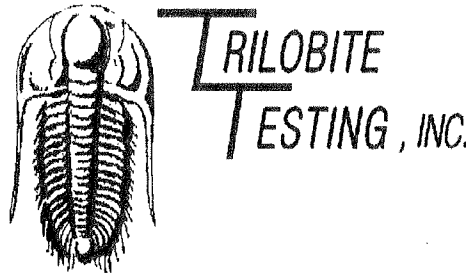


15-195-22565

9-135-22w



DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil CO.**

PO Box 372
Hays, Ks 67601

ATTN: Ron Nelson

9 13 22 Trego KS

Harvey #1-9

Start Date: 2008.08.23 @ 18:15:55

End Date: 2008.08.24 @ 00:53:25

Job Ticket #: 32735 DST #: 1

Trilobite Testing, Inc

PO Box 1733 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

Harvey #1-9

9 13 22 Trego KS

Job Ticket: 32735

DST#: 1

Test Start: 2008.08.23 @ 18:15:55

GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:04:55

Time Test Ended: 00:53:25

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 44

Interval: 3738.00 ft (KB) To 3768.00 ft (KB) (TVD)

Total Depth: 3768.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2302.00 ft (KB)

2295.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 6672 Inside

Press@RunDepth: 161.17 psig @ 3741.00 ft (KB)

Start Date: 2008.08.23

End Date: 2008.08.24

Capacity: 7000.00 psig

Last Calib.: 2008.08.24

Start Time: 18:15:56

End Time: 00:53:25

Time On Btm: 2008.08.23 @ 20:04:40

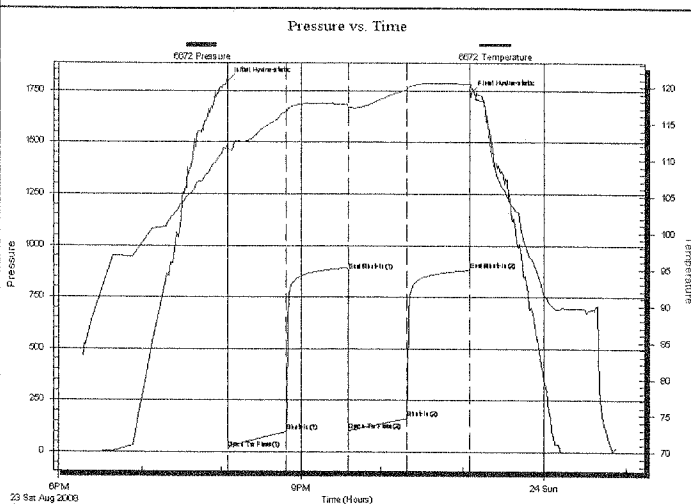
Time Off Btm: 2008.08.23 @ 23:05:25

TEST COMMENT: IFP Weak surface blow built to 7.5"

ISI no blow back

FFP Weak surface blow built to 3.5'

FSI no blow back



PRESSURE SUMMARY

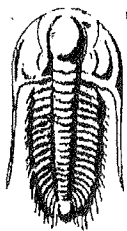
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1795.19	112.31	Initial Hydro-static
1	14.16	111.40	Open To Flow (1)
45	97.45	116.65	Shut-In (1)
91	874.72	117.62	End Shut-In (1)
91	100.46	117.14	Open To Flow (2)
135	161.17	119.68	Shut-In (2)
181	879.38	120.38	End Shut-In (2)
181	1732.46	120.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	MW 90%W,10%M	1.42
120.00	MW 70%, 30%M	1.70
60.00	MW w/scum of oil 60%W,40%M	0.85

