



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company Inc**

PO Box 1019
Hays Kansas 67601

ATTN: Marc Downing

Brack #1-24

28-18s-16w Rush,KS

Start Date: 2016.03.30 @ 09:07:00

End Date: 2016.03.30 @ 15:14:30

Job Ticket #: 65085 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.04.04 @ 09:54:57

Downing Nelson Oil Company Inc

28-18s-16w Rush,KS

Brack #1-24

DST # 1

Reagan Sand

2016.03.30



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Compay Inc

28-18s-16w Rush,KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65085

DST#: 1

ATTN: Marc Dow ning

Test Start: 2016.03.30 @ 09:07:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:07:30

Time Test Ended: 15:14:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Sw inney

Unit No: 72

Interval: 3437.00 ft (KB) To 3507.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3507.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741

Inside

Press@RunDepth: 72.29 psig @ 3502.64 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.03.30

End Date:

2016.03.30

Last Calib.:

2016.03.30

Start Time:

09:07:05

End Time:

15:14:29

Time On Btm:

2016.03.30 @ 11:05:30

Time Off Btm:

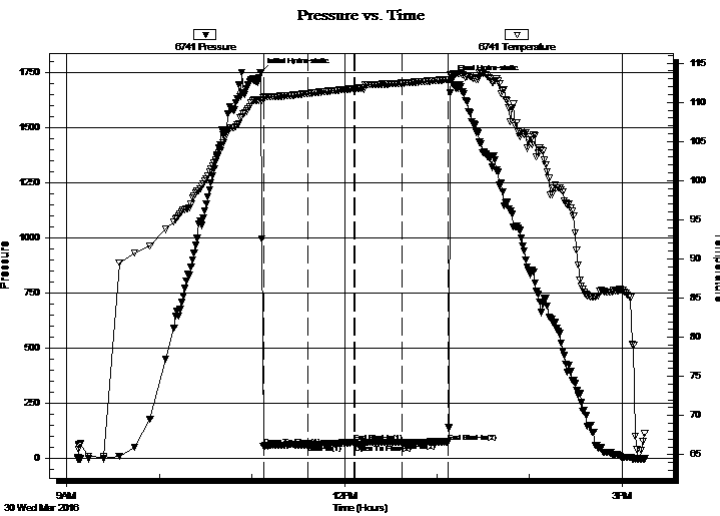
2016.03.30 @ 13:09:00

TEST COMMENT: IIFP Blow at 1" at open built to 2" then died to 1/2"

FFP No blow back

FiFP No blow Flush tool good surge then dead

FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1749.50	110.36	Initial Hydro-static
2	55.45	110.59	Open To Flow (1)
31	61.09	111.13	Shut-In(1)
61	71.34	111.73	End Shut-In(1)
62	62.47	111.75	Open To Flow (2)
92	72.29	112.46	Shut-In(2)
122	74.56	112.90	End Shut-In(2)
124	1718.03	113.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud 100%	0.30

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65085

DST#: 1

ATTN: Marc Downing

Test Start: 2016.03.30 @ 09:07:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:07:30

Time Test Ended: 15:14:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3437.00 ft (KB) To 3507.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3507.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8960 Outside

Press@RunDepth: 73.82 psig @ 3503.64 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.03.30

End Date:

2016.03.30

Last Calib.: 2016.03.30

Start Time: 09:07:05

End Time:

15:14:29

Time On Btm: 2016.03.30 @ 11:05:30

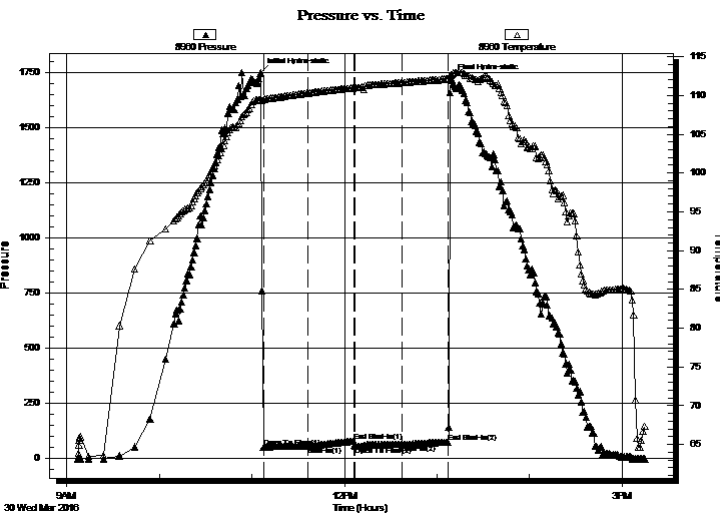
Time Off Btm: 2016.03.30 @ 13:09:00

TEST COMMENT: IIFP Blow at 1" at open built to 2" then died to 1/2"

FFP No blow back

FiFP No blow Flush tool good surge then dead

FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1746.08	109.52	Initial Hydro-static
2	50.01	109.44	Open To Flow (1)
31	54.98	110.33	Shut-In(1)
61	77.77	110.98	End Shut-In(1)
62	55.38	110.98	Open To Flow (2)
92	62.07	111.66	Shut-In(2)
122	73.82	112.16	End Shut-In(2)
124	1719.59	112.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Mud 100%	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65085

DST#: 1

ATTN: Marc Downing

Test Start: 2016.03.30 @ 09:07:00

Tool Information

Drill Pipe:	Length: 3305.00 ft	Diameter: 3.80 inches	Volume: 46.36 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	48000.00 lb
			<u>Total Volume: 46.95 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3437.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	69.64 ft				
Tool Length:	89.64 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: 65085 DNOC Brack #1-24 DST #1

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3422.00	
Hydraulic tool	5.00			3427.00	
Top Packer	5.00			3432.00	
Packer	5.00			3437.00	20.00 Bottom Of Top Packer
Anchor	2.00			3439.00	
Change Over Sub	1.00			3440.00	
Drill Pipe	31.64			3471.64	
Change Over Sub	1.00			3472.64	
Anchor	29.00			3501.64	
Recorder	1.00	6741	Inside	3502.64	
Recorder	1.00	8960	Outside	3503.64	
Bullnose	3.00			3506.64	69.64 Anchor Tool

