

DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

32-12s-21w Trego Ks

Schoenthaler #1-32

Start Date: 2004.07.20 @ 16:03:10

End Date: 2004.07.20 @ 21:30:39

Job Ticket #: 20038 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing-Nelson Oil Co Inc

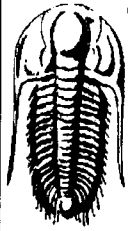
Schoenthaler #1-32

32-12s-21w Trego Ks

DST # 1

LKC

2004.07.20



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

Schoenthaler #1-32

P O Box 372
Hays Ks 67601

32-12s-21w Trego Ks

ATTN: Ron Nelson

Job Ticket: 20038 **DST#: 1**

Test Start: 2004.07.20 @ 16:03:10

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:55:09

Time Test Ended: 21:30:39

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 28

Interval: **3740.00 ft (KB) To 3820.00 ft (KB) (TVD)**

Total Depth: 3820.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2295.00 ft (KB)

2287.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6668

Inside

Press@RunDepth: 30.01 psig @ 3755.01 ft (KB)

Start Date: 2004.07.20

End Date:

2004.07.20

Start Time: 16:03:10

End Time:

21:30:39

Capacity: 7000.00 psig

Last Calib.: 2004.07.20

Time On Btm: 2004.07.20 @ 17:52:09

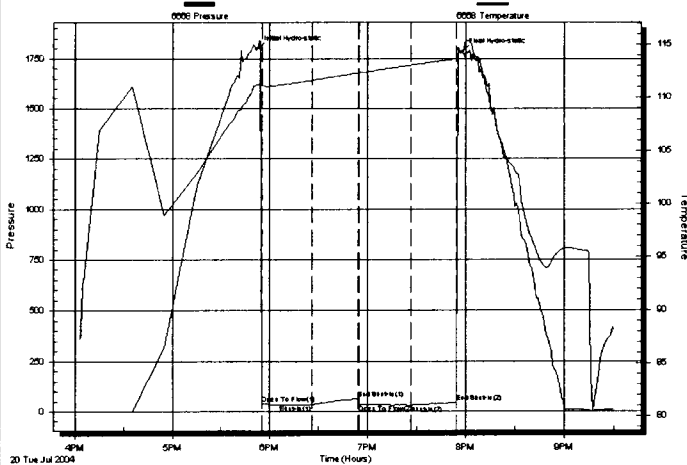
Time Off Btm: 2004.07.20 @ 19:57:39

TEST COMMENT: FFP-wk surface bl died in 20 min

FFP-no bl

Times 30-30-30-30

Pressure vs. Time



PRESSURE SUMMARY

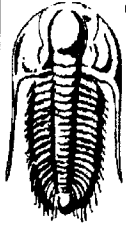
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1796.39	111.19	Initial Hydro-static
3	38.98	111.16	Open To Flow (1)
34	34.14	111.64	Shut-In (1)
62	61.68	112.35	End Shut-In (1)
63	34.30	112.35	Open To Flow (2)
94	30.01	113.07	Shut-In (2)
122	41.97	113.68	End Shut-In (2)
126	1782.05	114.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 7%oil 93%mud	0.14
0.00	w/show of clean oil on top of fluid	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

Schoenthaler #1-32

P O Box 372
Hays Ks 67601

32-12s-21w Trego Ks

Job Ticket: 20038

DST#: 1

ATTN: Ron Nelson

Test Start: 2004.07.20 @ 16:03:10

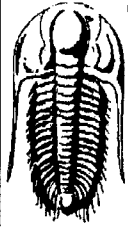
Tool Information

Drill Pipe:	Length: 3736.00 ft	Diameter: 3.80 inches	Volume: 52.41 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 52.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3740.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	80.02 ft			
Tool Length:	101.02 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			3720.00	
Shut In Tool	5.00			3725.00	
Hydraulic tool	5.00			3730.00	
Packer	5.00			3735.00	21.00 Bottom Of Top Packer
Packer	5.00			3740.00	
Stubb	1.00			3741.00	
Perforations	13.00			3754.00	
Change Over Sub	1.00			3755.00	
Recorder	0.01	6668	Inside	3755.01	
Blank Spacing	61.00			3816.01	
Change Over Sub	1.00			3817.01	
Recorder	0.01	13534	Outside	3817.02	
Bullnose	3.00			3820.02	80.02 Bottom Packers & Anchor

