



DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

12-12s-23w Trego,KS

Newcomer Brothers #1-12

Start Date: 2012.10.13 @ 05:25:00

End Date: 2012.10.13 @ 11:49:30

Job Ticket #: 43597 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.17 @ 14:14:08



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43597

DST#: 1

Test Start: 2012.10.13 @ 05:25:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:13:30

Time Test Ended: 11:49:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3623.00 ft (KB) To 3656.00 ft (KB) (TVD)

Reference Elevations: 2412.00 ft (KB)

Total Depth: 3656.00 ft (KB) (TVD)

2404.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8319 Inside

Press @ RunDepth: 14.74 psig @ 3627.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.13

End Date:

2012.10.13

Last Calib.: 2012.10.13

Start Time: 05:25:05

End Time:

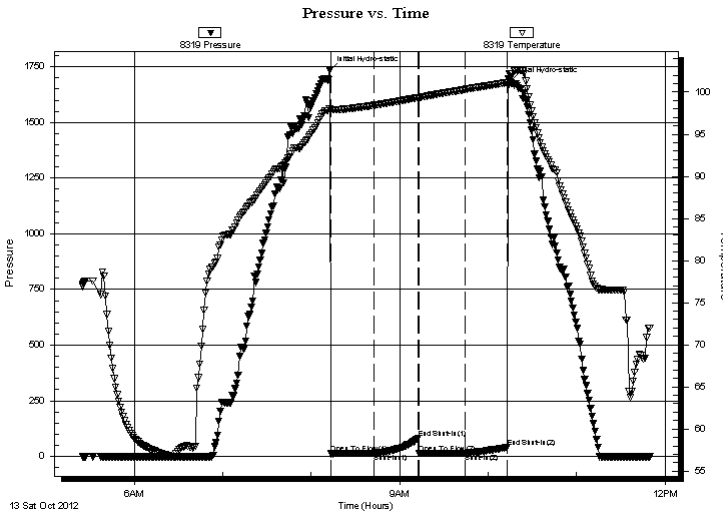
11:49:29

Time On Btm: 2012.10.13 @ 08:12:30

Time Off Btm: 2012.10.13 @ 10:15:00

TEST COMMENT: IF-1/4" blow died back to very weak surface blow
ISI-No blow
FF-Very weak surface blow
FSI-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1733.62	98.04	Initial Hydro-static
1	12.07	97.80	Open To Flow (1)
30	14.21	98.44	Shut-In(1)
60	81.55	99.36	End Shut-In(1)
61	13.40	99.35	Open To Flow (2)
92	14.74	100.31	Shut-In(2)
121	41.83	101.14	End Shut-In(2)
123	1683.26	102.15	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	Oil spotted mud	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43597

DST#: 1

Test Start: 2012.10.13 @ 05:25:00

Tool Information

Drill Pipe:	Length: 3583.00 ft	Diameter: 3.80 inches	Volume: 50.26 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:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 50.41 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3623.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	33.00 ft				
Tool Length:	53.00 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			3604.00	
Shut In Tool	5.00			3609.00	
Hydraulic tool	5.00			3614.00	
Packer	4.00			3618.00	20.00 Bottom Of Top Packer
Packer	5.00			3623.00	
Stubb	1.00			3624.00	
Perforations	3.00			3627.00	
Recorder	0.00	8319	Inside	3627.00	
Recorder	0.00	8166	Outside	3627.00	
Perforations	26.00			3653.00	
Bullnose	3.00			3656.00	33.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

Job Ticket: 43597

DST#: 1

ATTN: Ron Nelson

Test Start: 2012.10.13 @ 05:25:00

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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	Oil spotted mud	0.005

Total Length: 1.00 ft Total Volume: 0.005 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

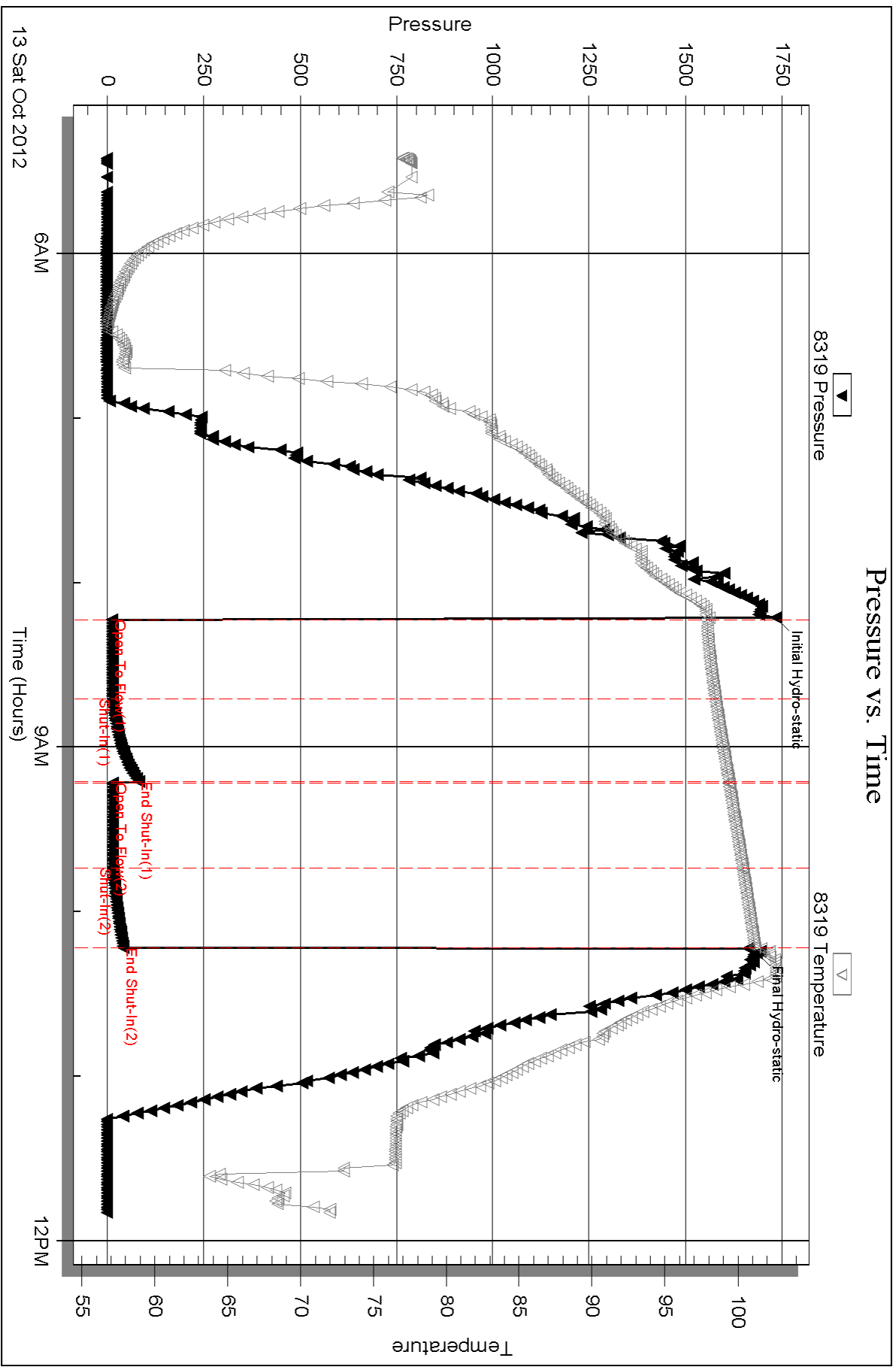
Serial #: 8319

Inside

Dow nting-Nelson Oil Co. Inc.