Total Tool Length: 89.64



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65085

DST#: 1

ATTN: Marc Downing

Test Start: 2016.03.30 @ 09:07:00

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Mud 100%	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

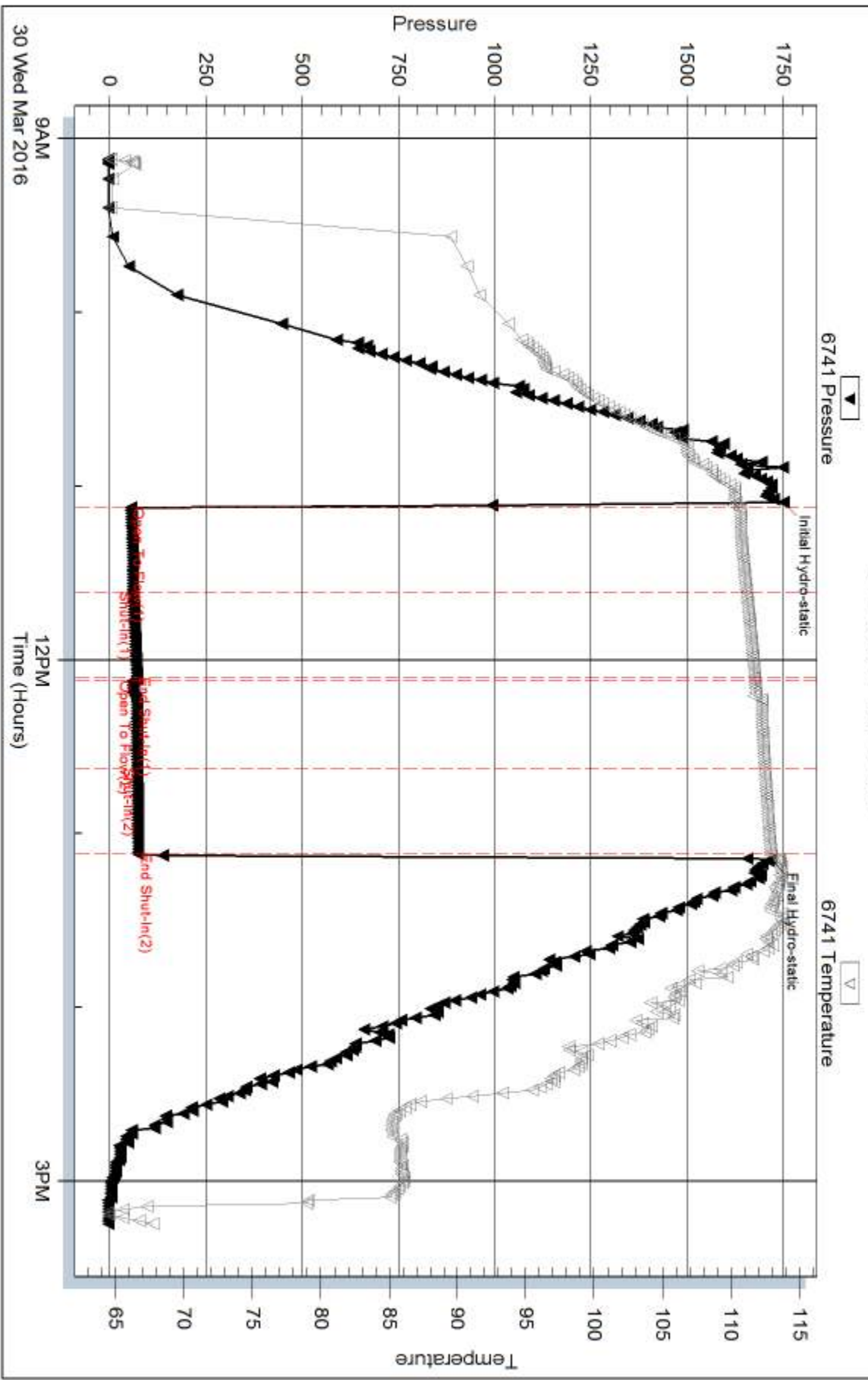
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

