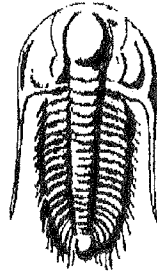


15-195-22564

13-12s-23w

IND



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

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

P O Box 372  
Hays KS 67601

ATTN: Ron Nelson

**13 12S 23W Trego KS**

**Riedel Farms # 1-13**

Start Date: 2008.07.11 @ 15:26:23

End Date: 2008.07.11 @ 22:19:17

Job Ticket #: 32898                      DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Downing-Nelson Oil Co Inc

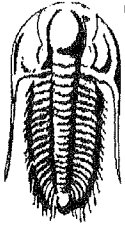
Riedel Farms # 1-13

13 12S 23W Trego KS

DST # 1

LKC

2008.07.11



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

Riedel Farms # 1-13

P O Box 372  
Hays KS 67601

13 12S 23W Trego KS

ATTN: Ron Nelson

Job Ticket: 32898

DST#: 1

Test Start: 2008.07.11 @ 15:26:23

## GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:22:48

Time Test Ended: 22:19:17

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3719.00 ft (KB) To 3760.00 ft (KB) (TVD)**

Total Depth: 3760.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2439.00 ft (KB)

2431.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: **8365**

Inside

Press@RunDepth: 264.25 psig @ 3724.01 ft (KB)

Start Date: 2008.07.11

End Date:

2008.07.11

Capacity: 7000.00 psig

Last Calib.: 2008.07.11

Start Time: 15:26:23

End Time:

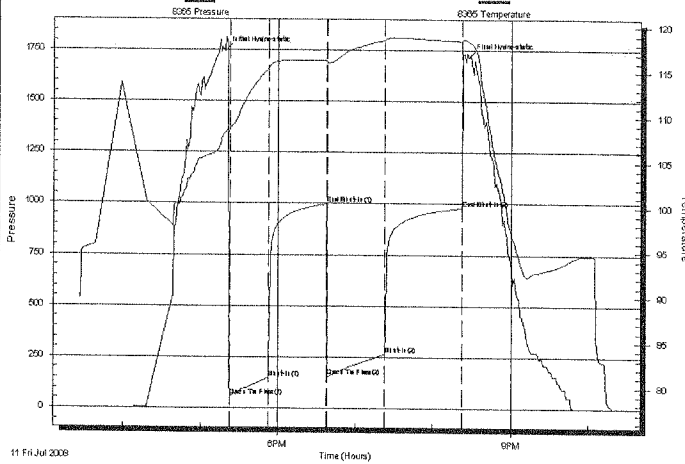
22:19:17

Time On Btm: 2008.07.11 @ 17:19:18

Time Off Btm: 2008.07.11 @ 20:27:47

TEST COMMENT: IFP Wk to strg in 7 min  
FFP Wk to strg in 10 min  
ISIP Surface bl bk  
FSIP 1 " bl bk Times 30 45 45 60

Pressure vs. Time



## PRESSURE SUMMARY

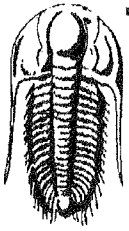
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1747.97	108.33	Initial Hydro-static
4	54.57	108.70	Open To Flow (1)
34	147.48	115.39	Shut-In(1)
78	996.34	116.32	End Shut-In(1)
79	154.06	116.03	Open To Flow (2)
124	264.25	118.56	Shut-In(2)
183	978.59	118.48	End Shut-In(2)
189	1716.99	118.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
186.00	Ww/show O	2.34
62.00	OGCMW 10%G 5%O 70%W 15%M	0.87
62.00	OGCWM 20%G 15%O 20%W 45%M	0.87
124.00	MGO 10%G 80%O 10%M	1.74
130.00	CO	1.82
0.00	615' GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