12-12s-23w Trego,KS

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 43597

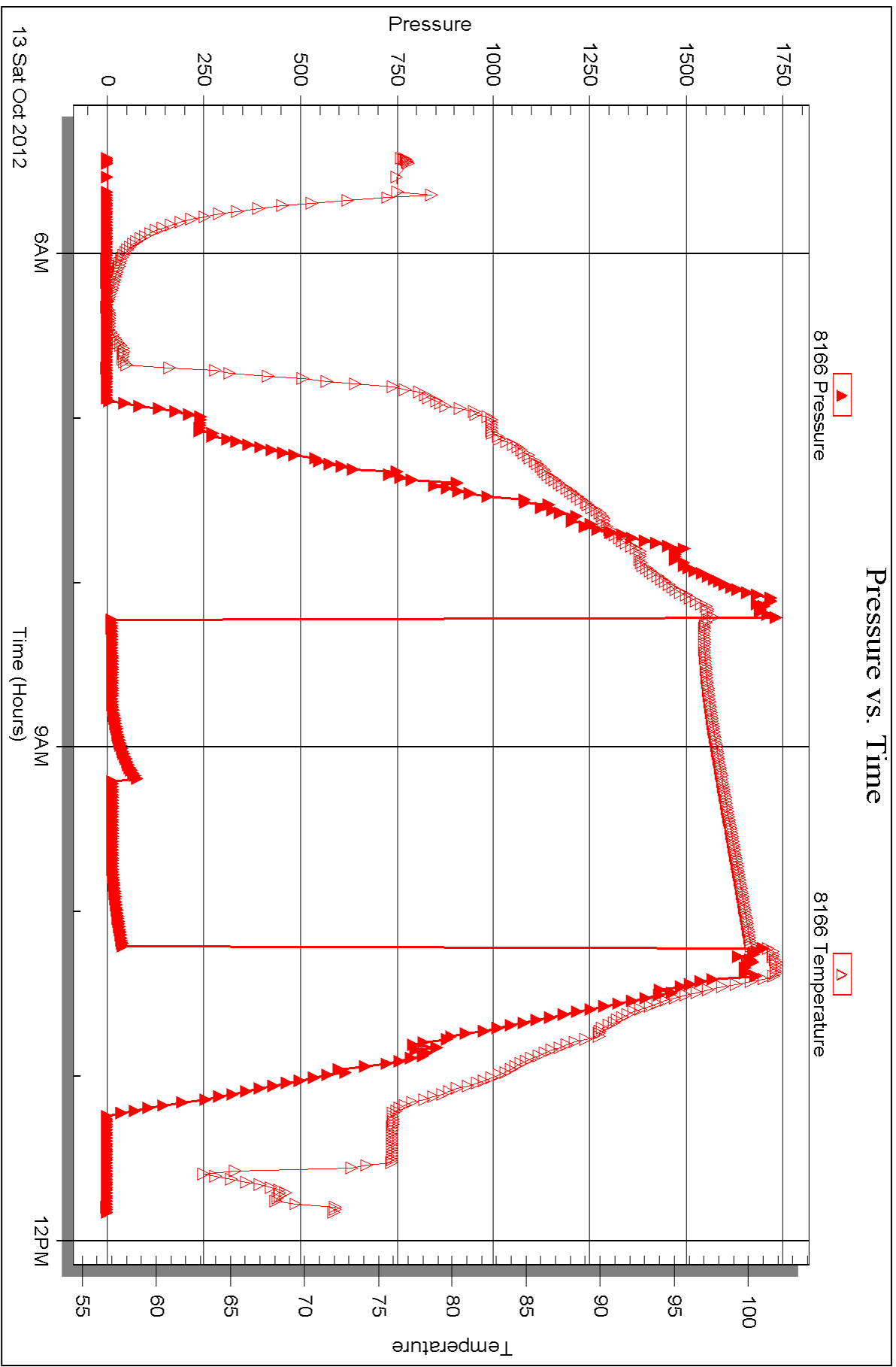
Printed: 2012.10.17 @ 14:14:13

Serial #: 8166

Outside Dow nting-Nelson Oil Co. Inc.

12-12s-23w Trego KS

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

12-12s-23w Trego,KS

Newcomer Brothers #1-12

Start Date: 2012.10.13 @ 22:20:00

End Date: 2012.10.14 @ 06:41:00

Job Ticket #: 43598 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.17 @ 14:09:40

Downing-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

12-12s-23w Trego,KS

DST # 2

KC-C-E

2012.10.13



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43598

DST#: 2

Test Start: 2012.10.13 @ 22:20:00

GENERAL INFORMATION:

Formation: **KC C-E**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:12:00
 Time Test Ended: 06:41:00
 Interval: **3680.00 ft (KB) To 3740.00 ft (KB) (TVD)**
 Total Depth: 3740.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brett Dickinson
 Unit No: 59
 Reference Elevations: 2412.00 ft (KB)
 2404.00 ft (CF)
 KB to GR/CF: 8.00 ft

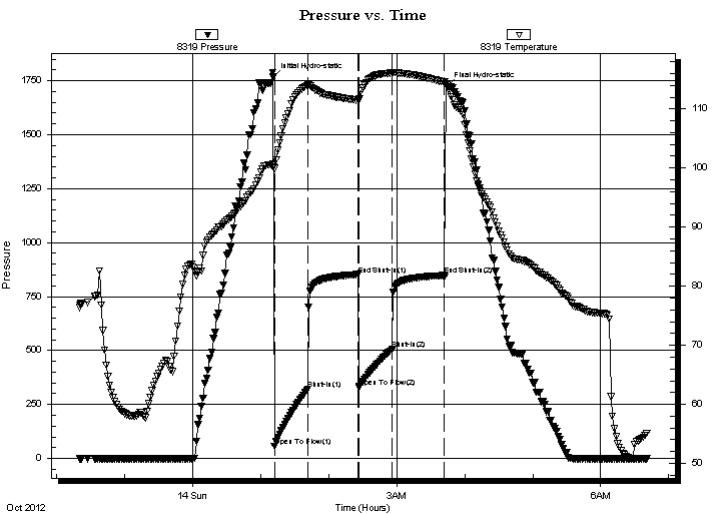
Serial #: 8319

Inside

Press @ Run Depth: 507.47 psig @ 3684.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.10.13 End Date: 2012.10.14 Last Calib.: 2012.10.14
 Start Time: 22:20:05 End Time: 06:40:59 Time On Btm: 2012.10.14 @ 01:11:00
 Time Off Btm: 2012.10.14 @ 03:44:30

TEST COMMENT: IF-BOB in 3 min
 ISI-Very weak surface blow
 FF-BOB in 4 min
 FSI-Very weak surface blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1766.43	100.26	Initial Hydro-static
1	56.46	99.99	Open To Flow (1)
31	322.39	114.04	Shut-In(1)
75	852.40	111.48	End Shut-In(1)
76	329.72	111.41	Open To Flow (2)
105	507.47	116.09	Shut-In(2)
151	847.96	114.58	End Shut-In(2)
154	1722.52	114.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
360.00	Water	4.78
125.00	Oilspotted SMCW 10%M 90%W	1.75
365.00	GSOMCW 25%G 20%M 5%O 50%W	5.12
263.00	GSOMCW 10%G 5%O 30%M 55%W	3.69
2.00	free oil	0.03
0.00	75ft GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43598

