

DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

Tammy B #1

26-11s-23w Trego,KS

Start Date: 2013.03.29 @ 06:00:00

End Date: 2013.03.29 @ 14:03:30

Job Ticket #: 52042 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.04 @ 10:38:09



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52042

DST#: 1

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 06:00:00

GENERAL INFORMATION:

Formation: **KC "A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:08:00

Time Test Ended: 14:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3644.00 ft (KB) To 3699.00 ft (KB) (TVD)

Total Depth: 3699.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2396.00 ft (KB)

2389.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8319 Inside

Press@RunDepth: 133.26 psig @ 3645.00 ft (KB)

Start Date: 2013.03.29

End Date:

2013.03.29

Start Time: 06:00:05

End Time:

14:03:29

Capacity: 8000.00 psig

Last Calib.: 2013.03.29

Time On Btm: 2013.03.29 @ 09:07:00

Time Off Btm: 2013.03.29 @ 12:09:30

TEST COMMENT: IF-BOB in 33 min

ISI-No blow

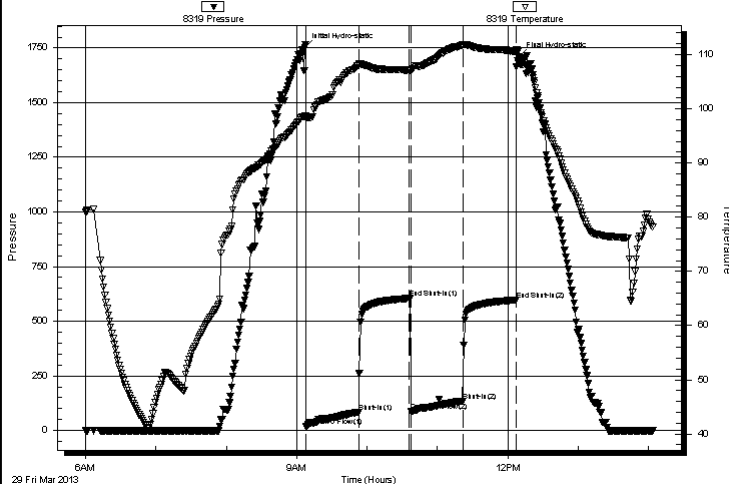
FF-6 1/2"

FSI-No blow

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1751.95	98.60	Initial Hydro-static
1	17.50	98.32	Open To Flow (1)
46	84.69	108.06	Shut-In(1)
89	604.82	107.17	End Shut-In(1)
91	86.40	107.01	Open To Flow (2)
135	133.26	111.79	Shut-In(2)
180	596.87	110.52	End Shut-In(2)
183	1709.48	108.34	Final Hydro-static

Pressure vs. Time

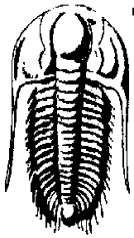


Recovery

Length (ft)	Description	Volume (bbl)
245.00	MCW 25%M 75%W	3.16

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

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Tammy B #1

Job Ticket: 52042

DST#: 1

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 06:00:00

GENERAL INFORMATION:

Formation: **KC "A-C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:08:00

Time Test Ended: 14:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3644.00 ft (KB) To 3699.00 ft (KB) (TVD)

Total Depth: 3699.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2396.00 ft (KB)

2389.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8166 Outside

Press@RunDepth: psig @ 3645.00 ft (KB)

Start Date: 2013.03.29

End Date:

2013.03.29

Start Time: 06:00:05

End Time:

14:02:59

Capacity: 8000.00 psig

Last Calib.:

2013.03.29

Time On Btm:

Time Off Btm:

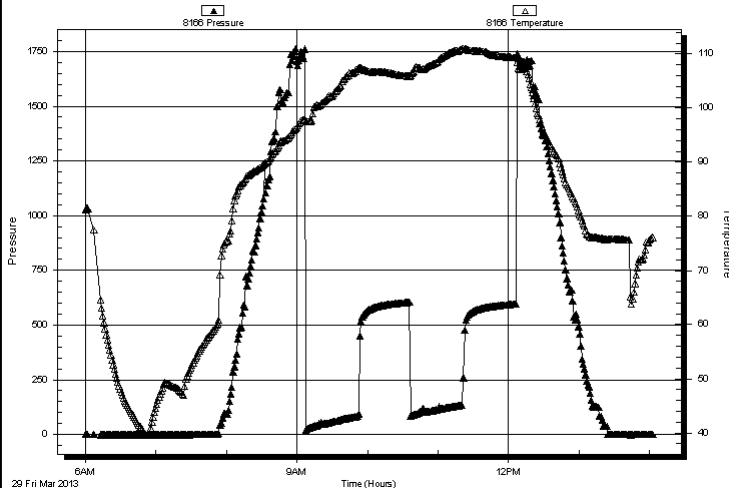
TEST COMMENT: IF-BOB in 33 min

ISI-No blow

FF-6 1/2"

FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
245.00	MCW 25%M 75%W	3.16

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.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52042

DST#: 1

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 06:00:00

Tool Information

Drill Pipe:	Length:	3613.00 ft	Diameter:	3.80 inches	Volume:	50.68 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.70 inches	Volume:	- 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:	75000.00 lb
					Total Volume:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		20.00 ft					String Weight: Initial	58000.00 lb
Depth to Top Packer:		3644.00 ft					Final	60000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		55.00 ft						
Tool Length:		76.00 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			3624.00	
Shut In Tool	5.00			3629.00	
Hydraulic tool	5.00			3634.00	
Packer	5.00			3639.00	21.00 Bottom Of Top Packer
Packer	5.00			3644.00	
Stubb	1.00			3645.00	
Recorder	0.00	8319	Inside	3645.00	
Recorder	0.00	8166	Outside	3645.00	
Perforations	3.00			3648.00	
Change Over Sub	1.00			3649.00	
Drill Pipe	31.00			3680.00	
Change Over Sub	1.00			3681.00	
Perforations	15.00			3696.00	
Bullnose	3.00			3699.00	55.00 Bottom Packers & Anchor

Total Tool Length: 76.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52042

DST#: 1

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 06:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 87.00 sec/qt

Water Loss: 6.39 in³

Resistivity: ohm.m

Salinity: 800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

ft

bbl

psig

deg API

Water Salinity: 53000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
245.00	MCW 25%M 75%W	3.163