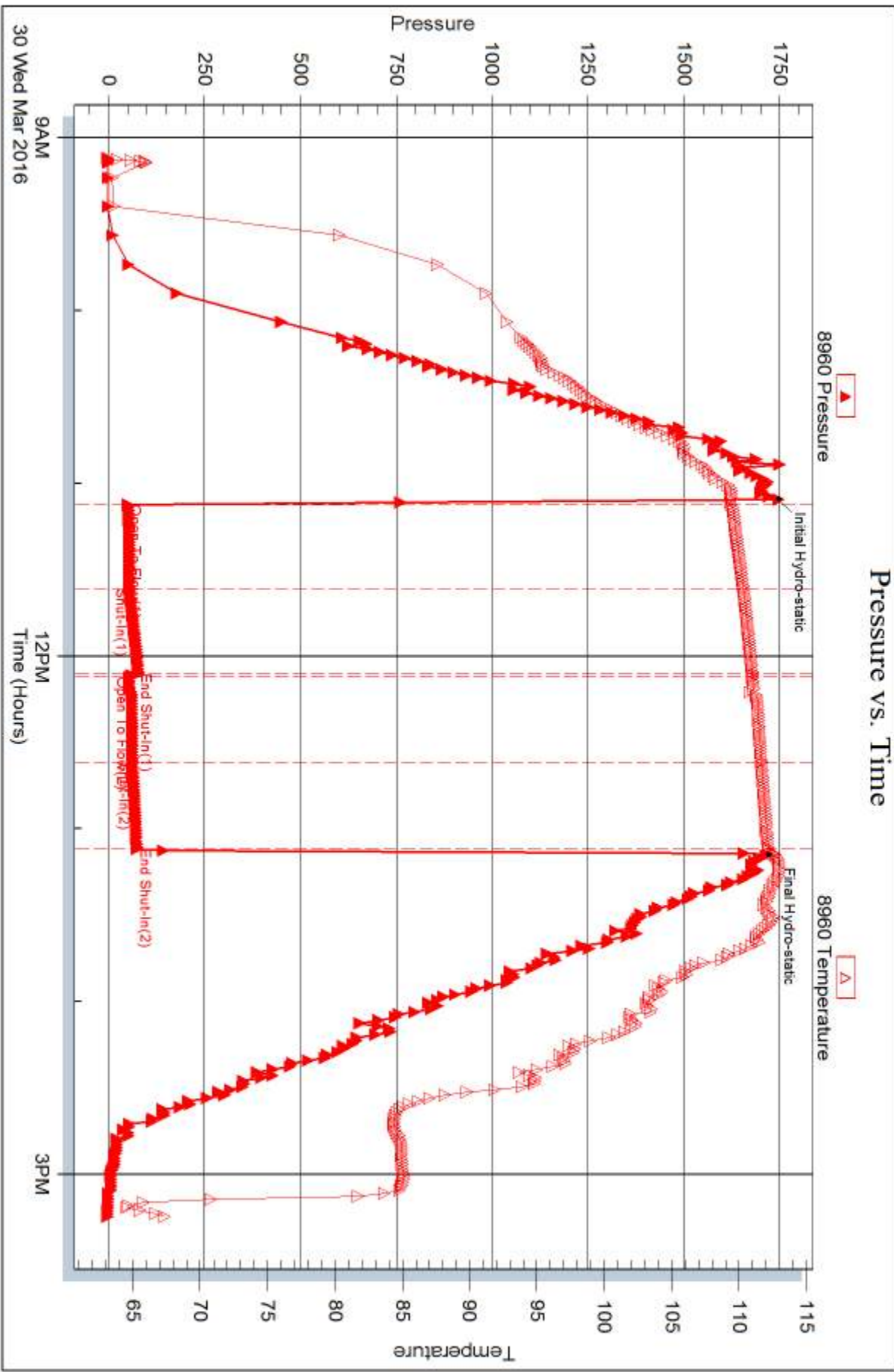


Serial #: 8960

Outside Dow n ing Nelson Oil Company Inc

Brack #1-24

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 65085

Printed: 2016.04.04 @ 09:54:59



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company Inc**

PO Box 1019
Hays Kansas 67601

ATTN: Marc Downing

Brack #1-24

28-18s-16w Rush,KS

Start Date: 2016.03.31 @ 13:32:00

End Date: 2016.03.31 @ 19:33:30

Job Ticket #: 65086 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.04.04 @ 09:53:38



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65086

DST#: 2

ATTN: Marc Downing

Test Start: 2016.03.31 @ 13:32:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:31:30

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3436.00 ft (KB) To 3538.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3538.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741

Inside

Press@RunDepth: 94.62 psig @ 3534.05 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.03.31

End Date:

2016.03.31

Last Calib.:

2016.03.31

Start Time:

13:32:05

End Time:

19:33:29

Time On Btm:

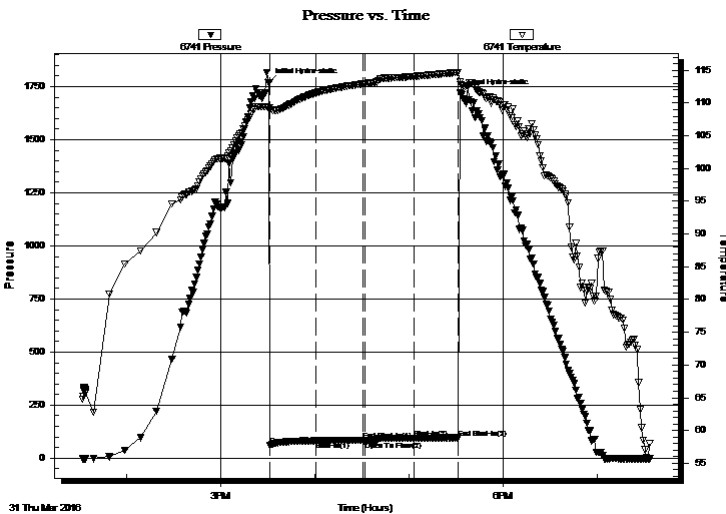
2016.03.31 @ 15:31:00

Time Off Btm:

2016.03.31 @ 17:33:00

TEST COMMENT: IFP Blow built to 3 1/4" then died to 2"
ISI No blow back
FFP No blow - Flush tool - good surge then dead
FSI No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.34	109.23	Initial Hydro-static
1	59.71	108.83	Open To Flow (1)
30	81.59	111.56	Shut-In(1)
60	85.87	112.93	End Shut-In(1)
61	81.90	112.96	Open To Flow (2)
92	94.62	114.06	Shut-In(2)
121	95.99	114.68	End Shut-In(2)
122	1716.92	112.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Mud 100%	0.37

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65086

DST#: 2

ATTN: Marc Downing

Test Start: 2016.03.31 @ 13:32:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:31:30

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3436.00 ft (KB) To 3538.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3538.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8960 Outside

Press@RunDepth: 97.89 psig @ 3535.05 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.03.31

End Date:

2016.03.31

Last Calib.:

2016.03.31

Start Time: 13:32:05

End Time:

19:32:59

Time On Btm:

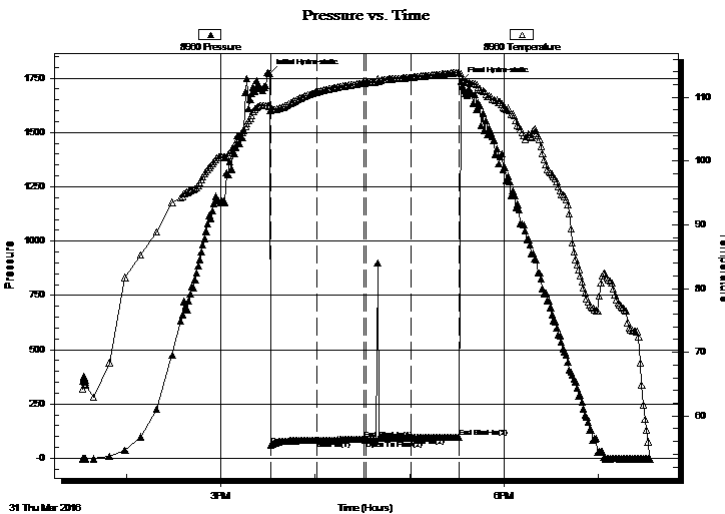
2016.03.31 @ 15:31:00

Time Off Btm:

