

## DRILL STEM TEST REPORT

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

PO Box 372  
Hays, KS 67601

ATTN: Ron Nelson

**14-10s-31w Thomas Ks**

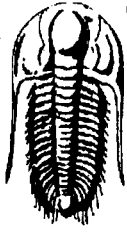
**R.J.Shea #1-14**

Start Date: 2001.12.06 @ 03:07:56

End Date: 2001.12.06 @ 08:39:55

Job Ticket #: 15661                      DST #: 1

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Downing-Nelson Oil Co., Inc.

**R.J. Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

ATTN: Ron Nelson

Job Ticket: 15661

**DST#: 1**

Test Start: 2001.12.06 @ 03:07:56

## GENERAL INFORMATION:

Formation: **LKC "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:05:55

Time Test Ended: 08:39:55

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: **4096.00 ft (KB) To 4120.00 ft (KB) (TVD)**

Total Depth: 4120.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2987.00 ft (KB)

2979.00 ft (CF)

KB to GR/CF: 8.00 ft

## Serial #: 3024

Inside

Press@RunDepth: 33.61 psig @ 4097.01 ft (KB)

Start Date: 2001.12.06

End Date:

2001.12.06

Start Time: 03:07:56

End Time:

08:39:55

Capacity: 7000.00 psig

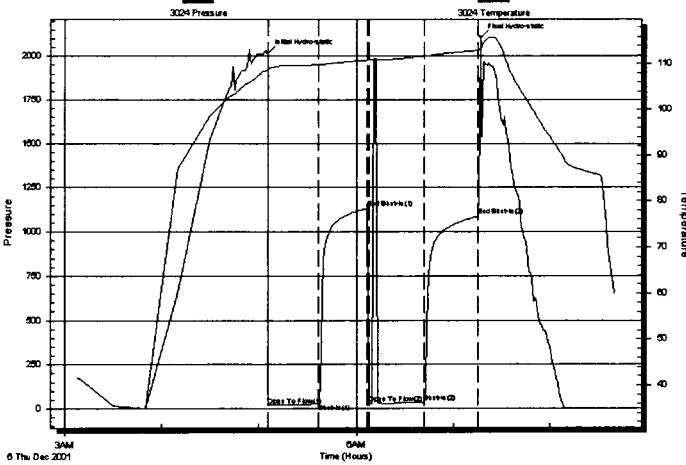
Last Calib.: 2001.12.06

Time On Btm: 2001.12.06 @ 05:05:25

Time Off Btm: 2001.12.06 @ 07:16:55

**TEST COMMENT:** FFP-weak blow throughout 1" to surface blow  
FFP-no blow Flushed tool  
times 30-30-30-30

Pressure vs. Time



## PRESSURE SUMMARY

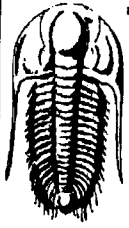
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2016.97	108.70	Initial Hydro-static
1	19.31	108.83	Open To Flow (1)
32	25.74	109.83	Shut-In(1)
61	1129.82	110.81	End Shut-In(1)
63	27.44	110.86	Open To Flow (2)
97	33.61	111.66	Shut-In(2)
130	1086.12	112.94	End Shut-In(2)
132	2105.97	113.24	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	mud	0.63

## 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.J. Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15661

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2001.12.06 @ 03:07:56

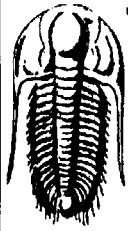
### Tool Information

Drill Pipe:	Length: 4097.00 ft	Diameter: 3.80 inches	Volume: 57.47 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: 95000.00 lb
			<b>Total Volume: 57.47 bbl</b>	Tool Chased 4.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4096.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.02 ft			
Tool Length:	45.02 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			4076.00	
S.I. Tool	5.00			4081.00	
HMV	5.00			4086.00	
Packer	5.00			4091.00	21.00 Bottom Of Top Packer
Packer	5.00			4096.00	
Stubb	1.00			4097.00	
Recorder	0.01	3024	Inside	4097.01	
Perforations	20.00			4117.01	
Recorder	0.01	11085	Outside	4117.02	
Bullnose	3.00			4120.02	24.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>45.02</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Downing- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15661      **DST#: 1**