Total Length: 245.00 ft

Total Volume: 3.163 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

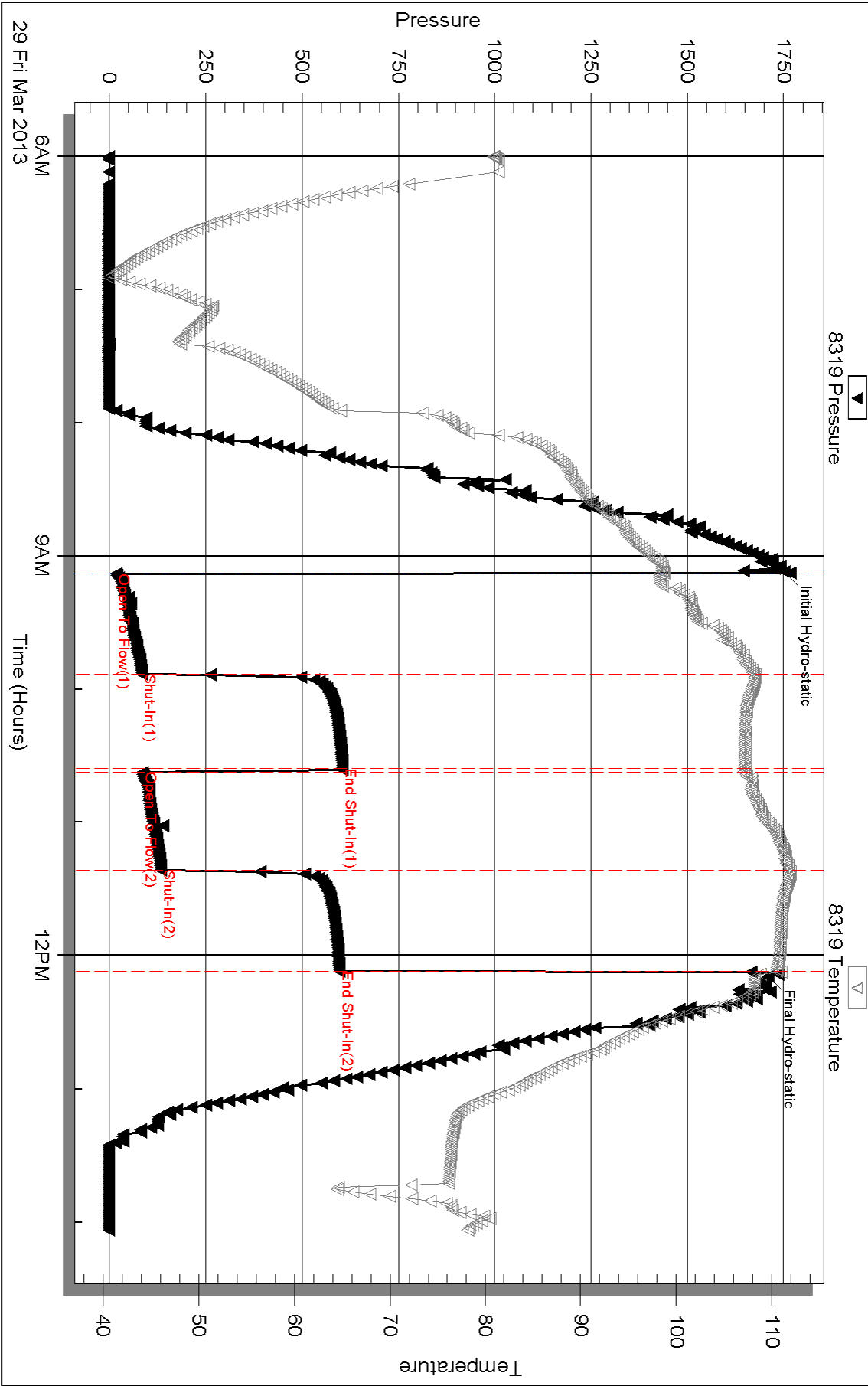
Inside

Dow nung-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 1

Pressure vs. Time

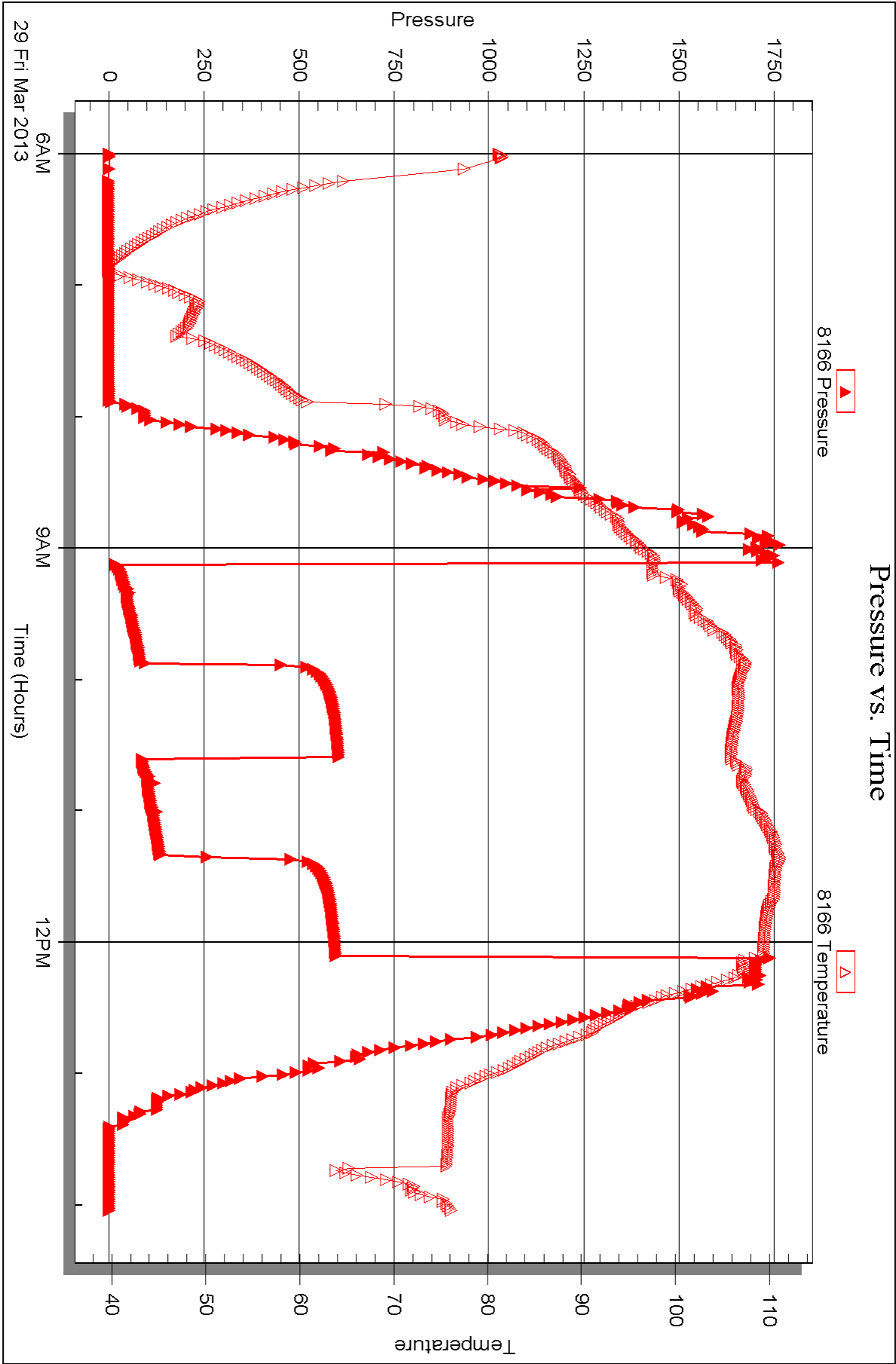


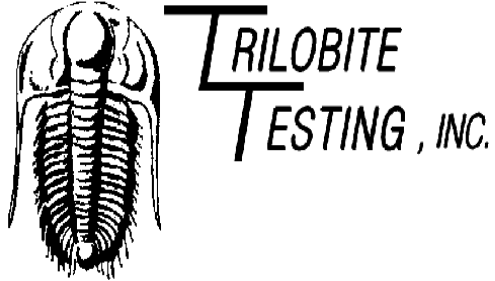
Serial #: 8166

Outside Dow nling-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

Tammy B #1

26-11s-23w Trego,KS

Start Date: 2013.03.29 @ 23:59:00

End Date: 2013.03.30 @ 07:18:30

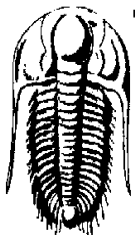
Job Ticket #: 52043 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.04 @ 10:37:30