2016.03.31 @ 17:32:30

TEST COMMENT: IFP Blow built to 3 1/4" then died to 2"
ISI No blow back
FFP No blow - Flush tool - good surge then dead
FSI No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1770.97	108.55	Initial Hydro-static
1	61.97	107.89	Open To Flow (1)
30	82.26	110.83	Shut-In(1)
60	88.61	112.24	End Shut-In(1)
61	83.31	112.27	Open To Flow (2)
90	95.10	113.14	Shut-In(2)
121	97.89	113.91	End Shut-In(2)
122	1735.24	113.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	Mud 100%	0.37

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65086

DST#: 2

ATTN: Marc Downing

Test Start: 2016.03.31 @ 13:32:00

Tool Information

Drill Pipe:	Length: 3305.00 ft	Diameter: 3.80 inches	Volume: 46.36 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	50000.00 lb
			<u>Total Volume: 46.95 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	42000.00 lb
Depth to Top Packer:	3436.00 ft			Final	42000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	102.05 ft				
Tool Length:	122.05 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			3421.00	
Hydraulic tool	5.00			3426.00	
Top Packer	5.00			3431.00	
Packer	5.00			3436.00	20.00 Bottom Of Top Packer
Anchor	3.00			3439.00	
Change Over Sub	1.00			3440.00	
Drill Pipe	63.05			3503.05	
Change Over Sub	1.00			3504.05	
Anchor	29.00			3533.05	
Recorder	1.00	6741	Inside	3534.05	
Recorder	1.00	8960	Outside	3535.05	
Bullnose	3.00			3538.05	102.05 Anchor Tool

Total Tool Length: 122.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65086

