



**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Conv. to GSW
- Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date      Date Reached TD      Completion Date or Recompletion Date

API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

**KCC Office Use ONLY**

- Letter of Confidentiality Received  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1131540

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i>  List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
---	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
-----------------------------------	-----------	---------	-------------	---------------	---------

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
---	--	--

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Tammy 'B' 1
Doc ID	1131540

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Density/Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Tammy 'B' 1
Doc ID	1131540

Tops

Name	Top	Datum
Top Anhydrite	1842'	+545
Base Anhydrite	1886'	+501
Topeka	3394'	-1007
Heebner	3613'	-1226
Toronto	3634'	-1247
LKC	3647'	-1260
BKC	3880'	-1493
Marmaton	3988'	-1601
Cherokee Shale	4039'	-1652
Cherokee Sand	4054'	-1667
Arbuckle	4096'	-1709

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6490

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-25-13	26	11	23	TREGO	KANSAS		6:30 pm
Lease <u>Tammy "A" [REDACTED]</u>				Well No. <u>#1</u>		Owner <u>DOWNING &amp; NELSON</u>	
Contractor <u>D.D. #3</u>				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job <u>SURFACE</u>				Charge To <u>DOWNING &amp; NELSON</u>			
Hole Size <u>12 1/4"</u>		T.D. <u>221'</u>		Street <u>P.O. Box 1019</u>			
Csg. <u>8 7/8</u>		Depth <u>221'</u>		City <u>HAYS, KS</u> State <u>KS</u>			
Tbg. Size		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Tool		Depth		Cement Amount Ordered <u>150 com - 3cc - 2 gel</u>			
Cement Left in Csg.		Shoe Joint <u>15'</u>					
Meas Line		Displace <u>132 bbls</u>		Common <u>150</u>			
<b>EQUIPMENT</b>							
Pumptrk # <u>16</u>	No.	Cementer		Poz. Mix			
		Helper <u>TRAVIS</u>		Gel. <u>3</u>			
Bulktrk # <u>14</u>	No.	Driver		Calcium <u>5</u>			
		Driver <u>LONNIE M</u>		Hulls			
Bulktrk <u>DW</u>	No.	Driver		Salt			
		Driver <u>CARLO</u>		Flowseal			
<b>JOB SERVICES &amp; REMARKS</b>							
Remarks:				Koi-Seal			
Rat Hole				Mud CLR 48			
Mouse Hole				CFL-117 or CD110 CAF 38			
Centralizers				Sand			
Baskets				Handling <u>158</u>			
D/V or Port Collar				Mileage			
<u>CEMENT DID CIRCULATE!</u>				<b>FLOAT EQUIPMENT</b>			
				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge <u>Surface</u>			
				Mileage <u>48</u>			
				Tax			
				Discount			
				Total Charge			
X Signature <u>Aden [Signature]</u>							

THANK YOU!

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 6600

Date	4-1-13	Sec.	28	Twp.	12	Range	23	County	Hog	State	KS	On Location	7:30 AM	Finish	1:00 PM
Lease								Well No.		Owner					
TAMMY B								1		To Quality Oilwell Cementing, Inc.					
Contractor								You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
DISCOVERY 3															
Type Job								Charge To							
plug 306								Downing - Nelson							
Hole Size				T.D.				Charge To							
				4150											
Csg.				Depth				Street							
Dill pipe															
Tbg. Size				Depth				City				State			
Tool				Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.				Shoe Joint				Cement Amount Ordered							
								270 - 60/40 - 4 1/2							
Meas Line				Displace				Gel 1/4 flow							
								Common 162							
EQUIPMENT								Poz. Mix							
								108							
Pumptrk				No.				Driver							
5								Helper							
Bulktrk				No.				Driver							
14								Brett							
Bulktrk				No.				Driver							
Du								Heath							
JOB SERVICES & REMARKS								Calcium							
Remarks:								Hulls							
Rat Hole								Salt							
30 SKS								Flowseal 67#							
Mouse Hole								Kol-Seal							
15 SKS															
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
1st 4100								Handling 280							
2nd 1865								50 SKS							
3rd 1040								25 SKS							
4th 270								100 SKS							
5th 40								40 SKS							
								10 SKS							
TAMMY B - #1 Thanks								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Wood Plug							
								Pumptrk Charge							
								Mileage 48 plug							
								Tax							
								Discount							
								Total Charge							
Signature															
John Smith															



## 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)**

Reference Elevations: 2396.00 ft (KB)

Total Depth: 3699.00 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 @ Run Depth: 133.26 psig @ 3645.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.29

End Date:

2013.03.29

Last Calib.:

2013.03.29

Start Time: 06:00:05

End Time:

14:03:29

Time On Btm:

2013.03.29 @ 09:07:00

Time Off Btm:

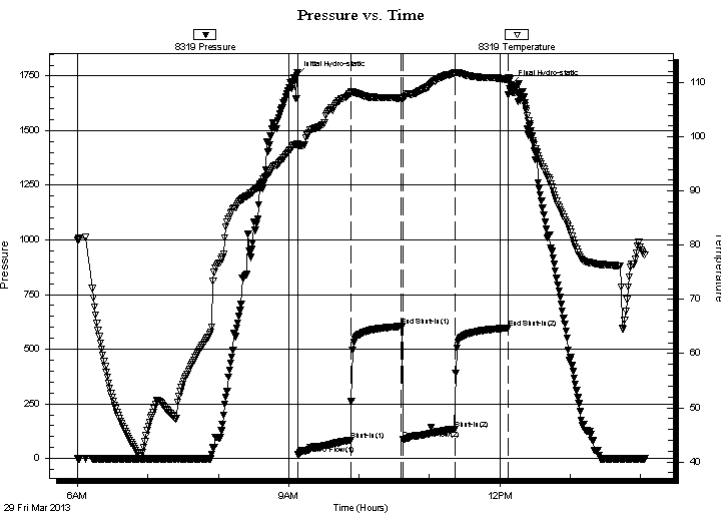
2013.03.29 @ 12:09:30

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

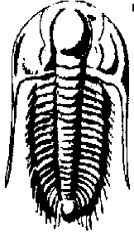
## Recovery

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**

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

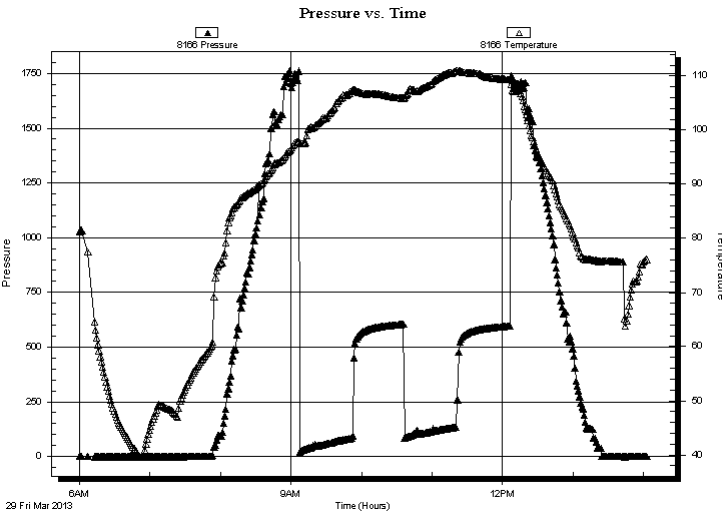
Reference Elevations: 2396.00 ft (KB)  
 2389.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 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  
 IS-No blow  
 FF-6 1/2"  
 FS-No blow