ATTN: Ron Nelson

Test Start: 2001.12.06 @ 03:07:56

**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: 7.92 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 2.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
45.00	mud	0.631

Total Length: 45.00 ft      Total Volume: 0.631 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 3024

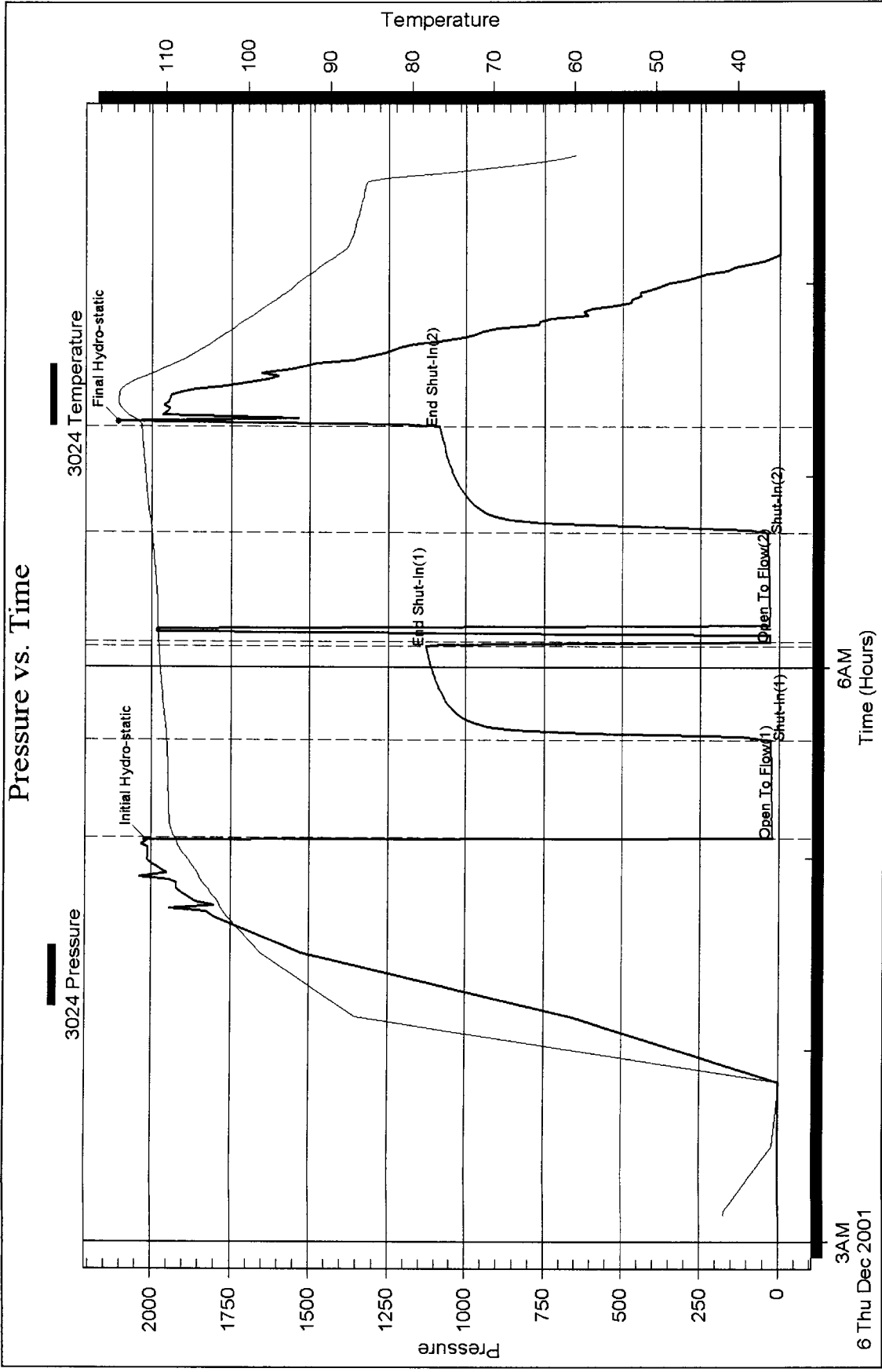
Inside

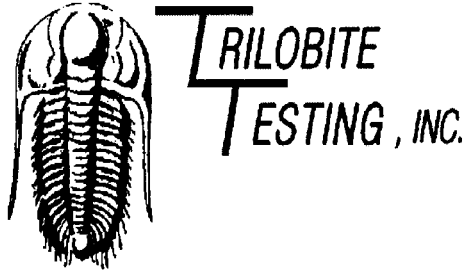
Downing- Nelson Oil Co., Inc.

14-10s-31w Thomas 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

**14-10s-31w Thomas Ks**

**R.J.Shea #1-14**

Start Date: 2001.12.07 @ 03:17:03

End Date: 2001.12.07 @ 08:40:02

Job Ticket #: 15662                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing- Nelson Oil Co.,Inc.

R.J.Shea #1-14

14-10s-31w Thomas Ks

DST # 2

LKC I,J,K

2001.12.07



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

ATTN: Ron Nelson

Job Ticket: 15662

**DST#: 2**

Test Start: 2001.12.07 @ 03:17:03

## GENERAL INFORMATION:

Formation: **LKC I,J,K**

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

Time Tool Opened: 05:17:02

Time Test Ended: 08:40:02

Test Type: **Conventional Bottom Hole**