ATTN: Ron Nelson

Job Ticket: 32898

**DST#: 1**

Test Start: 2008.07.11 @ 15:26:23

### Tool Information

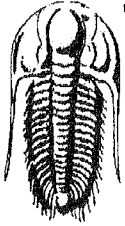
Drill Pipe:	Length: 3695.00 ft	Diameter: 3.80 inches	Volume: 51.83 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 51.98 bbl</u>	Tool Chased 4.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3719.00 ft			Final 52000.00 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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3699.00	
Shut In Tool	5.00			3704.00	
Hydraulic tool	5.00			3709.00	
Packer	5.00			3714.00	21.00 Bottom Of Top Packer
Packer	5.00			3719.00	
Stubb	1.00			3720.00	
Perforations	4.00			3724.00	
Recorder	0.01	8365	Inside	3724.01	
Recorder	0.01	6625	Outside	3724.02	
Perforations	4.00			3728.02	
Blank Spacing	33.00			3761.02	
Bullnose	3.00			3764.02	45.02 Bottom Packers & Anchor

**Total Tool Length: 66.02**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 32898

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2008.07.11 @ 15:26:23

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

75000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
186.00	Ww/show O	2.336
62.00	OGCMM 10%G 5%O 70%W 15%M	0.870
62.00	OGCWM 20%G 15%O 20%W 45%M	0.870
124.00	MGO 10%G 80%O 10%M	1.739
130.00	CO	1.824
0.00	615' GIP	0.000

Total Length:

564.00 ft

Total Volume:

7.639 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: slid tool approx 4' to bottom