DST#: 2

Test Start: 2012.10.13 @ 22:20:00

Tool Information

Drill Pipe:	Length: 3646.00 ft	Diameter: 3.80 inches	Volume: 51.14 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:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 51.29 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3680.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	60.00 ft				
Tool Length:	80.00 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			3661.00	
Shut In Tool	5.00			3666.00	
Hydraulic tool	5.00			3671.00	
Packer	4.00			3675.00	20.00 Bottom Of Top Packer
Packer	5.00			3680.00	
Stubb	1.00			3681.00	
Perforations	3.00			3684.00	
Recorder	0.00	8319	Inside	3684.00	
Recorder	0.00	8166	Outside	3684.00	
Change Over Sub	1.00			3685.00	
Blank Spacing	32.00			3717.00	
Change Over Sub	1.00			3718.00	
Perforations	19.00			3737.00	
Bullnose	3.00			3740.00	60.00 Bottom Packers & Anchor

Total Tool Length: 80.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

Job Ticket: 43598

DST#: 2

ATTN: Ron Nelson

Test Start: 2012.10.13 @ 22:20:00

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: 125000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
360.00	Water	4.777
125.00	Oilspotted SMCW 10%M 90%W	1.753
365.00	GSOMCW 25%G 20%M 5%O 50%W	5.120
263.00	GSOMCW 10%G 5%O 30%M 55%W	3.689
2.00	free oil	0.028
0.00	75ft GIP	0.000

Total Length: 1115.00 ft Total Volume: 15.367 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

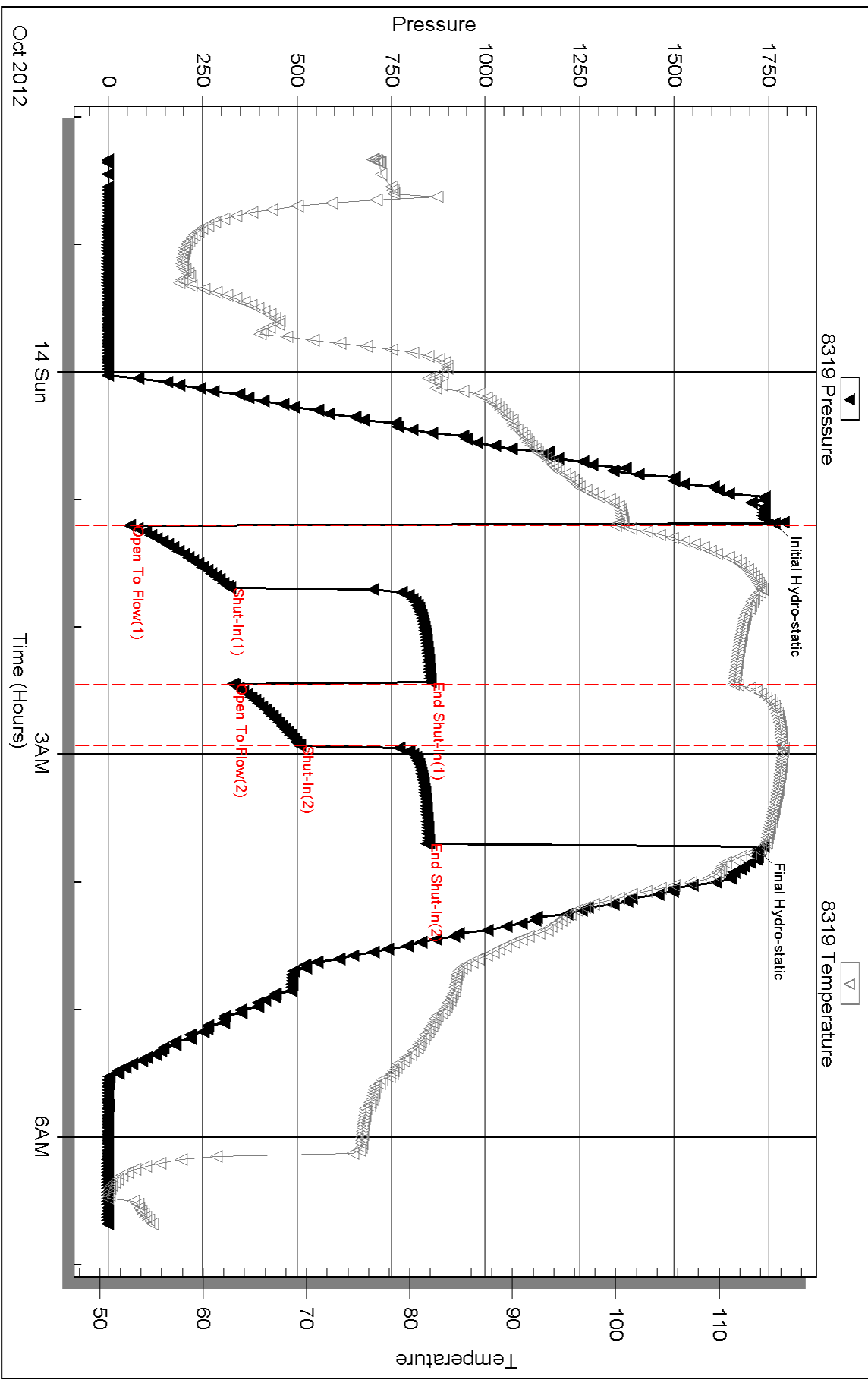
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

