



DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13s-20w Ellis Ks

Flax # 1-30

Start Date: 2003.06.23 @ 17:30:57

End Date: 2003.06.23 @ 23:44:26

Job Ticket #: 17030 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

Dow ning-Nelson Oil Co Inc

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Flax # 1-30

30-13s-20w Ellis Ks

Job Ticket: 17030

DST#: 1

Test Start: 2003.06.23 @ 17:30:57

GENERAL INFORMATION:

Formation: LKC "A"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:34:56

Time Test Ended: 23:44:26

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: 3579.00 ft (KB) To 3600.00 ft (KB) (TVD)

Total Depth: 3600.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2306.00 ft (KB)

2297.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 6668

Inside

Press@RunDepth: 27.96 psig @ 3580.01 ft (KB)

Start Date: 2003.06.23

End Date:

2003.06.23

Start Time: 17:30:57

End Time:

23:44:26

Capacity: 7000.00 psig

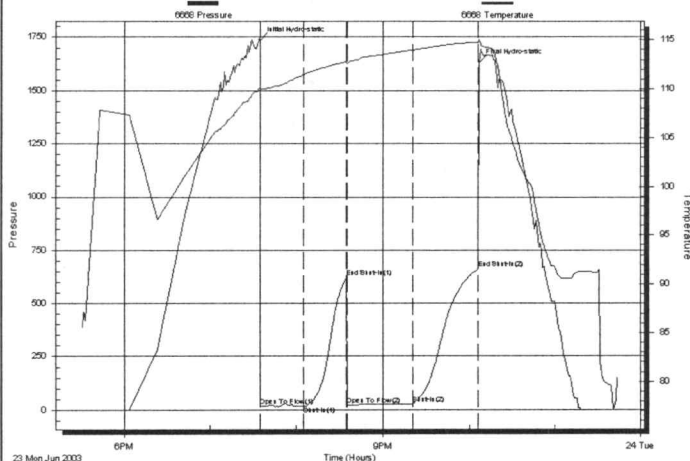
Last Calib.: 2003.06.23

Time On Btm: 2003.06.23 @ 19:34:26

Time Off Btm: 2003.06.23 @ 22:06:56

TEST COMMENT: IFP-w k bl thru-out 1/4" to 1/2" bl
FFP-w k bl thru-out 1" to 2 1/2" bl
Times 30-30-45-45

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1736.09	110.15	Initial Hydro-static
1	16.42	109.99	Open To Flow (1)
31	17.95	111.45	Shut-In (1)
61	623.23	112.74	End Shut-In (1)
61	22.97	112.59	Open To Flow (2)
107	27.96	113.95	Shut-In (2)
152	662.77	114.77	End Shut-In (2)
153	1632.01	115.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Clean Oil	0.01
40.00	HO&GCM 17% gas 38% oil 45% mud	0.56
0.00	200 GIP	0.00

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

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17030

DST#: 1

ATTN: Ron Nelson

Test Start: 2003.06.23 @ 17:30:57

Tool Information

Drill Pipe:	Length: 3570.00 ft	Diameter: 3.80 inches	Volume: 50.08 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:	40000.00 lb
			Total Volume: 50.08 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	35000.00 lb
Depth to Top Packer:	3579.00 ft			Final	35000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.02 ft				
Tool Length:	42.02 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			3559.00	
Shut In Tool	5.00			3564.00	
Hydraulic tool	5.00			3569.00	
Packer	5.00			3574.00	21.00 Bottom Of Top Packer
Packer	5.00			3579.00	
Stubb	1.00			3580.00	
Recorder	0.01	6668	Inside	3580.01	
Perforations	17.00			3597.01	
Recorder	0.01	11085	Outside	3597.02	
Bullnose	3.00			3600.02	21.02 Bottom Packers & Anchor
Total Tool Length:	42.02				



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17030

DST#: 1

ATTN: Ron Nelson

Test Start: 2003.06.23 @ 17:30:57

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: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.13 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Clean Oil	0.014
40.00	HO&GCM 17%gas 38%oil 45%mud	0.561
0.00	200 GIP	0.000

Total Length: 41.00 ft Total Volume: 0.575 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