Total Tool Length: 101.02



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Schoenthaler #1-32

P O Box 372
Hays Ks 67601

32-12s-21w Trego Ks

Job Ticket: 20038

DST#: 1

ATTN: Ron Nelson

Test Start: 2004.07.20 @ 16:03:10

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: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.75 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 2.00 inches			

Recovery Information

Recovery Table

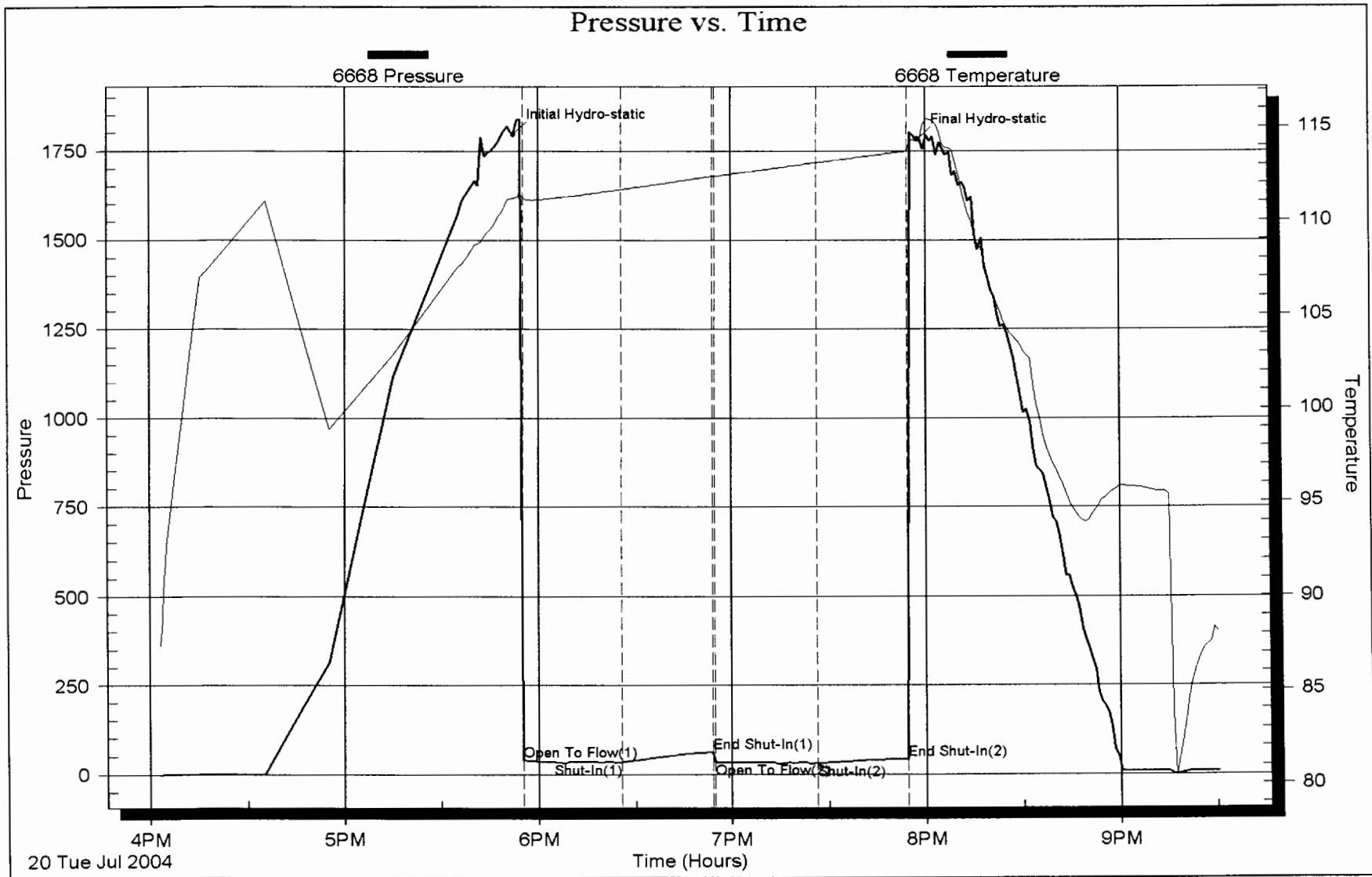
Length ft	Description	Volume bbl
10.00	OCM 7%oil 93%mud	0.140
0.00	w/show of clean oil on top of fluid	0.000