**PRESSURE SUMMARY**

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

**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
			<u>Total Volume:</u>	Tool Chased	0.00 ft
			- bbl	String Weight: Initial	58000.00 lb
Drill Pipe Above KB:	20.00 ft			Final	60000.00 lb
Depth to Top Packer:	3644.00 ft				
Depth to Bottom Packer:	ft				
Interval betw een Packers:	55.00 ft				
Tool Length:	76.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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  
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: 52042

**DST#: 1**

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 06:00:00

**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:

53000 ppm

Viscosity: 87.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

**Recovery Information**

Recovery Table

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

Total Length: 245.00 ft      Total Volume: 3.163 bbl

Num Fluid Samples: 0

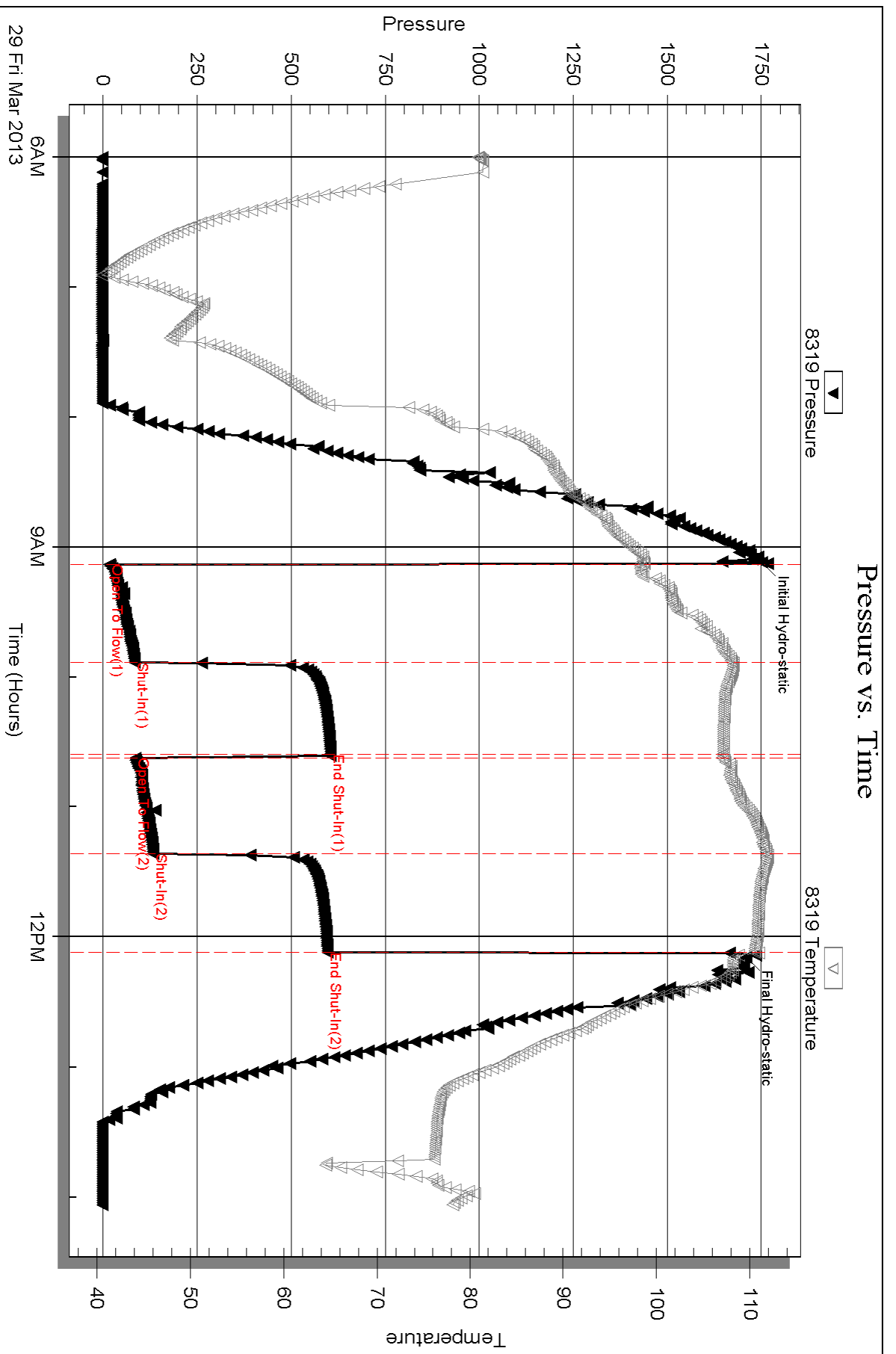
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