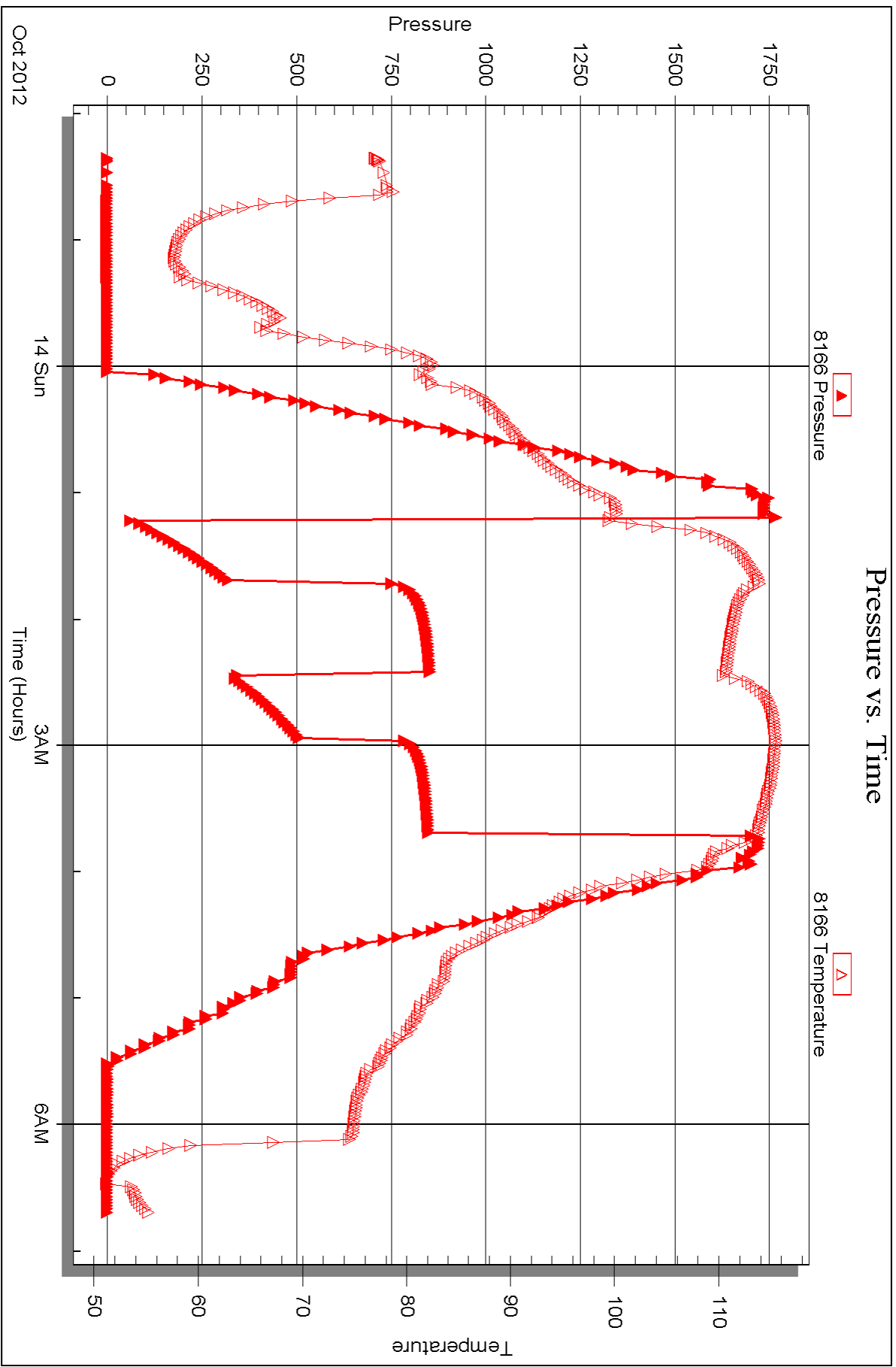


Serial #: 8166

Outside Dow nting-Nelson Oil Co. Inc.

12-12s-23w Trego KS

DST Test Number: 2





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

12-12s-23w Trego,KS

Newcomer Brothers #1-12

Start Date: 2012.10.15 @ 06:20:00

End Date: 2012.10.15 @ 14:39:00

Job Ticket #: 43599 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.17 @ 14:06:29

Downing-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

12-12s-23w Trego,KS

DST # 3

Marmaton

2012.10.15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43599

DST#: 3

Test Start: 2012.10.15 @ 06:20:00

GENERAL INFORMATION:

Formation: **Marmaton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:27:30

Time Test Ended: 14:39:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 4007.00 ft (KB) To 4045.00 ft (KB) (TVD)

Reference Elevations: 2412.00 ft (KB)

Total Depth: 4035.00 ft (KB) (TVD)

2404.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8319

Inside

Press @ Run Depth: 111.22 psig @ 4011.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.15

End Date:

2012.10.15

Last Calib.:

2012.10.15

Start Time: 06:20:05

End Time:

14:38:59

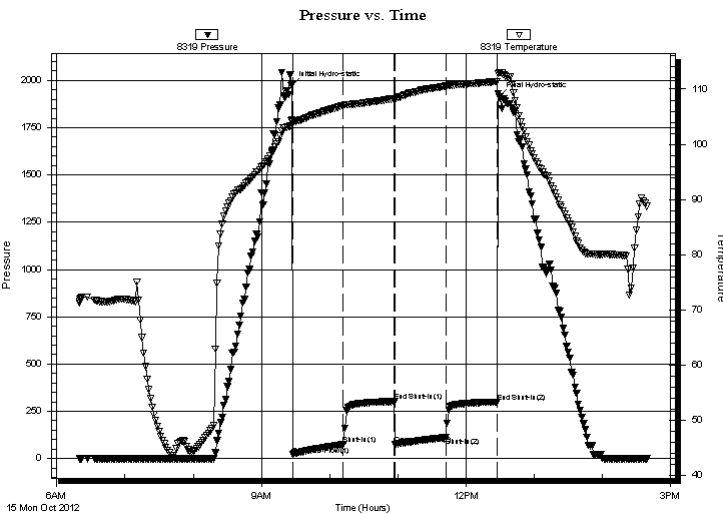
Time On Btm:

2012.10.15 @ 09:26:30

Time Off Btm:

2012.10.15 @ 12:29:30

TEST COMMENT: IF-BOB in 32 min
ISI-Very weak surface blow
FF-10" blow
FSI-Very weak surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1974.38	104.19	Initial Hydro-static
1	19.16	104.13	Open To Flow (1)
46	73.96	107.05	Shut-In(1)
90	301.73	108.29	End Shut-In(1)
91	75.84	108.26	Open To Flow (2)
136	111.22	110.57	Shut-In(2)
181	299.31	111.38	End Shut-In(2)
183	1914.38	113.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
170.00	Oil scum SMCW 90%w 10%m	2.11
40.00	SGO 5%G 95%O	0.56
0.00	150ft gip	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43599

DST#: 3

Test Start: 2012.10.15 @ 06:20:00

Tool Information

Drill Pipe:	Length: 3960.00 ft	Diameter: 3.80 inches	Volume: 55.55 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:	25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 55.70 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	4007.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 ft				
Tool Length:	48.00 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			3988.00	
Shut In Tool	5.00			3993.00	
Hydraulic tool	5.00			3998.00	
Packer	4.00			4002.00	20.00 Bottom Of Top Packer
Packer	5.00			4007.00	
Stubb	1.00			4008.00	
Perforations	3.00			4011.00	
Recorder	0.00	8319	Inside	4011.00	
Recorder	0.00	8166	Outside	4011.00	
Perforations	21.00			4032.00	
Bullnose	3.00			4035.00	28.00 Bottom Packers & Anchor

Total Tool Length: 48.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

Job Ticket: 43599

DST#: 3

ATTN: Ron Nelson

Test Start: 2012.10.15 @ 06:20:00

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:

70000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
170.00	Oil scum SMCW 90%w 10%m	2.111
40.00	SGO 5%G 95%O	0.561
0.00	150ft gip	0.000

