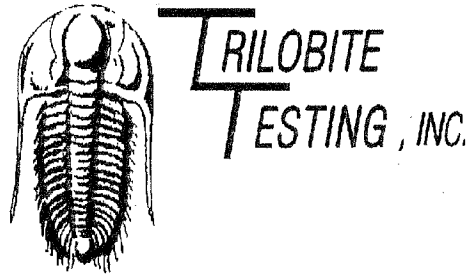


15-135-22509-0000

5-13s-22w



DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

5 13 22W Trego KS

Dietz C #1-5

Start Date: 2007.11.10 @ 01:41:10

End Date: 2007.11.10 @ 07:18:25

Job Ticket #: 30184 DST #: 1

15-195-22509

SW NW SE

1670 FSL 2250 FEL

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 nung-Nelson Oil Co

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

Dietz C #1-5

5 13 22W Trego KS

Job Ticket: 30184

DST#: 1

Test Start: 2007.11.10 @ 01:41:10

GENERAL INFORMATION:

Formation: **lkc**

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

Time Tool Opened: 03:44:55

Time Test Ended: 07:18:25

Test Type: **Conventional Bottom Hole**

Tester: **Kyle Kinderknecht**

Unit No: **38**

Interval: 3697.00 ft (KB) To 3734.00 ft (KB) (TVD)

Total Depth: **3734.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2306.00 ft (KB)**

2298.00 ft (CF)

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

Serial #: 6741

Inside

Press@RunDepth: **27.77 psig @ 3699.00 ft (KB)**

Start Date: **2007.11.10**

End Date:

2007.11.10

Capacity: **7000.00 psig**

Last Calib.: **2007.11.10**

Start Time: **01:41:12**

End Time:

07:18:25

Time On Btm: **2007.11.10 @ 03:43:40**

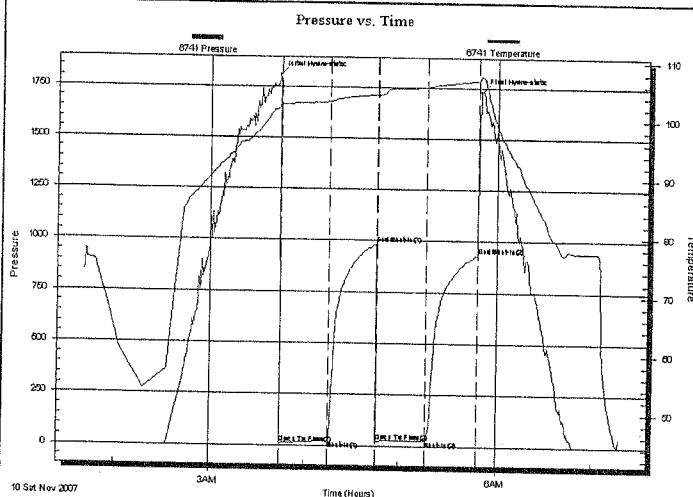
Time Off Btm: **2007.11.10 @ 05:49:40**

TEST COMMENT: IF 1/4 " died back to surface

ISI No blow

FF No blow

FSI No blow



PRESSURE SUMMARY

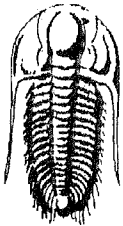
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1804.67	102.28	Initial Hydro-static
2	9.06	102.49	Open To Flow (1)
32	22.94	103.13	Shut-In(1)
62	985.07	104.38	End Shut-In(1)
62	21.83	103.92	Open To Flow (2)
93	27.77	105.69	Shut-In(2)
125	930.74	106.83	End Shut-In(2)
126	1728.38	107.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Mud	0.36