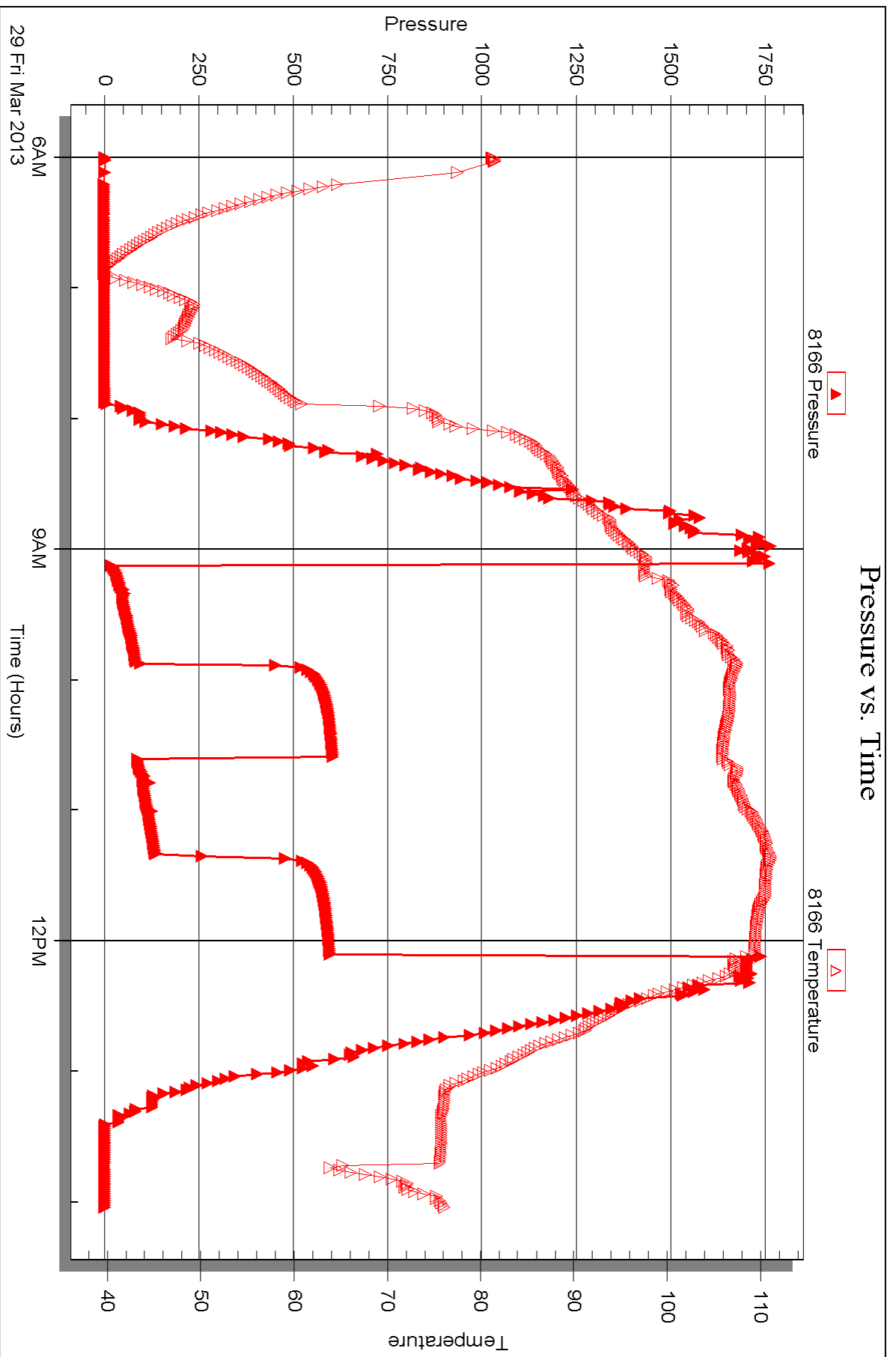


Serial #: 8166

Outside Dow nung-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 52042

Printed: 2013.04.04 @ 10:38:12



## 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  
 Interval: **3710.00 ft (KB) To 3762.00 ft (KB) (TVD)**  
 Total Depth: 3762.00 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: 2396.00 ft (KB)  
 2389.00 ft (CF)  
 KB to GR/CF: 7.00 ft

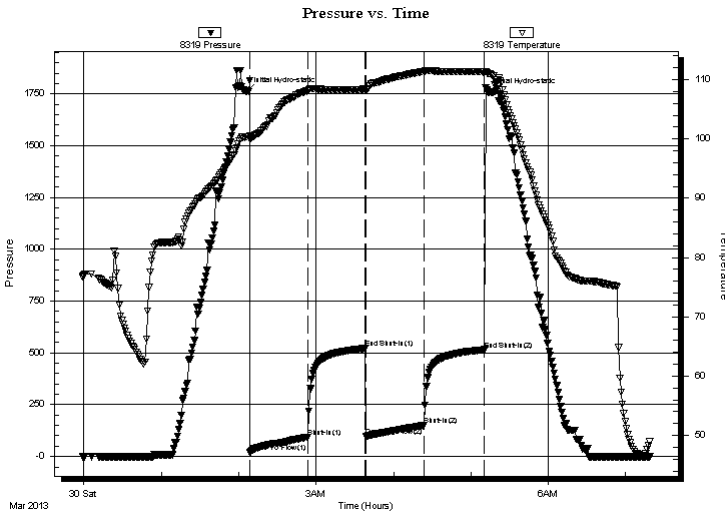
## Serial #: 8319

Inside

Press @ Run Depth: 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 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	V SOMCW 5%O 60%W 35%M	2.10
10.00	Fre Oil	0.14

\* Recovery from multiple tests

## Gas Rates

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



**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

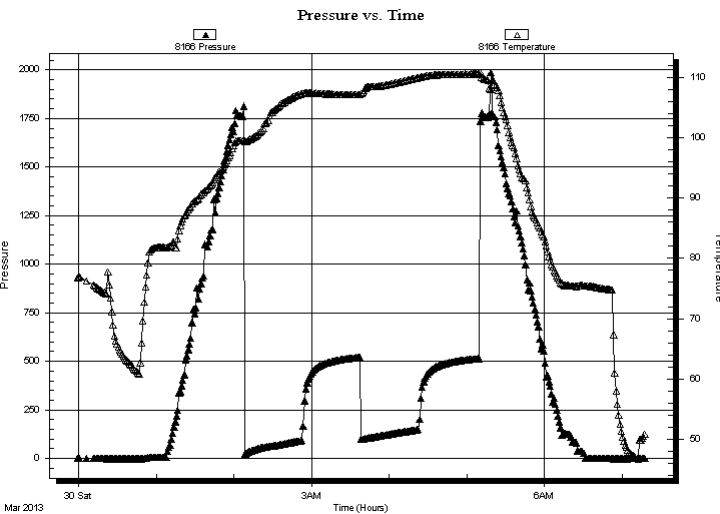
## GENERAL INFORMATION:

Formation: **KC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 02:09:00  
 Time Test Ended: 07:18:30  
 Interval: **3710.00 ft (KB) To 3762.00 ft (KB) (TVD)**  
 Total Depth: 3762.00 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: 2396.00 ft (KB)  
 2389.00 ft (CF)  
 KB to GR/CF: 7.00 ft

## Serial #: 8166 Outside

Press @ RunDepth: psig @ 3711.00 ft (KB)  
 Start Date: 2013.03.29 End Date: 2013.03.30  
 Start Time: 23:59:05 End Time: 07:17:59  
 Capacity: 8000.00 psig  
 Last Calib.: 2013.03.30  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF-BOB in 28 min  
 IS-NO blow  
 FF-BOB in 35 min  
 FS-No blow



## PRESSURE SUMMARY

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

## Recovery

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

\* 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.

**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
			<u>Total Volume:</u> - 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
------------------	-------------	------------	----------	------------	----------------

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  
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: 52043

