



DRILL STEM TEST REPORT

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

PO Box 372
Hays, KS 67601

ATTN: Ron Nelson

13-13s-21w-Ellis-Ks

Fischer # 2-13

Start Date: 2002.06.12 @ 05:16:52

End Date: 2002.06.12 @ 11:29:21

Job Ticket #: 16465

DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dowling / Nelson Oil Co Inc

Fischer # 2-13

PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16465

DST#: 1

ATTN: Ron Nelson

Test Start: 2002.06.12 @ 05:16:52

GENERAL INFORMATION:

Formation: **A-B-C LK**Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 07:09:21

Time Test Ended: 11:29:21

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3473.00 ft (KB) To 3530.00 ft (KB) (TVD)**

Total Depth: 3530.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2180.00 ft (KB)

2172.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 2357

Inside

Press@RunDepth: 118.14 psig @ 3476.01 ft (KB)

Start Date: 2002.06.12

End Date:

2002.06.12

Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Start Time: 05:16:52

End Time:

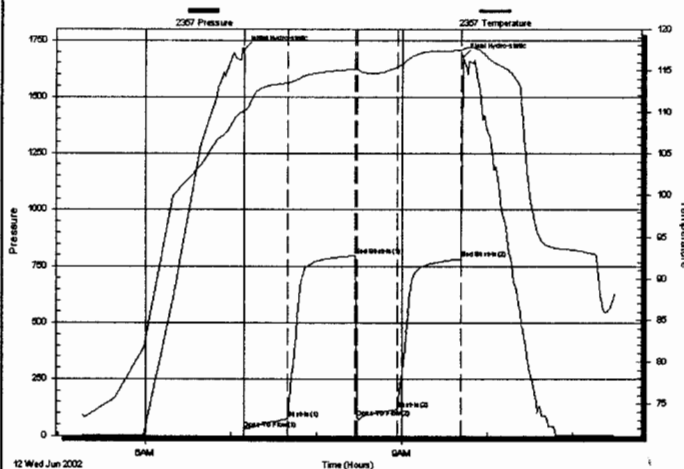
11:29:21

Time On Btm: 2002.06.12 @ 07:08:51

Time Off Btm: 2002.06.12 @ 09:42:51

TEST COMMENT: IF-Strong BOB in 4 min
 IS-Weak building to 2"
 FF-Strong BOB in 2 min
 FS-No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1709.33	110.11	Initial Hydro-static
1	27.74	110.15	Open To Flow (1)
31	76.33	113.54	Shut-In(1)
79	797.89	115.16	End Shut-In(1)
80	79.85	115.14	Open To Flow (2)
108	118.14	115.47	Shut-In(2)
153	783.33	117.43	End Shut-In(2)
154	1678.93	117.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
186.00	Frothy Gsy Oil 30%g 60%o 10%m	2.34
50.00	OCGsyM 10%g 5%o 85%m	0.70
2614.00	GIP	36.67

Gas Rates

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

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT		TOOL DIAGRAM	
	Downing / Nelson Oil Co Inc PO Box 372 Hays, KS 67601 ATTN: Ron Nelson		Fischer # 2-13 13-13s-21w-Ellis-Ks Job Ticket: 16465 DST#: 1 Test Start: 2002.06.12 @ 05:16:52	
Tool Information				
Drill Pipe:	Length: 3442.00 ft	Diameter: 3.80 inches	Volume: 48.28 bbl	Tool Weight: 1800.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume: 48.43 bbl		Tool Chased 0.01 ft
Drill Pipe Above KB:	20.01 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3473.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.02 ft			
Tool Length:	78.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				
Tool Description				
	Length (ft)	Serial No.	Position	Depth (ft)
C.O. Sub	1.00			3453.00
S.I. Tool	5.00			3458.00
HMV	5.00			3463.00
Packer	5.00			3468.00
				21.00 Bottom Of Top Packer
Packer	5.00			3473.00
Stubb	1.00			3474.00
Perforations	1.00			3475.00
C.O. Sub	1.00			3476.00
Recorder	0.01	2357	Inside	3476.01
Blank Spacing	31.00			3507.01
C.O. Sub	1.00			3508.01
Recorder	0.01	13254	Outside	3508.02
Perforations	19.00			3527.02
Bullnose	3.00			3530.02
				57.02 Bottom Packers & Anchor
Total Tool Length:		78.02		

10/6/17


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing / Nelson Oil Co Inc

Fischer # 2-13

 PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16465

DST#: 1

ATTN: Ron Nelson

Test Start: 2002.06.12 @ 05:16:52

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: 40.00 sec/qt

Cushion Volume:

bbl

 Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	Frothy Gsy Oil 30%g 60%o 10%m	2.336
50.00	OCGsyM 10%g 5%o 85%m	0.701
2614.00	GIP	36.668