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30184

DST#: 1

ATTN: Ron Nelson

Test Start: 2007.11.10 @ 01:41:10

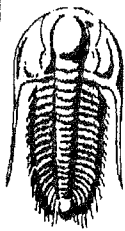
Tool Information

Drill Pipe:	Length: 3650.00 ft	Diameter: 3.82 inches	Volume: 51.74 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 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:	51.89 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3697.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	37.00 ft				
Tool Length:	58.00 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			3677.00	
Shut In Tool	5.00			3682.00	
Hydraulic tool	5.00			3687.00	
Packer	5.00			3692.00	21.00 Bottom Of Top Packer
Packer	5.00			3697.00	
Stubb	1.00			3698.00	
Perforations	1.00			3699.00	
Recorder	0.00	6741	Inside	3699.00	
Perforations	32.00			3731.00	
Recorder	0.00	13254	Outside	3731.00	
Bullnose	3.00			3734.00	37.00 Bottom Packers & Anchor

Total Tool Length: 58.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30184

DST#: 1

ATTN: Ron Nelson

Test Start: 2007.11.10 @ 01:41:10

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 8.80 in³

Resistivity: ohm.m

Salinity: 1800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	Mud	0.360

Total Length: 45.00 ft

Total Volume: 0.360 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

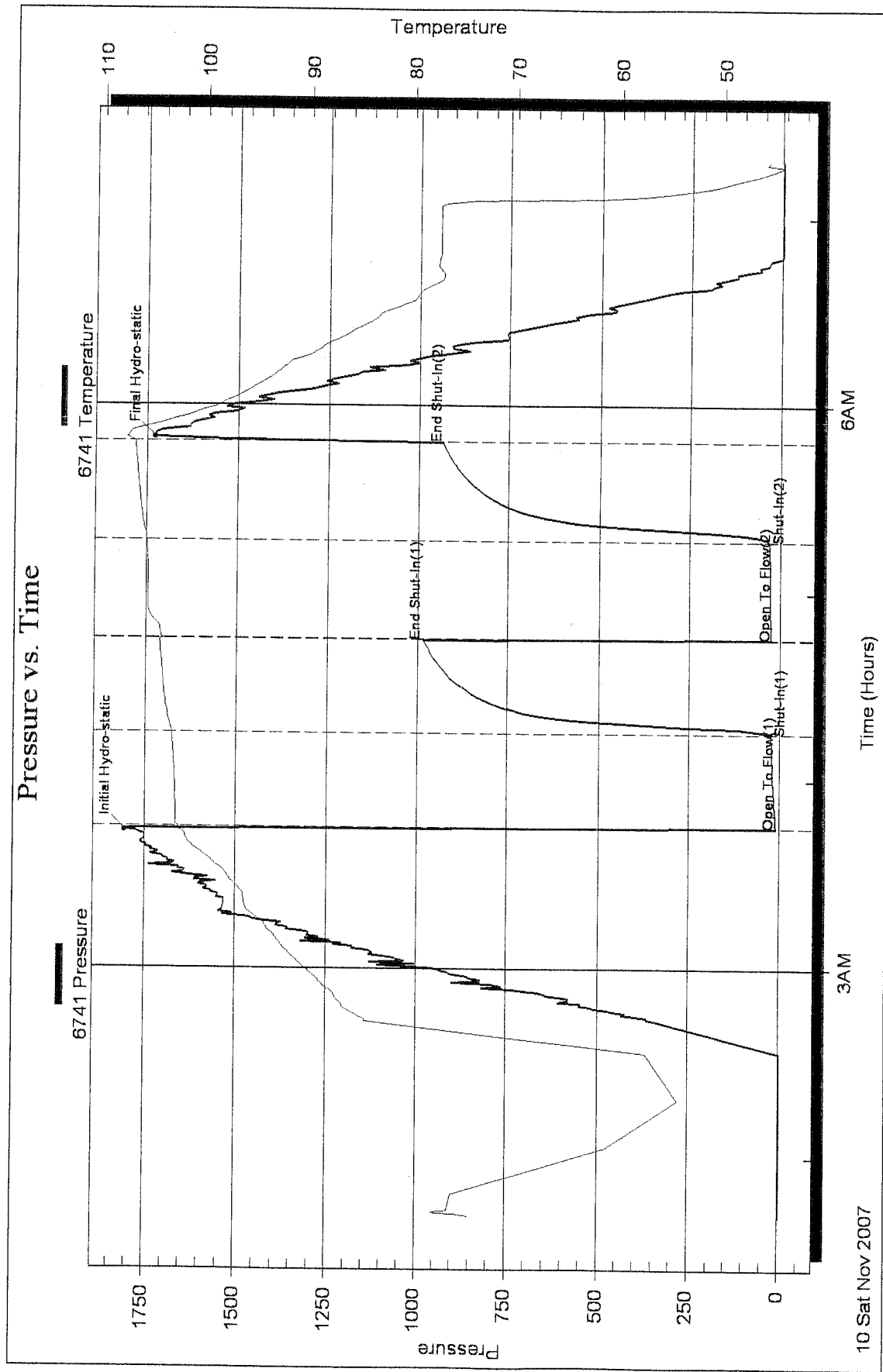
Serial #: 6741

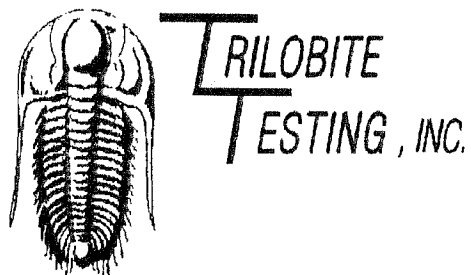
Inside

Dowling-Nelson Oil Co

5 13 22W Trego KS

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

5 13 22W Trego KS

Dietz C #1-5

Start Date: 2007.11.10 @ 21:42:00

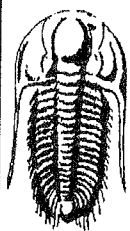
End Date: 2007.11.11 @ 04:23:00

Job Ticket #: 30185 DST #: 2

Trilobite Testing, Inc

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Downing-Nelson Oil Co

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

Dietz C #1-5

5 13 22W Trego KS

Job Ticket: 30185

DST#:2

Test Start: 2007.11.10 @ 21:42:00

GENERAL INFORMATION:

Formation: **lkc H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:30:50

Time Test Ended: 04:23:00

Interval: **3803.00 ft (KB) To 3870.00 ft (KB) (TVD)**

Total Depth: 3870.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Kyle Kinderknecht

Unit No: 38

Reference Elevations: 2306.00 ft (KB)

2298.00 ft (CF)

KB to GRVCF: 8.00 ft

Serial #: 6741

Inside

Press@RunDepth: 43.62 psig @ 3806.00 ft (KB)

Start Date: 2007.11.10

End Date:

2007.11.11

Start Time: 21:42:02

End Time:

04:23:00

Capacity: 7000.00 psig

Last Calib.: 2007.11.11

Time On Btm: 2007.11.10 @ 23:30:20

Time Off Btm: 2007.11.11 @ 02:31:00

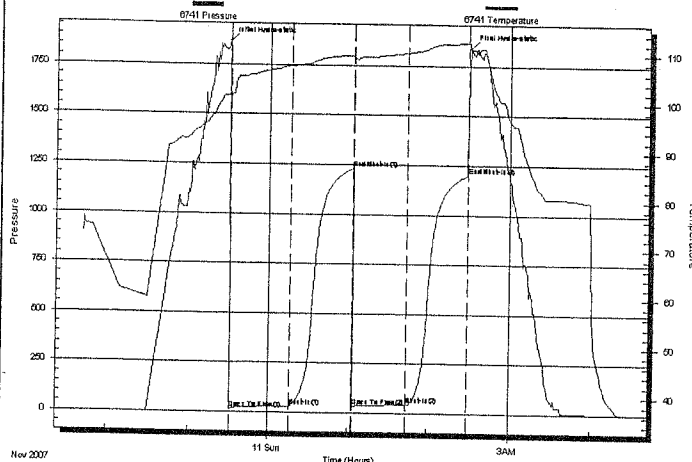
TEST COMMENT: IF 1/4 " built to 1 1/2 "