**DST#: 2**

ATTN: Ron Nelson

Test Start: 2013.03.29 @ 23:59:00

## 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:

85000 ppm

Viscosity: 87.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

## 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

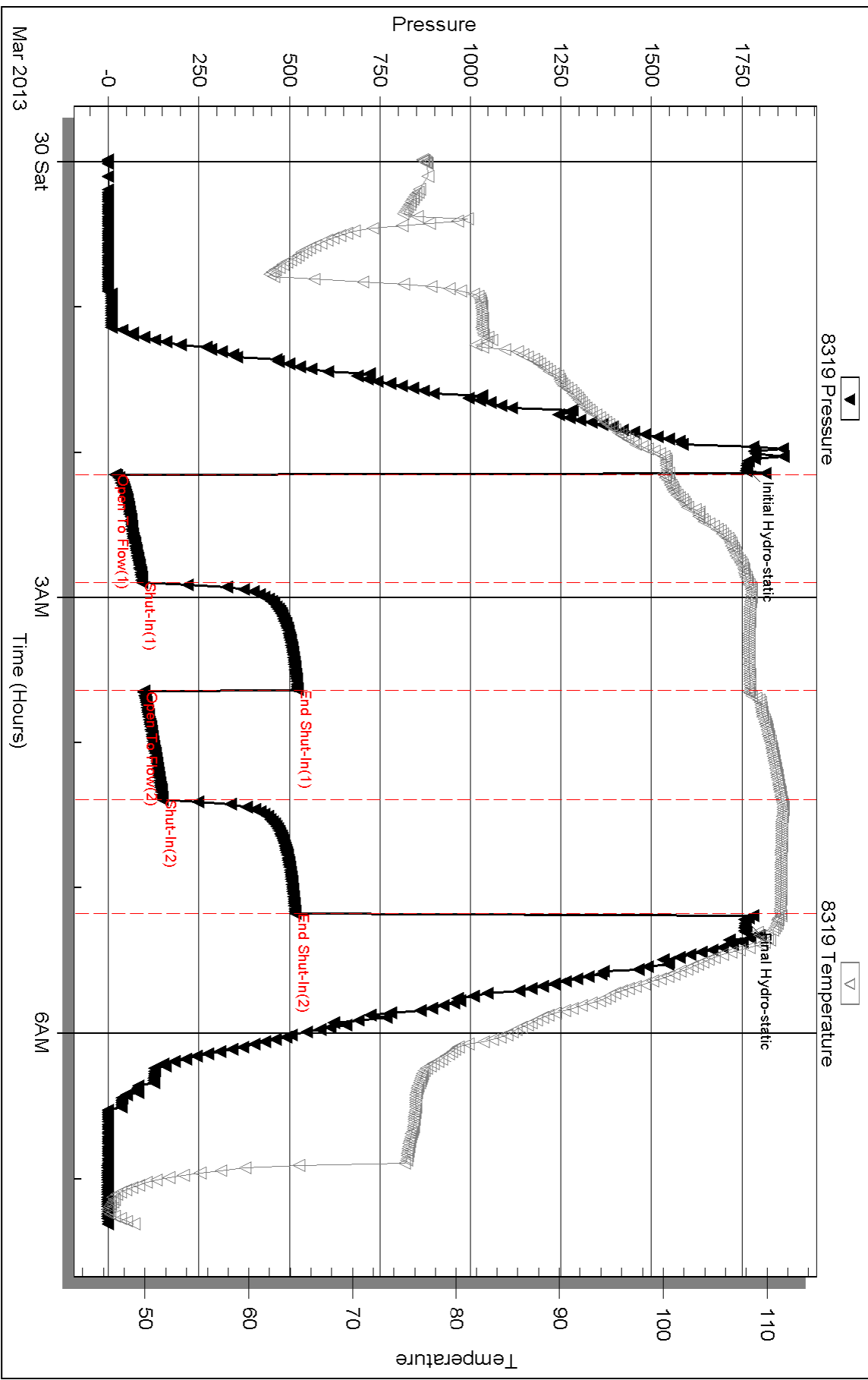
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



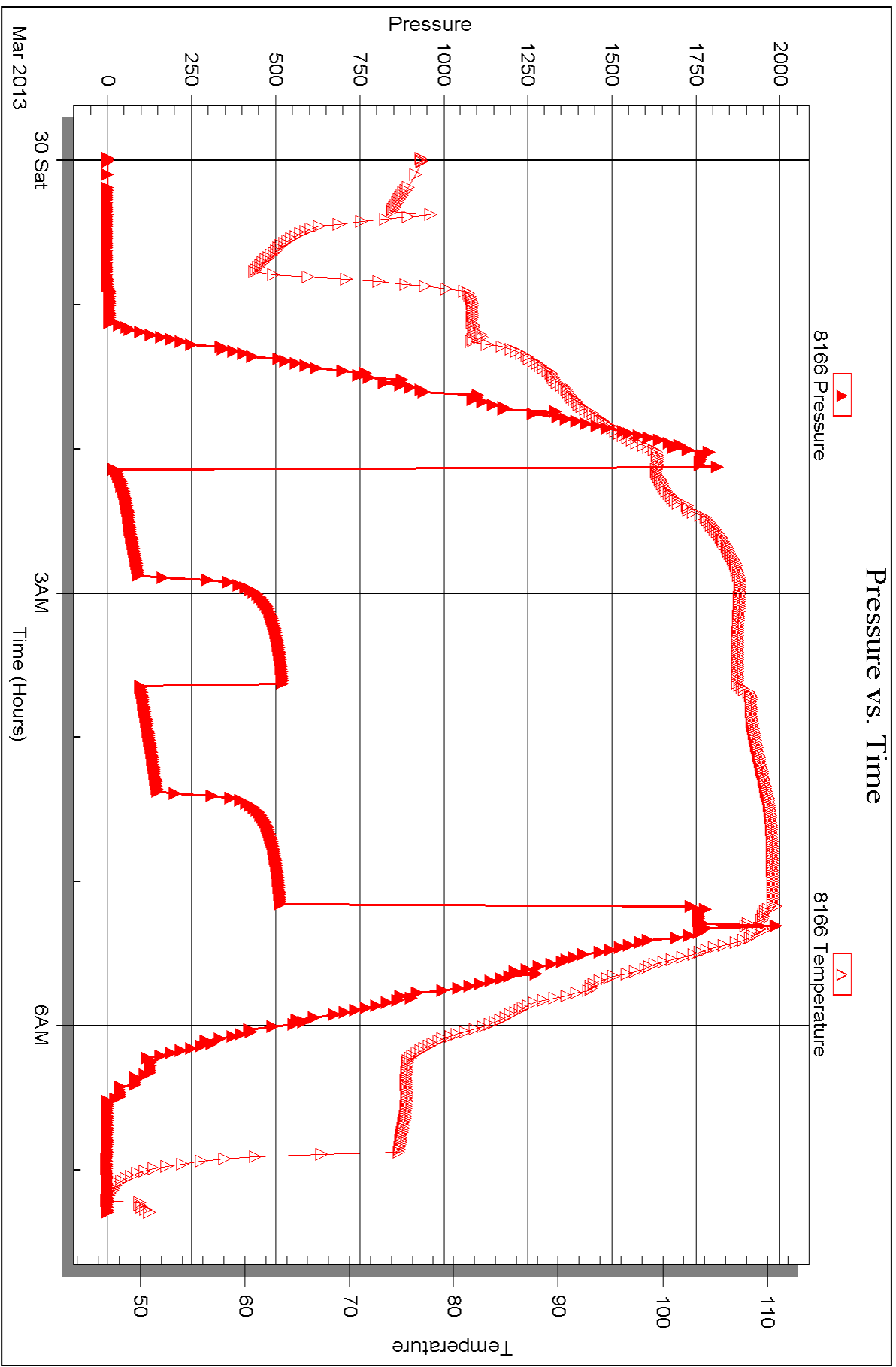
Serial #: 8166

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)**

Reference Elevations: 2396.00 ft (KB)

Total Depth: 4150.00 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 @ Run Depth: 29.71 psig @ 4006.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.31

End Date:

2013.04.01

Last Calib.: 2013.04.01

Start Time: 21:55:05

End Time:

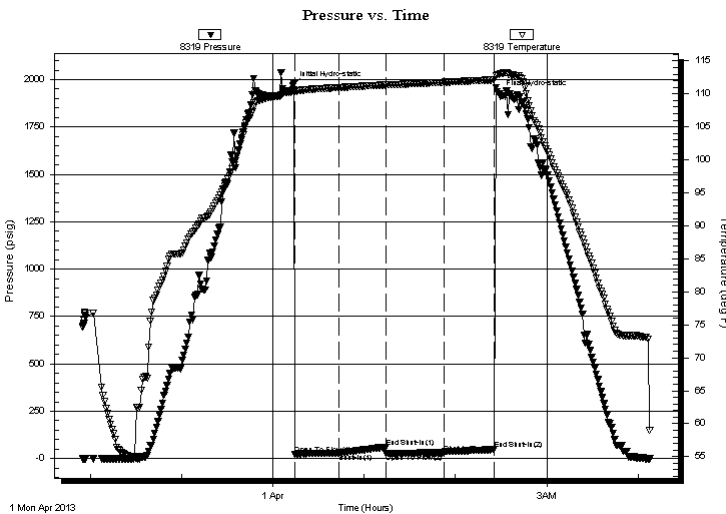
04:07:59

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 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)