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52043

DST#: 2

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 23:59:00

GENERAL INFORMATION:

Formation: **KC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:09:00

Time Test Ended: 07:18:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3710.00 ft (KB) To 3762.00 ft (KB) (TVD)

Reference Elevations: 2396.00 ft (KB)

Total Depth: 3762.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8319 Inside

Press@RunDepth: 149.76 psig @ 3711.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.29

End Date:

2013.03.30

Last Calib.: 2013.03.30

Start Time: 23:59:05

End Time:

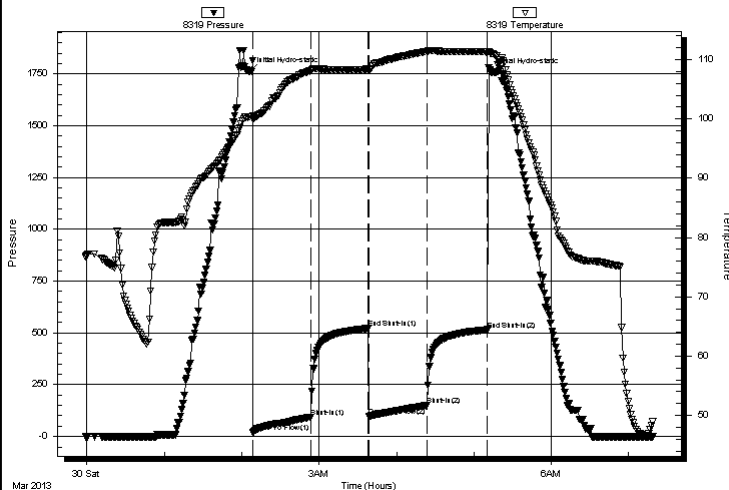
07:18:29

Time On Btm: 2013.03.30 @ 02:06:30

Time Off Btm: 2013.03.30 @ 05:13:00

TEST COMMENT: IF-BOB in 28 min
ISI-NO blow
FF-BOB in 35 min
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1762.10	100.32	Initial Hydro-static
3	18.86	99.96	Open To Flow (1)
47	93.84	108.15	Shut-In(1)
92	521.78	108.39	End Shut-In(1)
93	97.29	108.28	Open To Flow (2)
137	149.76	111.38	Shut-In(2)
184	515.39	111.29	End Shut-In(2)
187	1757.51	111.04	Final Hydro-static

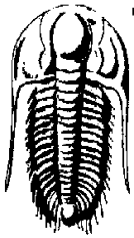
Recovery

Length (ft)	Description	Volume (bbl)
125.00	Water	1.48
150.00	VSOMCW 5%O 60%W 35%M	2.10
10.00	Fre Oil	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



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DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52043

DST#: 2

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 23:59:00

GENERAL INFORMATION:

Formation: **KC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:09:00

Time Test Ended: 07:18:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3710.00 ft (KB) To 3762.00 ft (KB) (TVD)

Reference Elevations: 2396.00 ft (KB)

Total Depth: 3762.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8166 Outside

Press@RunDepth: psig @ 3711.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.29

End Date:

2013.03.30

Last Calib.:

2013.03.30

Start Time: 23:59:05

End Time:

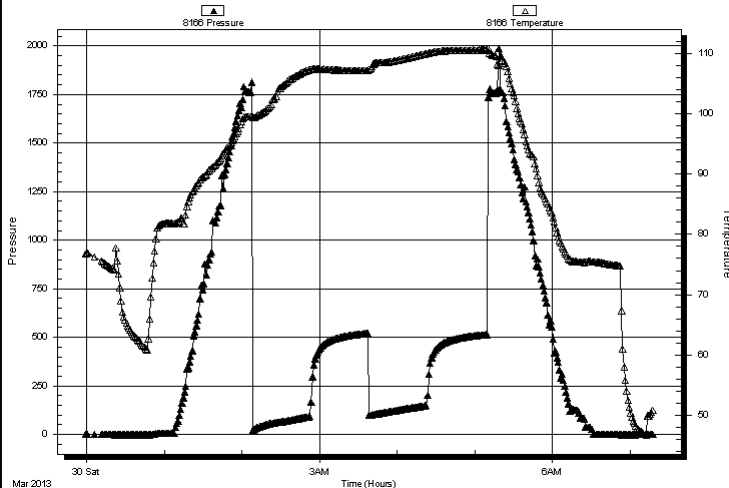
07:17:59

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-BOB in 28 min
ISI-NO blow
FF-BOB in 35 min
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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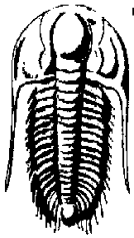
Recovery

Length (ft)	Description	Volume (bbl)
125.00	Water	1.48
150.00	VSOMCW 5%O 60%W 35%M	2.10
10.00	Fre Oil	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52043

DST#: 2

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 23:59:00

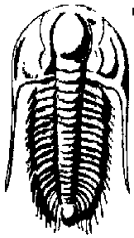
Tool Information

Drill Pipe:	Length:	3676.00 ft	Diameter:	3.80 inches	Volume:	51.56 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.70 inches	Volume:	- 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:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		17.00 ft					String Weight: Initial	58000.00 lb
Depth to Top Packer:		3710.00 ft					Final	60000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		52.00 ft						
Tool Length:		73.00 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			3690.00	
Shut In Tool	5.00			3695.00	
Hydraulic tool	5.00			3700.00	
Packer	5.00			3705.00	21.00 Bottom Of Top Packer
Packer	5.00			3710.00	
Stubb	1.00			3711.00	
Recorder	0.00	8319	Inside	3711.00	
Recorder	0.00	8166	Outside	3711.00	
Perforations	3.00			3714.00	
Change Over Sub	1.00			3715.00	
Drill Pipe	31.00			3746.00	
Change Over Sub	1.00			3747.00	
Perforations	12.00			3759.00	
Bullnose	3.00			3762.00	52.00 Bottom Packers & Anchor

Total Tool Length: 73.00



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52043

DST#: 2

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 23:59:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 87.00 sec/qt

Water Loss: 6.38 in³

Resistivity: ohm.m

Salinity: 800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API: deg API

Water Salinity: 85000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	Water	1.480
150.00	VSOMCW 5%O 60%W 35%M	2.104
10.00	Fre Oil	0.140

Total Length: 285.00 ft Total Volume: 3.724 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