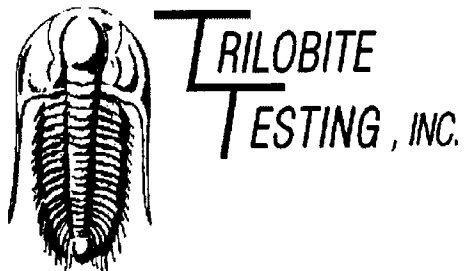
Total Length: 10.00 ft Total Volume: 0.140 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

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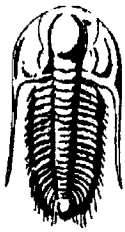
Schoenthaler #1-32

Start Date: 2004.07.21 @ 22:45:53

End Date: 2004.07.22 @ 05:26:22

Job Ticket #: 20039 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



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DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Schoenthaler #1-32

32-12s-21w Trego Ks

Job Ticket: 20039

DST#: 2

Test Start: 2004.07.21 @ 22:45:53

GENERAL INFORMATION:

Formation: n/a

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:16:52

Time Test Ended: 05:26:22

Test Type: Conventional Straddle

Tester: Ray Schwager

Unit No: 28

Interval: 3915.00 ft (KB) To 3995.00 ft (KB) (TVD)

Reference Elevations: 2295.00 ft (KB)

Total Depth: 4042.00 ft (KB) (TVD)

2287.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6668

Inside

Press@RunDepth: 103.85 psig @ 3925.02 ft (KB)

Capacity: 7000.00 psig

Start Date: 2004.07.21

End Date:

2004.07.22

Last Calib.: 2004.07.22

Start Time: 22:45:53

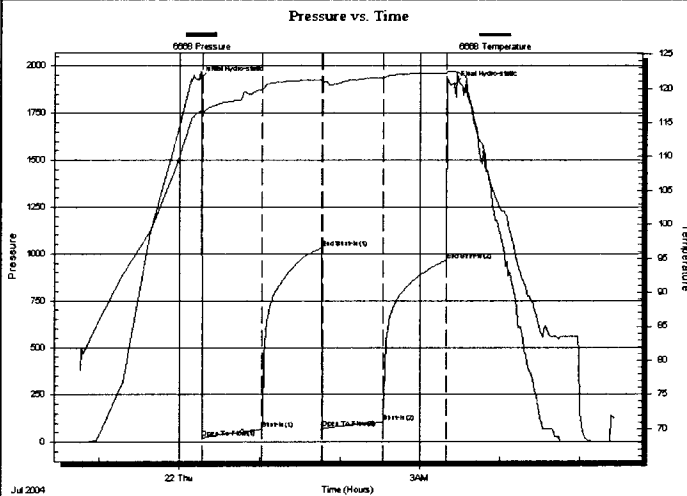
End Time:

05:26:22

Time On Btm: 2004.07.22 @ 00:14:22

Time Off Btm: 2004.07.22 @ 03:25:22

TEST COMMENT: IFF-w k bl thru-out 1/2" to 2 1/2" bl
FFP-w k bl thru-out surface bl to 1/4" bl
Times 45-45-45-45



PRESSURE SUMMARY

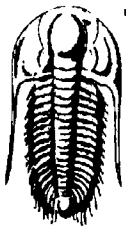
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1927.16	116.53	Initial Hydro-static
3	20.10	116.53	Open To Flow (1)
48	66.72	119.84	Shut-In(1)
92	1031.49	121.24	End Shut-In(1)
93	71.04	121.02	Open To Flow (2)
138	103.85	121.56	Shut-In(2)
185	965.00	122.26	End Shut-In(2)
191	1901.51	122.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
160.00	WM 45%w ater 55% mud	2.24
0.00	RW .4@71F	0.00