DST#: 2

ATTN: Marc Downing

Test Start: 2016.03.31 @ 13:32:00

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	Mud 100%	0.369

Total Length: 75.00 ft Total Volume: 0.369 bbl

Num Fluid Samples: 0

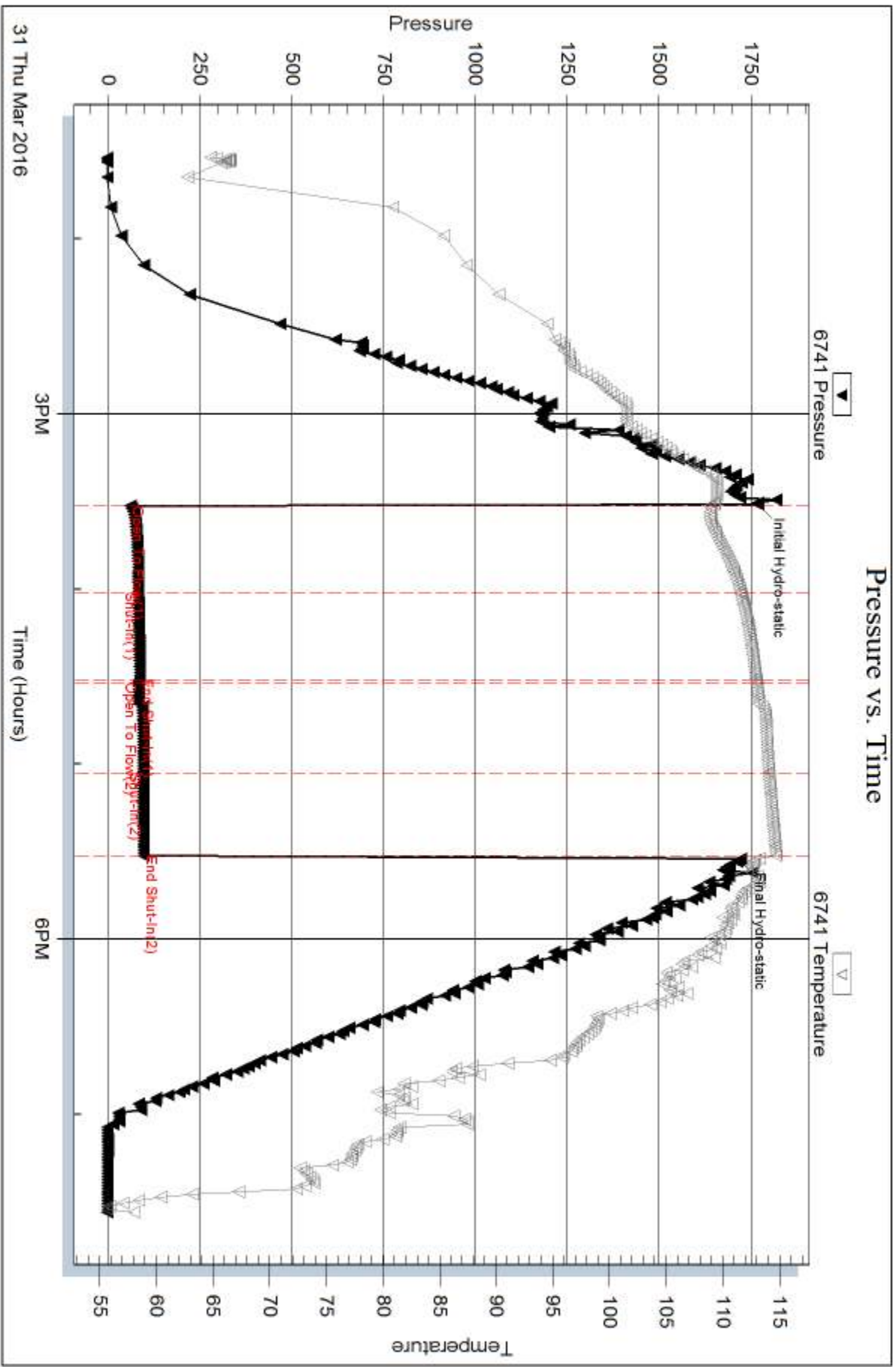
Num Gas Bombs: 0

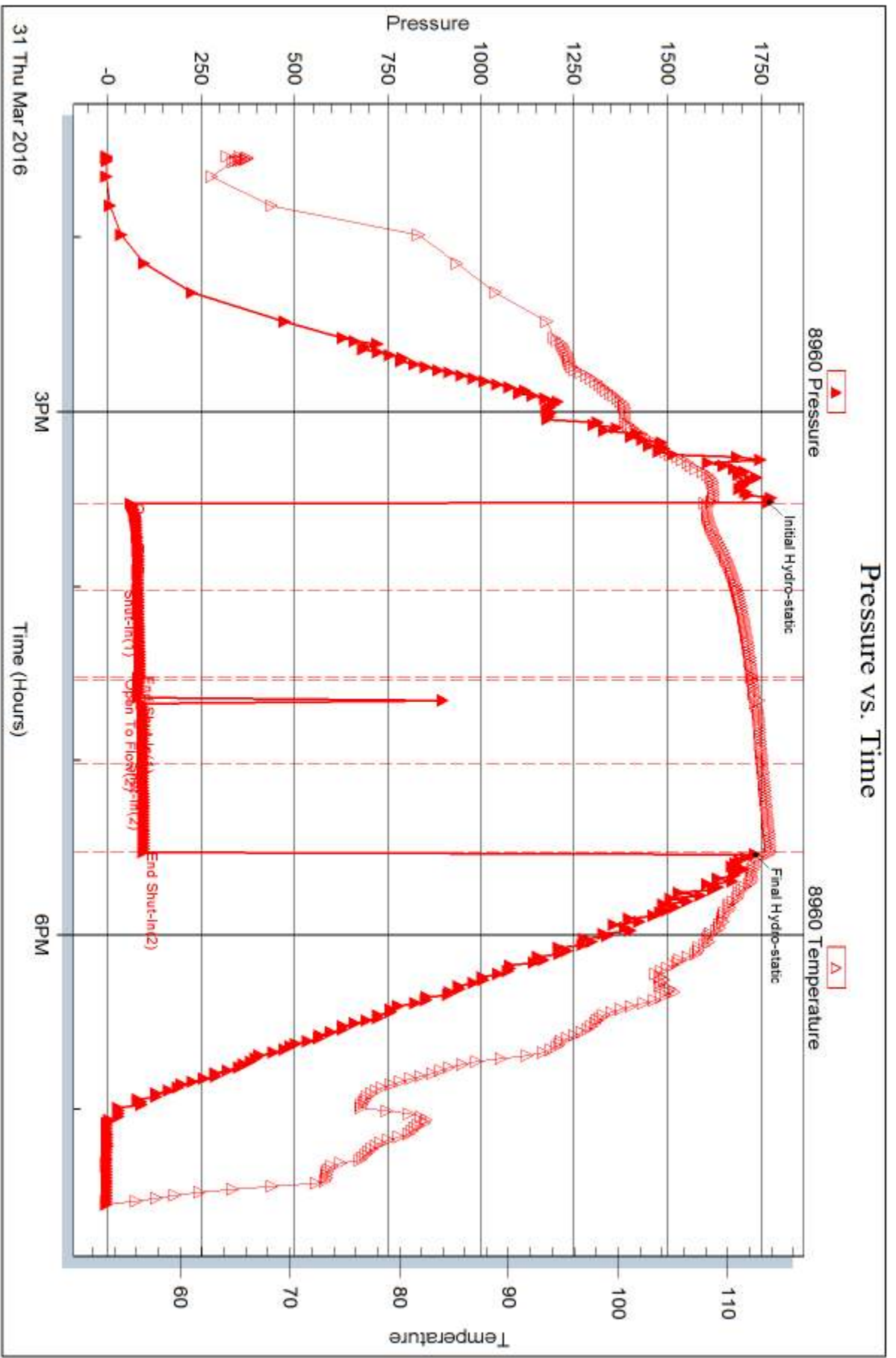
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Company Inc**

PO Box 1019
Hays Kansas 67601

ATTN: Marc Downing

Brack #1-24

28-18s-16w Rush,KS

Start Date: 2016.04.01 @ 17:05:00

End Date: 2016.04.01 @ 23:32:30

Job Ticket #: 65087 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.04.04 @ 09:53:03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65087

DST#: 3

ATTN: Marc Downing

Test Start: 2016.04.01 @ 17:05:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:01:30

Time Test Ended: 23:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3436.00 ft (KB) To 3568.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3568.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 6741

Inside

Press@RunDepth: 115.45 psig @ 3564.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.04.01

End Date:

2016.04.01

Last Calib.:

2016.04.01

Start Time:

17:05:05

End Time:

23:32:29

Time On Btm:

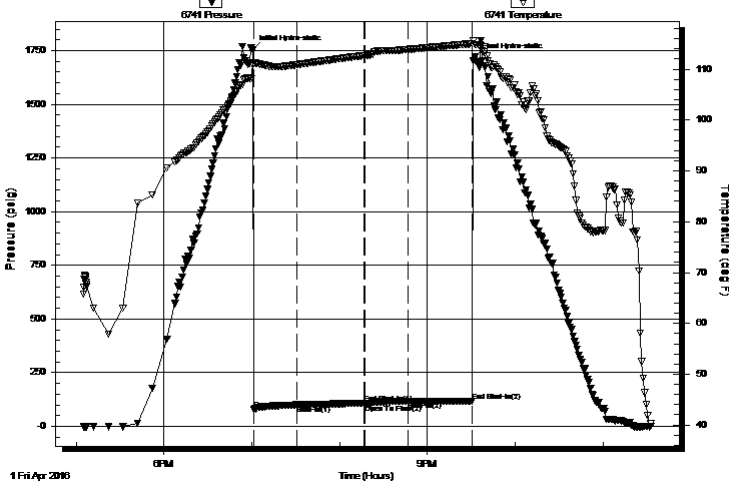
2016.04.01 @ 19:00:30

Time Off Btm:

2016.04.01 @ 21:32:30

TEST COMMENT: IFP Blow built to 4 1/4" by 22 min. then died to 3 1/2"
ISI No blow back
FFP No blow - Flush tool surface blow for 2 minutes
FSI No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1752.79	110.83	Initial Hydro-static
1	77.06	111.17	Open To Flow (1)
31	99.48	110.89	Shut-In(1)
76	106.67	112.67	End Shut-In(1)
77	100.87	112.69	Open To Flow (2)
106	115.45	113.89	Shut-In(2)
150	115.48	115.03	End Shut-In(2)
152	1719.98	114.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
105.00	Mud 100%	0.52

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65087

DST#: 3

ATTN: Marc Downing

Test Start: 2016.04.01 @ 17:05:00

GENERAL INFORMATION:

Formation: **Reagan Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:01:30

Time Test Ended: 23:32:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72

Interval: 3436.00 ft (KB) To 3568.00 ft (KB) (TVD)

Reference Elevations: 1932.00 ft (KB)

Total Depth: 3568.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

Serial #: 8960 Outside

Press@RunDepth: 114.46 psig @ 3565.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.04.01 End Date: 2016.04.01

Last Calib.: 2016.04.01

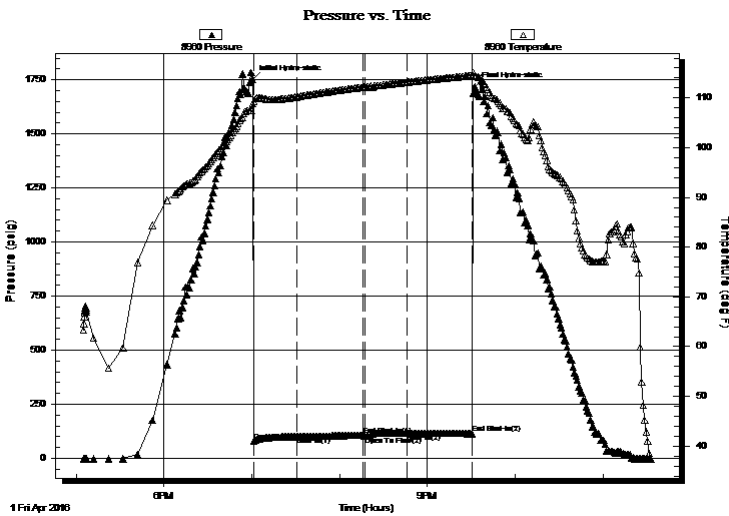
Start Time: 17:05:05 End Time: 23:32:29

Time On Btm: 2016.04.01 @ 19:00:30

Time Off Btm: 2016.04.01 @ 21:32:30

TEST COMMENT: IFP Blow built to 4 1/4" by 22 min. then died to 3 1/2"
ISI No blow back
FFP No blow - Flush tool surface blow for 2 minutes
FSI No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1752.09	108.82	Initial Hydro-static
1	79.40	109.33	Open To Flow (1)
31	100.07	110.22	Shut-In(1)
76	106.95	112.17	End Shut-In(1)
77	101.99	112.21	Open To Flow (2)
106	115.18	113.16	Shut-In(2)
150	114.46	114.49	End Shut-In(2)
152	1719.99	114.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
105.00	Mud 100%	0.52

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65087

DST#: 3

ATTN: Marc Downing

Test Start: 2016.04.01 @ 17:05:00

Tool Information

Drill Pipe:	Length: 3305.00 ft	Diameter: 3.50 inches	Volume: 39.33 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 54000.00 lb
			<u>Total Volume: 39.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3436.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	132.00 ft			
Tool Length:	152.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3421.00	
Hydraulic tool	5.00			3426.00	
Top Packer	5.00			3431.00	
Packer	5.00			3436.00	20.00 Bottom Of Top Packer
Anchor	5.00			3441.00	
Change Over Sub	1.00			3442.00	
Drill Pipe	95.00			3537.00	
Change Over Sub	1.00			3538.00	
Anchor	25.00			3563.00	
Recorder	1.00	6741	Inside	3564.00	
Recorder	1.00	8960	Outside	3565.00	
Bullnose	3.00			3568.00	132.00 Anchor Tool

Total Tool Length: 152.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Company Inc

28-18s-16w Rush, KS

PO Box 1019
Hays Kansas 67601

Brack #1-24

Job Ticket: 65087

DST#: 3

ATTN: Marc Downing

Test Start: 2016.04.01 @ 17:05:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
105.00	Mud 100%	0.516

Total Length: 105.00 ft Total Volume: 0.516 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