ISI No blow

FF 1/2 " built to 2 "

FSI No blow

Pressure vs. Time



PRESSURE SUMMARY

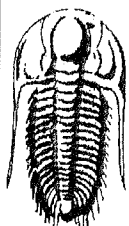
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1866.98	101.72	Initial Hydro-static
1	11.91	100.74	Open To Flow (1)
46	28.81	107.42	Shut-In(1)
93	1231.44	109.65	End Shut-In(1)
94	33.55	109.28	Open To Flow (2)
135	43.62	110.29	Shut-In(2)
180	1199.77	112.37	End Shut-In(2)
181	1840.43	111.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM 40%O 60%M	0.57
30.00	Oil	0.43
200.00	GIP	2.84

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30185

DST#: 2

ATTN: Ron Nelson

Test Start: 2007.11.10 @ 21:42:00

Tool Information

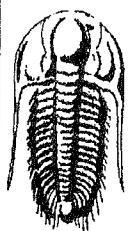
Drill Pipe:	Length: 3775.00 ft	Diameter: 3.82 inches	Volume: 53.51 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	58000.00 lb
		Total Volume:	53.66 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial	43000.00 lb
Depth to Top Packer:	3803.00 ft			Final	44000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	67.00 ft				
Tool Length:	88.00 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			3783.00	
Shut In Tool	5.00			3788.00	
Hydraulic tool	5.00			3793.00	
Packer	5.00			3798.00	21.00 Bottom Of Top Packer
Packer	5.00			3803.00	
Stubb	1.00			3804.00	
Perforations	1.00			3805.00	
Change Over Sub	1.00			3806.00	
Recorder	0.00	6741	Inside	3806.00	
Blank Spacing	31.00			3837.00	
Change Over Sub	1.00			3838.00	
Recorder	0.00	13254	Outside	3838.00	
Perforations	29.00			3867.00	
Bullnose	3.00			3870.00	67.00 Bottom Packers & Anchor

Total Tool Length: 88.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30185

DST#: 2

ATTN: Ron Nelson

Test Start: 2007.11.10 @ 21:42:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 58.00 sec/qt

Water Loss: 9.00 in³

Resistivity: ohm.m

Salinity: 1800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCM 40%O 60%M	0.573
30.00	Oil	0.425
200.00	GIP	2.835