Tester: **Ray Schwager**

Unit No: **16**

**Interval: 4191.00 ft (KB) To 4280.00 ft (KB) (TVD)**

Reference Elevations: **2987.00 ft (KB)**

Total Depth: **4280.00 ft (KB) (TVD)**

**2979.00 ft (CF)**

Hole Diameter: **7.85 inches** Hole Condition: **Fair**

KB to GR/CF: **8.00 ft**

## Serial #: 3024

**Inside**

Press@RunDepth: **33.29 psig @ 4193.01 ft (KB)**

Capacity: **7000.00 psig**

Start Date: **2001.12.07**

End Date:

**2001.12.07**

Last Calib.: **2001.12.07**

Start Time: **03:17:03**

End Time:

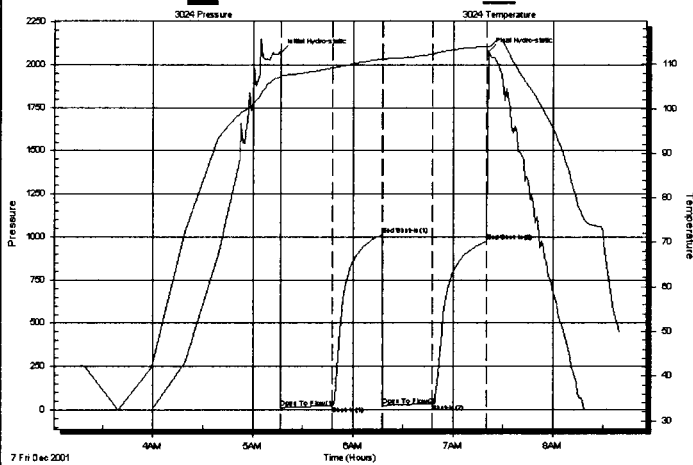
**08:40:02**

Time On Btm: **2001.12.07 @ 05:16:32**

Time Off Btm: **2001.12.07 @ 07:21:02**

**TEST COMMENT:** IFF-weak blow throughout 1/4"blow  
FFP- no blow flushed tool  
times 30-30-30-30

Pressure vs. Time



## PRESSURE SUMMARY

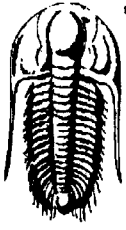
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2071.96	107.12	Initial Hydro-static
1	13.14	107.27	Open To Flow (1)
31	23.16	109.13	Shut-In(1)
61	1011.68	111.15	End Shut-In(1)
62	24.06	111.24	Open To Flow (2)
91	33.29	112.26	Shut-In(2)
124	971.35	114.00	End Shut-In(2)
125	2076.19	114.02	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud w/show of oil	0.56