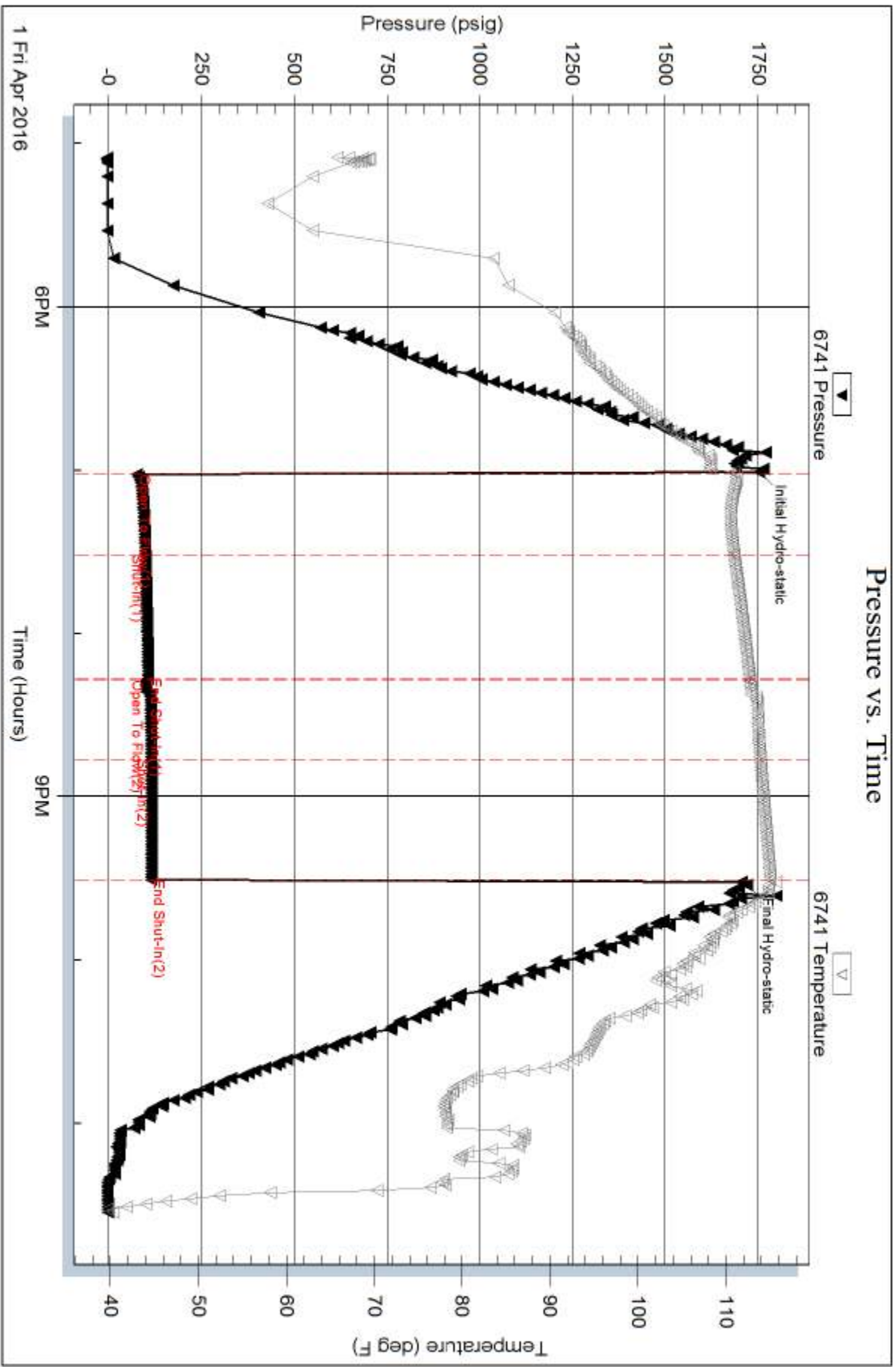
Serial #: 6741

Inside

Downing Nelson Oil Company Inc

Brack #1-24

DST Test Number: 3

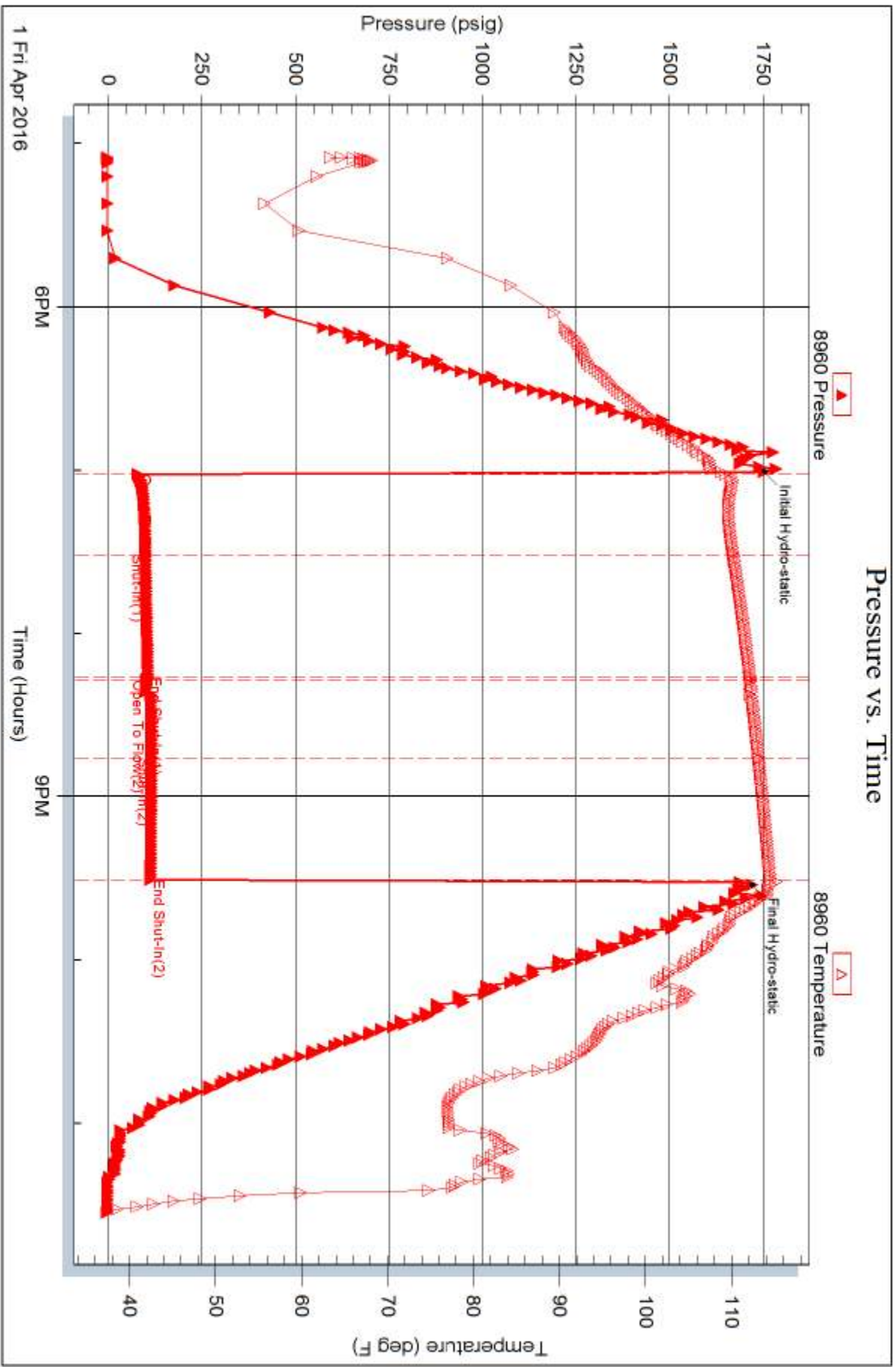


Serial #: 8960

Outside Dow n ing Nelson Oil Company Inc

Brack #1-24

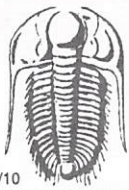
DST Test Number: 3



Triobite Testing, Inc

Ref. No: 65087

Printed: 2016.04.04 @ 09:53:04



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65085**

Well Name & No. Brack #1-24 Test No. 1 Date 30 MAR 16
 Company Downing Nelson Oil Company Inc Elevation 1932 KB 1921 GL
 Address PO Box 1019 Hays Kansas 67601
 Co. Rep/Geo. Marc Downing Rig Integrity Rig 7
 Location: Sec. 27 Twp. 185 Rge. 16W Co. Rush State KS

Interval Tested 3437-3507 Zone Tested Reagan Sand
 Anchor Length 70 Drill Pipe Run 3305 Mud Wt. 9.2
 Top Packer Depth 3432 Drill Collars Run 120 Vis 55
 Bottom Packer Depth 3437 Wt. Pipe Run - WL 7.4
 Total Depth 3507 Chlorides 1800 ppm System LCM 2#

Blow Description Initial flow - Blow of 1" at open built to 2" died to 1/2"
Initial shut in - no blow back
Final flow - No blow - Flush tool - good surge then dead
Final shut in - no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>Mud</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 113 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1749 Test 1050 T-On Location 7:44 am
 (B) First Initial Flow 55 Jars _____ T-Started 9:07 am
 (C) First Final Flow 61 Safety Joint _____ T-Open 11:06 am
 (D) Initial Shut-In 71 Circ Sub _____ T-Pulled 4:06 pm
 (E) Second Initial Flow 62 Hourly Standby _____ T-Out 3:14 pm
 (F) Second Final Flow 72 Mileage 34 25.50 Comments _____
 (G) Final Shut-In 74 Sampler _____
 (H) Final Hydrostatic 1718 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30

Sub Total 1075.50
 Total 1075.50
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

TriLOBITE TESTING Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65086**

Well Name & No. Brack #1-24 Test No. 2 Date 31 MAR 16
 Company Downing Nelson Oil Company Inc Elevation 1932 KB 1921 GL
 Address PO Box 1019 Hays Kansas 67601
 Co. Rep/Geo. Marc Downing Rig Integrity Rig 7
 Location: Sec. 27 Twp. 18S Rge. 16W Co. Rush State KS

Interval Tested 3436-3538 Zone Tested Reagan Sand
 Anchor Length 107 Drill Pipe Run 3305 Mud Wt. 9.3
 Top Packer Depth 3431 Drill Collars Run 120 Vis 50
 Bottom Packer Depth 3436 Wt. Pipe Run — WL -7.4
 Total Depth 3538 Chlorides 1700 ppm System LCM 2#
 Blow Description Initial flow blow built to 3 1/4 inch then died to 2"
Initial shut in no blow back
Final flow no blow flash fool good surge then dead
Final shut in no blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>75</u>	<u>mud</u>			<u>100</u>	