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

Schoenthaler #1-32

P O Box 372
Hays Ks 67601

32-12s-21w Trego Ks

Job Ticket: 20039

DST#: 2

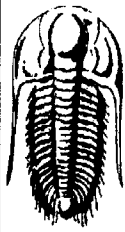
ATTN: Ron Nelson

Test Start: 2004.07.21 @ 22:45:53

Tool Information

Drill Pipe:	Length: 3919.00 ft	Diameter: 3.80 inches	Volume: 54.97 bbl	Tool Weight: 2500.00 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.97 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3915.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	3995.02 ft			
Interval between Packers:	80.02 ft			
Tool Length:	152.03 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3895.00	
Shut In Tool	5.00			3900.00	
Hydraulic tool	5.00			3905.00	
Packer	5.00			3910.00	21.00 Bottom Of Top Packer
Packer	5.00			3915.00	
Stubb	1.00			3916.00	
Perforations	4.00			3920.00	
Recorder	0.01	13534	Outside	3920.01	
Perforations	4.00			3924.01	
Change Over Sub	1.00			3925.01	
Recorder	0.01	6668	Inside	3925.02	
Blank Spacing	60.00			3985.02	
Change Over Sub	1.00			3986.02	
Perforations	5.00			3991.02	
Blank Off Sub	1.00			3992.02	
Blank Spacing	3.00			3995.02	80.02 Tool Interval
Packer	5.00			4000.02	
Stubb	1.00			4001.02	
Perforations	10.00			4011.02	
Change Over Sub	1.00			4012.02	
Recorder	0.01	11085	Below	4012.03	
Blank Spacing	30.00			4042.03	
Change Over Sub	1.00			4043.03	
Bullnose	3.00			4046.03	51.01 Bottom Packers & Anchor
Total Tool Length:	152.03				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Schoenthaler #1-32

P O Box 372
Hays Ks 67601

32-12s-21w Trego Ks

Job Ticket: 20039

DST#: 2

ATTN: Ron Nelson

Test Start: 2004.07.21 @ 22:45:53

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:

18000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.74 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
160.00	WM 45%water 55%mud	2.244
0.00	RW .4@71F	0.000