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15662

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2001.12.07 @ 03:17:03

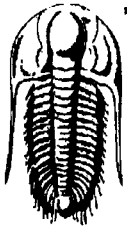
### Tool Information

Drill Pipe:	Length: 4188.00 ft	Diameter: 3.80 inches	Volume: 58.75 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: 85000.00 lb
			<u>Total Volume: 58.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4191.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.02 ft			
Tool Length:	110.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4171.00	
S.I. Tool	5.00			4176.00	
HMV	5.00			4181.00	
Packer	5.00			4186.00	21.00 Bottom Of Top Packer
Packer	5.00			4191.00	
Stubb	1.00			4192.00	
Perforations	1.00			4193.00	
Recorder	0.01	3024	Inside	4193.01	
C.O. Sub	1.00			4194.01	
Blank Spacing	62.00			4256.01	
C.O. Sub	1.00			4257.01	
Perforations	20.00			4277.01	
Recorder	0.01	11085	Outside	4277.02	
Bullnose	3.00			4280.02	89.02 Bottom Packers & Anchor

**Total Tool Length: 110.02**



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**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15662

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2001.12.07 @ 03:17:03

**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: 8.73 in <sup>3</sup>	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
40.00	mud w/show of oil	0.561

Total Length: 40.00 ft      Total Volume: 0.561 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