Total Length: 210.00 ft

Total Volume: 2.672 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

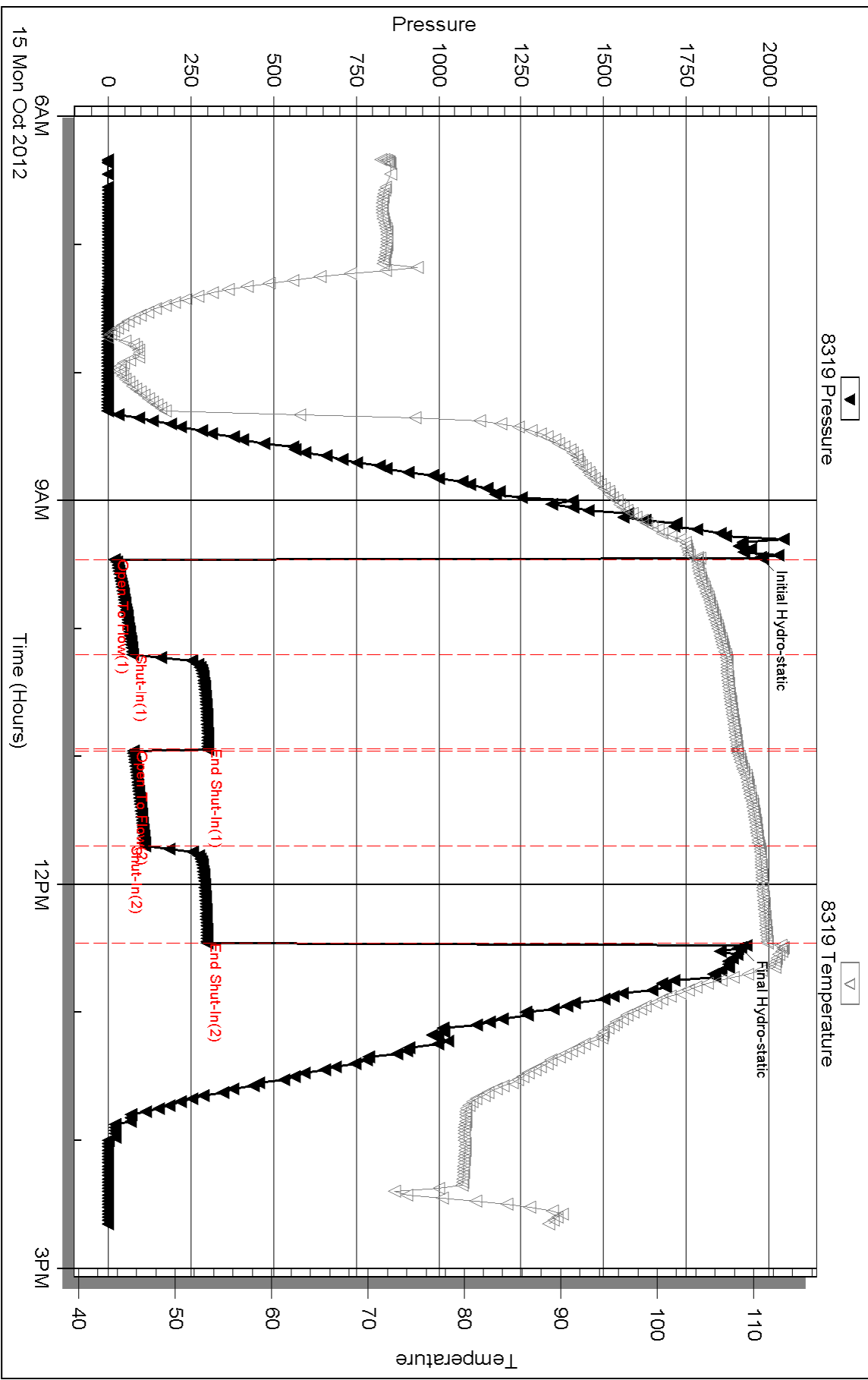
Inside

Dow nting-Nelson Oil Co. Inc.

12-12s-23w Trego KS

DST Test Number: 3

Pressure vs. Time

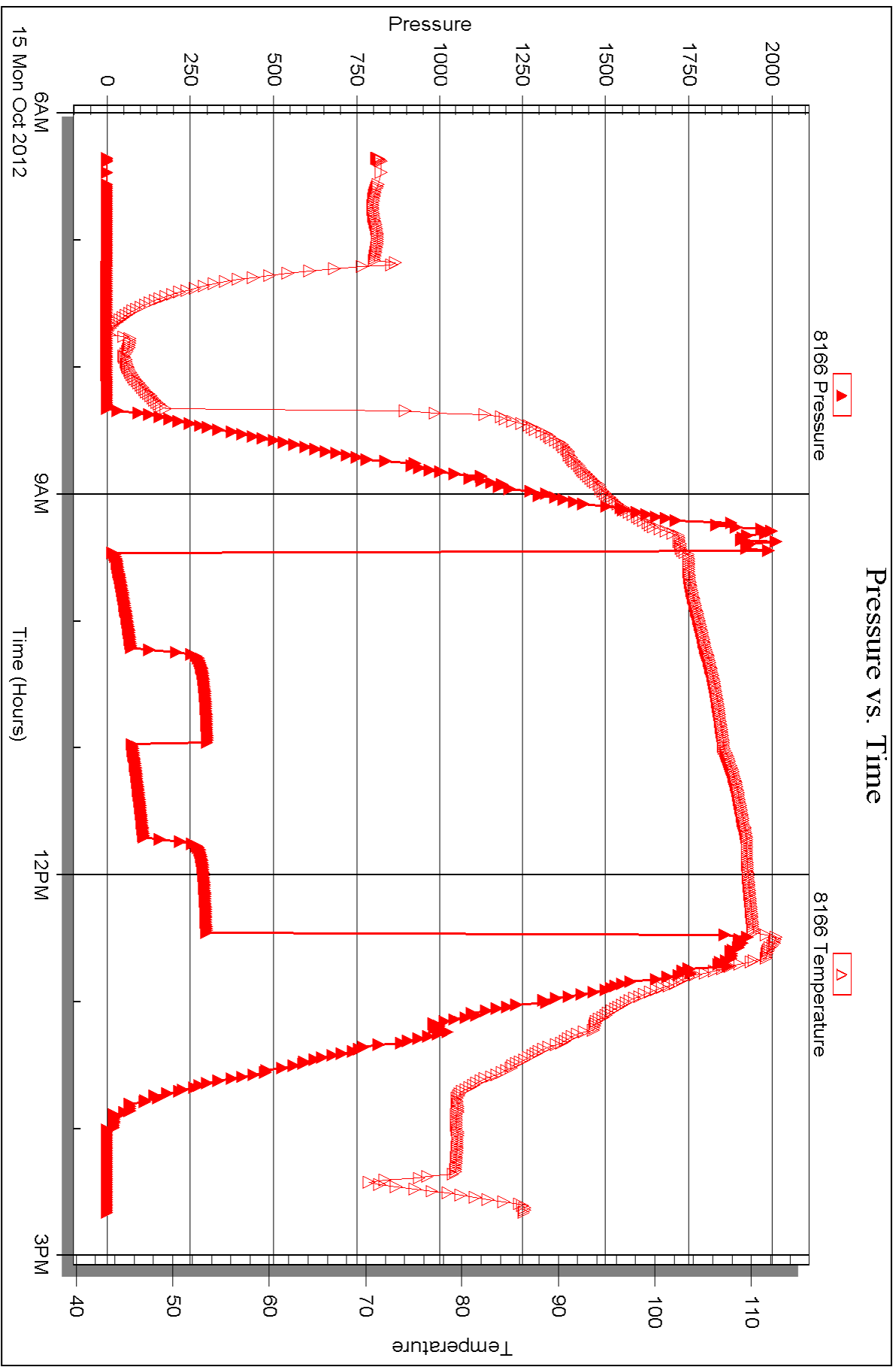


Serial #: 8166

Outside Dow nting-Nelson Oil Co. Inc.

12-12s-23w Trego,KS

DST Test Number: 3





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

12-12s-23w Trego,KS

Newcomer Brothers #1-12

Start Date: 2012.10.16 @ 05:55:00

End Date: 2012.10.16 @ 14:01:00

Job Ticket #: 43600 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.17 @ 13:45:21

Downing-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

12-12s-23w Trego,KS

DST # 4

KC E

2012.10.16



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43600

DST#: 4

Test Start: 2012.10.16 @ 05:55:00

GENERAL INFORMATION:

Formation: **KC E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:38:00

Time Test Ended: 14:01:00

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3719.00 ft (KB) To 3736.00 ft (KB) (TVD)

Reference Elevations: 2412.00 ft (KB)

Total Depth: 3736.00 ft (KB) (TVD)

2404.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 6753 Outside

Press @ Run Depth: 134.63 psig @ 3732.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.16