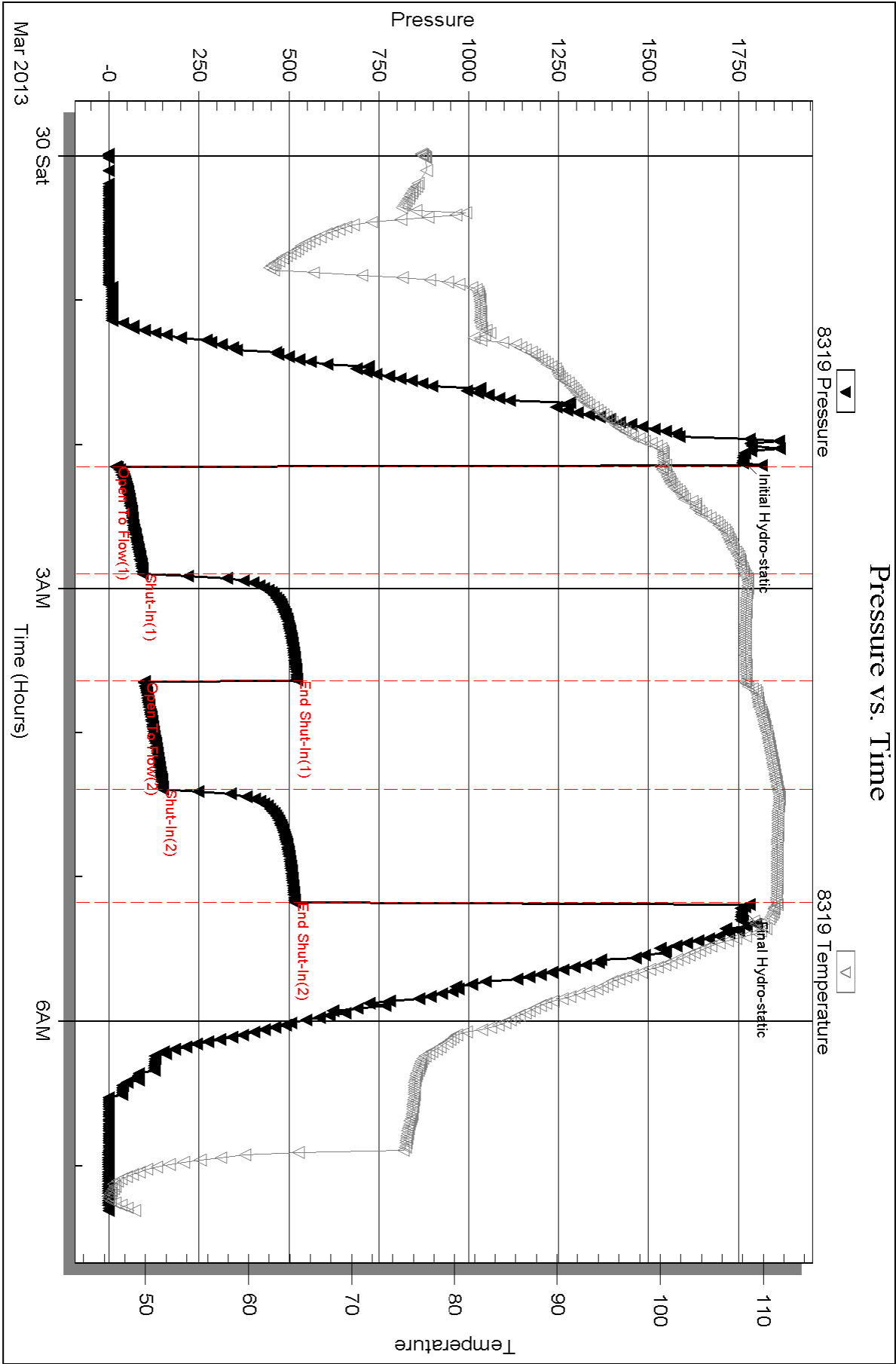
Serial #: 8319

Inside

Dow nting-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 2



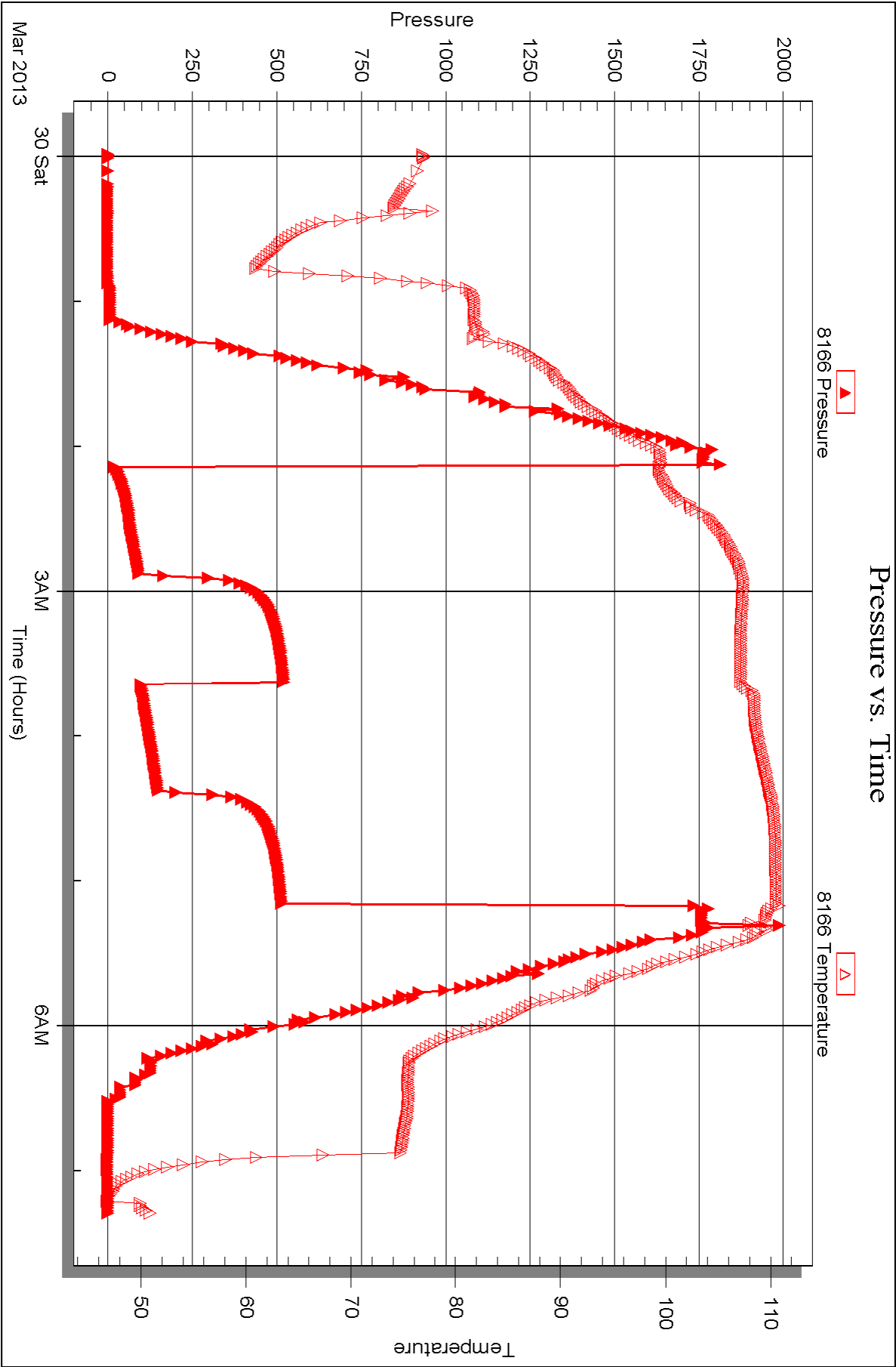
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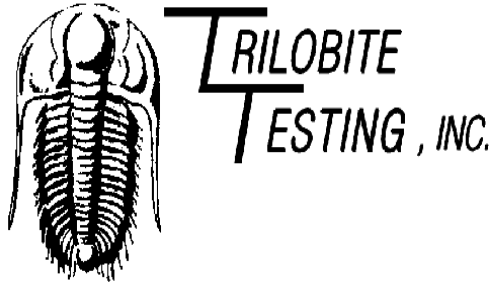
Outside