Total Length: 2850.00 ft

Total Volume: 39.705 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 2357

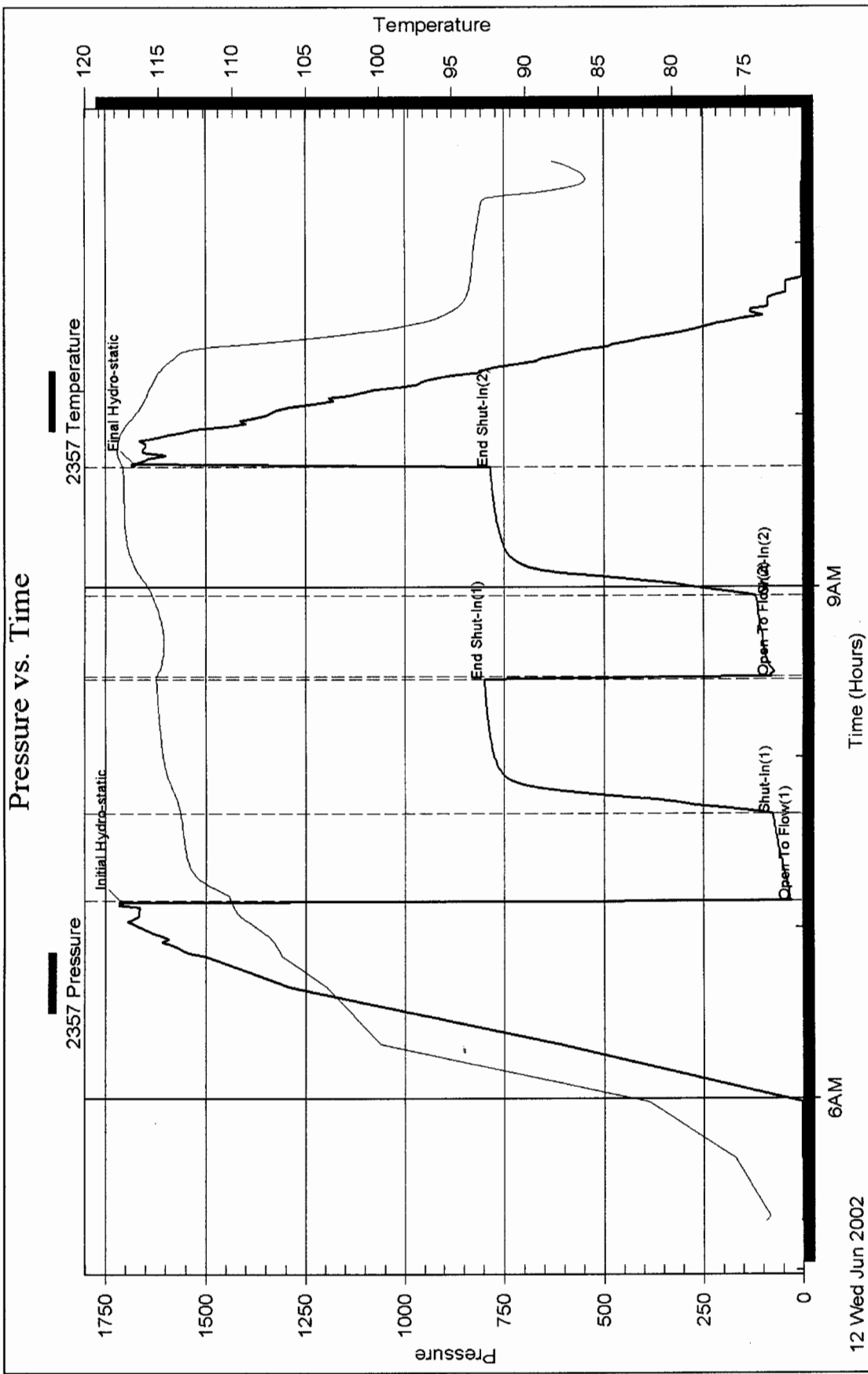
Downing / Nelson Oil Co Inc

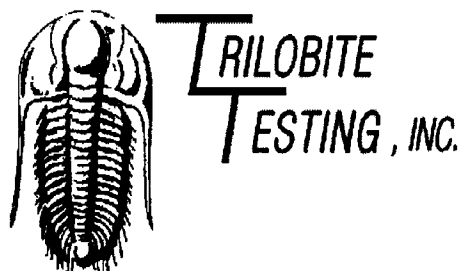
Inside

13-13s-21w - Ellis-Ks

DST Test Number: 1

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays, KS 67601

ATTN: Ron Nelson

13-13s-21w-Ellis-Ks

Fischer # 2-13

Start Date: 2002.06.13 @ 04:40:43

End Date: 2002.06.13 @ 10:52:43

Job Ticket #: 16466 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

Dowling / Nelson Oil Co Inc

Fischer # 2-13

PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16466

DST#: 2

ATTN: Ron Nelson

Test Start: 2002.06.13 @ 04:40:43

GENERAL INFORMATION:

Formation: **H-I-J LKC**

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

Time Tool Opened: 06:23:43

Time Test Ended: 10:52:43

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **3600.00 ft (KB) To 3675.00 ft (KB) (TVD)**

Reference Elevations: **2180.00 ft (KB)**

Total Depth: **3675.00 ft (KB) (TVD)**
2172.00 ft (CF)

Hole Diameter: **7.88 inches** Hole Condition: **Fair**
KB to GR/CF: 8.00 ft
Serial #: 2357
Inside

Press@RunDepth: **39.92 psig @ 3603.01 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2002.06.13**

End Date:

2002.06.13

Last Calib.: **1899.12.30**

Start Time: **04:40:44**

End Time:

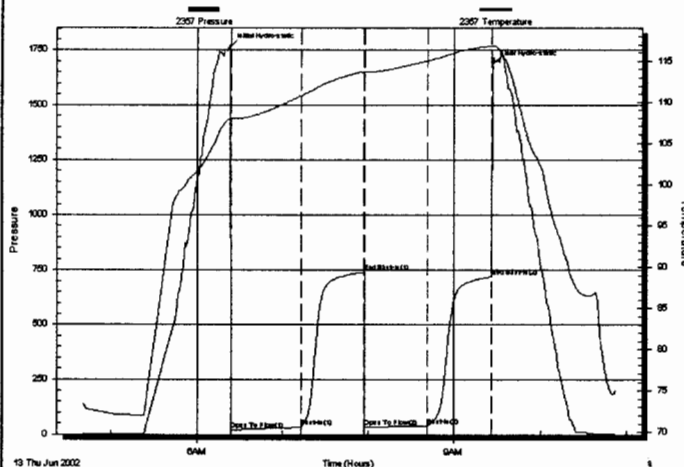
10:52:43

Time On Btm: **2002.06.13 @ 06:23:13**

Time Off Btm: **2002.06.13 @ 09:26:43**

TEST COMMENT: IF-Weak building to 2"
FF-Weak building to 1/4"
Times-45-45-45-45

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1766.47	107.98	Initial Hydro-static
1	18.91	107.99	Open To Flow (1)
50	32.97	110.78	Shut-In(1)
94	740.51	113.73	End Shut-In(1)
95	34.19	113.75	Open To Flow (2)
139	39.92	115.03	Shut-In(2)
183	720.74	116.85	End Shut-In(2)
184	1684.78	116.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	Mud w/ oil show	0.43