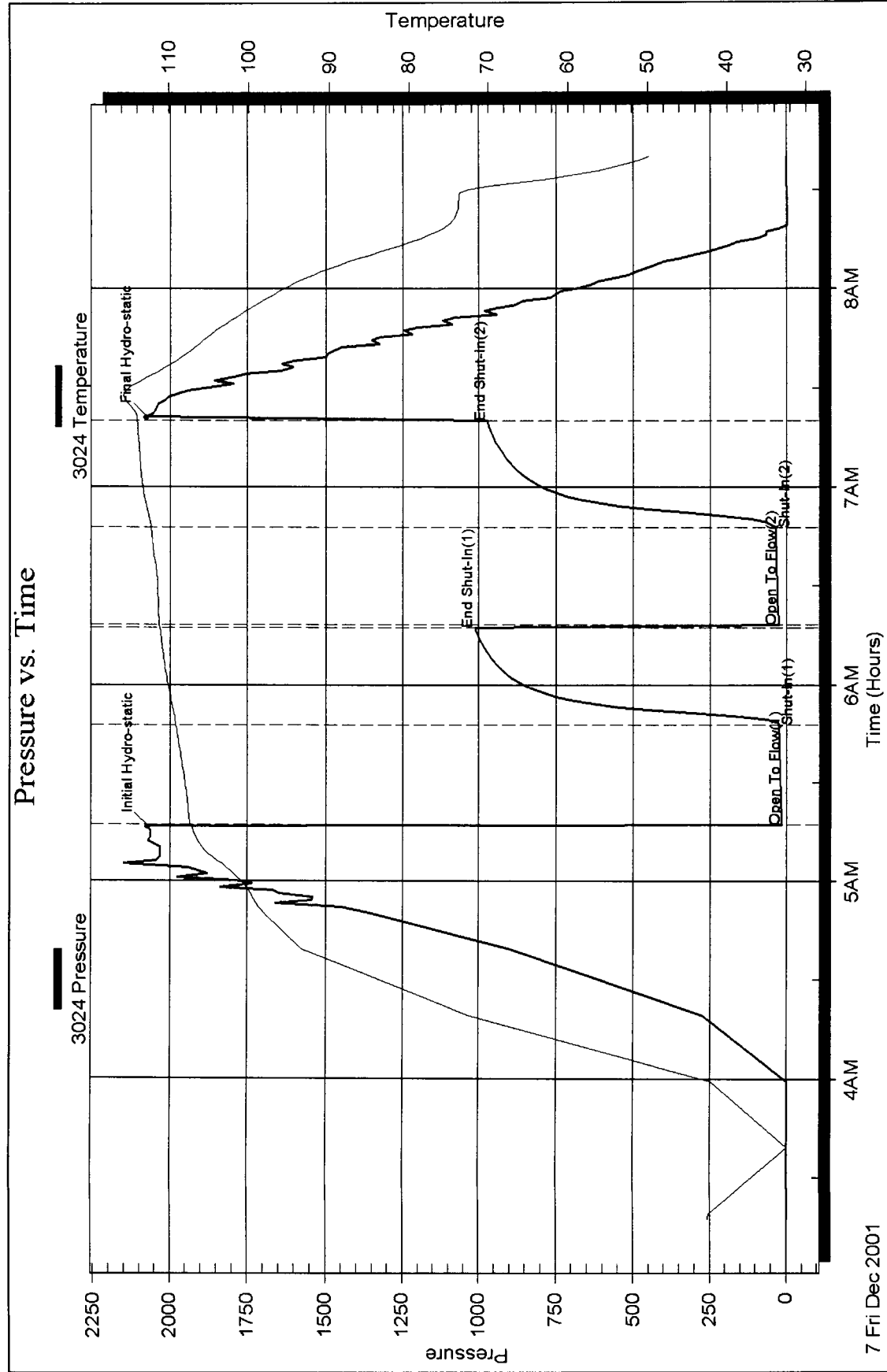
Serial #: 3024

Inside

Downing- Nelson Oil Co., Inc.

14-10s-31w Thomas Ks

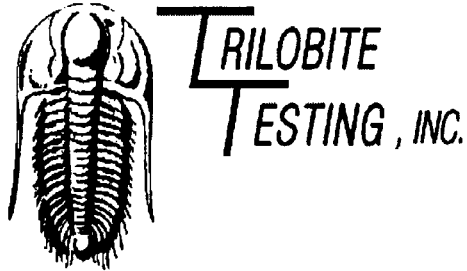
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 15662

Printed: 2001.12.10 @ 16:21:43 Page 5



## DRILL STEM TEST REPORT

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

PO Box 372  
Hays, KS 67601

ATTN: Ron Nelson

**14-10s-31w Thomas Ks**

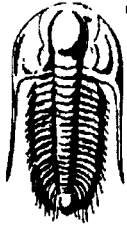
**R.J.Shea #1-14**

Start Date: 2001.12.07 @ 19:18:11

End Date: 2001.12.08 @ 02:25:40

Job Ticket #: 15663                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
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**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Dow ning- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

ATTN: Ron Nelson

Job Ticket: 15663

**DST#: 3**

Test Start: 2001.12.07 @ 19:18:11

## GENERAL INFORMATION:

Formation: **LKC "L" & Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:13:40

Time Test Ended: 02:25:40

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: **4277.00 ft (KB) To 4351.00 ft (KB) (TVD)**

Reference Elevations: 2987.00 ft (KB)

Total Depth: 4351.00 ft (KB) (TVD)

2979.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 3024**

**Outside**

Press@RunDepth: 85.48 psig @ 4286.02 ft (KB)

Capacity: 7000.00 psig

Start Date: 2001.12.07

End Date:

2001.12.08

Last Calib.: 2001.12.08

Start Time: 19:18:11

End Time:

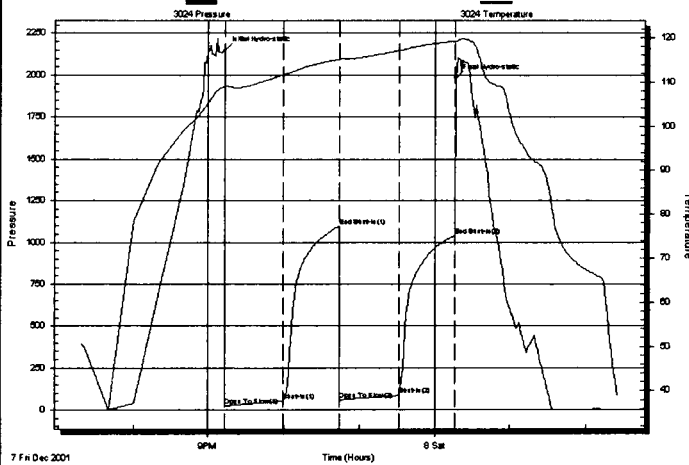
02:25:40

Time On Btm: 2001.12.07 @ 21:13:10

Time Off Btm: 2001.12.08 @ 00:16:40

**TEST COMMENT:** FFP-weak to strong in 12 min  
FFP-weak to strong in 12 min  
times 45-45-45-45 had blow back on shut-in