Dow nting-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 2





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Ron Nelson

Tammy B #1

26-11s-23w Trego,KS

Start Date: 2013.03.31 @ 21:55:00

End Date: 2013.04.01 @ 04:08:00

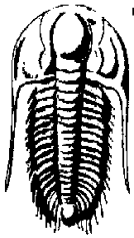
Job Ticket #: 52044 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.04.04 @ 10:36:31



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52044

DST#: 3

ATTN: Ron Nelson

Test Start: 2013.03.31 @ 21:55:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:14:30

Time Test Ended: 04:08:00

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3923.00 ft (KB) To 4010.00 ft (KB) (TVD)

Total Depth: 4150.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2396.00 ft (KB)

2389.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8319 Inside

Press@RunDepth: 29.71 psig @ 4006.00 ft (KB)

Start Date: 2013.03.31

End Date:

2013.04.01

Start Time: 21:55:05

End Time:

04:07:59

Capacity: 8000.00 psig

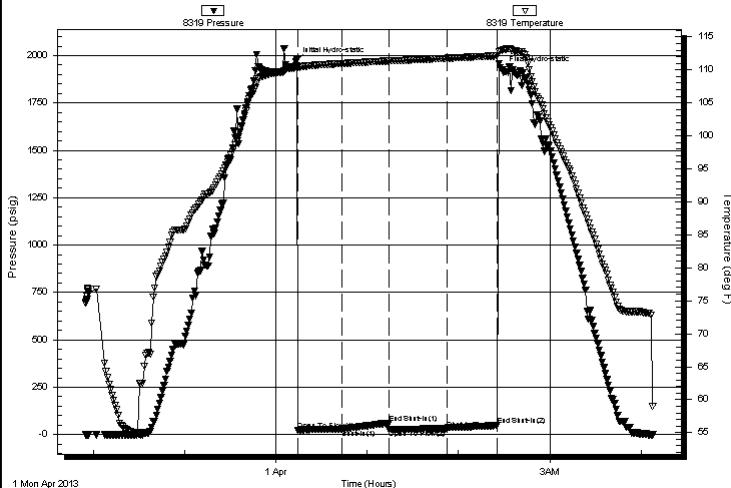
Last Calib.: 2013.04.01

Time On Btm: 2013.04.01 @ 00:13:00

Time Off Btm: 2013.04.01 @ 02:28:30

TEST COMMENT: IF-1" blow
ISI-No blow
FF-No blow
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1966.02	110.52	Initial Hydro-static
2	20.80	110.36	Open To Flow (1)
31	27.65	110.97	Shut-In(1)
61	60.87	111.35	End Shut-In(1)
62	28.45	111.35	Open To Flow (2)
100	29.71	111.77	Shut-In(2)
133	48.31	112.13	End Shut-In(2)
136	1922.76	112.98	Final Hydro-static

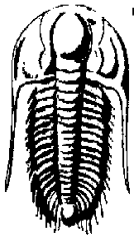
Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil spotted Mud	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52044

DST#: 3

ATTN: Ron Nelson

Test Start: 2013.03.31 @ 21:55:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:14:30

Time Test Ended: 04:08:00

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3923.00 ft (KB) To 4010.00 ft (KB) (TVD)

Total Depth: 4150.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2396.00 ft (KB)

2389.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 8166 Outside

Press@RunDepth: psig @ 4006.00 ft (KB)

Start Date: 2013.03.31

End Date:

2013.04.01

Start Time: 21:55:05

End Time:

04:07:29

Capacity: 8000.00 psig

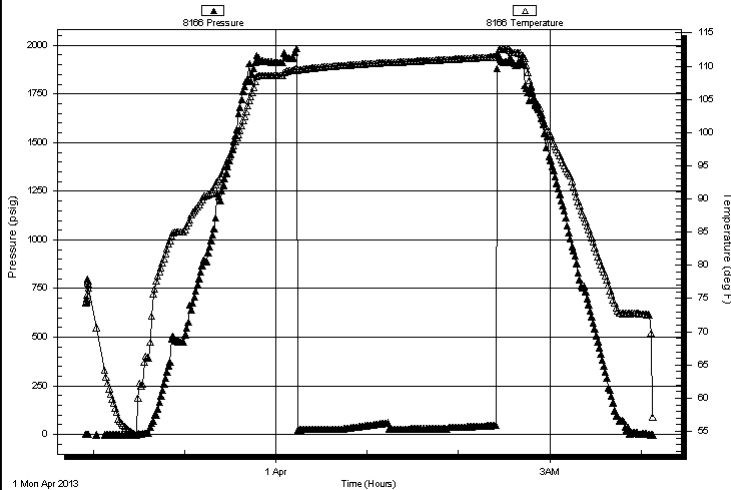
Last Calib.: 2013.04.01

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-1" blow
ISI-No blow
FF-No blow
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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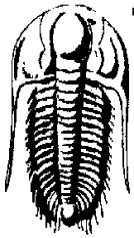
Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil spotted Mud	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Dow nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52044

DST#: 3

ATTN: Ron Nelson

Test Start: 2013.03.31 @ 21:55:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:14:30

Time Test Ended: 04:08:00

Test Type: Conventional Straddle (Reset)

Tester: Brett Dickinson

Unit No: 59

Interval: 3923.00 ft (KB) To 4010.00 ft (KB) (TVD)

Total Depth: 4150.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2396.00 ft (KB)

2389.00 ft (CF)

KB to GR/CF: 7.00 ft

Serial #: 6753 Below (Straddle)

Press@RunDepth: psig @ 4015.00 ft (KB)

Start Date: 2013.03.31

End Date:

2013.04.01

Start Time: 21:55:05

End Time:

04:31:59

Capacity: 8000.00 psig

Last Calib.:

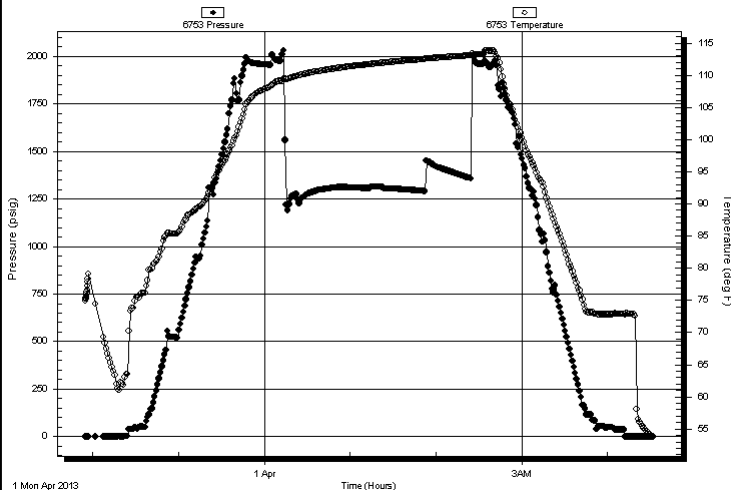
2013.04.01

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-1" blow
ISI-No blow
FF-No blow
FSI-No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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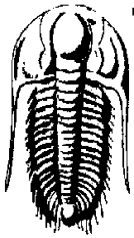
Recovery

Length (ft)	Description	Volume (bbl)
5.00	Oil spotted Mud	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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* Recovery from multiple tests



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52044

DST#: 3

ATTN: Ron Nelson

Test Start: 2013.03.31 @ 21:55:00

Tool Information

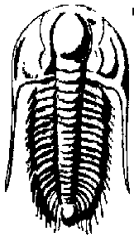
Drill Pipe:	Length:	3883.00 ft	Diameter:	3.80 inches	Volume:	54.47 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	ft	Diameter:	2.70 inches	Volume:	- bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	30.00 ft	Diameter:	2.25 inches	Volume:	0.15 bbl	Weight to Pull Loose:	85000.00 lb
					Total Volume:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		10.00 ft					String Weight: Initial	65000.00 lb
Depth to Top Packer:		3923.00 ft					Final	65000.00 lb
Depth to Bottom Packer:		4010.00 ft						
Interval between Packers:		87.00 ft						
Tool Length:		250.00 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			3904.00		
Shut In Tool	5.00			3909.00		
Hydraulic tool	5.00			3914.00		
Packer	4.00			3918.00	20.00	Bottom Of Top Packer
Packer	5.00			3923.00		
Stubb	1.00			3924.00		
Perforations	3.00			3927.00		
change Over Sub	1.00			3928.00		
Blank Spacing	63.00			3991.00		
change Over Sub	1.00			3992.00		
Perforations	14.00			4006.00		
Recorder	0.00	8319	Inside	4006.00		
Recorder	0.00	8166	Outside	4006.00		
Blank Off Sub	4.00			4010.00	87.00	Tool Interval
Packer	4.00			4014.00		
Stubb	1.00			4015.00		
Recorder	0.00	6753	Below	4015.00		
perforations	7.00			4022.00		
Change Over Sub	1.00			4023.00		
Blank Spacing	126.00			4149.00		
Change Over Sub	1.00			4150.00		
Bullnose	3.00			4153.00	143.00	Bottom Packers & Anchor

Total Tool Length: 250.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

26-11s-23w Trego,KS

PO Box 1019
Hays KS 67601

Tammy B #1

Job Ticket: 52044

DST#: 3

ATTN: Ron Nelson

Test Start: 2013.03.31 @ 21:55:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 87.00 sec/qt

Water Loss: 6.38 in³

Resistivity: ohm.m

Salinity: 800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Oil spotted Mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8319