End Date: 2012.10.16

Last Calib.: 2012.10.16

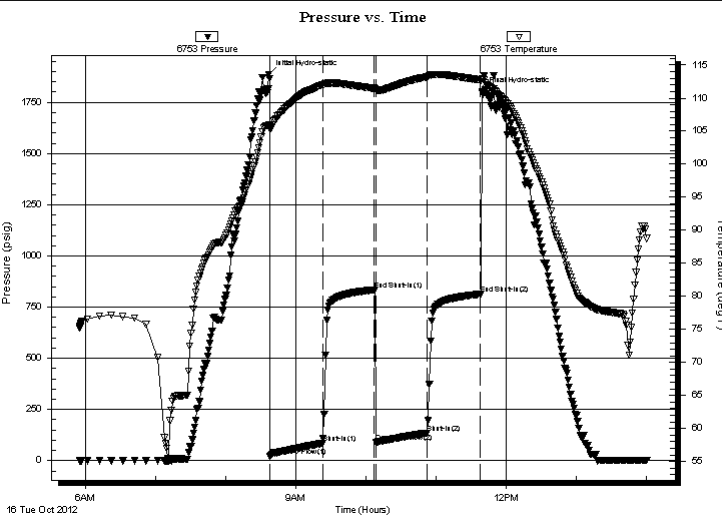
Start Time: 05:55:05

End Time: 14:00:59

Time On Btm: 2012.10.16 @ 08:37:00

Time Off Btm: 2012.10.16 @ 11:40:00

TEST COMMENT: IF-BOB in 21min
IS-1/2" blow
FF-BOB in 22 min
FS-1" blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1886.01	105.91	Initial Hydro-static
1	20.93	105.37	Open To Flow (1)
46	85.57	112.05	Shut-In(1)
90	834.38	111.48	End Shut-In(1)
92	89.30	111.20	Open To Flow (2)
136	134.63	113.23	Shut-In(2)
181	813.53	112.74	End Shut-In(2)
183	1801.47	112.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
185.00	SMCW 5%M 95%W	2.32
30.00	SWCM 10%W 90%M	0.42
45.00	GO 10%G 90%O	0.63

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

ATTN: Ron Nelson

Job Ticket: 43600

DST#: 4

Test Start: 2012.10.16 @ 05:55:00

Tool Information

Drill Pipe:	Length: 3675.00 ft	Diameter: 3.80 inches	Volume: 51.55 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: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 51.70 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	3719.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	3736.00 ft			
Interval between Packers:	17.00 ft			
Tool Length:	476.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3700.00	
Shut In Tool	5.00			3705.00	
Hydraulic tool	5.00			3710.00	
Packer	4.00			3714.00	20.00 Bottom Of Top Packer
Packer	5.00			3719.00	
Stubb	1.00			3720.00	
Perforations	12.00			3732.00	
Recorder	0.00	8166	Inside	3732.00	
Recorder	0.00	6753	Outside	3732.00	
Blank Off Sub	4.00			3736.00	17.00 Tool Interval
Packer	4.00			3740.00	
Stubb	1.00			3741.00	
Recorder	0.00	8319	Below	3741.00	
perforations	17.00			3758.00	
Change Over Sub	1.00			3759.00	
Blank Spacing	412.00			4171.00	
Change Over Sub	1.00			4172.00	
Bullnose	3.00			4175.00	439.00 Bottom Packers & Anchor

Total Tool Length: 476.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co. Inc.

Newcomer Brothers #1-12

PO Box 1019
Hays KS 67601

12-12s-23w Trego,KS

Job Ticket: 43600

DST#: 4

ATTN: Ron Nelson

Test Start: 2012.10.16 @ 05:55:00

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: 100000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 400.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
185.00	SMCW 5%M 95%W	2.322
30.00	SWCM 10%W 90%M	0.421
45.00	GO 10%G 90%O	0.631

Total Length: 260.00 ft Total Volume: 3.374 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

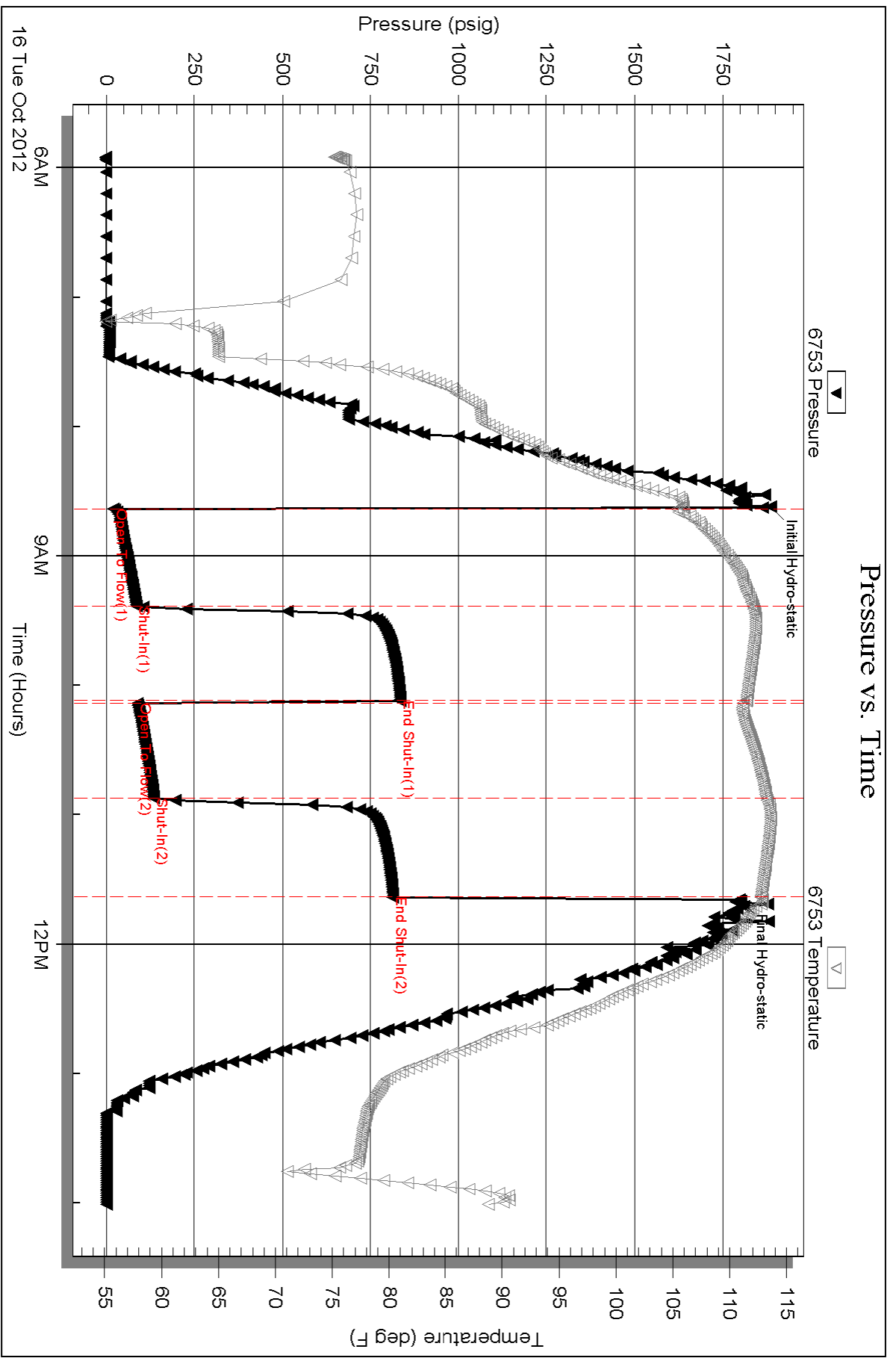
Recovery Comments:

Serial #: 6753

Outside Dow nung-Nelson Oil Co. Inc.