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 Inc

Fischer # 2-13

PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16466

DST#: 2

ATTN: Ron Nelson

Test Start: 2002.06.13 @ 04:40:43

Tool Information

Drill Pipe:	Length: 3564.00 ft	Diameter: 3.80 inches	Volume: 49.99 bbl	Tool Weight:	1300.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	40000.00 lb
			Total Volume: 50.14 bbl	Tool Chased	0.01 ft
Drill Pipe Above KB:	15.01 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3600.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	75.02 ft				
Tool Length:	96.02 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3580.00	
S.I. Tool	5.00			3585.00	
HMV	5.00			3590.00	
Packer	5.00			3595.00	21.00 Bottom Of Top Packer
Packer	5.00			3600.00	
Stubb	1.00			3601.00	
Perforations	1.00			3602.00	
C.O. Sub	1.00			3603.00	
Recorder	0.01	2357	Inside	3603.01	
Blank Spacing	61.00			3664.01	
C.O. Sub	1.00			3665.01	
Recorder	0.01	13254	Outside	3665.02	
Perforations	7.00			3672.02	
Bullnose	3.00			3675.02	75.02 Bottom Packers & Anchor

Total Tool Length: 96.02


**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing / Nelson Oil Co Inc

Fischer # 2-13

 PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16466

DST#: 2

ATTN: Ron Nelson

Test Start: 2002.06.13 @ 04:40:43

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: 50.00 sec/qt

Cushion Volume:

bbl

 Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	Mud w / oil show	0.428

Total Length: 50.00 ft

Total Volume: 0.428 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 2357

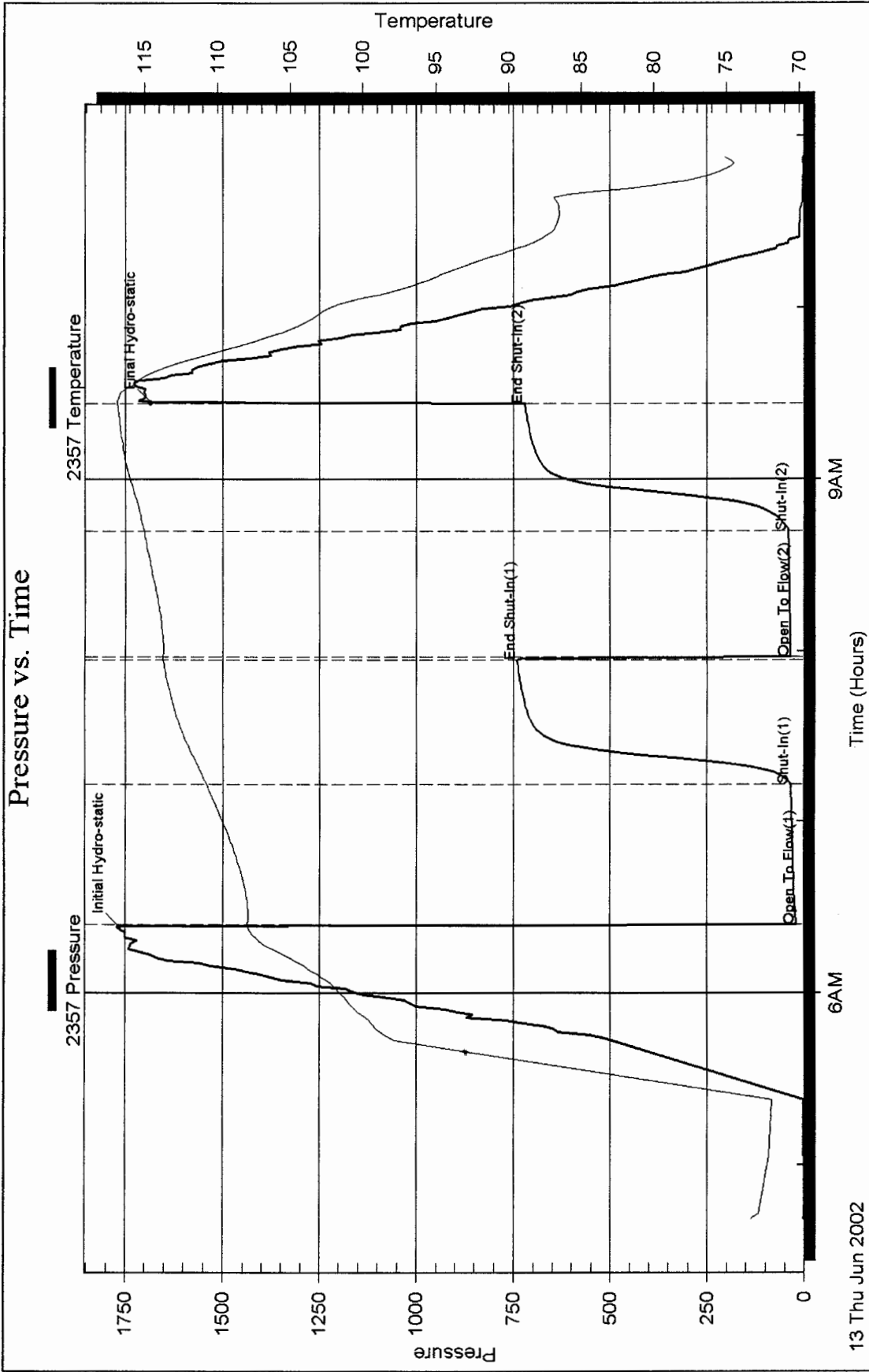
Inside

Downing / Nelson Oil Co Inc

13-13s-21w - Ellis-Ks

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays, KS 67601

ATTN: Ron Nelson

13-13s-21w-Ellis-Ks

Fischer # 2-13

Start Date: 2002.06.14 @ 00:19:21

End Date: 2002.06.14 @ 08:13:51

Job Ticket #: 16467

DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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