Pressure vs. Time



## PRESSURE SUMMARY

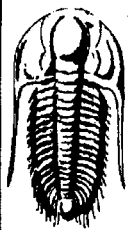
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2147.79	108.90	Initial Hydro-static
1	22.15	109.00	Open To Flow (1)
46	52.26	111.57	Shut-In(1)
91	1096.92	115.05	End Shut-In(1)
91	57.88	115.10	Open To Flow (2)
138	85.48	117.07	Shut-In(2)
183	1040.30	119.22	End Shut-In(2)
184	1982.28	119.21	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
800.00	GIP	11.22
60.00	MGO 5%gas 50 %oil 45%mud	0.84
120.00	GMO 45%gas 35%oil 20%mud	1.68

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15663

**DST#: 3**

ATTN: Ron Nelson

Test Start: 2001.12.07 @ 19:18:11

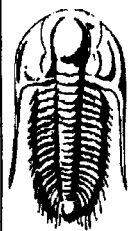
### Tool Information

Drill Pipe:	Length: 4281.00 ft	Diameter: 3.80 inches	Volume: 60.05 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: 75000.00 lb
			<u>Total Volume: 60.05 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4277.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.02 ft			
Tool Length:	95.02 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4257.00	
S.I. Tool	5.00			4262.00	
HMV	5.00			4267.00	
Packer	5.00			4272.00	21.00 Bottom Of Top Packer
Packer	5.00			4277.00	
Stubb	1.00			4278.00	
Perforations	4.00			4282.00	
Recorder	0.01	11085	Outside	4282.01	
Perforations	3.00			4285.01	
Combination Sub	1.00			4286.01	
Recorder	0.01	3024	Outside	4286.02	
Blank Spacing	61.00			4347.02	
C.O. Sub	1.00			4348.02	
Bullnose	3.00			4351.02	74.02 Bottom Packers & Anchor

**Total Tool Length: 95.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

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**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

ATTN: Ron Nelson

Job Ticket: 15663 **DST#: 3**

Test Start: 2001.12.07 @ 19:18:11

**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 in <sup>3</sup>	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
800.00	GIP	11.222
60.00	MGO 5%gas 50 %oil 45%mud	0.842
120.00	GMO 45%gas 35%oil 20%mud	1.683

Total Length: 980.00 ft Total Volume: 13.747 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 3024