RW .08 @ 88F

Serial #: 8365

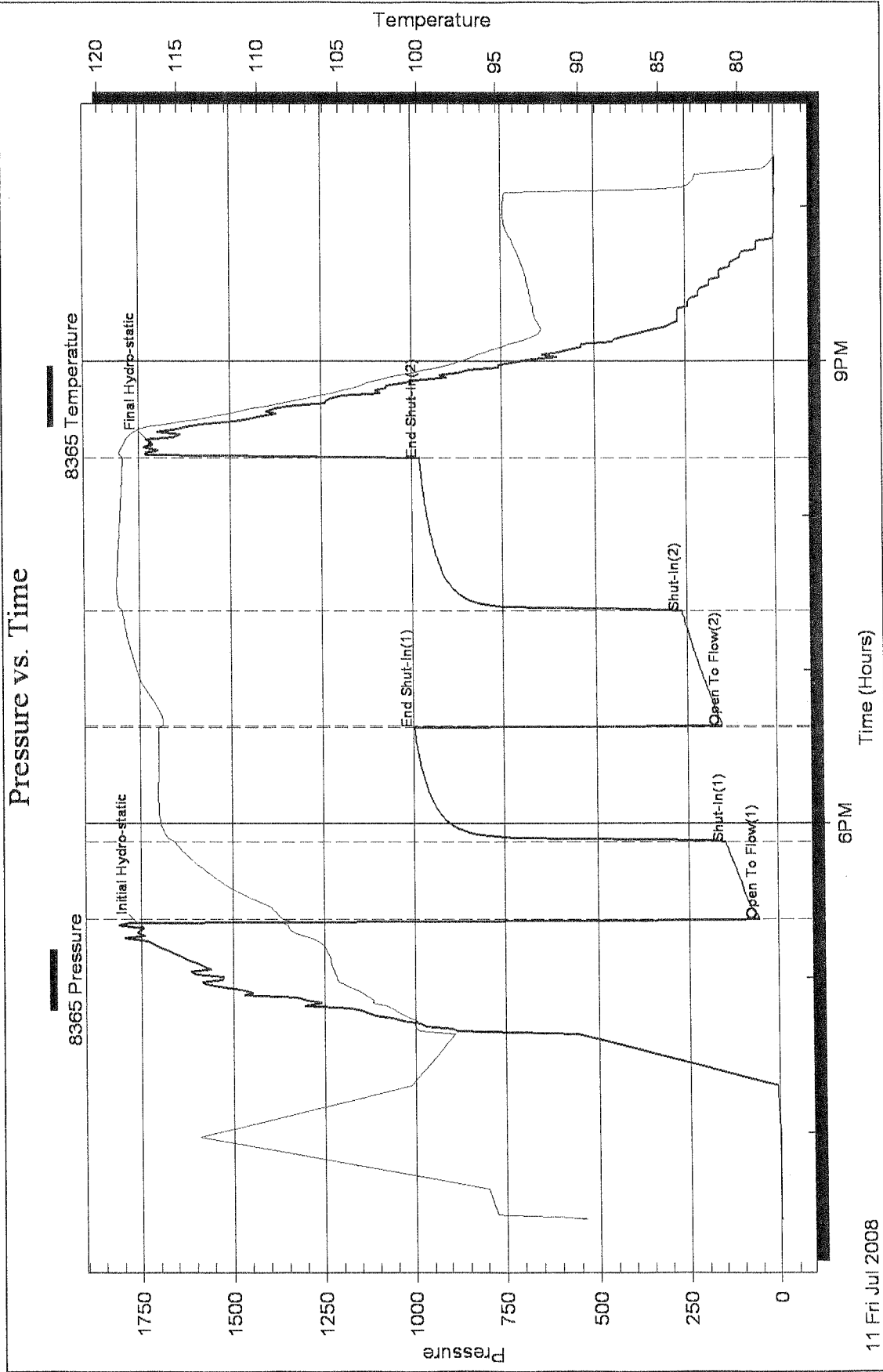
Inside

Downing-Nelson Oil Co Inc

13 12S 23W Trego KS

DST Test Number: 1

### Pressure vs. Time

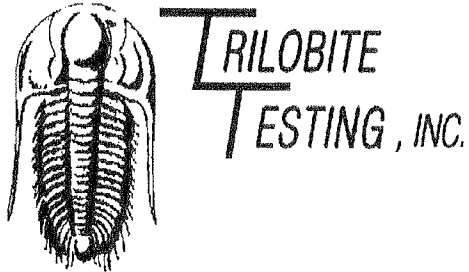


11 Fri Jul 2008

6PM

9PM

Time (Hours)



## DRILL STEM TEST REPORT

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

P O Box 372  
Hays KS 67601

ATTN: Ron Nelson

**13 12S 23W Trego KS**

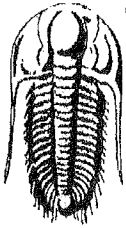
**Riedel Farms # 1-13**

Start Date: 2008.07.12 @ 04:47:39

End Date: 2008.07.12 @ 11:29:03

Job Ticket #: 32899                      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

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

ATTN: Ron Nelson

Job Ticket: 32899

DST#: 2

Test Start: 2008.07.12 @ 04:47:39

## GENERAL INFORMATION:

Formation: **LKC "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:02:04

Time Test Ended: 11:29:03

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3758.00 ft (KB) To 3774.00 ft (KB) (TVD)**

Reference Elevations: 2439.00 ft (KB)

Total Depth: 3774.00 ft (KB) (TVD)

2431.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8365**

Inside

Press@RunDepth: 172.59 psig @ 3759.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2008.07.12

End Date:

2008.07.12

Last Calib.: 2008.07.12

Start Time: 04:47:39

End Time:

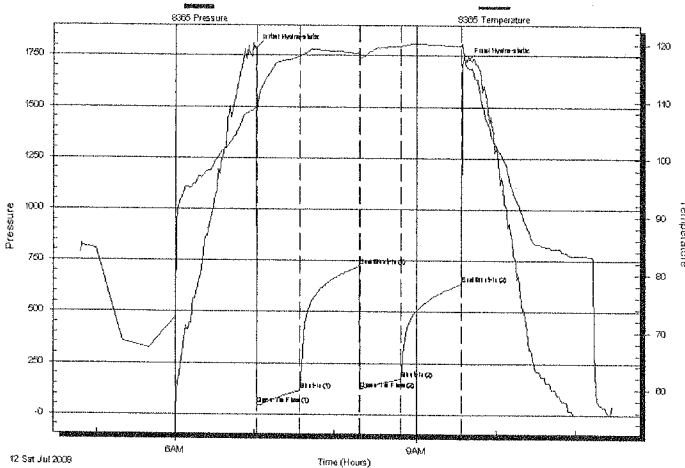
11:29:03

Time On Btm: 2008.07.12 @ 07:01:04

Time Off Btm: 2008.07.12 @ 09:37:33

TEST COMMENT: IFP Strg bl in 1 min  
FFP Strg bl thru-out  
ISIP Strg bl bk in 25 min  
FSIP Strg bl in 20 min Time 30 45 30 45