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

ATTN: Ron Nelson

Job Ticket: 32735

DST#: 1

Test Start: 2008.08.23 @ 18:15:55

Tool Information

Drill Pipe:	Length: 3692.00 ft	Diameter: 3.82 inches	Volume: 52.34 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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
			Total Volume: 52.49 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	59000.00 lb
Depth to Top Packer:	3738.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	30.00 ft				
Tool Length:	51.00 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			3718.00	
Shut In Tool	5.00			3723.00	
Hydraulic tool	5.00			3728.00	
Packer	5.00			3733.00	21.00 Bottom Of Top Packer
Packer	5.00			3738.00	
Stubb	1.00			3739.00	
Perforations	2.00			3741.00	
Recorder	0.00	8367	Inside	3741.00	
Recorder	0.00	6672	Inside	3741.00	
Perforations	24.00			3765.00	
Bullnose	3.00			3768.00	30.00 Bottom Packers & Anchor

Total Tool Length: 51.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

Job Ticket: 32735

DST#: 1

ATTN: Ron Nelson

Test Start: 2008.08.23 @ 18:15:55

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:

39000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	MW 90%W,10%M	1.423
120.00	MW 70%, 30%M	1.701
60.00	MW w/scum of oil 60%W,40%M	0.851

Total Length: 300.00 ft

Total Volume: 3.975 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

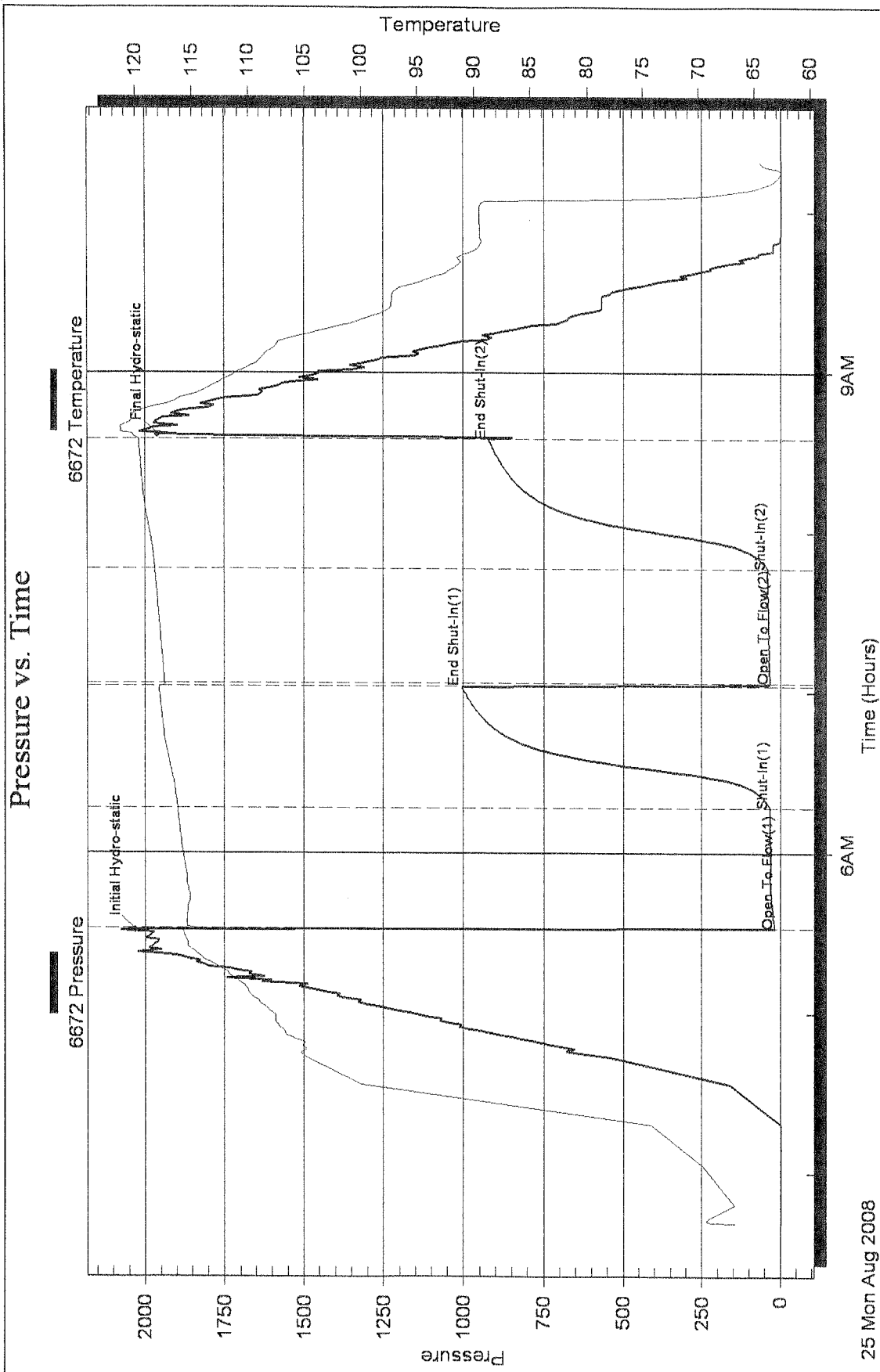
Serial #:

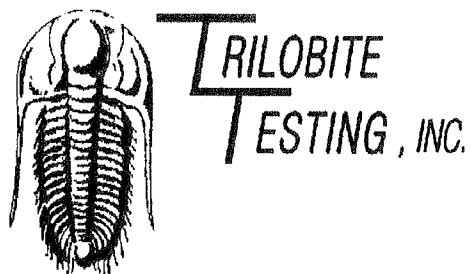
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil CO.**

PO Box 372
Hays, Ks 67601

ATTN: Ron Nelson

9 13 22 Trego KS

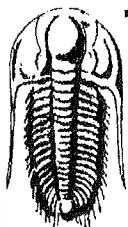
Harvey #1-9

Start Date: 2008.08.25 @ 03:41:22

End Date: 2008.08.25 @ 10:19:07

Job Ticket #: 32736 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.

PO Box 372
Hays, Ks 67601

ATTN: Ron Nelson

Harvey #1-9

9 13 22 Trego KS

Job Ticket: 32736

DST#: 2

Test Start: 2008.08.25 @ 03:41:22

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:31:37

Time Test Ended: 10:19:07

Test Type: Conventional Bottom Hole

Tester: Tyson Flax

Unit No: 44

Interval: 4051.00 ft (KB) To 4125.00 ft (KB) (TVD)

Total Depth: 4125.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2302.00 ft (KB)

2295.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 6672

Inside

Press@RunDepth: 39.51 psig @ 4055.00 ft (KB)

Start Date: 2008.08.25

End Date:

2008.08.25

Start Time: 03:41:23

End Time:

10:19:07

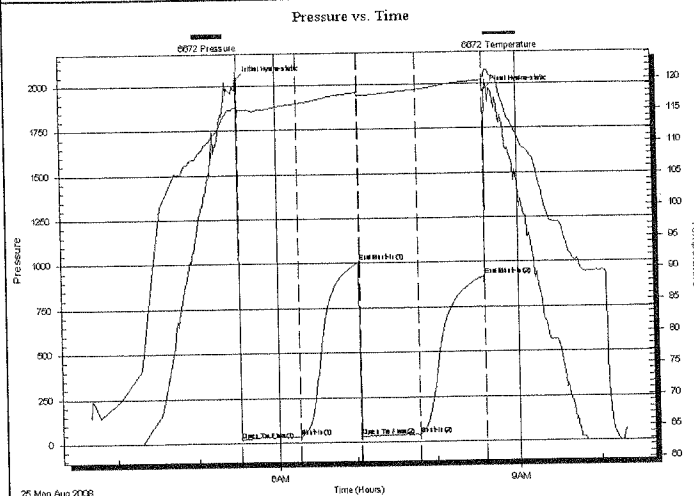
Capacity: 7000.00 psig

Last Calib.: 2008.08.25

Time On Btm: 2008.08.25 @ 05:31:07

Time Off Btm: 2008.08.25 @ 08:36:37

TEST COMMENT: IFP Weak surface blow built to 2.5"
ISI no blow back
FFP Weak surface blow built to 1.5"
FSI no blow back