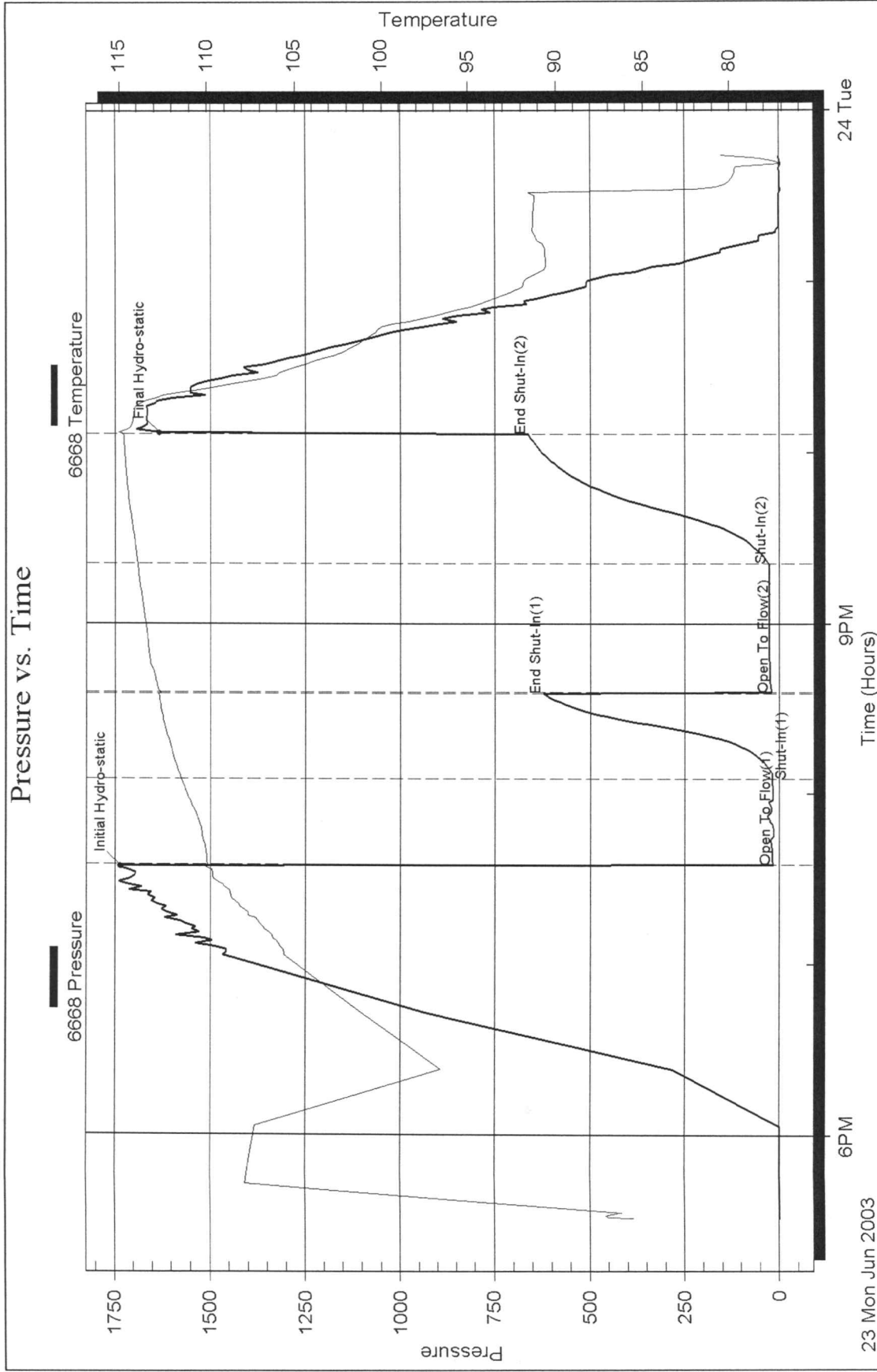
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: LCM 1 1/4#

Pressure vs. Time





DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13s-20w Ellis Ks

Flax # 1-30

Start Date: 2003.06.24 @ 08:32:07

End Date: 2003.06.24 @ 14:36:36

Job Ticket #: 17031 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

Downing-Nelson Oil Co Inc

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

Flax # 1-30

30-13s-20w Ellis Ks

Job Ticket: 17031

DST#: 2

Test Start: 2003.06.24 @ 08:32:07

GENERAL INFORMATION:

Formation: **LKC "E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:05:36

Time Test Ended: 14:36:36

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: **3649.00 ft (KB) To 3665.00 ft (KB) (TVD)**

Total Depth: 3665.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2306.00 ft (KB)

2297.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: **6668** Inside

Press@RunDepth: 119.47 psig @ 3650.01 ft (KB)

Start Date: 2003.06.24

End Date:

2003.06.24

Start Time: 08:32:07

End Time:

14:36:36

Capacity: 7000.00 psig

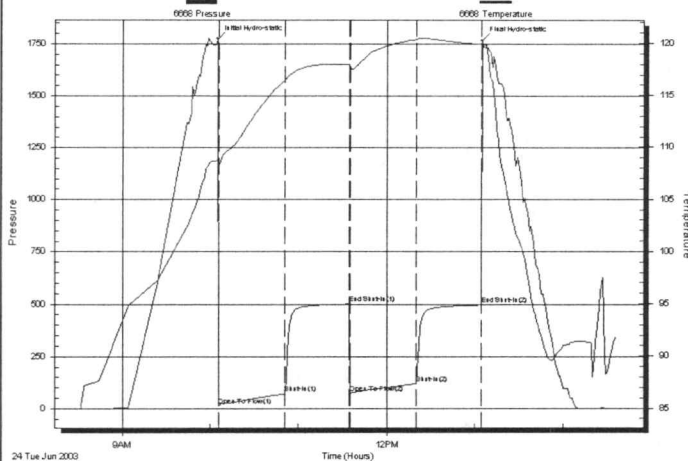
Last Calib.: 2003.06.24

Time On Btm: 2003.06.24 @ 10:05:06

Time Off Btm: 2003.06.24 @ 13:05:06

TEST COMMENT: IFP-wk to a fr bl 1/4" to 5" bl
FFP-wk bl thru-out 1/4" to 2 1/4"bl
Times 45-45-45-45

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.37	108.81	Initial Hydro-static
1	16.01	108.08	Open To Flow (1)
46	71.72	116.41	Shut-In (1)
90	501.00	117.97	End Shut-In (1)
90	75.82	117.79	Open To Flow (2)
135	119.47	120.34	Shut-In (2)
180	496.33	119.88	End Shut-In (2)
180	1765.96	120.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	water w/show of oil	2.52
35.00	socmw 1%oil 40%mud 59%water	0.49
5.00	clean oil	0.07
0.00	140 gip	0.00

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

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17031

DST#: 2

ATTN: Ron Nelson

Test Start: 2003.06.24 @ 08:32:07

Tool Information

Drill Pipe:	Length: 3662.00 ft	Diameter: 3.80 inches	Volume: 51.37 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: 45000.00 lb
			Total Volume: 51.37 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	34.00 ft			String Weight: Initial 37000.00 lb
Depth to Top Packer:	3649.00 ft			Final 37000.00 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			3629.00	
Shut In Tool	5.00			3634.00	
Hydraulic tool	5.00			3639.00	
Packer	5.00			3644.00	21.00 Bottom Of Top Packer
Packer	5.00			3649.00	
Stubb	1.00			3650.00	
Recorder	0.01	6668	Inside	3650.01	
Perforations	12.00			3662.01	
Recorder	0.01	11085	Outside	3662.02	
Bullnose	3.00			3665.02	16.02 Bottom Packers & Anchor
Total Tool Length:	37.02				



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17031

DST#: 2

ATTN: Ron Nelson

Test Start: 2003.06.24 @ 08:32:07

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: 38000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.12 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	water w/show of oil	2.525
35.00	socmw 1%oil 40%mud 59%water	0.491
5.00	clean oil	0.070
0.00	140 gip	0.000

Total Length: 220.00 ft Total Volume: 3.086 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .14@97F

