



DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Erbes Trust #1-3

3-18s-18w Rush,KS

Start Date: 2012.06.20 @ 01:31:05

End Date: 2012.06.20 @ 09:57:39

Job Ticket #: 47880 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.06.25 @ 16:13:31



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co

3-18s-18w Rush,KS

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DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.06.20 @ 01:31:05

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:38:30

Time Test Ended: 09:57:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Andy Carreira

Unit No: 39

Interval: 3793.00 ft (KB) To 3840.00 ft (KB) (TVD)

Reference Elevations: 2075.00 ft (KB)

Total Depth: 3840.00 ft (KB) (TVD)

2067.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8372 Outside

Press @ Run Depth: 685.91 psig @ 3800.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.06.20

End Date: 2012.06.20

Last Calib.: 2012.06.20

Start Time: 01:31:05

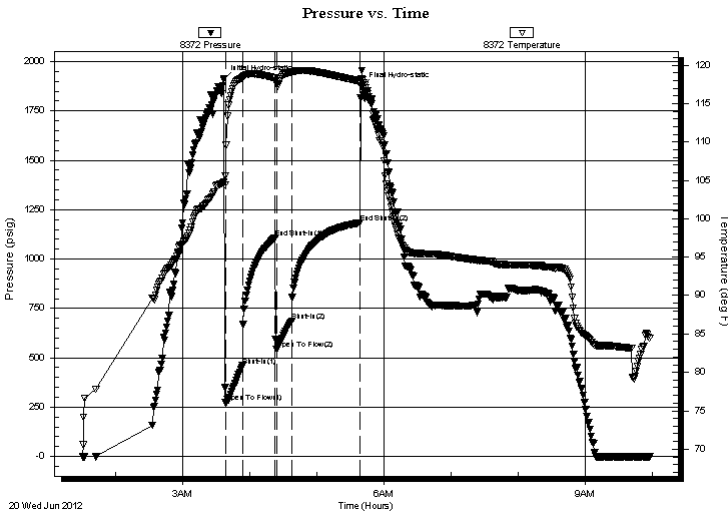
End Time: 09:57:40

Time On Btm: 2012.06.20 @ 03:37:00

Time Off Btm: 2012.06.20 @ 05:40:00

TEST COMMENT: IF:(15min) BOB, 30 sec.
IS:(30min) Return Blow , Built to 2". Died in 23 min.
FF:(15min) BOB, 30 sec.
FS:(60min) Return Blow , Built to 2". Died in 19 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1909.14	104.76	Initial Hydro-static
2	274.97	105.59	Open To Flow (1)
17	460.07	118.34	Shut-In(1)
46	1107.86	118.30	End Shut-In(1)
47	544.85	117.60	Open To Flow (2)
61	685.91	119.06	Shut-In(2)
122	1184.03	117.90	End Shut-In(2)
123	1871.57	118.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	GMCO g=20% m=35% o=45%	1.41
1780.00	GO g=20% o=80%	24.97
0.00	GIP= 270ft	0.00

Gas Rates

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



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TESTING, INC.**

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TOOL DIAGRAM

Dow ning-Nelson Oil Co

3-18s-18w Rush,KS

PO Box 1019
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Erbes Trust #1-3

Job Ticket: 47880

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.06.20 @ 01:31:05

Tool Information

Drill Pipe:	Length: 3763.00 ft	Diameter: 3.80 inches	Volume: 52.78 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 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:	70000.00 lb
			<u>Total Volume: 52.93 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3793.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een 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
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Change Over Sub	1.00			3774.00	
Shut In Tool	5.00			3779.00	
Hydraulic tool	5.00			3784.00	
Packer	5.00			3789.00	20.00 Bottom Of Top Packer
Packer	4.00			3793.00	
Stubb	1.00			3794.00	
Perforations	5.00			3799.00	
Change Over Sub	1.00			3800.00	
Recorder	0.00	8017	Inside	3800.00	
Recorder	0.00	8372	Outside	3800.00	
Drill Pipe	31.00			3831.00	
Change Over Sub	1.00			3832.00	
Perforations	5.00			3837.00	
Bullnose	3.00			3840.00	47.00 Bottom Packers & Anchor

Total Tool Length: 67.00



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FLUID SUMMARY

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3-18s-18w Rush,KS

PO Box 1019
Hays KS 67601

Erbes Trust #1-3

Job Ticket: 47880

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.06.20 @ 01:31:05

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 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
120.00	GMCO g=20% m=35% o=45%	1.410
1780.00	GO g=20% o=80%	24.969
0.00	GIP= 270ft	0.000

Total Length: 1900.00 ft Total Volume: 26.379 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