PRESSURE SUMMARY

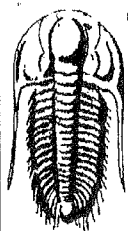
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2031.09	115.89	Initial Hydro-static
1	16.84	114.54	Open To Flow (1)
46	32.16	116.27	Shut-In(1)
92	1005.88	117.94	End Shut-In(1)
93	31.45	117.46	Open To Flow(2)
136	39.51	118.31	Shut-In(2)
184	922.63	119.73	End Shut-In(2)
186	1961.24	120.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	MCO 80%O,20%M	0.71

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

Job Ticket: 32736

DST#: 2

ATTN: Ron Nelson

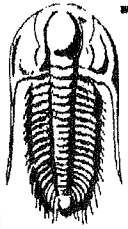
Test Start: 2008.08.25 @ 03:41:22

Tool Information

Drill Pipe:	Length: 4003.00 ft	Diameter: 3.82 inches	Volume: 56.74 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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
			Total Volume: 56.89 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4051.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	95.00 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			4035.00	
Change Over Sub	1.00			4036.00	
Hydraulic tool	5.00			4041.00	
Packer	5.00			4046.00	21.00 Bottom Of Top Packer
Packer	5.00			4051.00	
Stubb	1.00			4052.00	
Perforations	2.00			4054.00	
Change Over Sub	1.00			4055.00	
Recorder	0.00	8367	Inside	4055.00	
Recorder	0.00	6672	Inside	4055.00	
Blank Spacing	62.00			4117.00	
Change Over Sub	1.00			4118.00	
Perforations	4.00			4122.00	
Bullnose	3.00			4125.00	74.00 Bottom Packers & Anchor

Total Tool Length: 95.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

Job Ticket: 32736

DST#: 2

ATTN: Ron Nelson

Test Start: 2008.08.25 @ 03:41:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.28 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	MCO 80%O,20%M	0.715