12-12s-23w Trego KS

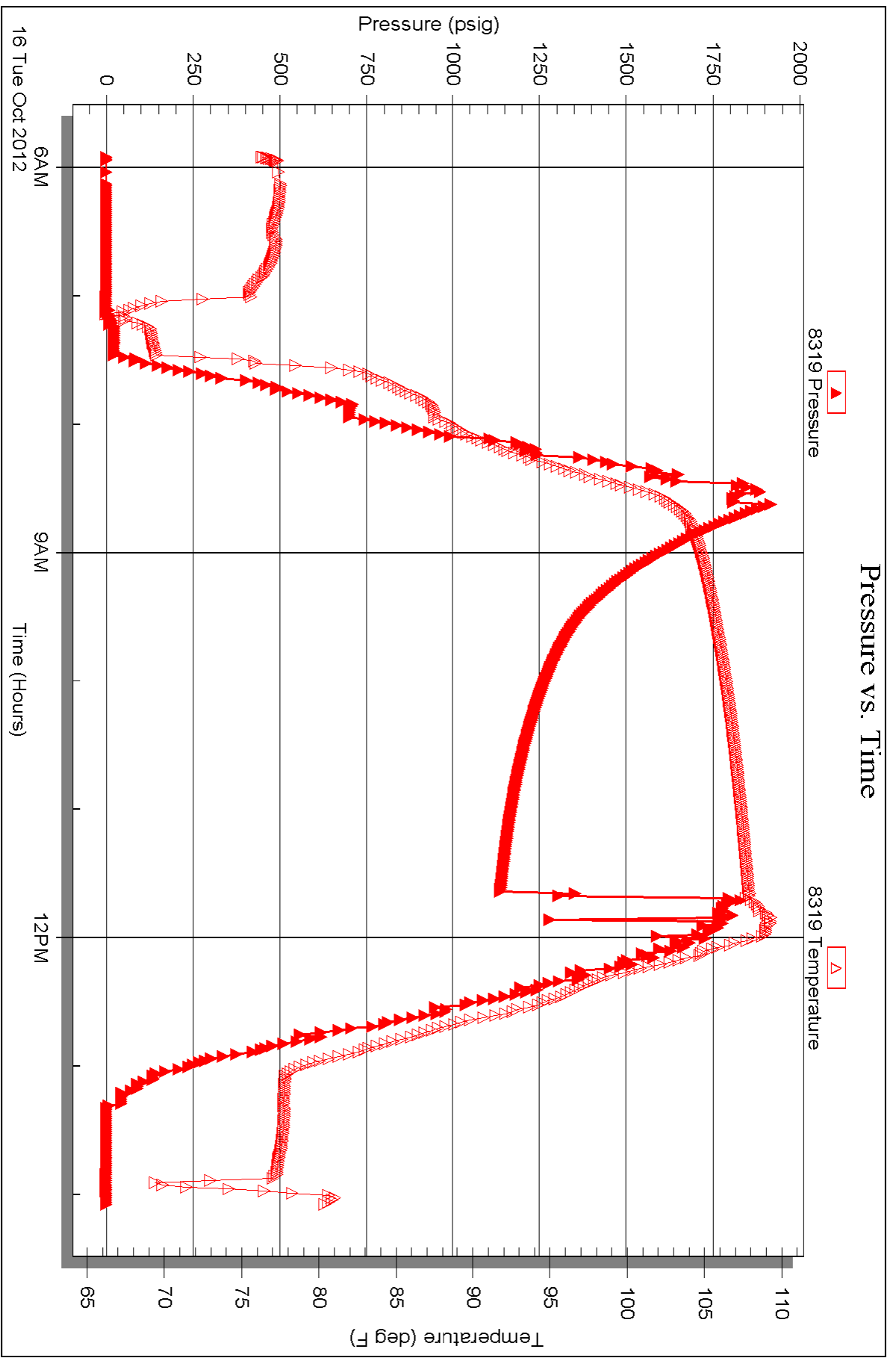
DST Test Number: 4



Triobite Testing, Inc

Ref. No: 43600

Printed: 2012.10.17 @ 13:45:26



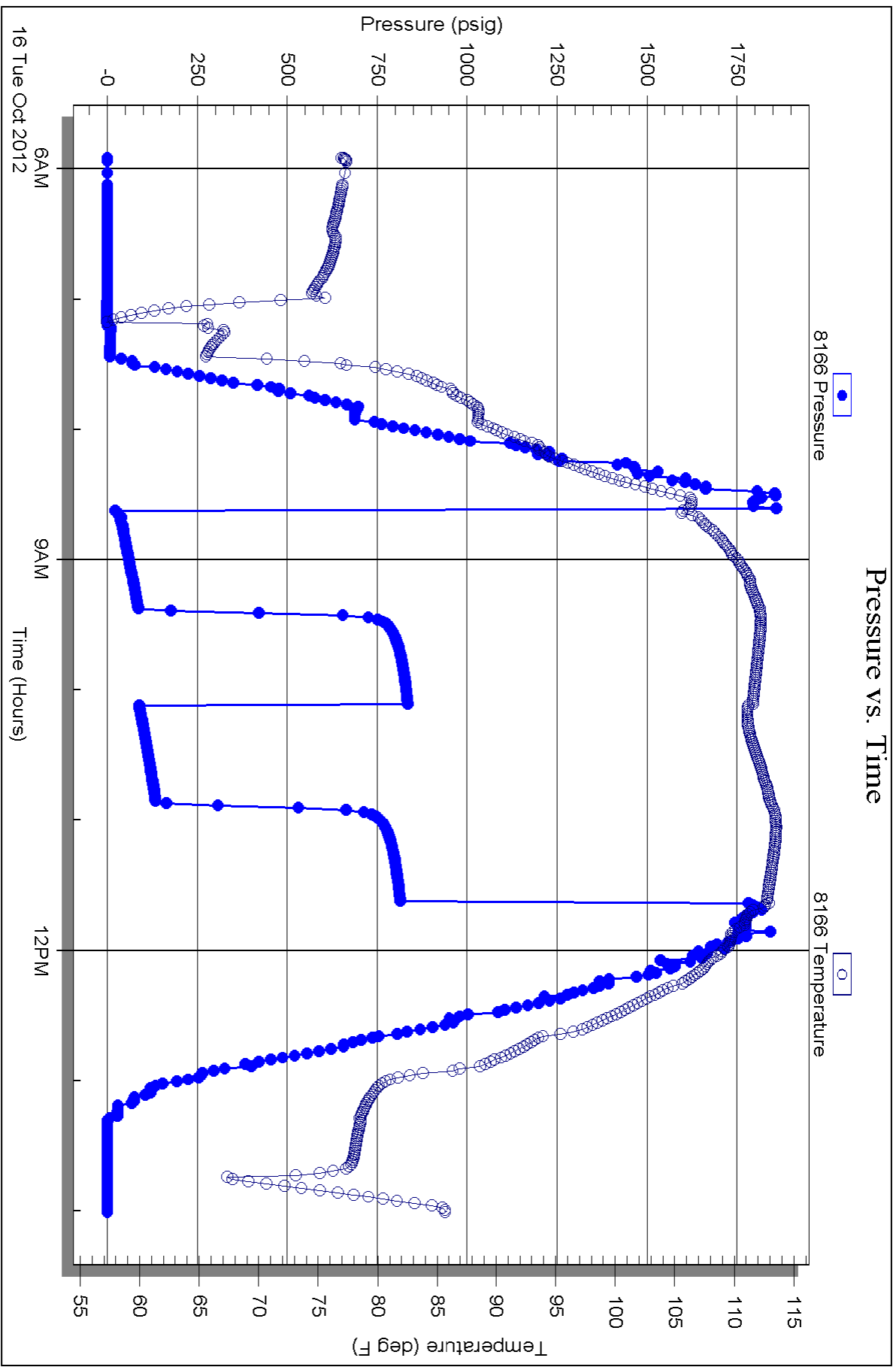
Serial #: 8166

Inside

Dow n/g-Nelson Oil Co. Inc.