Total Length: 160.00 ft

Total Volume: 2.244 bbl

Num Fluid Samples: 0

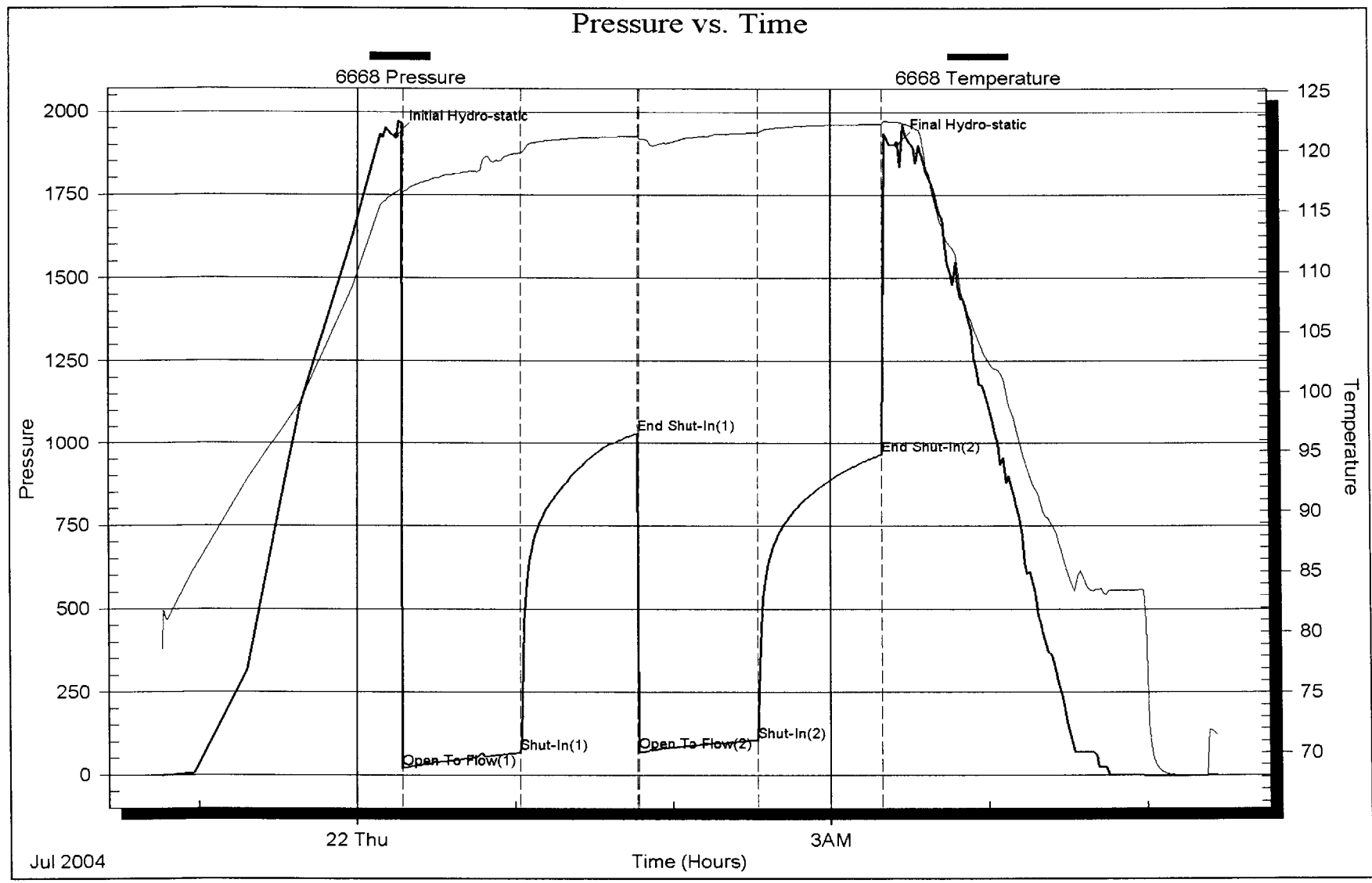
Num Gas Bombs: 0

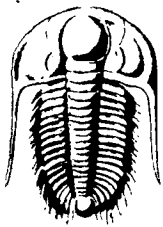
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

INV 0621

No 20038

05/03

Test Ticket

Well Name & No. Schoenthaler #1-32 Test No. 1 Date 7-20-04
 Company Downing-Nelson Oil Co. Inc Zone Tested LKC
 Address P.O. Box 372 Hays, Ks 67601 Elevation 2295 KB 2287 GL
 Co. Rep / Geo. Ron Nelson Cont. Discoveryrig1 Est. Ft. of Pay - Por. - %
 Location: Sec. 32 Twp. 12^s Rge. 21^w Co. 1 Rego State Ks
 No. of Copies Req Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3740-3820 Initial Str Wt./Lbs. 52000 Unseated Str Wt./Lbs. 52000
 Anchor Length 80 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 60000
 Top Packer Depth 3235 Tool Weight 2200
 Bottom Packer Depth 3740 Hole Size 7 7/8" Rubber Size 6 3/4"
 Total Depth 3820 Wt. Pipe Run - Drill Collar Run -
 Mud Wt. 9.2 LCM TR Vis. 52 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3736
 Blow Description IFP - Weak surface Blow died in 20 min
FFP - No Blow

Recovery - Total Feet 10 GIP - Ft. in DC - Ft. in DP 10
 Rec. 10 Feet of OCM %gas 7 %oil _____ %water 93 %mud _____
 Rec. _____ Feet of w/show of clean %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of Top of fluid %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 113 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 3000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1796</u> PSI	<u>6668</u>	<input checked="" type="checkbox"/>
(B) First Initial Flow Pressure		<u>38</u> PSI	(depth) <u>3755</u>	Elec. Rec. <input checked="" type="checkbox"/>
(C) First Final Flow Pressure		<u>34</u> PSI	Recorder No. <u>13534</u>	Jars _____
(D) Initial Shut-In Pressure		<u>61</u> PSI	(depth) <u>3817</u>	Safety Jt. _____
(E) Second Initial Flow Pressure		<u>34</u> PSI	Recorder No. <u>-</u>	Circ Sub _____
(F) Second Final Flow Pressure		<u>30</u> PSI	(depth) <u>-</u>	Sampler _____
(G) Final Shut-In Pressure		<u>41</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud		<u>1782</u> PSI	Initial Shut-In <u>30</u>	Ext. Packer _____

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.