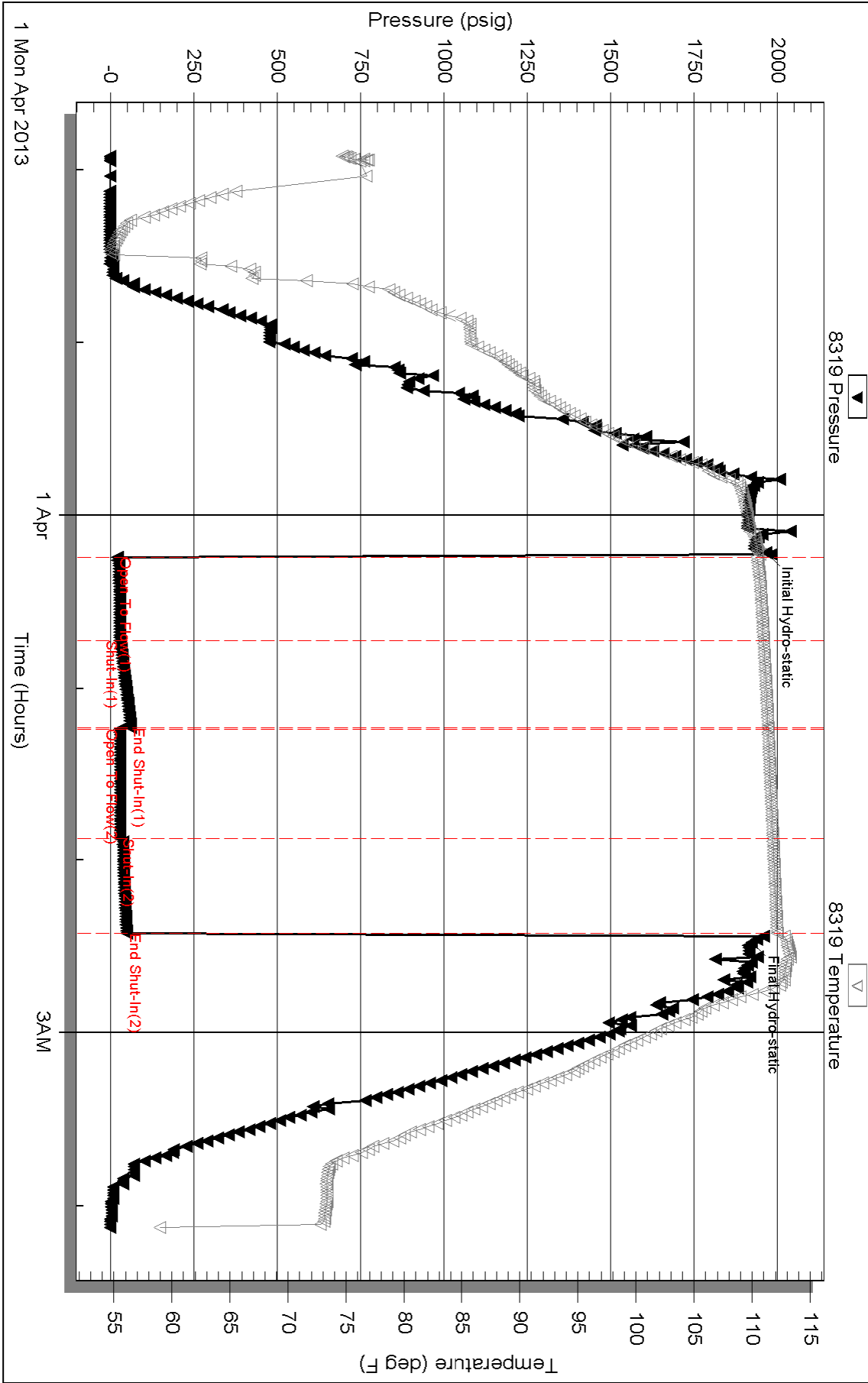
Inside

Dow nung-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3

Pressure vs. Time



Serial #: 8166

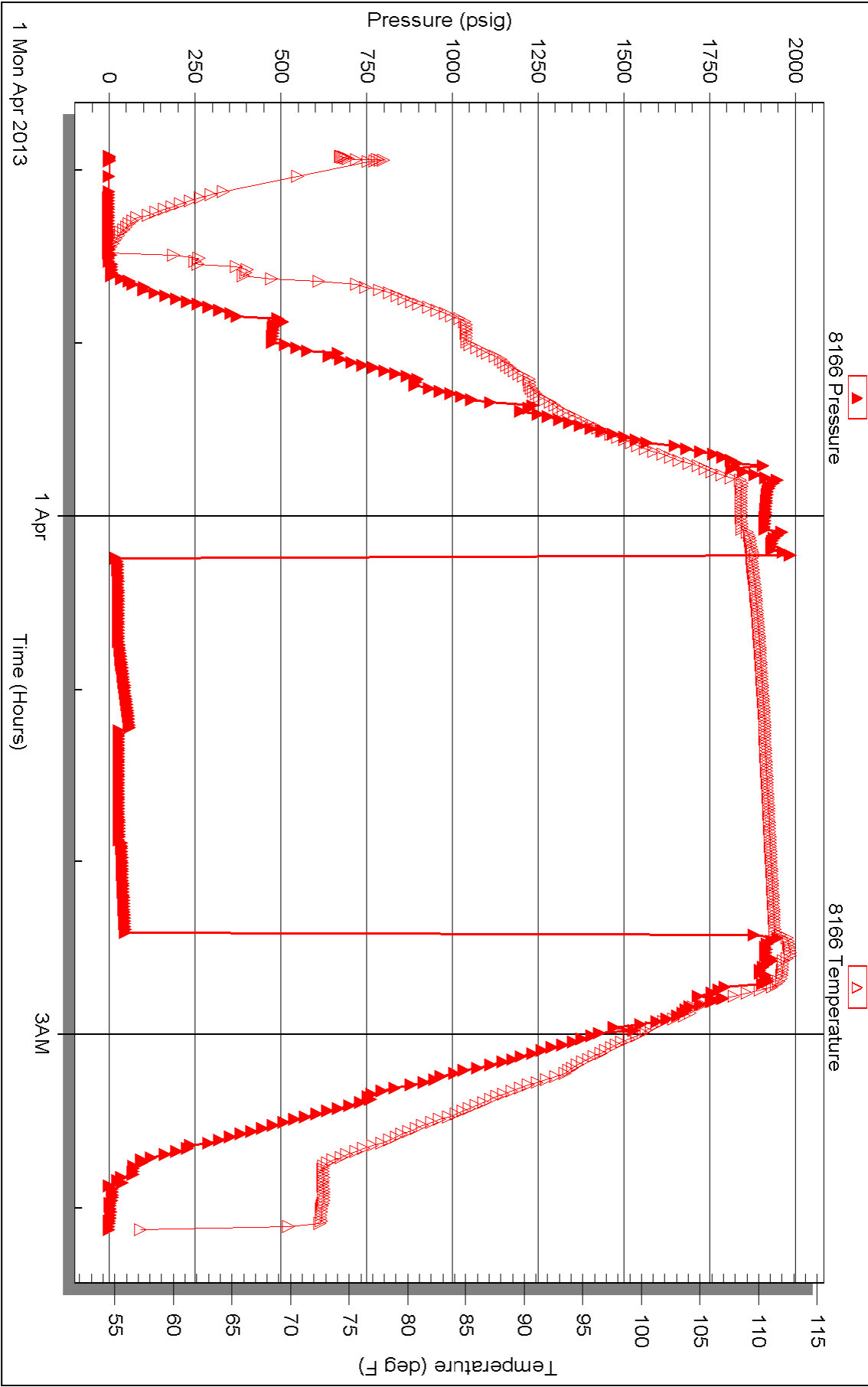
Outside

Dow nung-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3

Pressure vs. Time

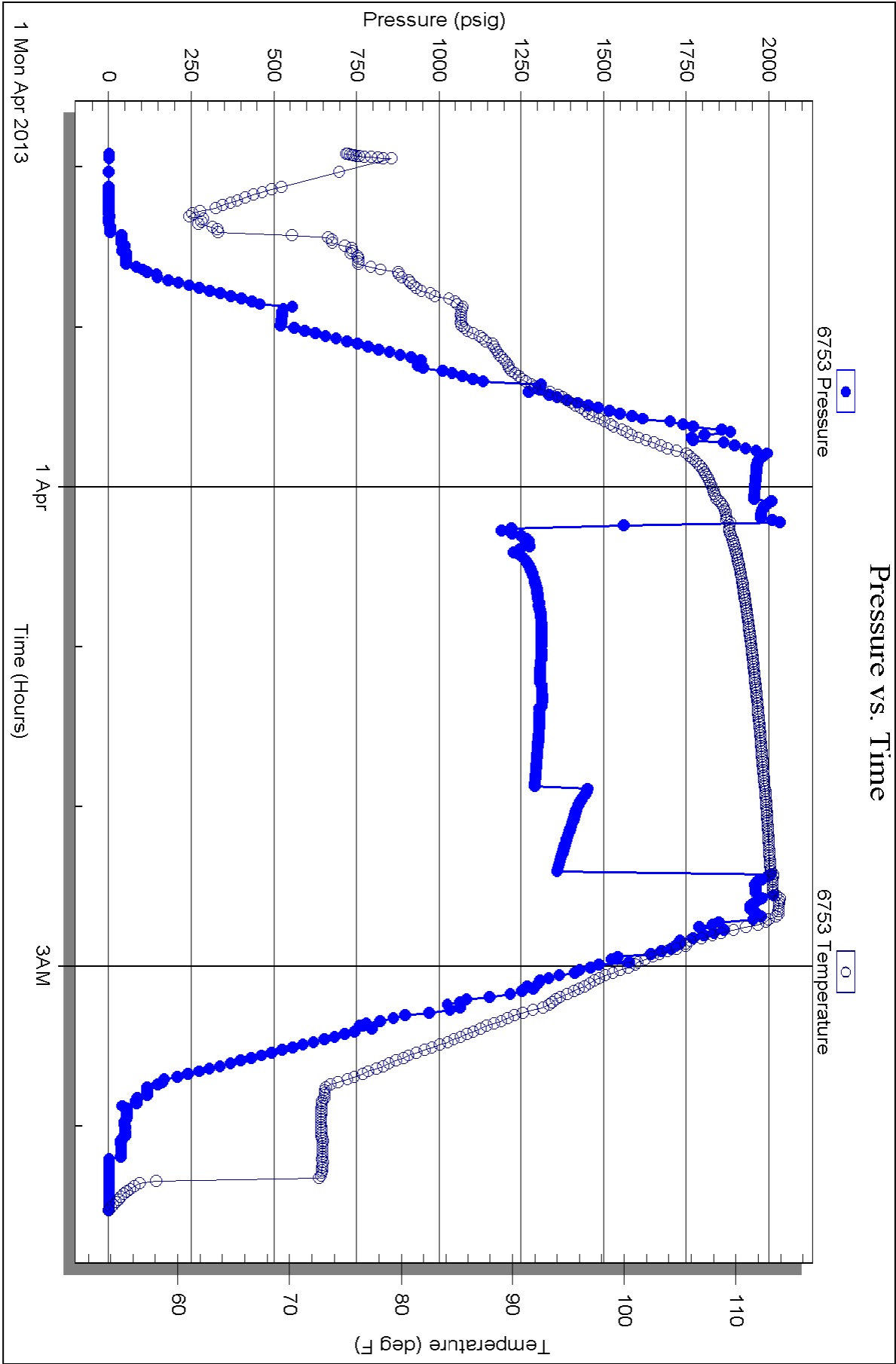


Serial #: 6753

Below (Stratton)ng-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 52042

Well Name & No. Tammy "B" #1 Test No. 1 Date 3/29/13
 Company Downing - Nelson Oil Co Inc. Elevation ~~2389~~ 2396 KB 2389 GL
 Address PO Box 1019 111 West 10th St Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 26 Twp. 11 Rge. 23 Co. Trego State KS