**TRILOBITE
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DRILL STEM TEST REPORT

Dowling / Nelson Oil Co Inc

Fischer # 2-13

PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16467

DST#: 3

ATTN: Ron Nelson

Test Start: 2002.06.14 @ 00:19:21

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:56:21

Time Test Ended: 08:13:51

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 21

Interval: **3794.00 ft (KB) To 3825.00 ft (KB) (TVD)**

Reference Elevations: 2180.00 ft (KB)

Total Depth: 3825.00 ft (KB) (TVD)

2172.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 2357
Inside

Press@RunDepth: 386.15 psig @ 3795.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2002.06.14

End Date:

2002.06.14

Last Calib.: 1899.12.30

Start Time: 00:19:22

End Time:

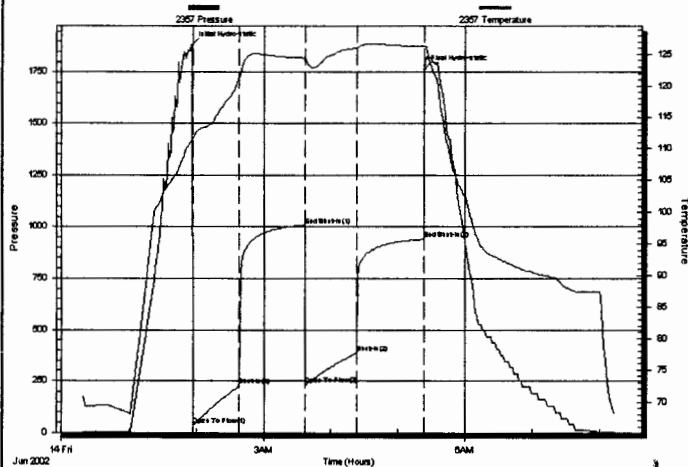
08:13:51

Time On Btm: 2002.06.14 @ 01:55:51

Time Off Btm: 2002.06.14 @ 05:23:51

TEST COMMENT: IF-Strong BOB in 4 min
ISI-Weak building to 1"
FF-Strong BOB in 5 min
FSI-Weak building to 1"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1882.06	111.46	Initial Hydro-static
1	36.55	111.56	Open To Flow (1)
42	226.23	121.31	Shut-In(1)
101	1008.36	124.41	End Shut-In(1)
102	230.40	124.28	Open To Flow (2)
147	386.15	126.09	Shut-In(2)
208	939.46	126.30	End Shut-In(2)
208	1763.76	126.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	HOCgsym 30%g 40%o 30%m	0.60
935.00	CGsyO 40%g 60%o	13.12
861.00	GIP	12.08

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 Inc

Fischer # 2-13

PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16467

DST#: 3

ATTN: Ron Nelson

Test Start: 2002.06.14 @ 00:19:21

Tool Information

Drill Pipe:	Length: 3750.00 ft	Diameter: 3.80 inches	Volume: 52.60 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.01 ft	Diameter: 0.01 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	40000.00 lb
		Total Volume:	52.75 bbl	Tool Chased	0.01 ft
Drill Pipe Above KB:	7.01 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3794.00 ft			Final	39000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	31.02 ft				
Tool Length:	52.02 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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C.O. Sub	1.00			3774.00	
S.I. Tool	5.00			3779.00	
HMV	5.00			3784.00	
Packer	5.00			3789.00	21.00 Bottom Of Top Packer
Packer	5.00			3794.00	
Stubb	1.00			3795.00	
Recorder	0.01	2357	Inside	3795.01	
Perforations	27.00			3822.01	
Recorder	0.01	13254	Outside	3822.02	
Bullnose	3.00			3825.02	31.02 Bottom Packers & Anchor
Total Tool Length:	52.02				


**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing / Nelson Oil Co Inc

Fischer # 2-13

 PO Box 372
Hays, KS 67601

13-13s-21w-Ellis-Ks

Job Ticket: 16467

DST#: 3

ATTN: Ron Nelson

Test Start: 2002.06.14 @ 00:19:21

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

 Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	HOCgsyM 30%g 40%o 30%m	0.596
935.00	CGsyO 40%g 60%o	13.116
861.00	GIP	12.078