12-12s-23w Trego KS

DST Test Number: 4



Triobite Testing, Inc

Ref. No: 43600

Printed: 2012.10.17 @ 13:45:27



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 43597

4/10

Well Name & No. Newcomer Brothers 1-12 Test No. 1 Date 10/13/12
 Company Downing-Nelson Oil Co Inc. Elevation 2412 KB 24071 GL
 Address PO BOX 1019 Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 12 Twp. 12 Rge. 23 Co. Trego State KS

Interval Tested 3623 - 3656 Zone Tested Toronto
 Anchor Length 33 Drill Pipe Run 3583 Mud Wt. 8.5
 Top Packer Depth 3618 Drill Collars Run 30 Vis 61
 Bottom Packer Depth 3623 Wt. Pipe Run _____ WL 8.0
 Total Depth 3656 Chlorides 400 ppm System LCM _____
 Blow Description IF - 1/4 in blow died back To very weak surface blow
ISI - No blow
FF - very weak surface blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>0.1 spotted mud</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 1 BHT 101 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1,734</u>	<input checked="" type="checkbox"/> Test 1150	T-On Location <u>4:45</u>
(B) First Initial Flow <u>12</u>	<input type="checkbox"/> Jars _____	T-Started <u>5:25</u>
(C) First Final Flow <u>14</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>8:08</u>
(D) Initial Shut-In <u>82</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>10:08</u>
(E) Second Initial Flow <u>13</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>11:48</u>
(F) Second Final Flow <u>15</u>	<input checked="" type="checkbox"/> Mileage <u>71rt</u> 110.05	Comments _____
(G) Final Shut-In <u>42</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1,683</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1260.05</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1260.05</u>	

Approved By _____ Our Representative Bert Davis

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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 43598

4/10

Well Name & No. Newcomer Brothers 1-12 Test No. 2 Date 10/13/12
 Company Downing - Nelson Oil Co Inc. Elevation 2412 KB 2404 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 12 Twp. 12 Rge. 23 Co. Trego State KS

Interval Tested 3680 - 3740 Zone Tested KC "C,D,E"
 Anchor Length 60 Drill Pipe Run _____ Mud Wt. 8.5
 Top Packer Depth 3675 Drill Collars Run 30 Vis 61
 Bottom Packer Depth 3680 Wt. Pipe Run — WL 8.0
 Total Depth 3740 Chlorides 400 ppm System LCM _____
 Blow Description IF - BOB in 3min
ISI - Very weak surface blow
FF - BOB in 4min
FSI - Very weak surface blow 2 ft Free Oil

Rec	Feet of	%gas	%oil	%water	%mud
<u>265</u>	<u>GSOMCW</u>	<u>10</u>	<u>5</u>	<u>55</u>	<u>30</u>
<u>365</u>	<u>GSOMCW</u>	<u>25</u>	<u>5</u>	<u>50</u>	<u>20</u>
<u>125</u>	<u>oil spotted smcw</u>	_____	_____	<u>90</u>	<u>10</u>
<u>360</u>	<u>water</u>	_____	_____	_____	_____
Rec	Feet of <u>25 FT GIP</u>	%gas	%oil	%water	%mud

Rec Total 1115 BHT 115 Gravity _____ API RW .08 @ 60 ° F Chlorides 125,000 ppm

(A) Initial Hydrostatic 1766 Test 1150 T-On Location 21:40
 (B) First Initial Flow 56 Jars T-Started 22:20
 (C) First Final Flow 322 Safety Joint T-Open 1:10
 (D) Initial Shut-In 852 Circ Sub T-Pulled 3:40
 (E) Second Initial Flow 330 Hourly Standby T-Out 6:40
 (F) Second Final Flow 507 Mileage 71.1 110.05 Comments _____
 (G) Final Shut-In 848 Sampler _____
 (H) Final Hydrostatic 1,223 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1260.05
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1260.05

Approved By _____ Our Representative Brian J. ...

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 43599

4/10

Well Name & No. Newcomer - Brothers 1-12 Test No. 3 Date 10/15/12
 Company Downing-Nelson Oil Co Inc. Elevation 2412 KB 2404 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 12 Twp. 12 Rge. 23 Co. Trego State KS

Interval Tested 4007 - 4035 Zone Tested Marm.
 Anchor Length 28 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 4002 Drill Collars Run 30 Vis _____
 Bottom Packer Depth 4007 Wt. Pipe Run — WL _____
 Total Depth 4035 Chlorides _____ ppm System LCM _____
 Blow Description IF - BOB in 32 min
ISF - Very weak surface blow
FF - 10 in blow
FSL - very weak surface blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>560</u>	<u>5</u>	<u>95</u>		
<u>170</u>	<u>oil scam SMCW</u>			<u>90</u>	<u>10</u>
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 210 BHT 111 Gravity 35 API RW .11 @ 70 ° F Chlorides 70,000 ppm
 (A) Initial Hydrostatic 1,974 Test 1250 T-On Location 4:20
 (B) First Initial Flow 69 Jars _____ T-Started ~~8:20~~ 6:20
 (C) First Final Flow 74 Safety Joint _____ T-Open 9:45
 (D) Initial Shut-In 302 Circ Sub _____ T-Pulled 12:45
 (E) Second Initial Flow 76 Hourly Standby _____ T-Out 15:00
 (F) Second Final Flow 111 Mileage 71 RT 110.05 Comments _____
 (G) Final Shut-In 299 Sampler _____
 (H) Final Hydrostatic 1,914 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1360.05
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1360.05

Approved By _____ Our Representative Burt Davis

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 43600

4/10

Well Name & No. Newcomer - Brothers #1-12 Test No. 4 Date 10/16/12
 Company Downing - Nelson Oil Co Inc. Elevation 2412 KB 2404 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 12 Twp. 12 Rge. 23 Co. Trego State KS

Interval Tested 3719-3736 Zone Tested KC
 Anchor Length 17 Drill Pipe Run 3675 Mud Wt. _____
 Top Packer Depth 3714, 3719 Drill Collars Run 30 Vis _____
 Bottom Packer Depth 3736 Wt. Pipe Run — WL _____
 Total Depth 4171 Chlorides _____ ppm System LCM _____

Blow Description IF - BOB in 21min
ISI - 1/2 in blow
FF - BOB in 22min
FST - 1 in blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>185</u>	<u>SMCW</u>		<u>95</u>	<u>5</u>	
<u>30</u>	<u>SWCM</u>		<u>10</u>	<u>90</u>	
<u>45</u>	<u>60</u>	<u>10</u>	<u>90</u>		
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 260 BHT _____ Gravity 38 API RW .08 @ 70 °F Chlorides 100,000 ppm

(A) Initial Hydrostatic 1,886 Test 1250 T-On Location 5:20
 (B) First Initial Flow 21 Jars T-Started 5:55
 (C) First Final Flow 86 Safety Joint T-Open 8:35
 (D) Initial Shut-In 834 Circ Sub T-Pulled 11:35
 (E) Second Initial Flow 89 Hourly Standby T-Out 14:00
 (F) Second Final Flow 135 Mileage 71rt 110.05 Comments _____
 (G) Final Shut-In 814 Sampler _____
 (H) Final Hydrostatic 1,801 Straddle 600 Ruined Shale Packer _____

Initial Open 45 Ruined Packer 320
 Initial Shut-In 45 Extra Copies _____
 Final Flow 45 Extra Packer _____ Sub Total 320
 Final Shut-In 45 Extra Recorder _____ Total 2280.05
 Day Standby _____ MP/DST Disc't _____
 Accessibility _____
 Sub Total 1960.05

Approved By _____ Our Representative Burt Dain

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