Pressure vs. Time



## PRESSURE SUMMARY

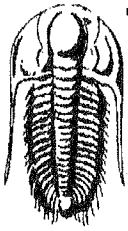
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1785.04	108.68	Initial Hydro-static
1	46.52	108.57	Open To Flow (1)
34	115.51	117.84	Shut-In(1)
78	721.39	118.45	End Shut-In(1)
78	123.50	117.93	Open To Flow (2)
108	172.59	119.68	Shut-In(2)
153	636.06	119.77	End Shut-In(2)
157	1724.14	116.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	MGO 30%G 45%O 25%M	0.60
124.00	MGO 40%G 50%O 10%M	1.74
254.00	CO	3.56
0.00	1975' GIP	0.00

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 32899

**DST#: 2**

ATTN: Ron Nelson

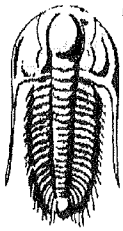
Test Start: 2008.07.12 @ 04:47:39

### Tool Information

Drill Pipe:	Length: 3717.00 ft	Diameter: 3.80 inches	Volume: 52.14 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: 60000.00 lb
		Total Volume: 52.29 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3758.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.02 ft			
Tool Length:	37.02 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			3738.00	
Shut In Tool	5.00			3743.00	
Hydraulic tool	5.00			3748.00	
Packer	5.00			3753.00	21.00 Bottom Of Top Packer
Packer	5.00			3758.00	
Stubb	1.00			3759.00	
Recorder	0.01	8365	Inside	3759.01	
Recorder	0.01	6625	Outside	3759.02	
Perforations	12.00			3771.02	
Bullnose	3.00			3774.02	16.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>37.02</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 32899

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2008.07.12 @ 04:47:39

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	34 deg API
Mud Weight: 9.00 lb/gal	Cushion Length:	Water Salinity:	ppm
Viscosity: 56.00 sec/qt	ft		
Water Loss: 9.40 in <sup>3</sup>	Cushion Volume:		
Resistivity: ohm.m	bbl		
Salinity: 2000.00 ppm	Gas Cushion Type:		
Filter Cake: 1.00 inches	Gas Cushion Pressure:	psig	

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	MGO 30%G 45%O 25%M	0.596
124.00	MGO 40%G 50%O 10%M	1.739
254.00	CO	3.563
0.00	1975 ' GIP	0.000

