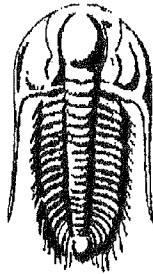


15-195-22472

9-13s-22w



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Al Downing

9 13 22 Trego KS

Deitz 1-9

Start Date: 2007.07.18 @ 09:46:02

End Date: 2007.07.18 @ 14:47:42

Job Ticket #: 28467 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing-Nelson Oil Co

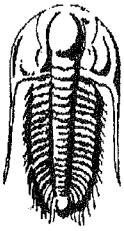
Deitz 1-9

9 13 22 Trego KS

DST # 1

lkc "A"

2007.07.18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28467

DST#: 1

ATTN: Al Dow ning

Test Start: 2007.07.18 @ 09:46:02

GENERAL INFORMATION:

Formation: **lkc "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:21:13

Time Test Ended: 14:47:42

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 41

Interval: 3663.00 ft (KB) To 3698.00 ft (KB) (TVD)

Total Depth: 3698.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2307.00 ft (KB)

2300.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8018 Inside

Press@RunDepth: 33.55 psig @ 3664.00 ft (KB)

Start Date: 2007.07.18

End Date: 2007.07.18

Capacity: 7000.00 psig

Last Calib.: 2007.07.18

Start Time: 09:46:07

End Time: 14:47:43

Time On Btm: 2007.07.18 @ 11:20:28

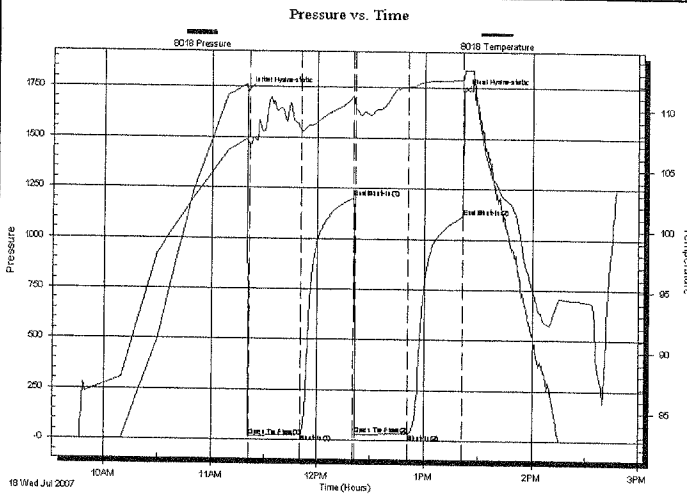
Time Off Btm: 2007.07.18 @ 13:21:58

TEST COMMENT: IF Weak surface built to 1 "

ISI No blow

FF 1/4 "

FSI No blow



PRESSURE SUMMARY

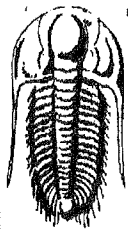
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1728.08	107.50	Initial Hydro-static
1	17.23	107.13	Open To Flow (1)
31	27.97	108.22	Shut-In(1)
61	1202.00	111.18	End Shut-In(1)
62	28.77	110.09	Open To Flow (2)
91	33.55	111.91	Shut-In(2)
121	1112.75	112.48	End Shut-In(2)
122	1729.53	112.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	100%M	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28467

DST#: 1

ATTN: Al Downing

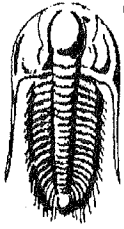
Test Start: 2007.07.18 @ 09:46:02

Tool Information

Drill Pipe:	Length: 3638.00 ft	Diameter: 3.82 inches	Volume: 51.57 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: 20000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 51.72 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3663.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3648.00	
Hydraulic tool	5.00			3653.00	
Packer	5.00			3658.00	20.00 Bottom Of Top Packer
Packer	5.00			3663.00	
Stubb	1.00			3664.00	
Recorder	0.00	8018	Inside	3664.00	
Perforations	31.00			3695.00	
Recorder	0.00	13548	Outside	3695.00	
Bullnose	3.00			3698.00	35.00 Bottom Packers & Anchor
Total Tool Length:	55.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28467

DST#: 1

ATTN: Al Downing

Test Start: 2007.07.18 @ 09:46:02

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.18 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	100%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