\* 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)**

Reference Elevations: 2396.00 ft (KB)

Total Depth: 4150.00 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 @ Run Depth: psig @ 4006.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.31

End Date:

2013.04.01

Last Calib.:

2013.04.01

Start Time: 21:55:05

End Time:

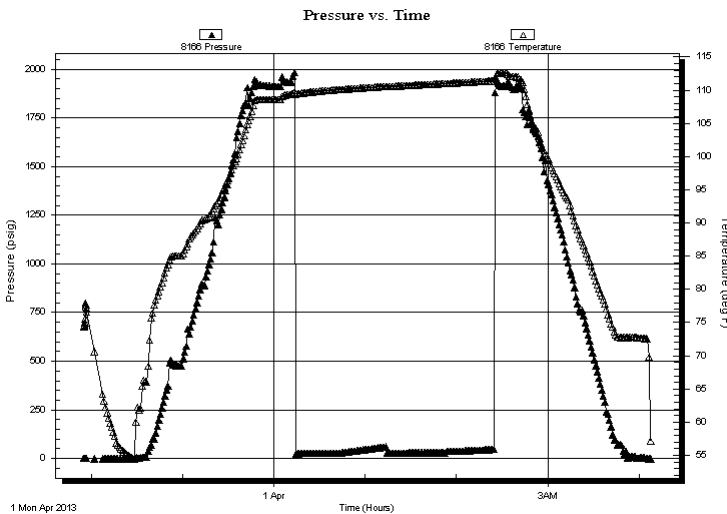
04:07:29

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF-1" blow  
IS- No blow  
FF- No blow  
FS- No blow

## PRESSURE SUMMARY



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

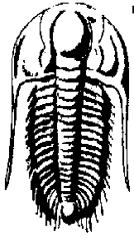
## Recovery

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

## Gas Rates

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

\* 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)**

Reference Elevations: 2396.00 ft (KB)

Total Depth: 4150.00 ft (KB) (TVD)

2389.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6753 Below (Straddle)**

Press @ RunDepth: psig @ 4015.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.03.31 End Date: 2013.04.01

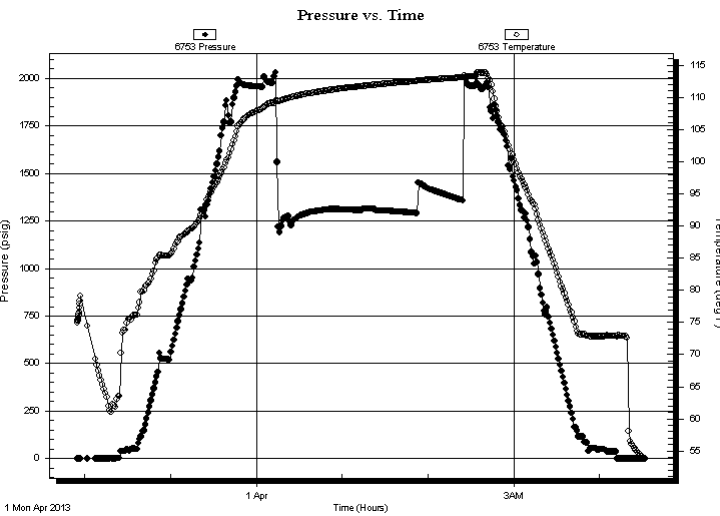
Last Calib.: 2013.04.01

Start Time: 21:55:05 End Time: 04:31:59

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-1" blow  
IS- No blow  
FF- No blow  
FS- No blow



### PRESSURE SUMMARY

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

### Recovery

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

### 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.

**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
			<u>Total Volume:</u>	Tool Chased	0.00 ft
				String Weight: Initial	65000.00 lb
Drill Pipe Above KB:	10.00 ft			Final	65000.00 lb
Depth to Top Packer:	3923.00 ft				
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

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

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 87.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: inches