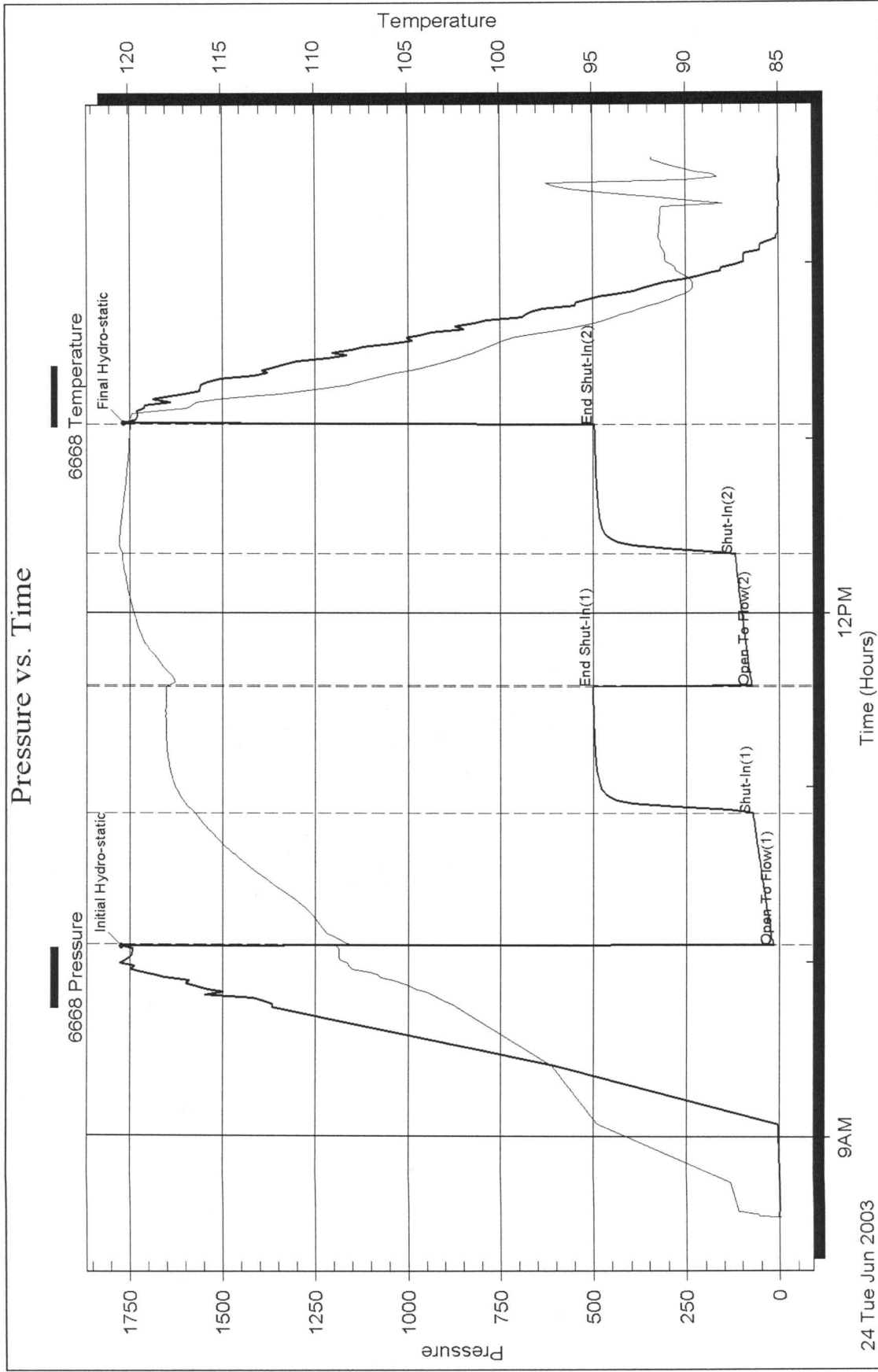
Serial #: 6668

Inside

Dowling-Nelson Oil Co Inc

30-13s-20w Ellis Ks

DST Test Number: 2





DRILL STEM TEST REPORT

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

P O Box 372
Hays Ks 67601

ATTN: Ron Nelson

30-13s-20w Ellis Ks

Flax # 1-30

Start Date: 2003.06.25 @ 01:51:42

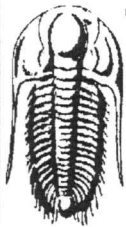
End Date: 2003.06.25 @ 07:48:11

Job Ticket #: 17032 DST #: 3

Trilobite Testing, Inc

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



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DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17032

DST#: 3

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 01:51:42

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:38:41

Time Test Ended: 07:48:11

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: 3735.00 ft (KB) To 3780.00 ft (KB) (TVD)

Total Depth: 3780.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2306.00 ft (KB)

2297.00 ft (CF)

KB to GRVCF: 9.00 ft

Serial #: 6668

Inside

Press@RunDepth: 103.47 psig @ 3736.01 ft (KB)

Start Date: 2003.06.25 End Date: 2003.06.25

Start Time: 01:51:42 End Time: 07:48:11

Capacity: 7000.00 psig

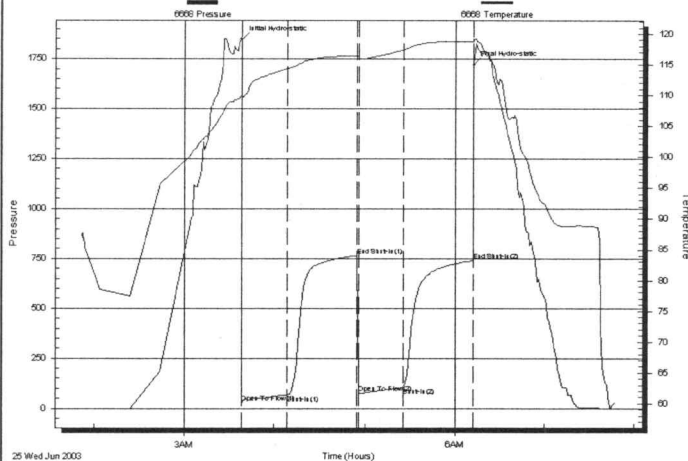
Last Calib.: 2003.06.25

Time On Btm: 2003.06.25 @ 03:38:11

Time Off Btm: 2003.06.25 @ 06:12:11

TEST COMMENT: IFP-w k to strg in 5 min
FFP-w k to strg in 3 min
Times 30-45-30-45
had bl bk on shut-in