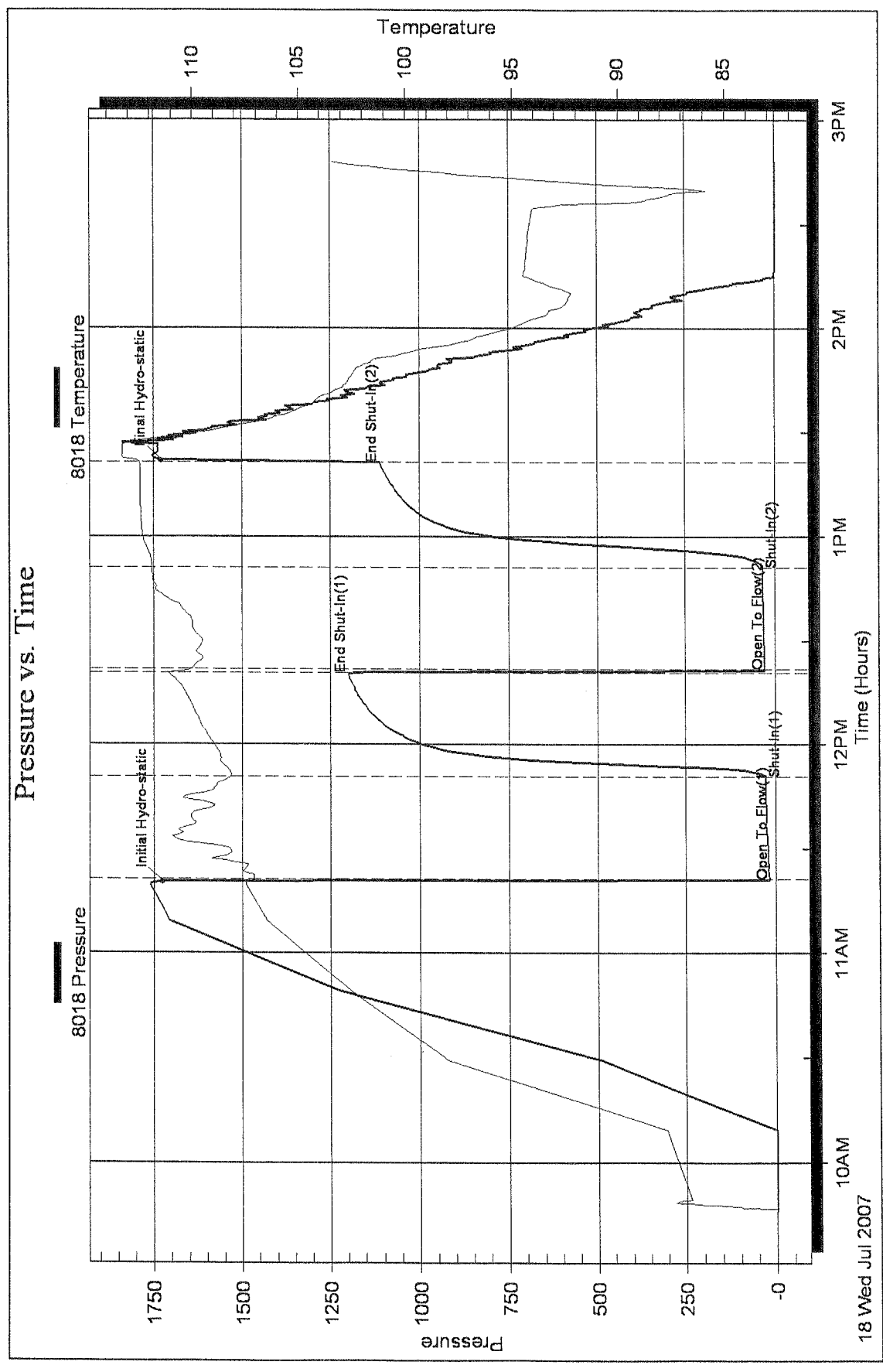
Num Gas Bombs: 0

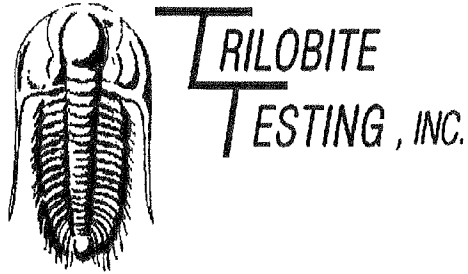
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Al Downing

9 13 22 Trego KS

Deitz 1-9

Start Date: 2007.07.18 @ 22:23:50

End Date: 2007.07.19 @ 05:01:20

Job Ticket #: 28468 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Downing-Nelson Oil Co