Total Length: 1858.00 ft

Total Volume: 25.790 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

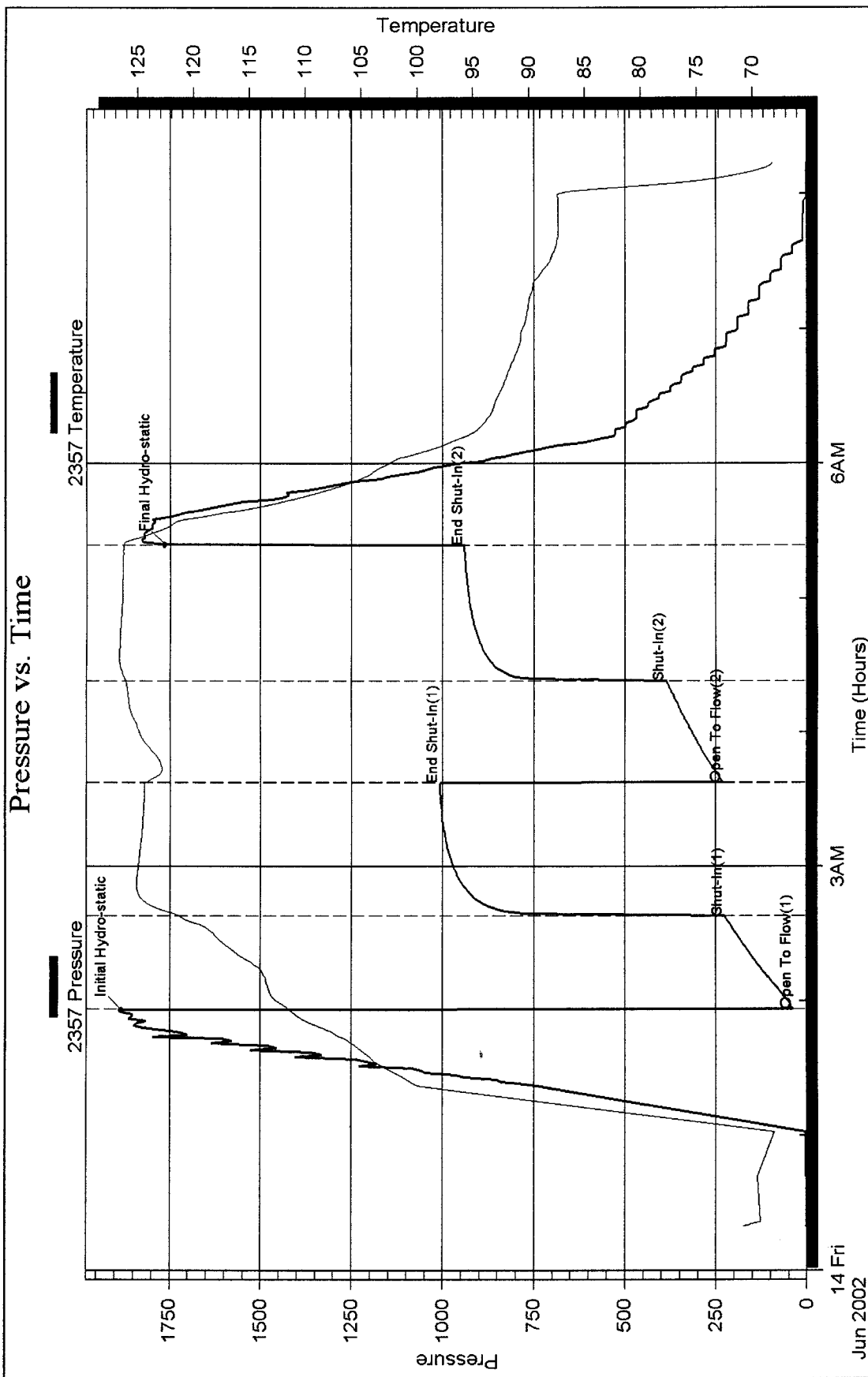
Serial #:

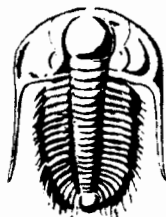
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16465

Test Ticket

Well Name & No. <u>Fischer #2-13</u>	Test No. <u>1</u>	Date <u>6-12-02</u>
Company <u>Downing/Nelson Oil Co Inc</u>	Zone Tested <u>A-B-C</u>	<u>LKC</u>
Address <u>P.O. Box 372, Hays, KS 67601</u>	Elevation <u>2180</u>	KB <u>2172</u> GL
Co. Rep / Geo. <u>Ron Nelson</u>	Cont. <u>Discovery #2</u>	Est. Ft. of Pay <u> </u> Por. <u> </u> %
Location: Sec. <u>13</u>	Twp. <u>13</u>	Rge. <u>21</u> Co. <u>Prego</u> State <u>KS</u>
No. of Copies <u> </u>	Distribution Sheet (Y, N) <u> </u>	Turnkey (Y, N) <u> </u> Evaluation (Y, N) <u> </u>

Interval Tested <u>3473 — 3530</u>	Initial Str Wt./Lbs. <u>38,000</u>	Unseated Str Wt./Lbs. <u>38,000</u>
Anchor Length <u>57</u>	Wt. Set Lbs. <u>30,000</u>	Wt. Pulled Loose/Lbs. <u>49,000</u>
Top Packer Depth <u> </u>	Tool Weight <u>1800</u>	
Bottom Packer Depth <u>3473</u>	Hole Size — 7 7/8" <u> </u>	Rubber Size — 6 3/4" <u> </u>
Total Depth <u>3530</u>	Wt. Pipe Run <u> </u>	Drill Collar Run <u>30</u>
Mud Wt. <u>8.8</u> LCM <u> </u> Vis. <u>40</u> WL <u>8.8</u>	Drill Pipe Size <u>4.5 XH</u>	Ft. Run <u>3442</u>
Blow Description <u>I.F. Strong B.O.B. in 4 min.</u>		
<u>ISI - Weak blow building to 2"</u>		
<u>E.F. Strong - B.O.B. in 2 min.</u>		
<u>FSI - No blow back</u>		

Recovery — Total Feet <u>236</u>	GIP <u>2614</u>	Ft. in DC <u>30</u>	Ft. in DP <u>206</u>
Rec. <u>50</u> Feet Of <u>0 CM</u>	<u>10</u> %gas <u>5</u> %oil	%water <u>85</u> %mud	
Rec. <u>186</u> Feet Of <u>Frothy Gsy 0</u>	<u>30</u> %gas <u>60</u> %oil	%water <u>10</u> %mud	
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud	
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud	
Rec. <u> </u> Feet Of <u> </u>	%gas <u> </u> %oil	%water <u> </u> %mud	
BHT <u>117</u> °F Gravity <u> </u>	°API D@ <u> </u>	°F Corrected Gravity <u> </u>	°API <u> </u>
RW <u> </u> @ <u> </u> °F	Chlorides <u> </u> ppm Recovery	Chlorides <u>4,000</u> ppm System	

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1709</u>	PSI	Recorder No. <u>2357</u>	T-On Location <u>04:15</u>	
(B) First Initial Flow Pressure	<u>27</u>	PSI	(depth) <u>3476</u>	T-Started <u>05:16</u>	
(C) First Final Flow Pressure	<u>26</u>	PSI	Recorder No. <u>13254</u>	T-Open <u>07:05</u>	
(D) Initial Shut-In Pressure	<u>797</u>	PSI	(depth) <u>3508</u>	T-Pulled <u>10:40</u>	
(E) Second Initial Flow Pressure	<u>79</u>	PSI	Recorder No. <u> </u>	T-Out <u>11:29</u>	
(F) Second Final Flow Pressure	<u>118</u>	PSI	(depth) <u> </u>	T-Off Location <u>12:00</u>	
(G) Final Shut-in Pressure	<u>783</u>	PSI	Initial Opening <u>30</u>	Test <u>700</u>	
(Q) Final Hydrostatic Mud	<u>1678</u>	PSI	Initial Shut-in <u>45</u>	Jars <u> </u>	
			Final Flow <u>30</u>	Safety Joint <u> </u>	
			Final Shut-in <u>45</u>	Straddle <u> </u>	
				Circ. Sub <u> </u>	
				Sampler <u> </u>	
				Extra Packer <u> </u>	
				Elec. Rec. <u>X</u> <u>150</u>	
				Mileage <u>22</u>	
				Other <u> </u>	
				TOTAL PRICE \$ <u>872</u>	

