket

NO. 37167

10/08

BY: _____

Well Name & No. R+B #1-22 Test No. 1 Date 2-11-10

Company Downing-Nelson Oil Co, Inc Elevation 2456 KB 2448 GL

Address P.O. Box 372 Hays, Ks 67601-0372

Co. Rep / Geo. MARC Downing Rig Discovery rig 1

Location: Sec. 22 Twp. 9⁵ Rge. 24^w Co. GRAHAM State Ks

Interval Tested 3820-3865 Zone Tested LKC C+D

Anchor Length 45 Drill Pipe Run 3800 Mud Wt. 9

Top Packer Depth 3815 Drill Collars Run 30 Vis 60

Bottom Packer Depth 3820 Wt. Pipe Run - WL 7.8

Total Depth 3865 Chlorides 1000 ppm System LCM 3/4

Blow Description IFP - WEAK TO STRONG IN 11 MIN
FFP - WEAK TO A GOOD BLOW 1/4" TO 6 1/2" BLOW
NO BLOW ON SHUT-IN

Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>MW w/show of oil</u>			<u>80</u>	<u>20</u>
<u>375</u>	<u>WATER</u>				

Rec Total 455 BHT 106 Gravity - API RW .13 @ 55 °F Chlorides 80000 ppm

(A) Initial Hydrostatic 1814 Test 1050- T-On Location 0600

(B) First Initial Flow 31 Jars _____ T-Started 0752

(C) First Final Flow 160 Safety Joint _____ T-Open 0835

(D) Initial Shut-In 307 Circ Sub _____ T-Pulled 1105

(E) Second Initial Flow 163 Hourly Standby _____ T-Out 1242

(F) Second Final Flow 228 Mileage 120 RT Comments _____

(G) Final Shut-In 305 Sampler _____

(H) Final Hydrostatic 1794 Straddle _____

Initial Open 30 Shale Packer _____ Ruined Shale Packer _____

Initial Shut-In 45 Extra Packer _____ Ruined Packer _____

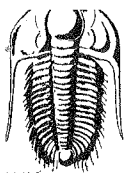
Final Flow 30 Extra Recorder _____ Extra Copies _____

Final Shut-In 45 Day Standby _____ Sub Total 0

Sub Total 1170- Accessibility _____ Total 1170-

Approved By _____ Our Representative RAY SCHWAGER Thank you 404

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 15 2010

Test Ticket

NO. 37168

Well Name & No. R+B #1-22 BY: _____ Test No. 2 Date 2-11-10
 Company Downing-Nelson Oil Co Inc Elevation 2456 KB 2448 GL _____
 Address P.O. Box 372 Hays, Ks 67601-0372
 Co. Rep / Geo. AL Downing Rig Discovery rig 1
 Location: Sec. 22 Twp. 9^s Rge. 24^w Co. GRAHAM State K

Interval Tested 3911-3990 Zone Tested LKC H, I, J
 Anchor Length 79 Drill Pipe Run 3864 Mud Wt. 9.1
 Top Packer Depth 3906 Drill Collars Run 30 Vis 55
 Bottom Packer Depth 3911 Wt. Pipe Run - WL 7.8
 Total Depth 3990 Chlorides 1800 ppm System LCM 3/4 #
 Blow Description IFP-WEAK Blow thru-out 1/4" To 2" Blow
FFP-WEAK Blow thru-out 2" To 3" Blow
NO BLOW ON shut-IN

Rec	Feet of	%gas	%oil	%water	%mud
<u>250</u>	<u>GIP</u>				
<u>65</u>	<u>H0+6CM</u>	<u>10</u>	<u>40</u>		<u>50</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 65 BHT 109 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1873 Test 1050 T-On Location 2220
 (B) First Initial Flow 20 Jars _____ T-Started 2315
 (C) First Final Flow 34 Safety Joint _____ T-Open 0055
 (D) Initial Shut-In 385 Circ Sub _____ T-Pulled 0355
 (E) Second Initial Flow 29 Hourly Standby _____ T-Out 0531
 (F) Second Final Flow 43 Mileage 120RT Comments _____
 (G) Final Shut-In 387 Sampler _____
 (H) Final Hydrostatic 1851 Straddle _____
 Shale Packer _____ Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Initial Open 45 Day Standby _____ Sub Total 0
 Initial Shut-In 45 Accessibility _____ Total 1170
 Final Flow 45
 Final Shut-In 45
 Sub Total 1170

Approved By _____ Our Representative Ray Schwager thank you
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.