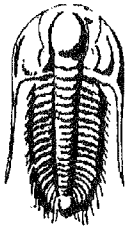
Deitz 1-9

9 13 22 Trego KS

DST # 2

lkc "B" "C"

2007.07.18



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28468

DST#: 2

ATTN: Al Downing

Test Start: 2007.07.18 @ 22:23:50

GENERAL INFORMATION:

Formation: **1kc "B" "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:18:35

Time Test Ended: 05:01:20

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 41

Interval: **3695.00 ft (KB) To 3742.00 ft (KB) (TVD)**

Total Depth: 3742.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2307.00 ft (KB)

2300.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8018

Inside

Press@RunDepth: 56.60 psig @ 3701.00 ft (KB)

Start Date: 2007.07.18

End Date:

2007.07.19

Start Time: 22:23:55

End Time:

05:01:19

Capacity: 7000.00 psig

Last Calib.: 2007.07.19

Time On Btm: 2007.07.19 @ 00:18:20

Time Off Btm: 2007.07.19 @ 03:19:04

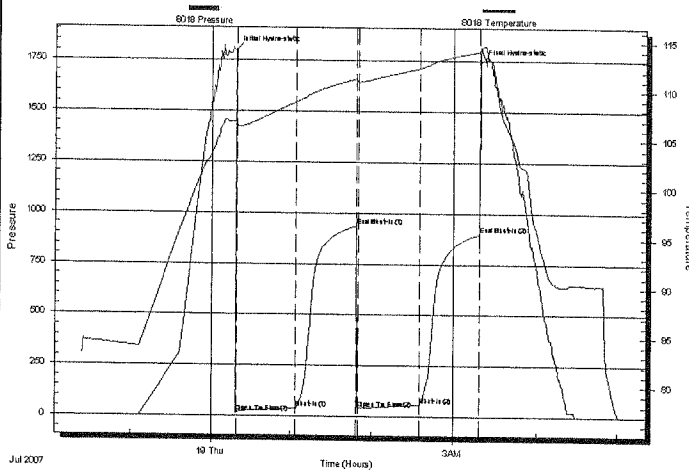
TEST COMMENT: IF Weak surface built to 8 "

ISI Weak surface

FF 1/4 " to BOB 20 min

FSI Weak surface

Pressure vs. Time



PRESSURE SUMMARY

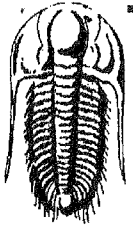
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1797.81	106.93	Initial Hydro-static
1	17.25	105.98	Open To Flow (1)
46	39.16	108.87	Shut-In(1)
91	935.99	111.24	End Shut-In(1)
92	41.13	110.93	Open To Flow(2)
137	56.60	112.35	Shut-In(2)
181	897.38	114.06	End Shut-In(2)
181	1739.37	114.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	GIP	0.43
130.00	GO 40%G 60%O	1.84

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28468

DST#: 2

ATTN: Al Downing

Test Start: 2007.07.18 @ 22:23:50

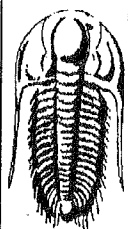
Tool Information

Drill Pipe:	Length: 3670.00 ft	Diameter: 3.82 inches	Volume: 52.02 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 52.17 bbl</u>	Tool Chased: ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3695.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3680.00	
Hydraulic tool	5.00			3685.00	
Packer	5.00			3690.00	20.00 Bottom Of Top Packer
Packer	5.00			3695.00	
Stubb	1.00			3696.00	
Perforations	5.00			3701.00	
Recorder	0.00	8018	Inside	3701.00	
Change Over Sub	1.00			3702.00	
Blank Spacing	31.00			3733.00	
Change Over Sub	1.00			3734.00	
Perforations	5.00			3739.00	
Recorder	0.00	13548	Outside	3739.00	
Bullnose	3.00			3742.00	47.00 Bottom Packers & Anchor

Total Tool Length: 67.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co

Deitz 1-9

PO Box 372
Hays KS 67601

9 13 22 Trego KS

Job Ticket: 28468

DST#: 2

ATTN: Al Downing

Test Start: 2007.07.18 @ 22:23:50

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 56.00 sec/qt

Water Loss: 9.17 in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

deg API

Water Salinity:

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	GIP	0.431
130.00	GO 40%G 60%O	1.843

Total Length: 180.00 ft Total Volume: 2.274 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