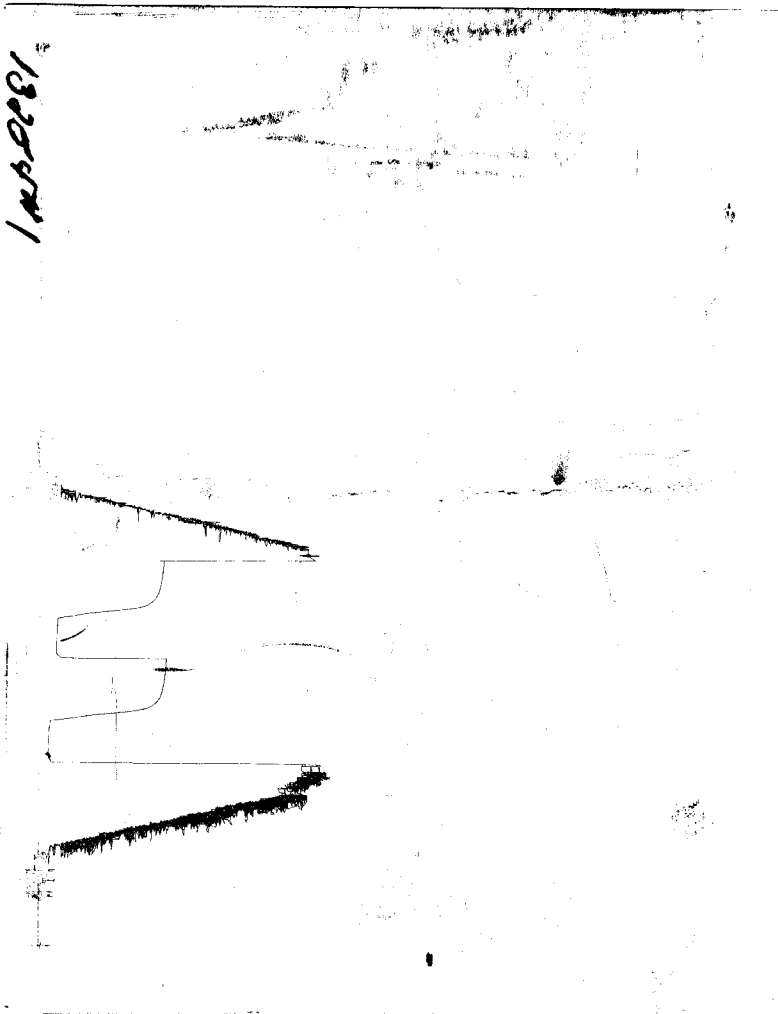
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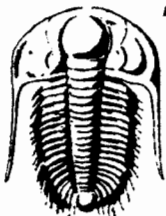
Approved By

Our Representative Dan Rangle

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16466

Test Ticket

Well Name & No. <u>Fischer #2-13</u>	Test No. <u>2</u>	Date <u>6-13-02</u>
Company <u>Downing/Nelson Oil Co. Inc</u>	Zone Tested <u>H-I-I</u>	<u>LXC</u>
Address _____	Elevation <u>2180</u>	KB <u>2172</u> GL
Co. Rep / Geo. <u>Ron Nelson</u>	Cont. <u>Discovery</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>13</u>	Twp. <u>13</u>	Rge. <u>21</u>
	Co. <u>Trego</u>	State <u>KS</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____
	Evaluation (Y, N) _____	

Interval Tested <u>3600 - 3675</u>	Initial Str Wt./Lbs. <u>38,000</u>	Unseated Str Wt./Lbs. <u>38,000</u>
Anchor Length <u>75</u>	Wt. Set Lbs. <u>39,000</u>	Wt. Pulled Loose/Lbs. <u>40,000</u>
Top Packer Depth <u>3595</u>	Tool Weight <u>1300</u>	
Bottom Packer Depth <u>3600</u>	Hole Size — 7 7/8" _____	Rubber Size — 6 3/4" _____
Total Depth <u>3675</u>	Wt. Pipe Run _____	Drill Collar Run <u>30</u>
Mud Wt. <u>9</u> LCM _____ Vis. <u>50</u> WL <u>8.8</u>	Drill Pipe Size <u>4.5 XH</u>	Ft. Run <u>3625</u>
Blow Description <u>I.F. Weak - building to 2"</u>		

I.F. Weak - building to 1/4"

Recovery — Total Feet <u>50</u>	GIP _____	Ft. in DC <u>30</u>	Ft. in DP <u>20</u>
Rec. <u>50</u>	Feet Of <u>Mud w/oil show</u>	%gas _____	%oil _____
Rec. _____	Feet Of _____	%water _____	%mud _____
Rec. _____	Feet Of _____	%gas _____	%oil _____
Rec. _____	Feet Of _____	%water _____	%mud _____
Rec. _____	Feet Of _____	%gas _____	%oil _____
Rec. _____	Feet Of _____	%water _____	%mud _____
BHT <u>116</u> °F Gravity _____	°API D@ _____	°F Corrected Gravity _____	°API _____
RW _____ @ _____ °F	Chlorides _____ ppm Recovery	Chlorides <u>4,200</u> ppm System	