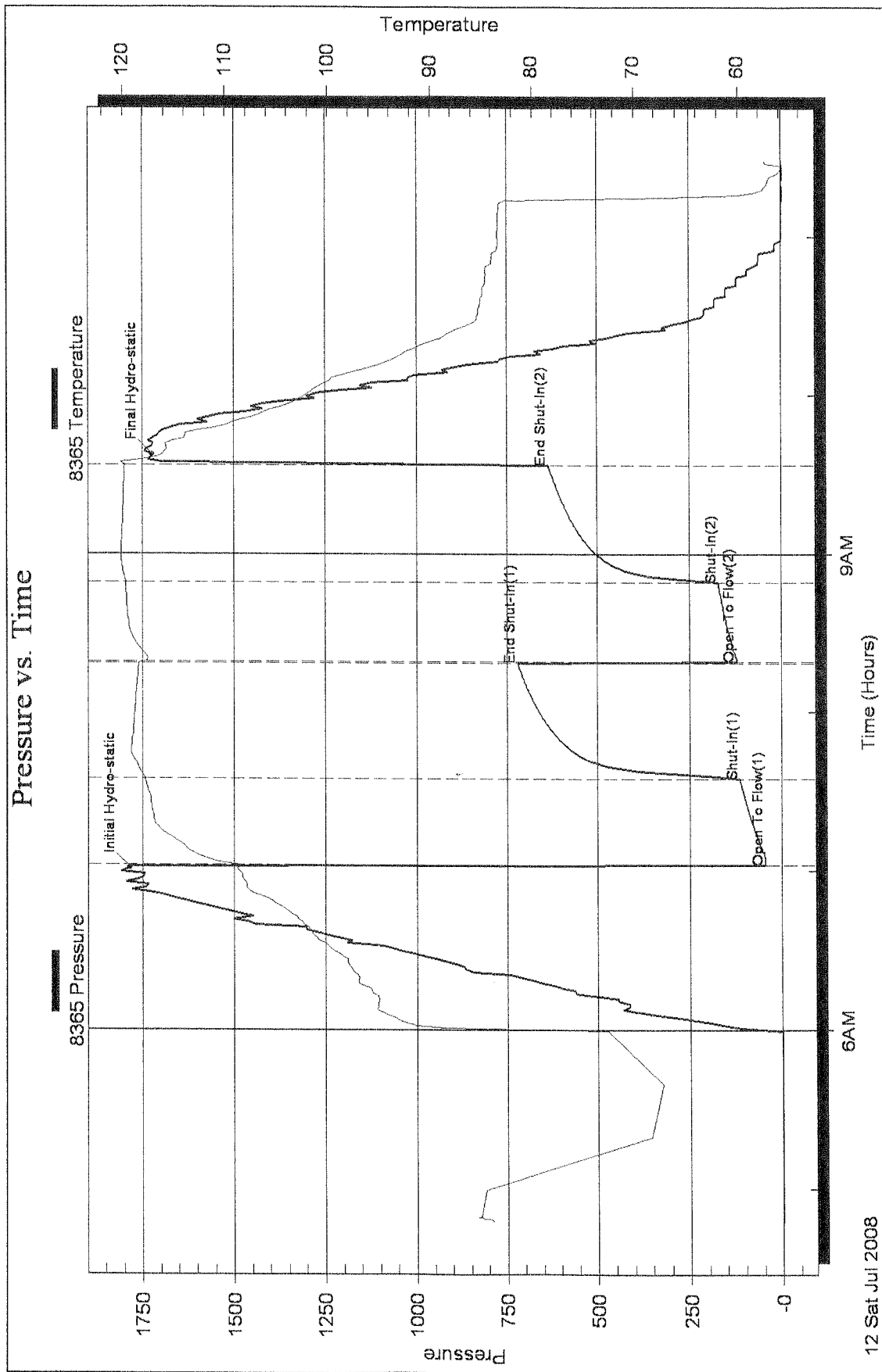
Total Length: 440.00 ft      Total Volume: 5.898 bbl

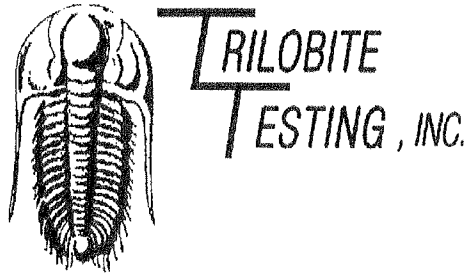
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

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

P O Box 372  
Hays KS 67601

ATTN: Ron Nelson

**13 12S 23W Trego KS**

**Riedel Farms # 1-13**

Start Date: 2008.07.12 @ 22:45:35

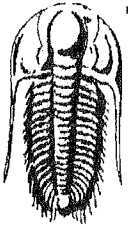
End Date: 2008.07.13 @ 04:12:59

Job Ticket #: 32900                      DST #: 3

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

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

ATTN: Ron Nelson

Job Ticket: 32900

DST#: 3

Test Start: 2008.07.12 @ 22:45:35

## GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:27:00

Time Test Ended: 04:12:59

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3817.00 ft (KB) To 3890.00 ft (KB) (TVD)**

Total Depth: 3890.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2439.00 ft (KB)

2431.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8365**

Inside

Press@RunDepth: 93.92 psig @ 3824.01 ft (KB)

Start Date: 2008.07.12

End Date:

2008.07.13

Capacity: 7000.00 psig

Start Time: 22:45:35

End Time:

04:12:59

Last Calib.: 2008.07.13

Time On Btm: 2008.07.13 @ 00:22:30

Time Off Btm: 2008.07.13 @ 02:30:00

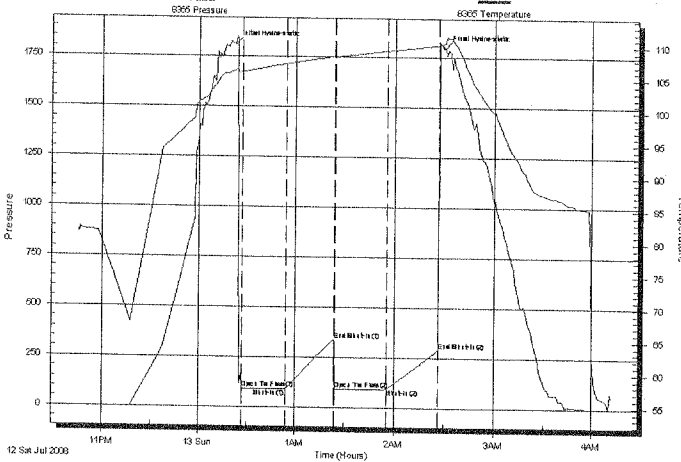
TEST COMMENT: IFP Strg bl thru-out

FFP No blow

No bl on shut-in

Time 30 30 30 30

Pressure vs. Time



## PRESSURE SUMMARY

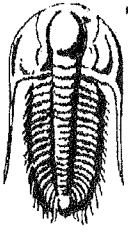
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1810.60	106.25	Initial Hydro-static
5	91.31	106.00	Open To Flow (1)
32	90.52	107.27	Shut-In (1)
62	336.50	108.43	End Shut-In (1)
62	91.56	108.35	Open To Flow (2)
93	93.92	109.31	Shut-In (2)
124	286.72	110.23	End Shut-In (2)
128	1796.55	110.56	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
155.00	M	1.90

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 32900

**DST#: 3**

ATTN: Ron Nelson

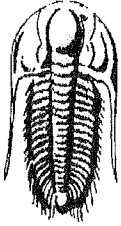
Test Start: 2008.07.12 @ 22:45:35

### Tool Information

Drill Pipe:	Length: 3779.00 ft	Diameter: 3.80 inches	Volume: 53.01 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: 65000.00 lb
			<u>Total Volume: 53.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3817.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.02 ft			
Tool Length:	94.02 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			3797.00	
Shut In Tool	5.00			3802.00	
Hydraulic tool	5.00			3807.00	
Packer	5.00			3812.00	21.00 Bottom Of Top Packer
Packer	5.00			3817.00	
Stubb	1.00			3818.00	
Perforations	6.00			3824.00	
Recorder	0.01	8365	Inside	3824.01	
Recorder	0.01	6625	Outside	3824.02	
Blank Spacing	63.00			3887.02	
Bullnose	3.00			3890.02	73.02 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>94.02</b>				



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 32900

**DST#: 3**

ATTN: Ron Nelson

Test Start: 2008.07.12 @ 22:45:35

**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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.40 in<sup>3</sup>