Pressure vs. Time



PRESSURE SUMMARY

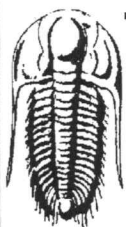
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1848.30	109.87	Initial Hydro-static
1	28.34	109.56	Open To Flow (1)
31	66.98	114.36	Shut-In (1)
77	765.94	116.45	End Shut-In (1)
78	76.13	116.19	Open To Flow (2)
108	103.47	117.45	Shut-In (2)
154	738.94	118.74	End Shut-In (2)
154	1720.28	119.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	GMO 45%gas 25%mud 30%oil	1.75
90.00	Clean oil	1.26
0.00	1920 GIP	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17032

DST#: 3

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 01:51:42

Tool Information

Drill Pipe:	Length: 3722.00 ft	Diameter: 3.80 inches	Volume: 52.21 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: 45000.00 lb
		Total Volume: 52.21 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 37000.00 lb
Depth to Top Packer:	3735.00 ft			Final 38000.00 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			3715.00	
Shut In Tool	5.00			3720.00	
Hydraulic tool	5.00			3725.00	
Packer	5.00			3730.00	21.00 Bottom Of Top Packer
Packer	5.00			3735.00	
Stubb	1.00			3736.00	
Recorder	0.01	6668	Inside	3736.01	
Perforations	41.00			3777.01	
Recorder	0.01	11085	Outside	3777.02	
Bullnose	3.00			3780.02	45.02 Bottom Packers & Anchor
Total Tool Length:	66.02				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17032

DST#: 3

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 01:51:42

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.12 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	GMO 45%gas 25%mud 30%oil	1.753
90.00	Clean oil	1.262
0.00	1920 GIP	0.000