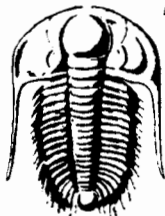
(A) Initial Hydrostatic Mud	AK-1 <u>1766</u>	Alpine	PSI Recorder No. <u>2357</u>	T-On Location <u>04:15</u>
(B) First Initial Flow Pressure	<u>18</u>	PSI (depth)	<u>3598</u>	T-Started <u>04:40</u>
(C) First Final Flow Pressure	<u>32</u>	PSI Recorder No.	<u>13254</u>	T-Open <u>06:20</u>
(D) Initial Shut-In Pressure	<u>740</u>	PSI (depth)	<u>3660</u>	T-Pulled <u>09:25</u>
(E) Second Initial Flow Pressure	<u>34</u>	PSI Recorder No.		T-Out <u>10:52</u>
(F) Second Final Flow Pressure	<u>39</u>	PSI (depth)		T-Off Location <u>11:15</u>
(G) Final Shut-in Pressure	<u>720</u>	PSI Initial Opening	<u>45</u>	Test _____
(Q) Final Hydrostatic Mud	<u>1701</u>	PSI Initial Shut-in	<u>45</u>	Jars _____
		Final Flow	<u>45</u>	Safety Joint _____
		Final Shut-in	<u>45</u>	Straddle _____
				Circ. Sub _____
				Sampler _____
				Extra Packer _____
				Elec. Rec. <u>X</u>
				Mileage <u>22</u>
				Other _____
				TOTAL PRICE \$ _____

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE 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

Dan Runghe



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16466

Test Ticket

Well Name & No.	<u>Fischer #2-13</u>	Test No.	<u>2</u>	Date	<u>6-13-02</u>
Company	<u>Downing/Nelson Oil Co. Inc</u>	Zone Tested	<u>H-I-I</u>	LXC	
Address			Elevation	<u>2180</u>	KB <u>2172</u> GL
Co. Rep / Geo.	<u>Ron Nelson</u>	Cont.	<u>Discovery</u>	Est. Ft. of Pay	Por. %
Location: Sec.	<u>13</u>	Twp.	<u>13</u>	Rge.	<u>21</u>
			Co.	<u>Trego</u>	State <u>KS</u>
No. of Copies		Distribution Sheet (Y, N)		Turnkey (Y, N)	Evaluation (Y, N)

Interval Tested	<u>3600 - 3675</u>	Initial Str Wt./Lbs.	<u>38,000</u>	Unseated Str Wt./Lbs.	<u>38,000</u>
Anchor Length	<u>75</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>40,000</u>
Top Packer Depth	<u>3595</u>	Tool Weight	<u>1300</u>		
Bottom Packer Depth	<u>3600</u>	Hole Size — 7 7/8"		Rubber Size — 6 3/4"	
Total Depth	<u>3675</u>	Wt. Pipe Run		Drill Collar Run	<u>30</u>
Mud Wt. <u>9</u> LCM Vis. <u>50</u> WL <u>8.8</u>		Drill Pipe Size	<u>4.5 XH</u>	Ft. Run	<u>3625</u>
Blow Description	<u>I.F. Weak - building to 2"</u>				

I.F. Weak - building to 1/4"

Recovery — Total Feet	<u>50</u>	GIP		Ft. in DC	<u>30</u>	Ft. in DP	<u>20</u>
Rec. <u>50</u>	Feet Of	<u>Mud w/oil show</u>	%gas	%oil	%water	%mud	
Rec.	Feet Of		%gas	%oil	%water	%mud	
Rec.	Feet Of		%gas	%oil	%water	%mud	
Rec.	Feet Of		%gas	%oil	%water	%mud	
Rec.	Feet Of		%gas	%oil	%water	%mud	
BHT <u>116</u>	°F Gravity		°API D@		°F Corrected Gravity		°API
RW	@	°F	Chlorides	ppm Recovery	Chlorides <u>1,200</u>	ppm System	

	AK-1	Alpine				
(A) Initial Hydrostatic Mud		<u>1766</u>	PSI	Recorder No.	<u>2357</u>	T-On Location <u>04:15</u>
(B) First Initial Flow Pressure		<u>18</u>	PSI	(depth)	<u>3598</u>	T-Started <u>04:40</u>
(C) First Final Flow Pressure		<u>32</u>	PSI	Recorder No.	<u>13254</u>	T-Open <u>06:20</u>
(D) Initial Shut-In Pressure		<u>740</u>	PSI	(depth)	<u>3660</u>	T-Pulled <u>09:25</u>
(E) Second Initial Flow Pressure		<u>34</u>	PSI	Recorder No.		T-Out <u>10:52</u>
(F) Second Final Flow Pressure		<u>39</u>	PSI	(depth)		T-Off Location <u>11:15</u>
(G) Final Shut-in Pressure		<u>720</u>	PSI	Initial Opening	<u>45</u>	Test
(Q) Final Hydrostatic Mud		<u>1701</u>	PSI	Initial Shut-in	<u>45</u>	Jars
				Final Flow	<u>45</u>	Safety Joint
				Final Shut-in	<u>45</u>	Straddle