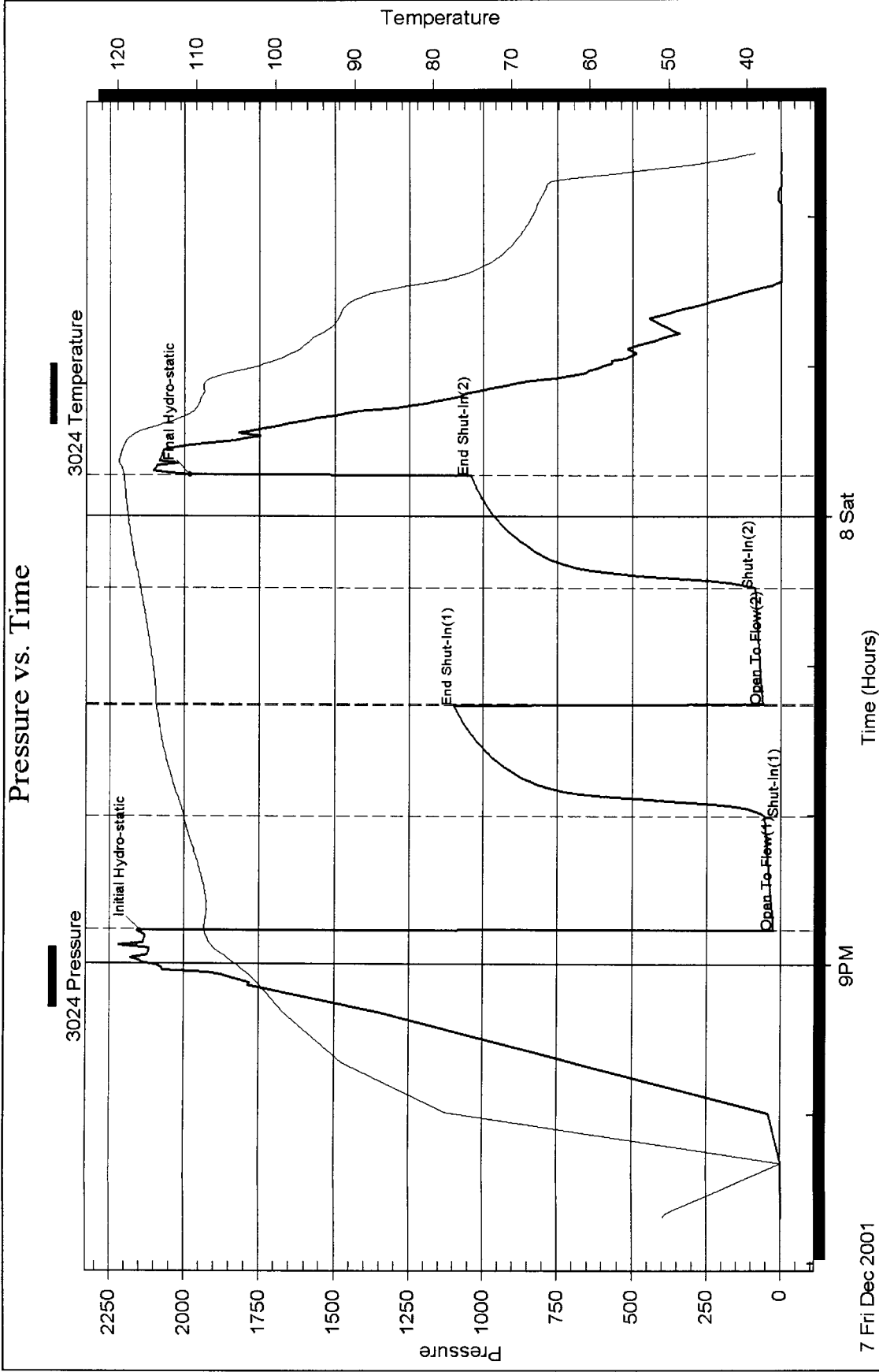
Outside

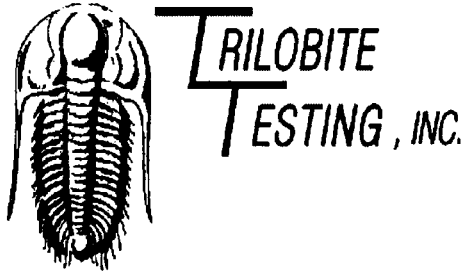
Downing- Nelson Oil Co., Inc.

14-10s-31w Thomas Ks

DST Test Number: 3

### Pressure vs. Time





## DRILL STEM TEST REPORT

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

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ATTN: Ron Nelson

**14-10s-31w Thomas Ks**

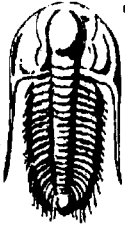
**R.J.Shea #1-14**

Start Date: 2001.12.08 @ 14:33:00

End Date: 2001.12.08 @ 20:41:29

Job Ticket #: 15664                      DST #: 4

Trilobite Testing, Inc  
PO Box 362 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.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

ATTN: Ron Nelson

Job Ticket: 15664

**DST#: 4**

Test Start: 2001.12.08 @ 14:33:00

**GENERAL INFORMATION:**

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:19:59

Time Test Ended: 20:41:29

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: **4402.00 ft (KB) To 4460.00 ft (KB) (TVD)**