## 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

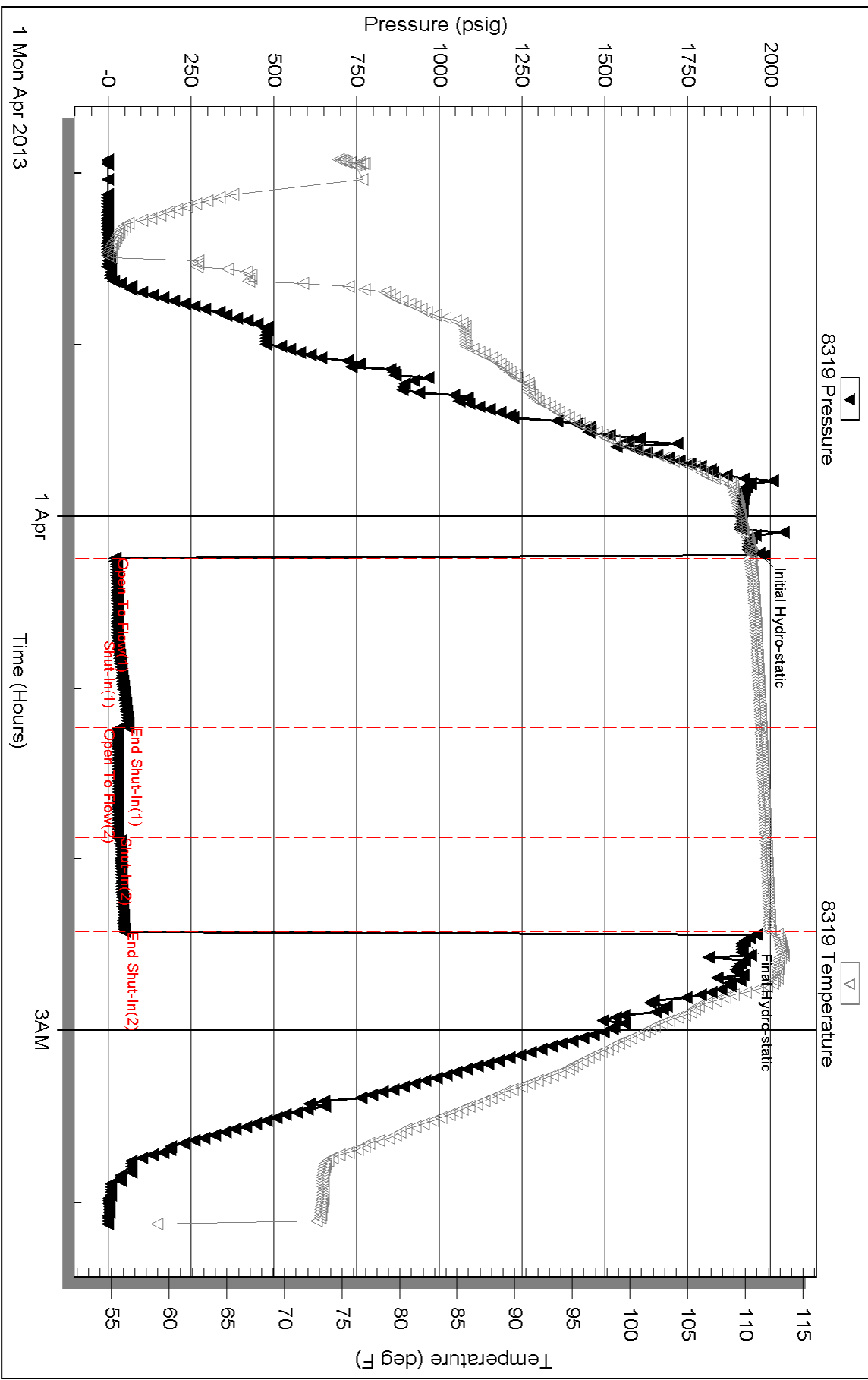
Inside

Dow nung-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 52044

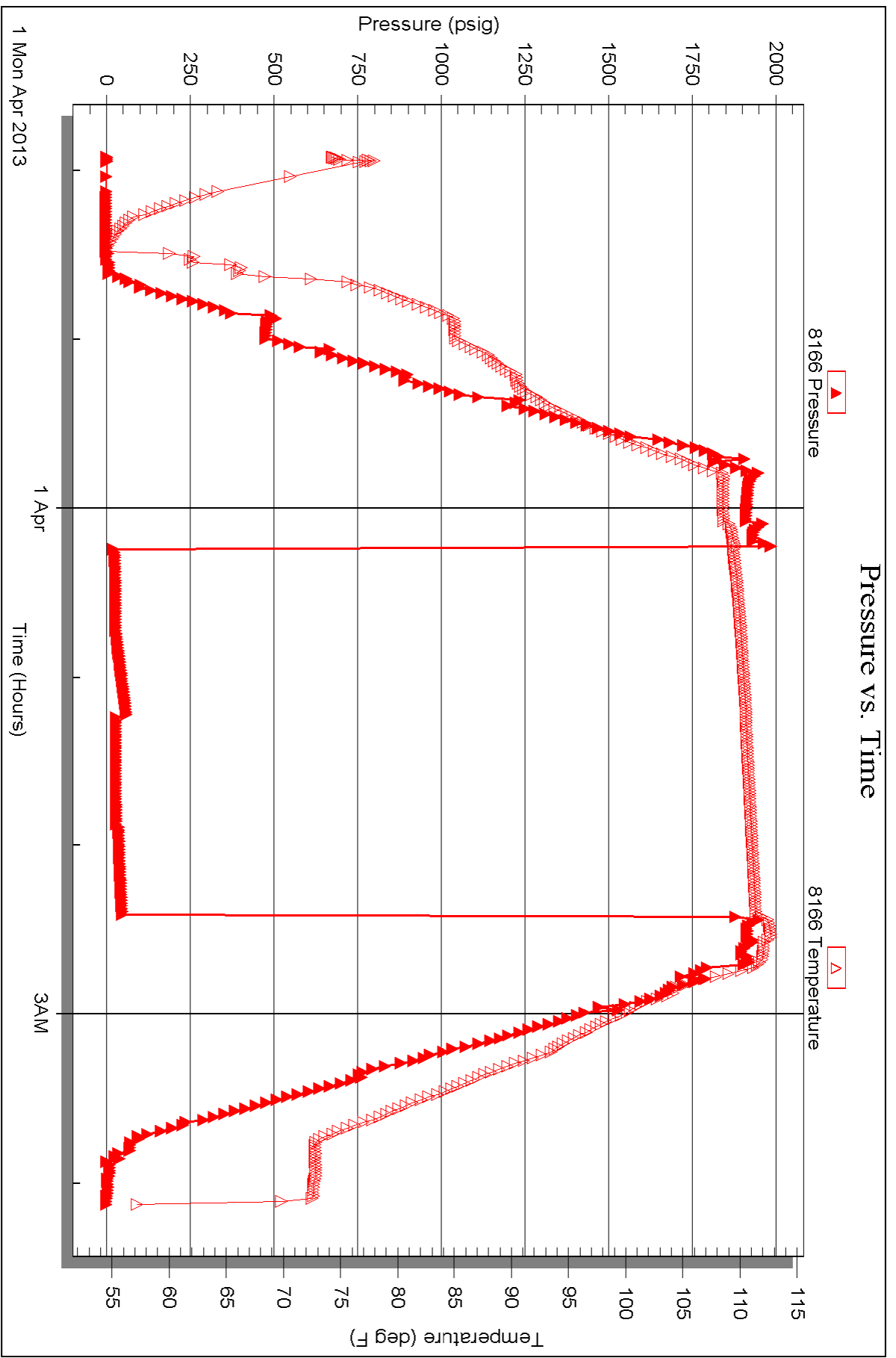
Printed: 2013.04.04 @ 10:36:35

Serial #: 8166

Outside Dow nting-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 52044

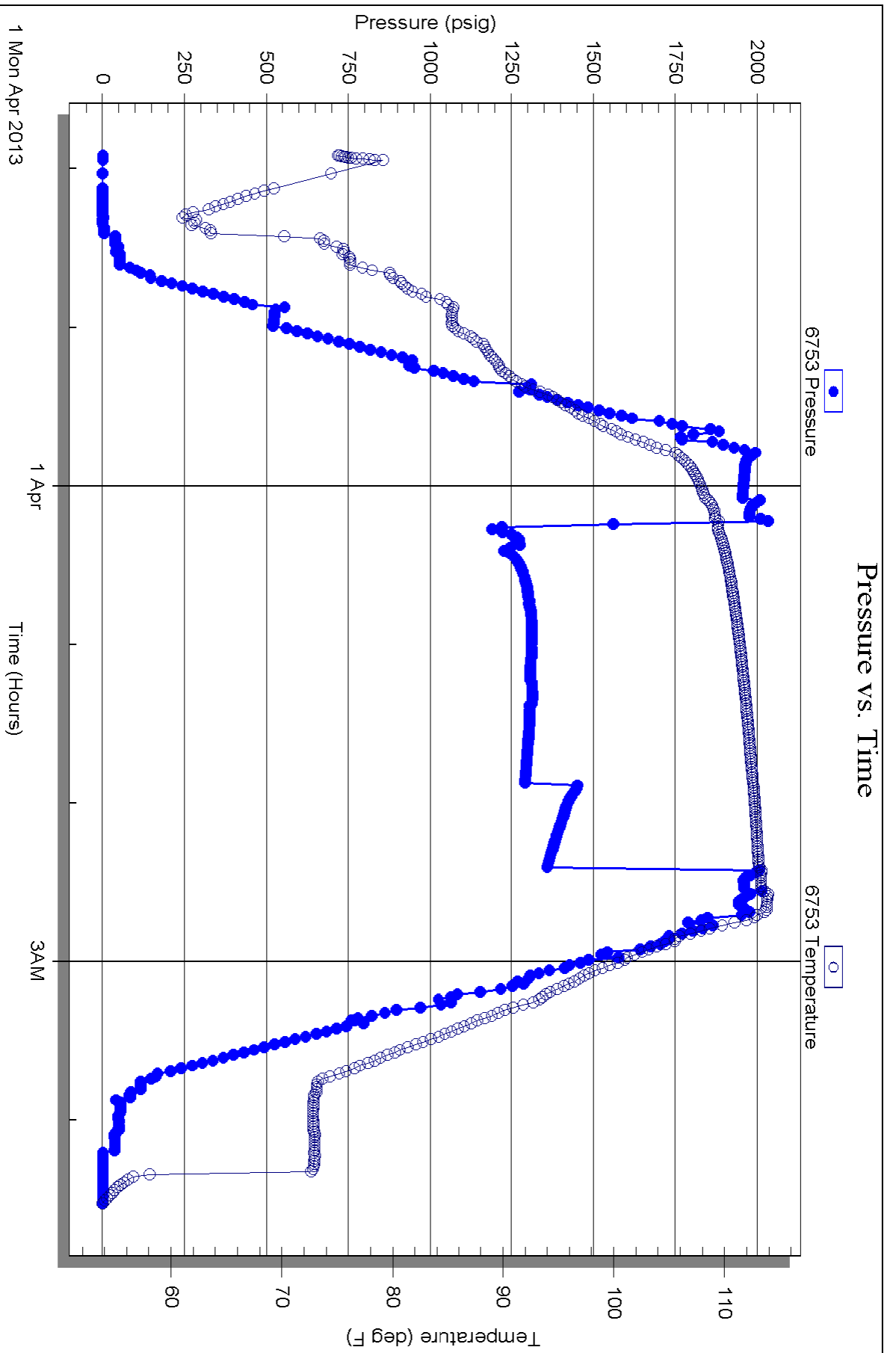
Printed: 2013.04.04 @ 10:36:35

Serial #: 6753

Below (Stratton)ng-Nelson Oil Co Inc.

Tammy B #1

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 52044

Printed: 2013.04.04 @ 10:36:36



# 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 ~~2396~~ 2389 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  
FSF - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>245</u>	<u>MCW</u>			<u>75</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 Total 245 BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW .16 @ 65 °F Chlorides 53000 ppm

(A) Initial Hydrostatic 1,752  Test 1150 T-On Location 5:00  
 (B) First Initial Flow 18  Jars \_\_\_\_\_ T-Started 6:00  
 (C) First Final Flow 85  Safety Joint \_\_\_\_\_ T-Open 9:07  
 (D) Initial Shut-In 605  Circ Sub \_\_\_\_\_ T-Pulled 12:07  
 (E) Second Initial Flow 86  Hourly Standby \_\_\_\_\_ T-Out 14:00  
 (F) Second Final Flow 133  Mileage 76 RT 117.80 Comments \_\_\_\_\_  
 (G) Final Shut-In 597  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1,709  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_

Initial Open 45  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 45  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1267.80  
 Sub Total \_\_\_\_\_  
 Total 1267.80  
 MP/DST Disc't \_\_\_\_\_

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 Powling-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 28 min  
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>				
_____	_____				
_____	_____				

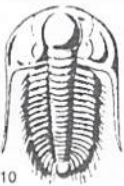
Rec Total 285 BHT 111 Gravity \_\_\_\_\_ API RW .14 @ 46 °F Chlorides 85,000 ppm

(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 76rT 117.80 Comments \_\_\_\_\_  
 (G) Final Shut-In 515  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1,758  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_