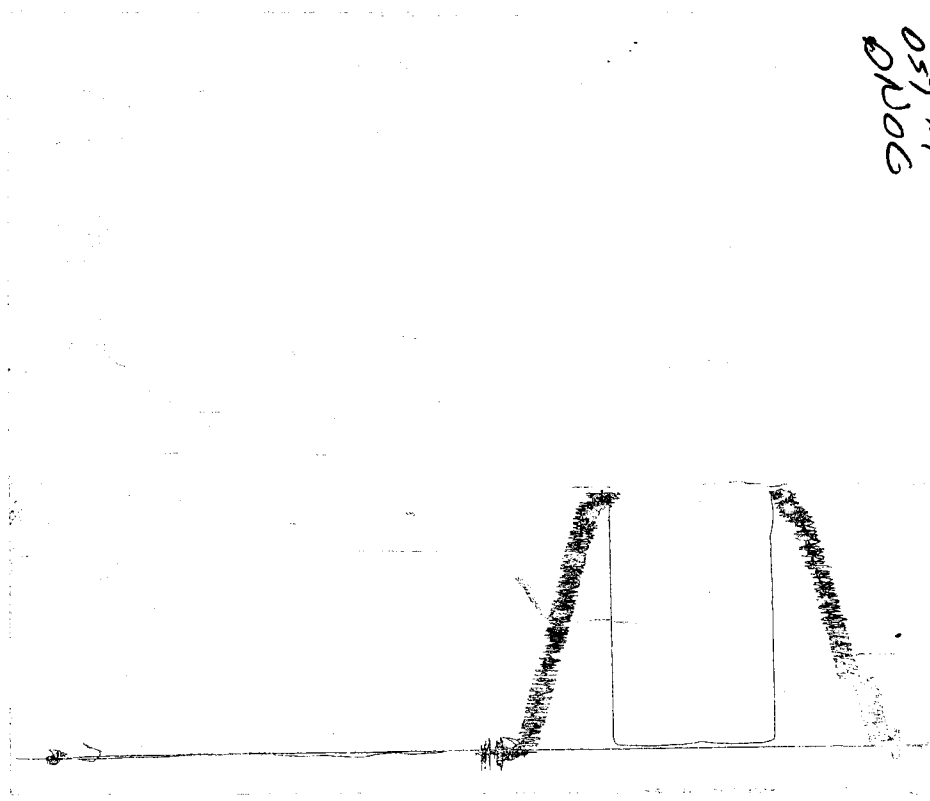
Approved By _____
 Our Representative Ray Schwager *Thank*
11/04

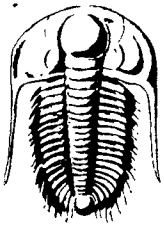
Final Flow 30 Shale Packer _____
 Final Shut-In 30 Mileage 53 RT
 T-On Location 1500 Sub Total: 945.05
 T-Started 1603 Std. By _____
 T-Open 1755 Other _____
 T-Pulled 1955 Total: _____
 T-Out 2100

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

13554
OST #1
01006





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20039

05/03

Test Ticket

Well Name & No. Schoethaler #1-32 Test No. 2 Date 7-21-04
 Company Downing-Nelson Oil Co Inc Zone Tested N/A
 Address P.O. Box 372 Hays, Ko 67601 Elevation 2295 KB 2287 GL
 Co. Rep / Geo. Ron Nelson Cont. Discovery rig 1 Est. Ft. of Pay - Por. - %
 Location: Sec. 32 Twp. 12^s Rge. 21^w Co. Trego State Ko
 No. of Copies Reg Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3915-3995 Initial Str Wt./Lbs. 57000 Unseated Str Wt./Lbs. 57000
 Anchor Length 80' Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 70000
 Top Packer Depth 3915-3910 Tool Weight 2200
 Bottom Packer Depth 3995 Hole Size 7 7/8" - Rubber Size 6 3/4" -
 Total Depth 4042 Wt. Pipe Run - Drill Collar Run -
 Mud Wt. 9.2 LCM TR Vis. 54 WL 8.8 Drill Pipe Size 4 1/2 XH Ft. Run 3919
 Blow Description IFP - WEAK BLOW THRU-OUT 1/2" TO 2 1/2" BLOW
FFP - WEAK BLOW THRU-OUT SURFACE TO 1/4" BLOW

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
<u>160</u>	<u>-</u>	<u>-</u>	<u>160</u>
Rec. <u>160</u> Feet of <u>WM</u>	%gas	%oil	%water
Rec. _____ Feet of _____	%gas	%oil	%water
Rec. _____ Feet of _____	%gas	%oil	%water
Rec. _____ Feet of _____	%gas	%oil	%water
Rec. _____ Feet of _____	%gas	%oil	%water
BHT <u>122</u> °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API			
RW <u>.4</u> @ <u>71</u> °F Chlorides <u>18000</u> ppm Recovery _____ Chlorides <u>3000</u> ppm System			