Total Length: 215.00 ft

Total Volume: 3.015 bbl

Num Fluid Samples: 0

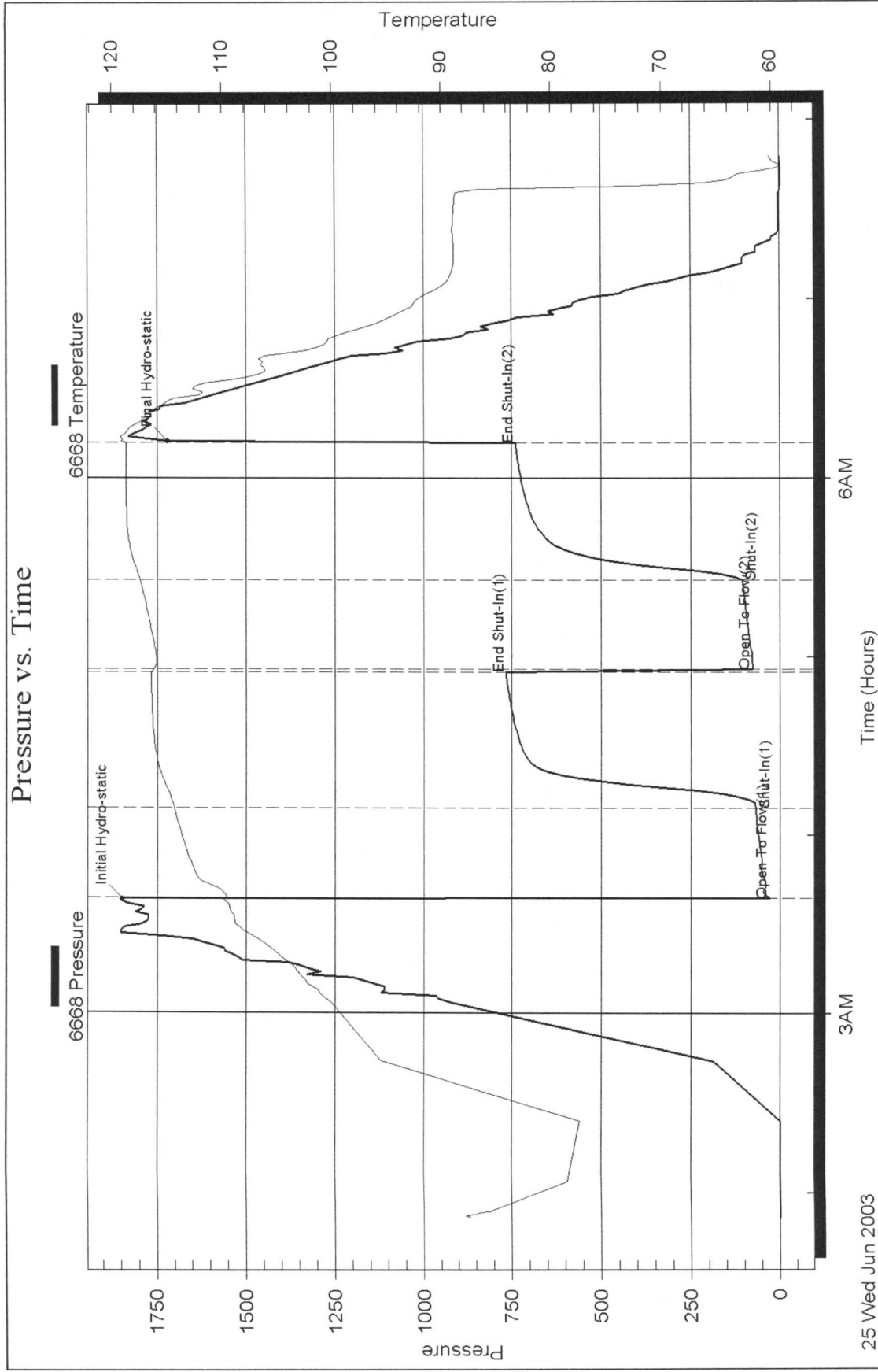
Num Gas Bombs: 0

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

30-13s-20w Ellis Ks

Flax # 1-30

Start Date: 2003.06.25 @ 21:35:22

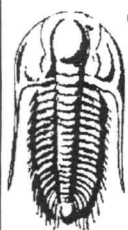
End Date: 2003.06.26 @ 05:13:51

Job Ticket #: 17033 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

Downing-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17033

DST#: 4

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 21:35:22

GENERAL INFORMATION:

Formation: **Cher Sd**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:46:51

Time Test Ended: 05:13:51

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: 3922.00 ft (KB) To 3950.00 ft (KB) (TVD)

Total Depth: 3950.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2306.00 ft (KB)

2297.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 6668

Inside

Press@RunDepth: 408.62 psig @ 3923.01 ft (KB)

Start Date: 2003.06.25

End Date:

2003.06.26

Start Time: 21:35:22

End Time:

05:13:51

Capacity: 7000.00 psig

Last Calib.: 2003.06.26

Time On Btm: 2003.06.25 @ 23:46:21

Time Off Btm: 2003.06.26 @ 02:18:51

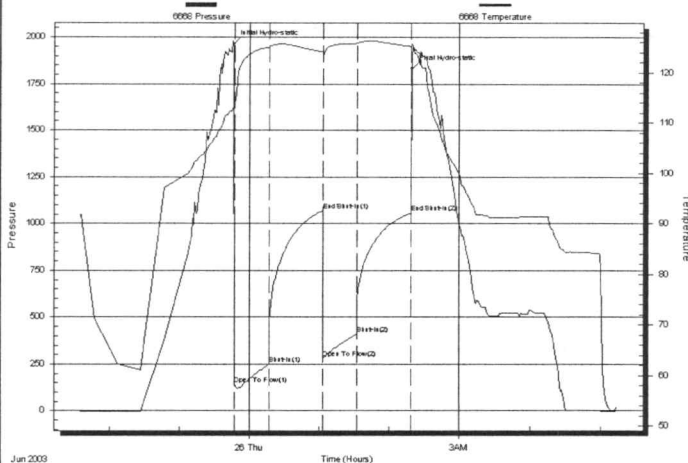
TEST COMMENT: IFP-strg bl in 90 sec GTS in 30min

FFP-strg bl thru-out

Times 30-45-30-45

gd bl bk on shut-in

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1964.11	113.17	Initial Hydro-static
1	140.87	113.18	Open To Flow (1)
31	251.53	125.01	Shut-In (1)
77	1070.08	124.11	End Shut-In (1)
77	281.82	123.08	Open To Flow (2)
106	408.62	125.79	Shut-In (2)
152	1056.87	125.18	End Shut-In (2)
153	1831.65	125.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GMO 45%gas 20%mud 35%oil	1.68
1020.00	Clean Oil	14.31
0.00	GTS	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17033