Initial Open 45  Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 45  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Final Flow 45  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 45  Day Standby \_\_\_\_\_ Total 1267.80  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1267.80

Approved By \_\_\_\_\_ Our Representative BWA Dan

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

4/10

Well Name & No. Tommy B" #1 Test No. 3 Date 3/31/13  
 Company Penning - 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  
ISF - No blow  
FF - No blow  
FSF - 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 \_\_\_\_\_  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_  
 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 BWD

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.



# Marc Downing

Consulting Petroleum Geologist

1411 Washington Circle

Hays, Ks 67601

Phone: 620-428-1356 (cell) 785-621-2286

## GEOLOGIC REPORT LOG

COMPANY Downing-Nelson Oil Co., Inc.

WELL Tammy B #1

FIELD WILDCAT

LOCATION 575' ESL & 830' FWL

SEC. 26 TWP. 11S RGE. 23W

COUNTY TREBO

STATE KANSAS

### PRODUCTION

ELEVATION KB 2387'

DF

GL 2379'

Drilling Measured From: KB

Samples Saved From 3600 To: TD

Drilling Time From 3200 To: TD

Samples Examined From 3600 To: TD

Geological Supervision From 3600 To Total Depth

Wellsite Geologist Ron Nelson

Electrical Surveys MAGSAS Density-Neutron

micro, sonic, dual induction

OPERATOR DNOCI

CONTRACTOR Discovery Drilling Rights

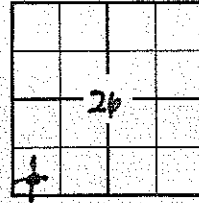
COMM: 3-25-13 COMP: 3-31-13

### CASING RECORD

SURF: 8 3/8" @ 221' PROD: NONE

TOTAL DEPTH DRILLERS: 4150'

TOTAL DEPTH LOG: 4150'



### FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
TOP ANHYDRITE	1842	1842	+545	-7
BASE ANHYDRITE	1886	1886	+501	-9
TD PERA	3395	3394	-1007	-17
HEEBNER	3614	3613	-1226	-20
TORONTO	3638	3634	-1247	-19
LKC	3649	3647	-1260	-20
BKC	3896	3880	-1493	-21
MARMATON	3989	3988	-1601	-19
CHELDREE SHALE	4039	4039	-1652	-30
CHELDREE SAND	4054	4054	-1667	-30
ARBUCKLE	4085	4086	-1709	-27

REFERENCE WELL FOR STRUCTURE DNOCI'S TAMMY A #1 @ 2370' FWL  
2225' FWL 26-11-83

### DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IHP-FHP	RECOVERY

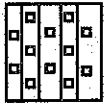
REMARKS AND RECOMMENDATIONS THIS TEST WAS A SEISMIC BUST & MUCH TOO LOW TO PRODUCE.