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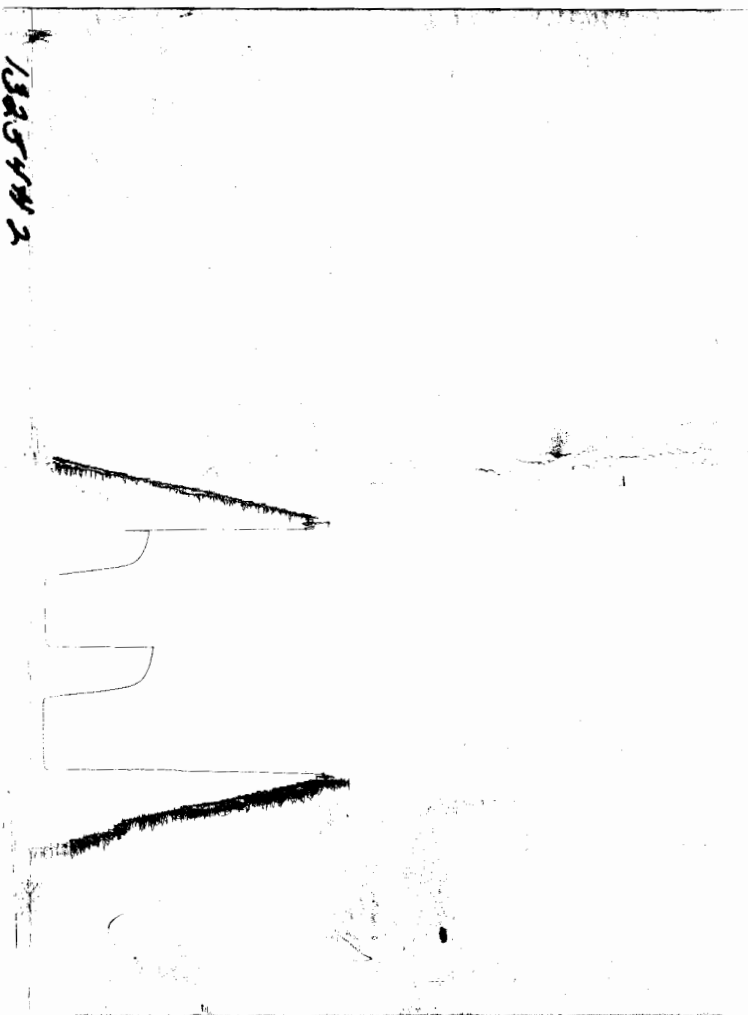
Approved By _____

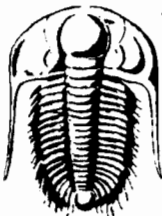
Our Representative Dan Rangle

Extra Packer _____
Elec. Rec. X _____
Mileage 22 _____
Other _____
TOTAL PRICE \$ _____

CHART PAGE

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





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16467

Test Ticket

Well Name & No.	<u>Fischer #2-13</u>	Test No.	<u>3</u>	Date	<u>6-14-02</u>
Company	<u>Downing/Nelson Oil Co. Inc.</u>	Zone Tested	<u>Marmaton</u>		
Address		Elevation	<u>2180</u>	KB	<u>2122</u> GL
Co. Rep / Geo.	<u>Ron Nelson</u>	Cont.	<u>Discovery #2</u>	Est. Ft. of Pay	<u> </u> Por. <u> </u> %
Location: Sec.	<u>13</u>	Twp.	<u>13</u>	Rge.	<u>21</u> Co. <u>Trego</u> State <u>KS</u>
No. of Copies	<u> </u>	Distribution Sheet (Y, N)	<u> </u>	Turnkey (Y, N)	<u> </u> Evaluation (Y, N) <u> </u>

Interval Tested	<u>3794 — 3825</u>	Initial Str Wt./Lbs.	<u>38,000</u>	Unseated Str Wt./Lbs.	<u>39,000</u>
Anchor Length	<u>31</u>	Wt. Set Lbs.	<u>30,000</u>	Wt. Pulled Loose/Lbs.	<u>49,000</u>
Top Packer Depth	<u>3789</u>	Tool Weight	<u>1500</u>		
Bottom Packer Depth	<u>3794</u>	Hole Size — 7 7/8"		Rubber Size — 6 3/4"	
Total Depth	<u>3825</u>	Wt. Pipe Run		Drill Collar Run	<u>30</u>
Mud Wt. <u>9.2</u> LCM <u> </u> Vis. <u>46</u> WL <u>8.8</u>		Drill Pipe Size	<u>4.5 XH</u>	Ft. Run	<u>3750</u>

Blow Description I.F. Strong - b.o.b. in 4 min.

ISI - Weak - building to 1"

I.F. Strong - b.o.b. in 5 min.

ISI - Weak - building to 1"

Recovery — Total Feet	<u>997</u>	GLP	<u>861</u>	Ft. in DC	<u>30</u>	Ft. in DP	<u>967</u>
Rec. <u>935</u>	Feet Of	<u>CGSYM</u>	<u>40</u> %gas	<u>60</u> %oil	%water	%mud	
Rec. <u>62</u>	Feet Of	<u>HOC GSYM</u>	<u>30</u> %gas	<u>40</u> %oil	%water	<u>30</u> %mud	
Rec. <u> </u>	Feet Of		%gas	%oil	%water	%mud	
Rec. <u> </u>	Feet Of		%gas	%oil	%water	%mud	
Rec. <u> </u>	Feet Of		%gas	%oil	%water	%mud	
BHT <u>126</u>	°F Gravity	<u> </u>	°API D@	<u> </u>	°F Corrected Gravity	<u>41</u>	°API
RW <u> </u>	@ <u> </u>	°F Chlorides	<u> </u>	ppm Recovery	Chlorides <u>4,000</u>	ppm System	

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>1908</u>	PSI	Recorder No.	<u>2357</u>	T-On Location <u>00:12</u>
(B) First Initial Flow Pressure	<u>36</u>	PSI	(depth)	<u>3795</u>	T-Started <u>00:19</u>
(C) First Final Flow Pressure	<u>226</u>	PSI	Recorder No.	<u>13254</u>	T-Open <u>01:50</u>
(D) Initial Shut-In Pressure	<u>1008</u>	PSI	(depth)	<u>3822</u>	T-Pulled <u>05:20</u>
(E) Second Initial Flow Pressure	<u>230</u>	PSI	Recorder No.		T-Out <u>08:12</u>
(F) Second Final Flow Pressure	<u>386</u>	PSI	(depth)		T-Off Location <u> </u>
(G) Final Shut-in Pressure	<u>939</u>	PSI	Initial Opening	<u>45</u>	Test <u> </u>
(Q) Final Hydrostatic Mud	<u>1822</u>	PSI	Initial Shut-in	<u>60</u>	Jars <u> </u>
			Final Flow	<u>45</u>	Safety Joint <u> </u>
			Final Shut-in	<u>60</u>	Straddle <u> </u>
					Circ. Sub <u> </u>
					Sampler <u> </u>
					Extra Packer <u> </u>
					Elec. Rec. <u>X</u>
					Mileage <u>22</u>
					Other <u> </u>
					TOTAL PRICE \$ <u> </u>

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Approved By

Our Representative

Dan Banfle

CHART PAGE

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