Total Length: 290.00 ft

Total Volume: 3.833 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

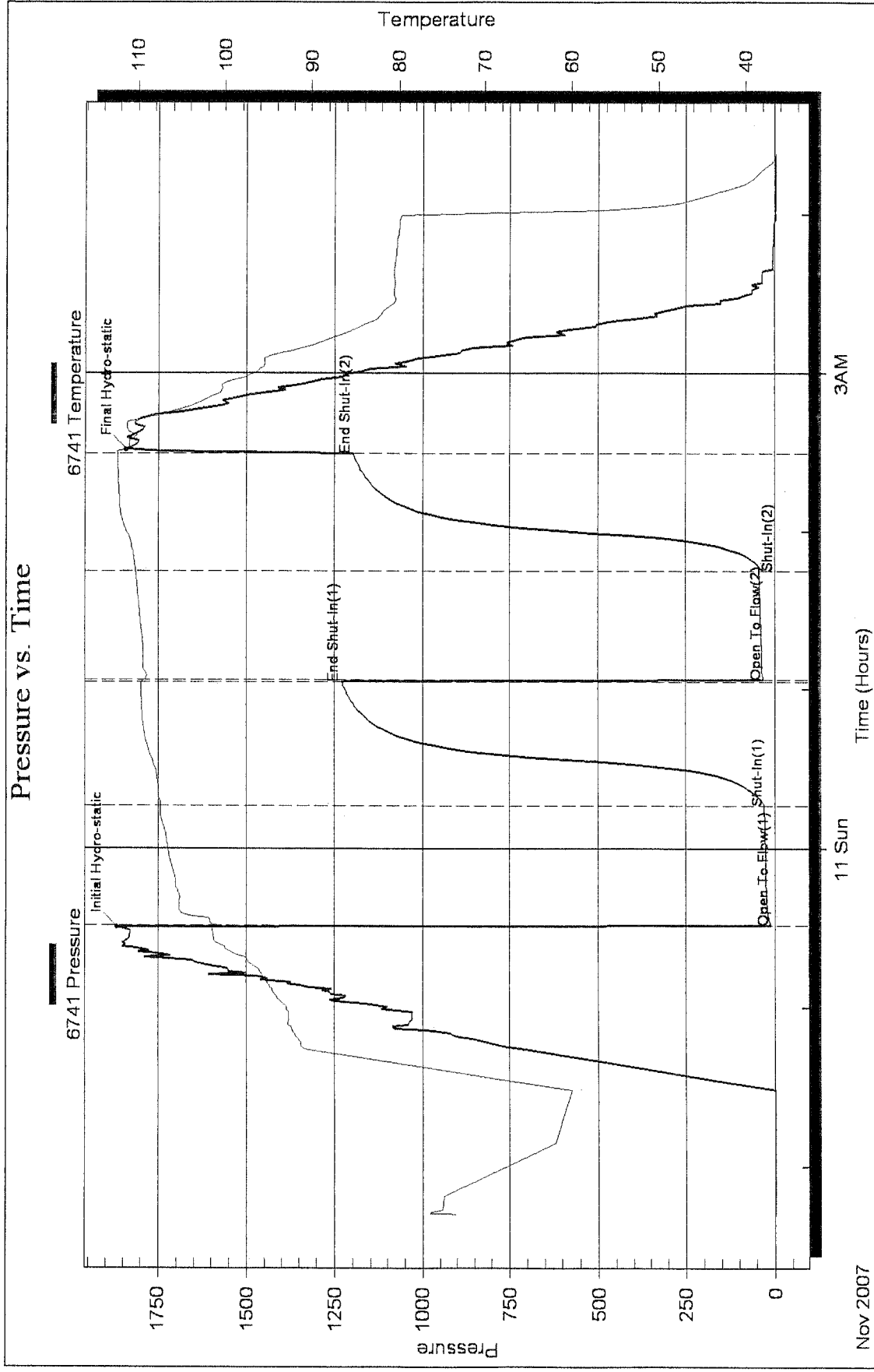
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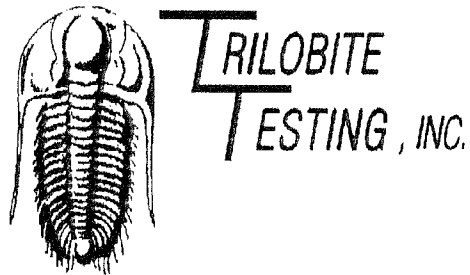
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

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

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

5 13 22W Trego KS

Dietz C #1-5

Start Date: 2007.11.11 @ 23:23:20

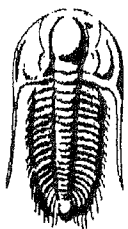
End Date: 2007.11.12 @ 06:10:20

Job Ticket #: 30428 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dowling-Nelson Oil Co

PO Box 372
Hays KS 67601

ATTN: Ron Nelson

Dietz C #1-5

5 13 22W Trego KS

Job Ticket: 30428

DST#: 3

Test Start: 2007.11.11 @ 23:23:20

GENERAL INFORMATION:

Formation: **Cher Sd**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:32:20

Time Test Ended: 06:10:20

Test Type: Conventional Bottom Hole

Tester: Dan Bangle

Unit No: 38

Interval: **4065.00 ft (KB) To 4133.00 ft (KB) (TVD)**

Total Depth: 4133.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2306.00 ft (KB)