*Ron Nelson*

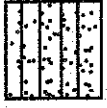
# LEGEND



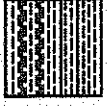
Anhydrite



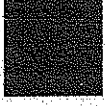
Salt



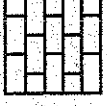
Sandstone



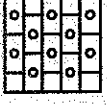
Shale



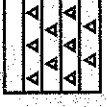
Carb sh



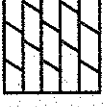
Limestone



Ool.Lime



Chert



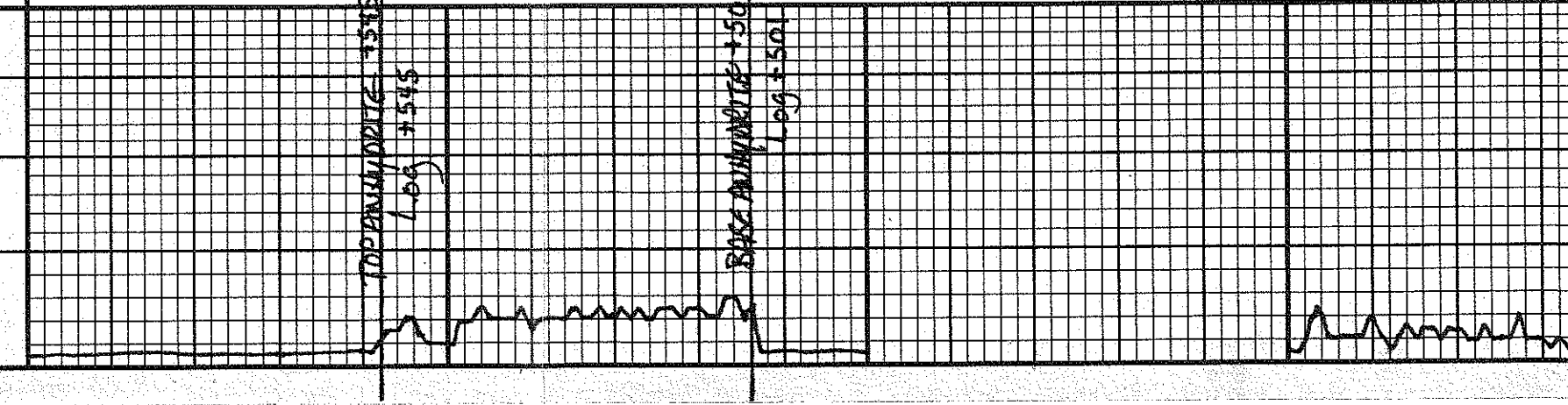
Dolomite

DRILLING TIME IN MINUTES  
PER FOOT

Rate of Penetration Decreases



5" 10" 15"



DEPTH

1500

50

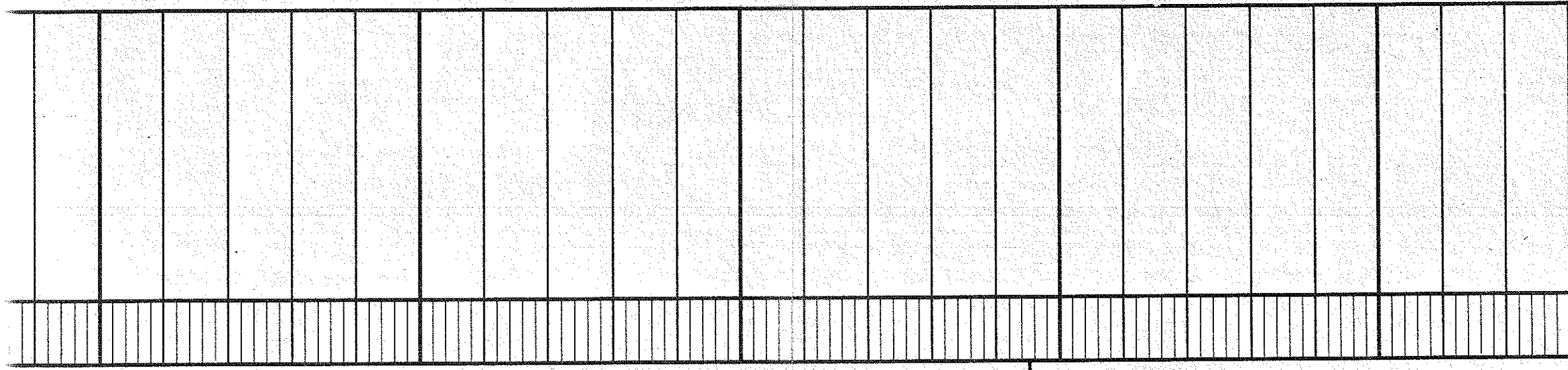
1900

3200

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS



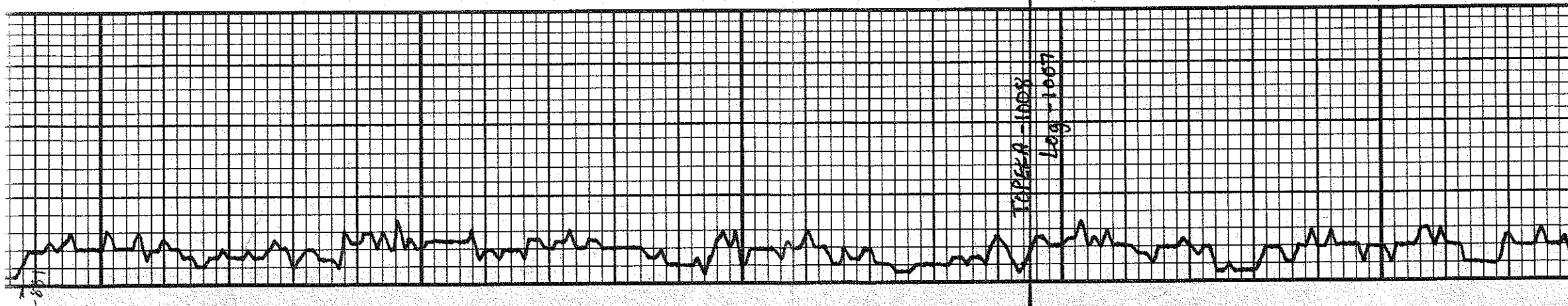
50

3300

50

3400

50



TAPER-A-INDEX  
Log-1007



MARIETTA TRN - 11607  
LOG - 1667

4000

CHEEROKEE SHALE  
LOG - 1652

652

CHEEROKEE SAND - 1667  
LOG - 1667

50

ARBUCKLE - 1708  
LOG - 1709

4100

50

4200

SHS on gray Brn

l. ch - tan to light brown  
p. 100 N.S. w/ imp. s  
mud

sh. w. tan sm brn. s. dol. in  
s. w/ h. p. p. p. poss. bl. s. l. ad  
w. s. s. s.

oo. oo. s. & m. s. s. s. w/ ab. ad  
ch. ad. s. s. s. s. s. s.

ABON. VANS mic. s. s. s. s. s.  
w/ ch. s. s. s. s. s.

frag. s. s. s. s. s. s. s. s. s.  
w/ ch. s.

SHS BUC. s. s. s. s. s. s. s. s. s.  
974

fl. s. s. s. s. s. s. s. s. s. s. s. s.  
cl. s. s. s. s. s. s. s. s. s. s. s. s.  
o. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ ch. s. s. s. s. s. s. s. s. s. s.

ABON. VANS mic. s. s. s. s. s. s. s. s. s.  
974

ch. tan. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ m. s. s. s. s. s. s. s. s. s. s. s. s.  
SH BUC. s. s. s. s. s. s. s. s. s. s. s. s.

970 g. w.

DOLO. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ m. s. s. s. s. s. s. s. s. s. s. s. s.  
int. s. s. s. s. s. s. s. s. s. s. s. s.

DOLO. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ m. s. s. s. s. s. s. s. s. s. s. s. s.

fl. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ ch. s. s. s. s. s. s. s. s. s. s. s. s.

DOLO. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ m. s. s. s. s. s. s. s. s. s. s. s. s.

sh. s. s. s. s. s. s. s. s. s. s. s. s.  
w/ ch. s.

San Nelson

	<p>DEPTH</p>	<p>LITHOLOGY</p>	<p>SAMPLE DESCRIPTIONS</p>	<p>OIL SHOWS</p>	<p>REMARKS</p>
<p>CONTRACTOR <u>Discovery Drilling Rig # 3</u> LOCATION <u>575' E. S. 4 830' Foot</u></p> <p>LEASE <u>Tenny B. #1</u> IP <u>0.4A</u> SEC <u>26</u> TWP <u>11S</u> RING <u>23W</u></p> <p>ELEVATION <u>2387' KB</u> RTD <u>4450'</u> COUNTY <u>TRICK</u> STATE <u>KANSAS</u></p>					