DST#: 4

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 21:35:22

Tool Information

Drill Pipe:	Length: 3909.00 ft	Diameter: 3.80 inches	Volume: 54.83 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 45000.00 lb
			Total Volume: 54.83 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	3922.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.02 ft			
Tool Length:	49.02 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			3902.00	
Shut In Tool	5.00			3907.00	
Hydraulic tool	5.00			3912.00	
Packer	5.00			3917.00	21.00 Bottom Of Top Packer
Packer	5.00			3922.00	
Stubb	1.00			3923.00	
Recorder	0.01	6668	Inside	3923.01	
Perforations	24.00			3947.01	
Recorder	0.01	11085	Outside	3947.02	
Bullnose	3.00			3950.02	28.02 Bottom Packers & Anchor
Total Tool Length:	49.02				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17033

DST#: 4

ATTN: Ron Nelson

Test Start: 2003.06.25 @ 21:35:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

42 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	GMO 45%gas 20%mud 35%oil	1.683
1020.00	Clean Oil	14.308
0.00	GTS	0.000

Total Length: 1140.00 ft

Total Volume: 15.991 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

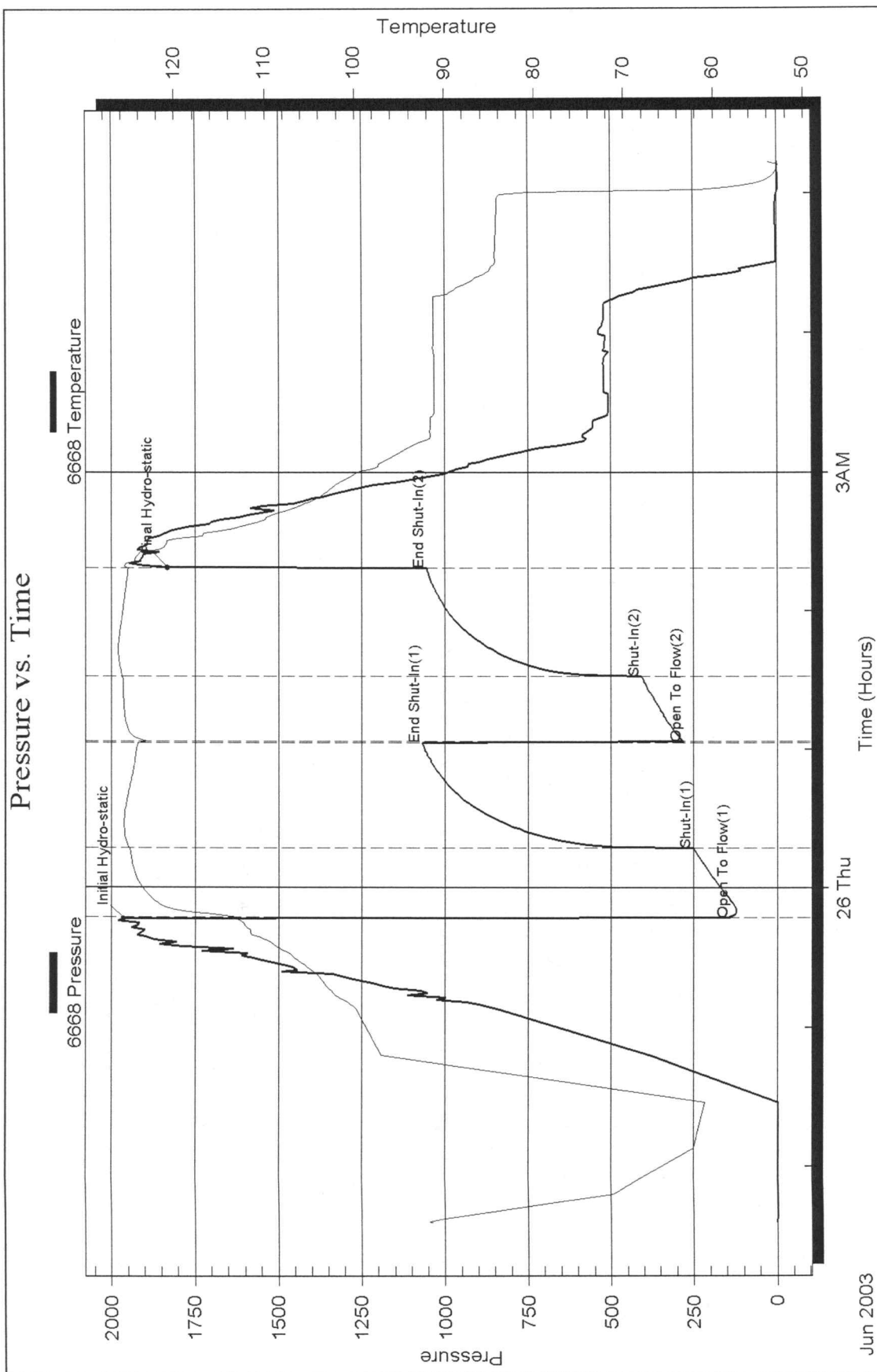
Serial #:

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

30-13s-20w Ellis Ks

Flax # 1-30

Start Date: 2003.06.26 @ 11:00:54

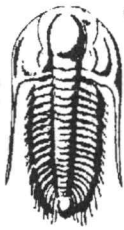
End Date: 2003.06.26 @ 17:43:23

Job Ticket #: 17034 DST #: 5

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

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17034

DST#: 5

ATTN: Ron Nelson

Test Start: 2003.06.26 @ 11:00:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:34:53

Time Test Ended: 17:43:23

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 16

Interval: **3947.00 ft (KB) To 3958.00 ft (KB) (TVD)**

Total Depth: 3958.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 2306.00 ft (KB)

2297.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: **6668**

Inside

Press@RunDepth: 502.95 psig @ 3948.01 ft (KB)

Start Date: 2003.06.26

End Date:

2003.06.26

Start Time: 11:00:54

End Time:

17:43:23

Capacity: 7000.00 psig

Last Calib.: 2003.06.26

Time On Btm: 2003.06.26 @ 12:34:23

Time Off Btm: 2003.06.26 @ 15:05:23

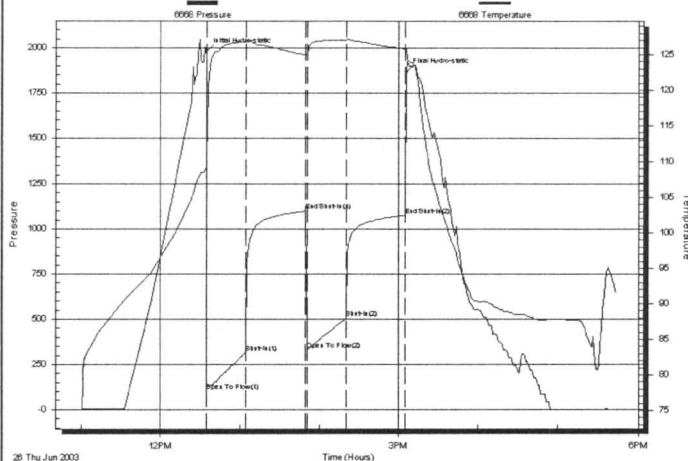
TEST COMMENT: IFF- strg bl in 4 min GTS in 30 min

FFP-strg bl in 90 sec

Times 30-45-30-45

gd bl bk on shut-in

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1978.87	109.24	Initial Hydro-static
1	101.02	110.95	Open To Flow (1)
30	313.52	126.81	Shut-In(1)
75	1099.55	124.95	End Shut-In(1)
76	329.03	124.93	Open To Flow (2)
106	502.95	127.04	Shut-In(2)
151	1076.98	125.81	End Shut-In(2)
151	1866.84	125.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	water RW .19@91	3.51
310.00	socw 1%oil 99%water	4.35
250.00	gm&w co 25%gas 5%mud 30%water 40%	3.51
355.00	CO	4.98

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17034

DST#: 5

ATTN: Ron Nelson

Test Start: 2003.06.26 @ 11:00:54

Tool Information

Drill Pipe:	Length: 3943.00 ft	Diameter: 3.80 inches	Volume: 55.31 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:	50000.00 lb
			Total Volume: 55.31 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial	39000.00 lb
Depth to Top Packer:	3947.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	11.02 ft				
Tool Length:	32.02 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			3927.00	
Shut In Tool	5.00			3932.00	
Hydraulic tool	5.00			3937.00	
Packer	5.00			3942.00	21.00 Bottom Of Top Packer
Packer	5.00			3947.00	
Stubb	1.00			3948.00	
Recorder	0.01	6668	Inside	3948.01	
Perforations	7.00			3955.01	
Recorder	0.01	11085	Outside	3955.02	
Bullnose	3.00			3958.02	11.02 Bottom Packers & Anchor
Total Tool Length:	32.02				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

Flax # 1-30

P O Box 372
Hays Ks 67601

30-13s-20w Ellis Ks

Job Ticket: 17034

DST#: 5

ATTN: Ron Nelson

Test Start: 2003.06.26 @ 11:00:54

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

45 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

28000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.13 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	water RW .19@91	3.507
310.00	socw 1%oil 99%w ater	4.348
250.00	gm&w co 25%gas 5%mud 30%w ater 40%oil	3.507
355.00	CO	4.980

Total Length: 1165.00 ft

Total Volume: 16.342 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