Interval Tested 3644 - 3699 Zone Tested KC "A-C"
 Anchor Length 55 Drill Pipe Run _____ Mud Wt. 8.6
 Top Packer Depth 3639 Drill Collars Run 30 Vis 87
 Bottom Packer Depth 3644 Wt. Pipe Run _____ WL 6.4
 Total Depth 3699 Chlorides 800 ppm System LCM 3

Blow Description 7F-BOB in 33min
ISI - No blow
FF - 6 1/2 in blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>245</u>	<u>mcu</u>			<u>25</u>	<u>25</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 245 BHT _____ Gravity _____ API RW .16 @ 65 °F Chlorides 53000 ppm

(A) Initial Hydrostatic <u>1,752</u>	☒ Test <u>1150</u>	T-On Location <u>5:00</u>
(B) First Initial Flow <u>18</u>	☐ Jars _____	T-Started <u>6:00</u>
(C) First Final Flow <u>85</u>	☐ Safety Joint _____	T-Open <u>9:07</u>
(D) Initial Shut-In <u>605</u>	☐ Circ Sub _____	T-Pulled <u>12:07</u>
(E) Second Initial Flow <u>86</u>	☐ Hourly Standby _____	T-Out <u>14:00</u>
(F) Second Final Flow <u>133</u>	☒ Mileage <u>76 RT</u> <u>117.80</u>	Comments _____
(G) Final Shut-In <u>597</u>	☐ Sampler _____	
(H) Final Hydrostatic <u>1,709</u>	☐ Straddle _____	☐ Ruined Shale Packer _____
	☐ Shale Packer _____	☐ Ruined Packer _____
	☐ Extra Packer _____	☐ Extra Copies _____
	☐ Extra Recorder _____	Sub Total <u>0</u>
	☐ Day Standby _____	Total <u>1267.80</u>
	☐ Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1267.80</u>	

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45

Approved By _____

Our Representative Brian D...

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. 52043

Well Name & No. Tammy "B" #1 Test No. 2 Date 3/29/13
 Company Powning-Nelson Oil Co Inc. Elevation 2396 KB 2389 GL
 Address PO BOX 1019 Hays KS 67601
 Co. Rep / Geo. _____ Rig _____
 Location: Sec. 26 Twp. 11 Rge. 23 Co. Trego State KS

Interval Tested 3710 - 3762 Zone Tested KC
 Anchor Length 52 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 3705 Drill Collars Run 30 Vis _____
 Bottom Packer Depth 3710 Wt. Pipe Run _____ WL _____
 Total Depth 3762 Chlorides _____ ppm System LCM _____

Blow Description IF-BOB in 28min
ISE-No blow
IF-BOB in 35 min
ISE-No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>water</u>				
<u>150</u>	<u>vsomcu</u>		<u>5</u>	<u>60</u>	<u>35</u>
<u>10</u>	<u>Free O: 1</u>				
_____	_____	%gas	%oil	%water	%mud
_____	_____	%gas	%oil	%water	%mud

Rec Total 285 BHT 111 Gravity _____ API RW .14 @ 46 °F Chlorides 85,000 ppm
 (A) Initial Hydrostatic 1762 ☒ Test 1150 T-On Location 23:30
 (B) First Initial Flow 19 ☐ Jars _____ T-Started 00:05
 (C) First Final Flow 94 ☐ Safety Joint _____ T-Open 2:15
 (D) Initial Shut-In 522 ☐ Circ Sub _____ T-Pulled 5:15
 (E) Second Initial Flow 97 ☐ Hourly Standby _____ T-Out 7:25
 (F) Second Final Flow 150 ☒ Mileage 76.7 117.80 Comments _____
 (G) Final Shut-In 515 ☐ Sampler _____
 (H) Final Hydrostatic 1,758 ☐ Straddle _____

Initial Open 45 ☐ Shale Packer _____
 Initial Shut-In 45 ☐ Extra Packer _____
 Final Flow 45 ☐ Extra Recorder _____
 Final Shut-In 45 ☐ Day Standby _____
 Sub Total 1267.80 ☐ Accessibility _____
 Sub Total 1267.80

Approved By _____ Our Representative Brian D...
 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. 52044

Well Name & No. Tommy B" #1 Test No. 3 Date 3/31/13
 Company Pennings - Nelson Oil Co Inc. Elevation 2396 KB 2389 GL
 Address PO Box 1019 West 10th St Hays KS 67601
 Co. Rep / Geo. _____ Rig Discovery #3
 Location: Sec. 26 Twp. 11 Rge. 23 Co. Trego State KS

Interval Tested 3923-4010 Zone Tested _____
 Anchor Length 87 Drill Pipe Run _____ Mud Wt. _____
 Top Packer Depth 3918, 3923 Drill Collars Run 30 Vis _____
 Bottom Packer Depth 4010 Wt. Pipe Run _____ WL _____
 Total Depth 4150 Chlorides _____ ppm System LCM _____

Blow Description IF - 1 in blow
IS - No blow
FF - No blow
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>oil 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 5 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic 1,966 ☒ Test 1250 T-On Location 21:20
 (B) First Initial Flow 21 ☐ Jars _____ T-Started 21:55
 (C) First Final Flow 28 ☐ Safety Joint _____ T-Open 00:15
 (D) Initial Shut-In 61 ☐ Circ Sub _____ T-Pulled 2:15
 (E) Second Initial Flow 28 ☐ Hourly Standby _____ T-Out 4:10
 (F) Second Final Flow 30 ☒ Mileage 76.7 117.80 Comments _____
 (G) Final Shut-In 48 ☐ Sampler _____
 (H) Final Hydrostatic 1,923 ☒ Straddle 600 ☐ Ruined Shale Packer _____

Initial Open 30 ☐ Shale Packer _____ ☐ Ruined Packer _____
 Initial Shut-In 30 ☐ Extra Packer _____ ☐ Extra Copies _____
 Final Flow 30 ☐ Extra Recorder _____ Sub Total 458.33
 Final Shut-In 30 ☒ Day Standby 38 1d 13.75h Total 2426.13
☐ Accessibility _____ MP/DST Disc't _____
 Sub Total 1967.80

Approved By _____ Our Representative BW
 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.