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
155.00	M	1.901

Total Length: 155.00 ft

Total Volume: 1.901 bbl

Num Fluid Samples: 0

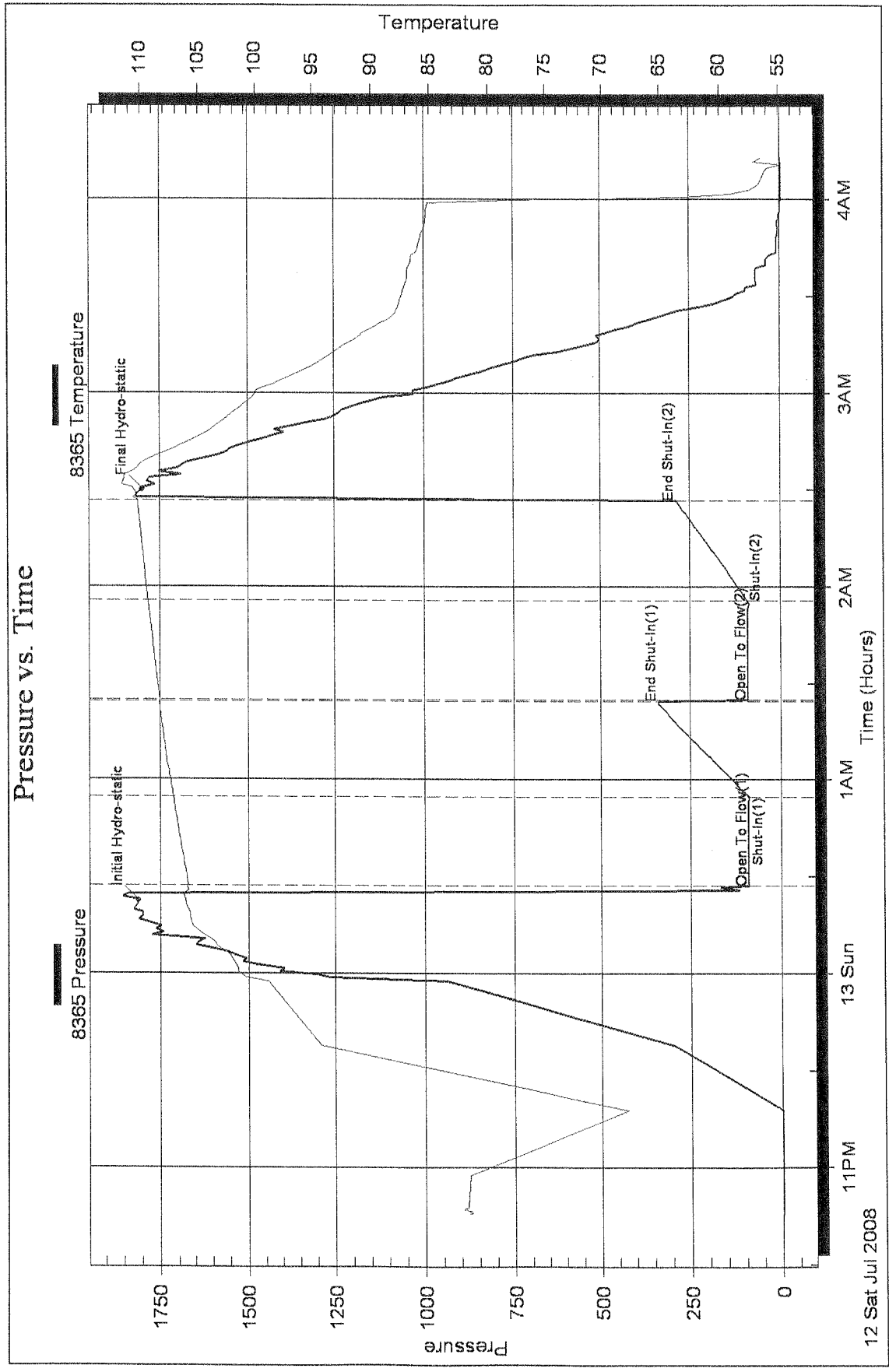
Num Gas Bombs: 0

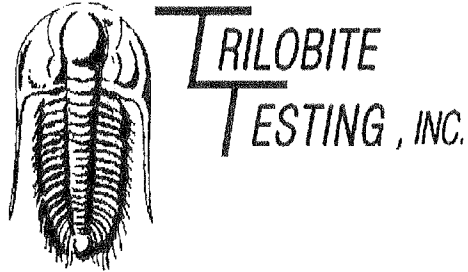
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





## DRILL STEM TEST REPORT

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

P O Box 372  
Hays KS 67601

ATTN: Ron Nelson

**13 12S 23W Trego KS**

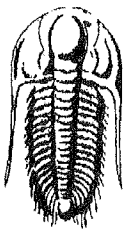
**Riedel Farms # 1-13**

Start Date: 2008.07.13 @ 19:20:03

End Date: 2008.07.14 @ 01:56:57

Job Ticket #: 31901                      DST #: 4

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

ATTN: Ron Nelson

Job Ticket: 31901

**DST#: 4**

Test Start: 2008.07.13 @ 19:20:03

## GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:08:58

Time Test Ended: 01:56:57

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

**Interval: 4040.00 ft (KB) To 4085.00 ft (KB) (TVD)**

Total Depth: 4085.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2439.00 ft (KB)