2298.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6741

Inside

Press@RunDepth: 604.12 psig @ 4068.00 ft (KB)

Start Date: 2007.11.11

End Date:

2007.11.12

Start Time: 23:23:22

End Time:

06:10:20

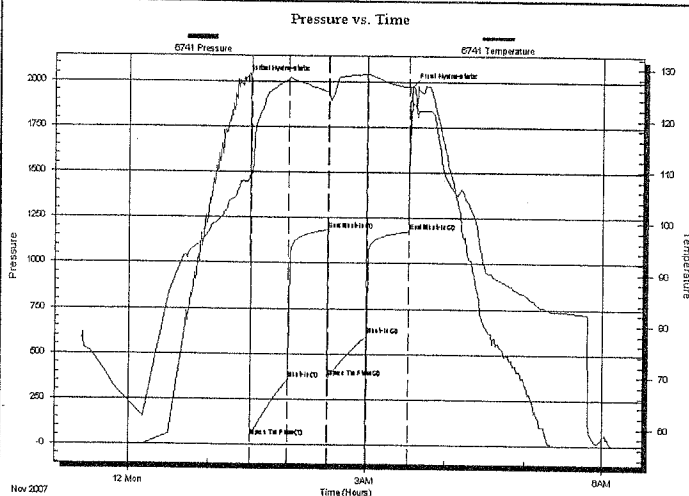
Capacity: 7000.00 psig

Last Calib.: 2007.11.12

Time On Btm: 2007.11.12 @ 01:27:40

Time Off Btm: 2007.11.12 @ 03:34:50

TEST COMMENT: IF Strong B-B in 4 min
FF Strong B-B in 6 min



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2010.95	107.95	Initial Hydro-static
5	43.73	108.51	Open To Flow (1)
34	361.24	127.93	Shut-In(1)
63	1183.89	125.66	End Shut-In(1)
64	370.69	125.12	Open To Flow (2)
94	604.12	128.87	Shut-In(2)
125	1175.44	126.39	End Shut-In(2)
128	1972.21	122.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
805.00	MW	11.13
310.00	Silty OMCW 3%O 57%W 40%M	4.39
248.00	Silty OCM 3%O 97%M	3.52
1.00	CO	0.01

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)
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TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30428

DST#: 3

ATTN: Ron Nelson

Test Start: 2007.11.11 @ 23:23:20

Tool Information

Drill Pipe:	Length: 4027.00 ft	Diameter: 3.82 inches	Volume: 57.08 bbl	Tool Weight:	2000.00 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:	65000.00 lb
		Total Volume:	57.23 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	44000.00 lb
Depth to Top Packer:	4065.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	68.00 ft				
Tool Length:	89.00 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			4045.00	
Shut In Tool	5.00			4050.00	
Hydraulic tool	5.00			4055.00	
Packer	5.00			4060.00	21.00 Bottom Of Top Packer
Packer	5.00			4065.00	
Stubb	1.00			4066.00	
Perforations	1.00			4067.00	
Change Over Sub	1.00			4068.00	
Recorder	0.00	6741	Inside	4068.00	
Drill Pipe	31.00			4099.00	
Change Over Sub	1.00			4100.00	
Recorder	0.00	13254	Outside	4100.00	
Perforations	30.00			4130.00	
Bullnose	3.00			4133.00	68.00 Bottom Packers & Anchor

Total Tool Length: 89.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co

Dietz C #1-5

PO Box 372
Hays KS 67601

5 13 22W Trego KS

Job Ticket: 30428

DST#: 3

ATTN: Ron Nelson

Test Start: 2007.11.11 @ 23:23:20

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 9.40 in³

Resistivity: ohm.m

Salinity: 2000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
805.00	MW	11.133
310.00	SltlyOMCW 3%O 57%W 40%M	4.394
248.00	SltlyOCM 3%O 97%M	3.516
1.00	CO	0.014

Total Length: 1364.00 ft

Total Volume: 19.057 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