Rec Total 75 BHT 114 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1769 Test 1050 T-On Location 11:58 am
 (B) First Initial Flow 59 Jars _____ T-Started 1:32 pm
 (C) First Final Flow 81 Safety Joint _____ T-Open 3:32 pm
 (D) Initial Shut-In 85 Circ Sub _____ T-Pulled 5:32 pm
 (E) Second Initial Flow 81 Hourly Standby _____ T-Out 7:33 pm
 (F) Second Final Flow 94 Mileage 34 25.50 Comments _____
 (G) Final Shut-In 95 Sampler _____
 (H) Final Hydrostatic 1716 Straddle _____

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1075.50
 Sub Total 1075.50
 Sub Total 0
 Total 1075.50
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65087**

Well Name & No. Brack #1-24 Test No. 3 Date 1 Apr 16
 Company Downing Nelson Oil Company Inc Elevation 1932 KB 1921 GL
 Address PO Box 1019 Hays Kansas 67601
 Co. Rep / Geo. Marc Downing Rig Integrity Rig 7
 Location: Sec. 27 Twp. 18S Rge. 16W Co. Rush State KS

Interval Tested 3436 - 3568 Zone Tested Reagan Sand
 Anchor Length 132 Drill Pipe Run 3305 Mud Wt. 9.3
 Top Packer Depth 3431 Drill Collars Run 120 Vis 52
 Bottom Packer Depth 3436 Wt. Pipe Run - WL 7.6
 Total Depth 3568 Chlorides 1900 ppm System LCM 2#

Blow Description Initial Flow - Blow built to 4 1/4 inch by 22 min then died to 3 1/2 inch
Initial shut in - No blow back
Final Flow - ~~blow~~ blow/Flush tool surface blow for 2 min
Final shut in - No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>105</u>	<u>Mud</u>				<u>100%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 105 BHT 115 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1752</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>3:41 pm</u>
(B) First Initial Flow <u>77</u>	<input type="checkbox"/> Jars _____	T-Started <u>5:08 pm</u>
(C) First Final Flow <u>99</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>7:05 pm</u>
(D) Initial Shut-In <u>106</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>9:35 pm</u>
(E) Second Initial Flow <u>100</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>11:36 pm</u>
(F) Second Final Flow <u>115</u>	<input checked="" type="checkbox"/> Mileage <u>34</u> <u>25.50</u>	Comments _____
(G) Final Shut-In <u>115</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1719</u>	<input type="checkbox"/> Straddle _____	
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Extra Copies _____
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby _____	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility _____	Total <u>1075.50</u>
	Sub Total <u>1075.50</u>	MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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