Total Length: 70.00 ft

Total Volume: 0.715 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

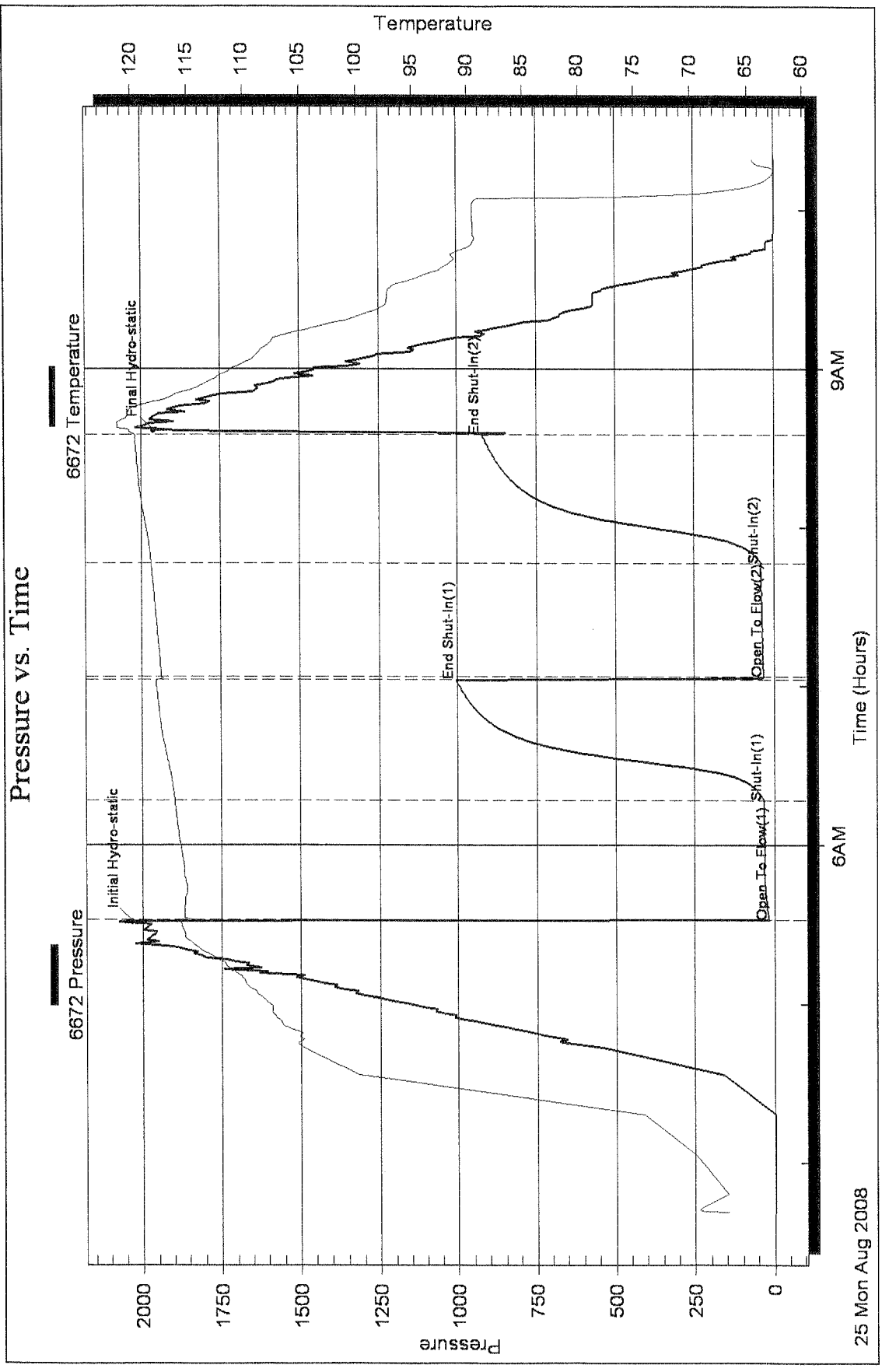
Laboratory Name:

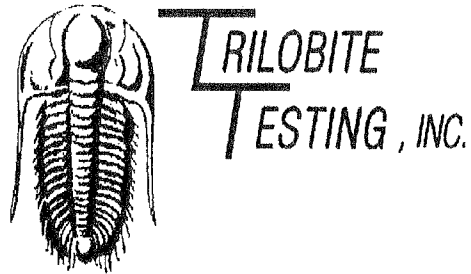
Laboratory Location:

Recovery Comments:

6672

Serial #: 6672 Inside Dow nung-Nelson Oil CO. 9 13 22 Trego KS DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Downing-Nelson Oil CO.**

PO Box 372
Hays, Ks 67601

ATTN: Ron Nelson

9 13 22 Trego KS

Harvey #1-9

Start Date: 2008.08.26 @ 01:18:14

End Date: 2008.08.26 @ 08:43:44

Job Ticket #: 32737 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

Dowling-Nelson Oil CO.

PO Box 372
Hays, Ks 67601

ATTN: Ron Nelson

Harvey #1-9

9 13 22 Trego KS

Job Ticket: 32737

DST#: 3

Test Start: 2008.08.26 @ 01:18:14

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:31:44

Time Test Ended: 08:43:44

Test Type: Conventional Straddle

Tester: Tyson Flax

Unit No: 44

Interval: **4040.00 ft (KB) To 4188.00 ft (KB) (TVD)**

Total Depth: 4253.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2302.00 ft (KB)

2295.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8367

Outside

Press@RunDepth: 70.68 psig @ 4192.00 ft (KB)

Start Date: 2008.08.26

End Date:

2008.08.26

Start Time: 01:18:15

End Time:

08:43:44

Capacity: 7000.00 psig

Last Calib.: 2008.08.26

Time On Btm: 2008.08.26 @ 03:31:14

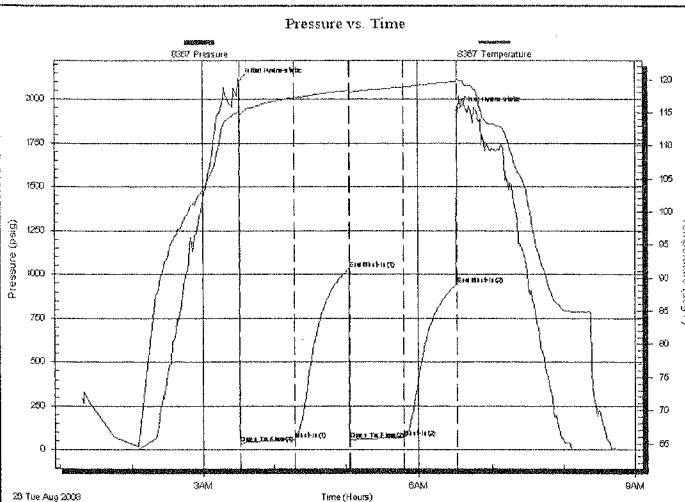
Time Off Btm: 2008.08.26 @ 06:32:14

TEST COMMENT: IFP Weak surface blow built to 6"

ISI no blow back

FFP Weak surface blow built to 3"

FSI no blow back



PRESSURE SUMMARY

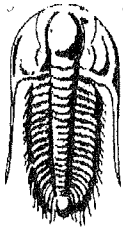
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2101.64	115.35	Initial Hydro-static
1	35.49	114.55	Open To Flow (1)
46	58.71	117.27	Shut-In(1)
92	1029.87	118.32	End Shut-In(1)
93	56.17	118.02	Open To Flow (2)
137	70.68	118.86	Shut-In(2)
181	943.74	119.67	End Shut-In(2)
181	1934.58	120.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
48.00	OCM 20%O,80%M	0.40
60.00	MCO 50%O,50%M	0.85
2.00	CO	0.03

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

Job Ticket: 32737

DST#: 3

ATTN: Ron Nelson

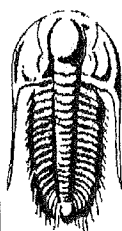
Test Start: 2008.08.26 @ 01:18:14

Tool Information

Drill Pipe:	Length: 4003.00 ft	Diameter: 3.82 inches	Volume: 56.74 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.25 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: 70000.00 lb
			Total Volume: 56.89 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4040.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	4189.00 ft			
Interval between Packers:	149.00 ft			
Tool Length:	236.00 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			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	4.00			4045.00	
Change Over Sub	1.00			4046.00	
Recorder	0.00	6672	Inside	4046.00	
Blank Spacing	127.00			4173.00	
Change Over Sub	1.00			4174.00	
Perforations	12.00			4186.00	
Recorder	0.00	13401	Inside	4186.00	
Blank Off Sub	1.00			4187.00	
Stubb	2.00			4189.00	149.00 Tool Interval
Packer	1.00			4190.00	
Stubb	1.00			4191.00	
Change Over Sub	1.00			4192.00	
Recorder	0.00	8367	Outside	4192.00	
Blank Spacing	63.00			4255.00	66.00 Bottom Packers & Anchor

Total Tool Length: 236.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil CO.

Harvey #1-9

PO Box 372
Hays, Ks 67601

9 13 22 Trego KS

Job Ticket: 32737

DST#: 3

ATTN: Ron Nelson

Test Start: 2008.08.26 @ 01:18:14

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: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2300.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
48.00	OCM 20%O,80%M	0.403
60.00	MCO 50%O,50%M	0.851
2.00	CO	0.028

Total Length: 110.00 ft

Total Volume: 1.282 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 3

9 13 22 Trego KS

Outside Dowling-Nelson Oil CO.

Serial #: 8367

Pressure vs. Time