2431.00 ft (CF)

KB to GR/CF: 8.00 ft

**Serial #: 8365**

Inside

Press@RunDepth: 39.39 psig @ 4049.01 ft (KB)

Start Date: 2008.07.13

End Date:

2008.07.14

Capacity: 7000.00 psig

Start Time: 19:20:03

End Time:

01:56:57

Last Calib.: 2008.07.14

Time On Btm: 2008.07.13 @ 22:05:58

Time Off Btm: 2008.07.14 @ 00:16:57

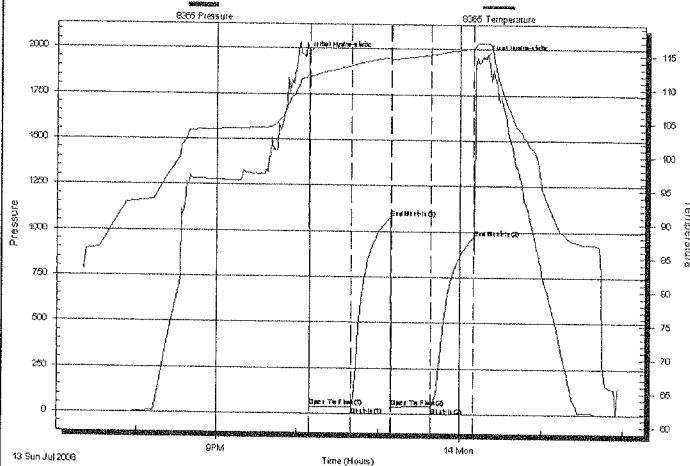
TEST COMMENT: IFF Wk bl thru-out 1" to 1 3/4" bl

FFP Wk bl thru-out 1/4" bl

Times 30 30 30 30

No bl on shut-in

Pressure vs. Time



## PRESSURE SUMMARY

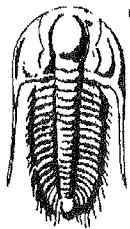
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1958.18	111.58	Initial Hydro-static
3	35.46	111.48	Open To Flow (1)
34	36.80	113.31	Shut-In(1)
63	1073.97	114.58	End Shut-In(1)
63	38.30	114.22	Open To Flow (2)
93	39.39	114.99	Shut-In(2)
124	968.08	116.00	End Shut-In(2)
131	1949.19	116.82	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
45.00	OCM 5%O 95%M	0.36

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 31901

**DST#: 4**

ATTN: Ron Nelson

Test Start: 2008.07.13 @ 19:20:03

## Tool Information

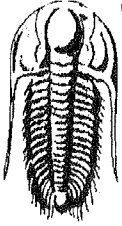
Drill Pipe:	Length: 3999.00 ft	Diameter: 3.80 inches	Volume: 56.10 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 56.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	4040.00 ft			Final 53000.00 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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4020.00	
Shut In Tool	5.00			4025.00	
Hydraulic tool	5.00			4030.00	
Packer	5.00			4035.00	21.00 Bottom Of Top Packer
Packer	5.00			4040.00	
Stubb	1.00			4041.00	
Perforations	8.00			4049.00	
Recorder	0.01	8365	Inside	4049.01	
Recorder	0.01	6625	Outside	4049.02	
Blank Spacing	33.00			4082.02	
Bullnose	3.00			4085.02	45.02 Bottom Packers & Anchor

**Total Tool Length: 66.02**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Downing-Nelson Oil Co Inc

**Riedel Farms # 1-13**

P O Box 372  
Hays KS 67601

**13 12S 23W Trego KS**

Job Ticket: 31901

DST#: 4

ATTN: Ron Nelson

Test Start: 2008.07.13 @ 19:20:03

## 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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	OCM 5%O 95%M	0.358

Total Length: 45.00 ft      Total Volume: 0.358 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

Serial #: 8365

Inside

Dowling-Nelson Oil Co Inc

13 12S 23W Trego KS

DST Test Number: 4

### Pressure vs. Time