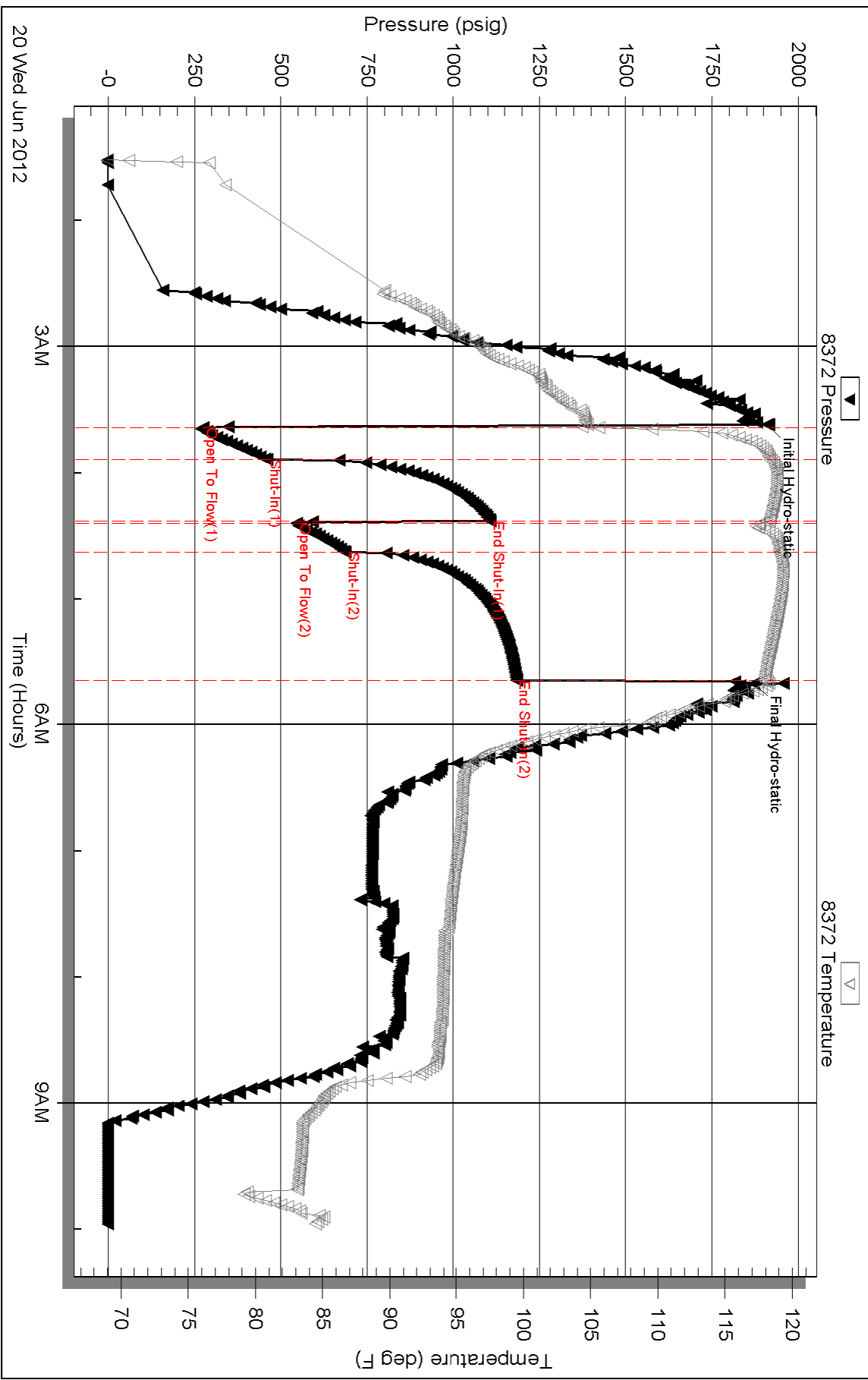
Serial #: 8372

Outside Dow nging-Nelson Oil Co

Ebbs Trust #1-3

DST Test Number: 1

Pressure vs. Time



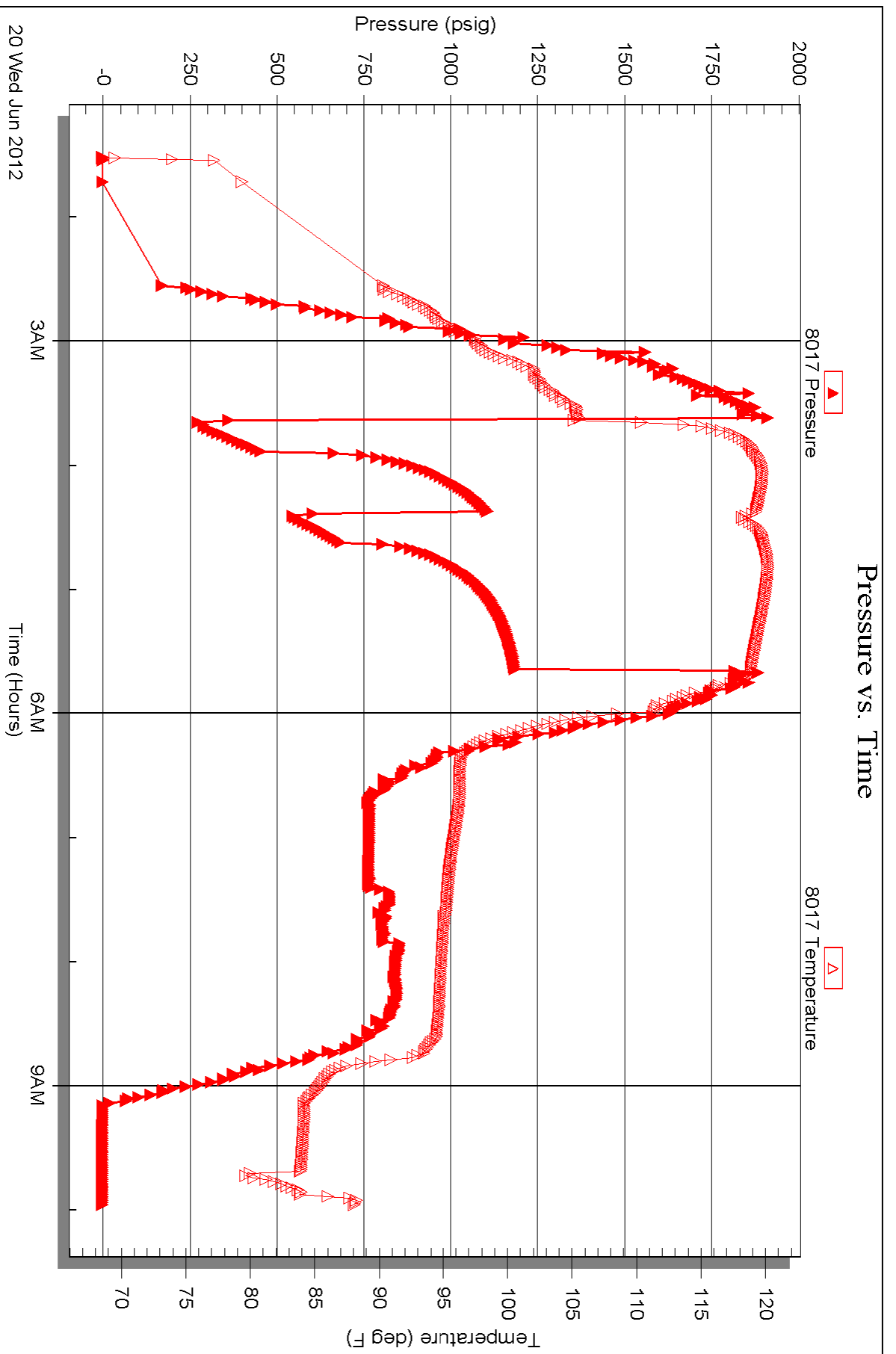
Serial #: 8017

Inside

Dow nung-Nelson Oil Co

Ebbs Trust #1-3

DST Test Number: 1





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47880

Well Name & No. Erbes Trust #1-3 Test No. 1 Date 6-20-12
 Company DNOc Elevation 2075 KB 2067 GL
 Address PO Box 1019 Hays Ks. 67601
 Co. Rep / Geo. Maec Downing Rig Discovery #4
 Location: Sec. 3 Twp. 18S Rge. 18W Co. Rush State Ks

Interval Tested 3793-3840 Zone Tested Neubuckle
 Anchor Length 47' Drill Pipe Run 3763 Mud Wt. 8.5
 Top Packer Depth 3788 Drill Collars Run 30 Vis 53
 Bottom Packer Depth 3793 Wt. Pipe Run 0 WL 8.0
 Total Depth 3840 Chlorides 3000 ppm System LCM 24

Blow Description IF: BOB, 30 sec
ISF: Return blow, Built to 2" sized in 23min
FF: BOB, 30 sec
FSD: Return blow, Built to 2" sized in 19min

Rec	Feet of	%gas	%oil	%water	%mud
<u>1780</u>	<u>GO</u>	<u>20</u>	<u>80</u>		
<u>120</u>	<u>GMCO</u>	<u>20</u>	<u>45</u>		<u>35</u>
<u>270</u>	<u>GIP</u>				

Rec Total 1900' BHT 117° Gravity 39 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1909 Test 1150 T-On Location 00:25
 (B) First Initial Flow 274 Jars T-Started 01:31
 (C) First Final Flow 460 Safety Joint T-Open 03:38
 (D) Initial Shut-In 1107 Circ Sub 50 T-Pulled 05:38
 (E) Second Initial Flow 544 Hourly Standby .5h 50 T-Out 09:58
 (F) Second Final Flow 685 Mileage 56RT 86.80
 (G) Final Shut-In 1184 Sampler
 (H) Final Hydrostatic 1871 Straddle
 Shale Packer
 Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1336.80

Initial Open 15
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 60

Sub Total 1336.80

Approved By _____

Our Representative [Signature]