Reference Elevations: 2987.00 ft (KB)

Total Depth: 4460.00 ft (KB) (TVD)

2979.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 3024**

**Inside**

Press@RunDepth: 32.03 psig @ 4405.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2001.12.08 End Date: 2001.12.08

Last Calib.: 2001.12.08

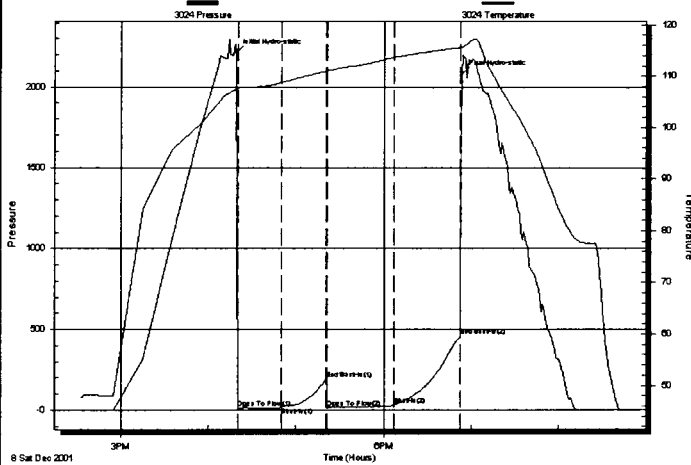
Start Time: 14:33:00 End Time: 20:41:29

Time On Btm: 2001.12.08 @ 16:18:59

Time Off Btm: 2001.12.08 @ 18:53:29

**TEST COMMENT:** FFP-weak blow throughout 1/4" blow  
FFP-weak blow throughout 2" to 1/4"  
times 30-30-45-45

Pressure vs. Time



**PRESSURE SUMMARY**

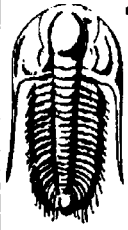
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2210.13	107.45	Initial Hydro-static
1	13.54	107.68	Open To Flow (1)
31	15.97	108.74	Shut-In(1)
62	191.30	110.98	End Shut-In(1)
63	14.20	111.05	Open To Flow (2)
108	32.03	113.63	Shut-In(2)
154	461.55	115.60	End Shut-In(2)
155	2084.06	115.63	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
150.00	GIP	2.10
30.00	OCM 2%gas 10%oil 88%mud	0.42

**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.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15664

**DST#: 4**

ATTN: Ron Nelson

Test Start: 2001.12.08 @ 14:33:00

### Tool Information

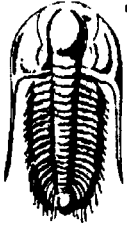
Drill Pipe:	Length: 4405.00 ft	Diameter: 3.80 inches	Volume: 61.79 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 61.79 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	4402.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.02 ft			
Tool Length:	79.02 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			4382.00	
S.I. Tool	5.00			4387.00	
HMV	5.00			4392.00	
Packer	5.00			4397.00	21.00 Bottom Of Top Packer
Packer	5.00			4402.00	
Stubb	1.00			4403.00	
Perforations	2.00			4405.00	
Recorder	0.01	3024	Inside	4405.01	
C.O. Sub	1.00			4406.01	
Blank Spacing	30.00			4436.01	
C.O. Sub	1.00			4437.01	
Perforations	20.00			4457.01	
Recorder	0.01	11085	Outside	4457.02	
Bullnose	3.00			4460.02	58.02 Bottom Packers & Anchor

**Total Tool Length: 79.02**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Downing- Nelson Oil Co., Inc.

**R.J.Shea #1-14**

PO Box 372  
Hays, KS 67601

**14-10s-31w Thomas Ks**

Job Ticket: 15664

**DST#: 4**

ATTN: Ron Nelson

Test Start: 2001.12.08 @ 14:33:00

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 63.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.96 in<sup>3</sup>

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 bbf
150.00	GIP	2.104
30.00	OCM 2%gas 10%oil 88%mud	0.421

Total Length: 180.00 ft

Total Volume: 2.525 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time