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1927</u> PSI	<u>6668</u>	Test <input checked="" type="checkbox"/>
(B) First Initial Flow Pressure	<u>20</u> PSI	(depth) <u>3925</u>	Elec. Rec <input checked="" type="checkbox"/>
(C) First Final Flow Pressure	<u>66</u> PSI	Recorder No. <u>13534</u>	Jars _____
(D) Initial Shut-In Pressure	<u>10.31</u> PSI	(depth) <u>3920</u>	Safety Jt. _____
(E) Second Initial Flow Pressure	<u>71</u> PSI	Recorder No. <u>11085</u>	Circ Sub _____
(F) Second Final Flow Pressure	<u>103</u> PSI	(depth) <u>400?</u>	Sampler _____
(G) Final Shut-In Pressure	<u>965</u> PSI	Initial Opening <u>45</u>	Straddle <input checked="" type="checkbox"/>
(Q) Final Hydrostatic Mud	<u>1901</u> PSI	Initial Shut-In <u>45</u>	Ext. Packer <input checked="" type="checkbox"/>
		Final Flow <u>45</u>	Shale Packer _____
		Final Shut-In <u>45</u>	Mileage <input checked="" type="checkbox"/> <u>53 RT</u>

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T-On Location	T-Started	T-Open	T-Pulled	T-Out
<u>2130</u>	<u>2245</u>	<u>0015</u>	<u>0315</u>	<u>0526</u>
Sub Total: <u>1345.05</u>	Std. By _____	Other _____	Total: _____	

Approved By _____
 Our Representative Ray Schwager THANK

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

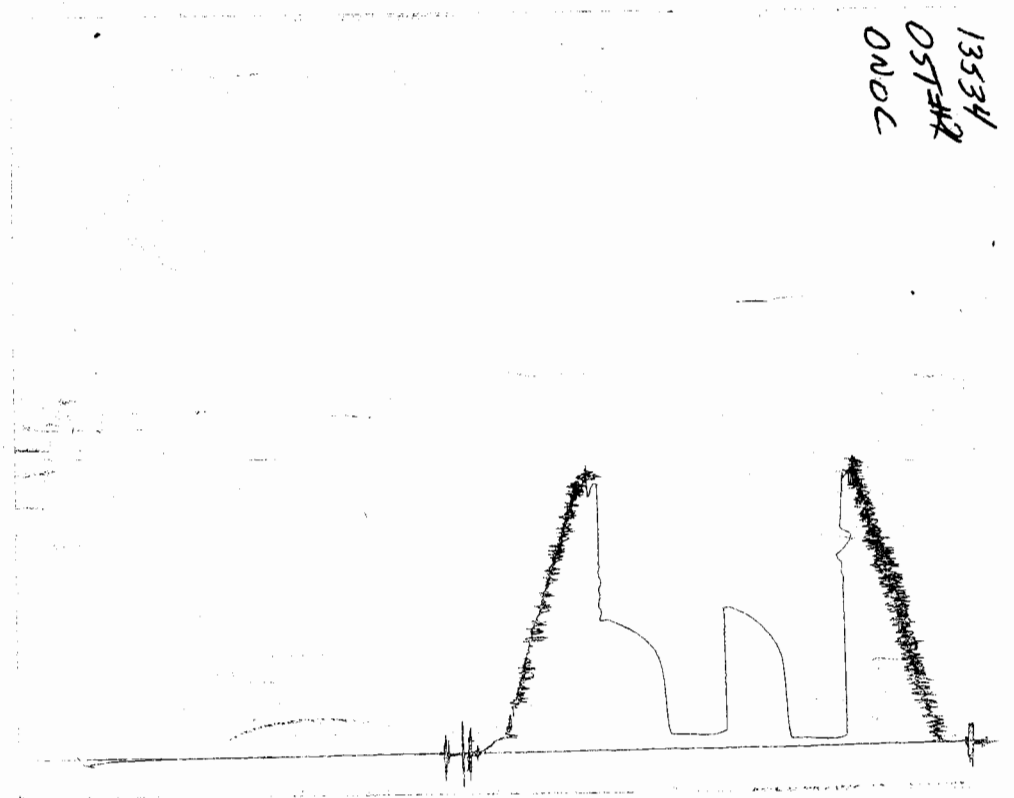


CHART PAGE

This is a photocopy of the actual AK-1 recorder chart

