



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: _____



1080967

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
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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
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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> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Rita 1-18
Doc ID	1080967

Tops

Name	Top	Datum
Top Anhydrite	1450'	+690
Base Anhydrite	1490'	+650
Topeka	3190'	-1050
Heebner	3430'	-1290
Toronto	3447'	-1307
LKC	3476'	-1336
BKC	3700'	-1560
Arbuckle	3759'	-1619

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. 384

Date	Sec.	Twp.	Range	County	State	On Location	Finish
5-4-12	18	13	18	ELLIS	KANSAS		3:00 PM
Lease <i>RITA</i>	Well No. <i>1-18</i>		Location <i>HAYS BYPASS 1/2 N - W - INTD</i>				
Contractor <i>DISCOVERY DEALING #3</i>				Owner <i>DOWNING & NELSON</i>			
Type Job <i>SURFACE</i>				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.			
Hole Size <i>12 1/4</i>	T.D. <i>222'</i>		Charge To <i>DOWNING & NELSON</i>				
Csg. <i>8 7/8'</i>	Depth <i>221</i>		Street <i>PO BOX 1019</i>				
Tbg. Size	Depth		City <i>HAYS</i> State <i>KANSAS, 67601</i>				
Tool	Depth		The above was done to satisfaction and supervision of owner agent or contractor.				
Cement Left in Csg.	Shoe Joint <i>15'</i>		Cement Amount Ordered <i>150 com. 3% gel - 2% gel</i>				
Meas Line	Displace <i>13 BLS</i>						
EQUIPMENT							
Pumptrk <i>#15</i> No.	Cement Helper <i>PAUL</i>	Common <i>150</i>					
Bulktrk <i>#10</i> No.	Driver <i>BETAN</i>	Poz. Mix					
Bulktrk <i>PIU</i> No.	Driver <i>CESCO</i>	Gel. <i>3</i>					
JOB SERVICES & REMARKS				Calcium <i>5</i>			
Remarks:				Hulls			
Rat Hole				Salt			
Mouse Hole				Flowseal			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
D/V or Port Collar				CFL-117 or CD110 CAF 38			
				Sand			
				Handling <i>158</i>			
				Mileage			
FLOAT EQUIPMENT							
<i>CEMENT DID NOT CIRCULATE!</i>				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
<i>THANK YOU!</i>				Latch Down			
				Pumptrk Charge <i>Surface</i>			
				Mileage <i>3 (25 min)</i>			
				Tax			
				Discount			
				Total Charge			
X Signature <i>Don Holler</i>							



DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Rita #1-18

18-13s-18w Ellis,KS

Start Date: 2012.05.08 @ 10:58:30

End Date: 2012.05.08 @ 16:33:30

Job Ticket #: 47227 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.05.15 @ 08:59:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47227

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 10:58:30

GENERAL INFORMATION:

Formation: **LKC "C&D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:35:20

Time Test Ended: 16:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3488.00 ft (KB) To 3536.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3536.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press @RunDepth: 32.04 psig @ 3527.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.08

End Date: 2012.05.08

Last Calib.: 2012.05.08

Start Time: 11:08:30

End Time: 16:33:30

Time On Btm: 2012.05.08 @ 12:35:00

Time Off Btm: 2012.05.08 @ 15:09:30

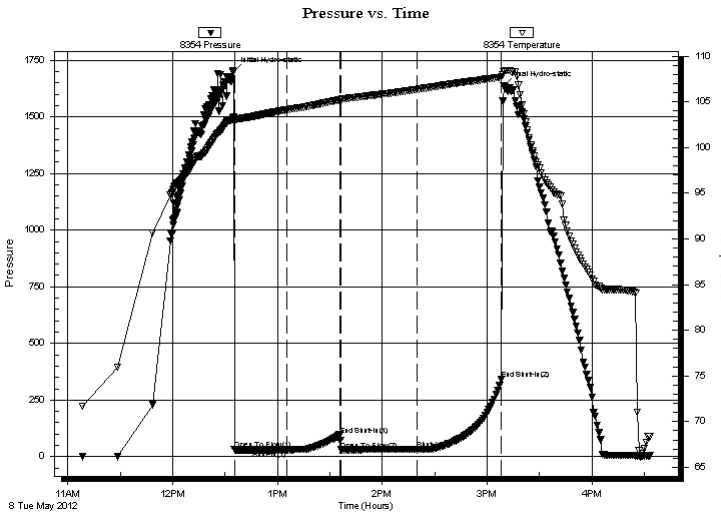
TEST COMMENT: IF-Weak surface blow @ 18 minutes. Built to 1&1/2 inches.

ISI-No Return

FF-Weak building blow . Built to 8 inches.

FSI-No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1700.70	103.32	Initial Hydro-static
1	33.59	102.91	Open To Flow (1)
31	29.22	104.15	Shut-In(1)
61	96.40	105.24	End Shut-In(1)
62	29.34	105.27	Open To Flow (2)
105	32.04	106.38	Shut-In(2)
153	340.39	107.72	End Shut-In(2)
155	1638.52	108.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	15%Oil/85%Mud	0.42
0.00	93' G.I.P.	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47227

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 10:58:30

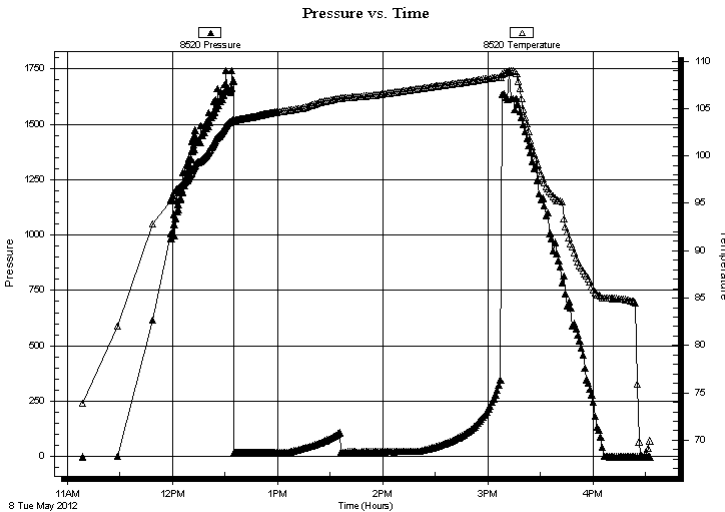
GENERAL INFORMATION:

Formation:	LKC "C&D"				
Deviated:	No Whipstock:	ft (KB)		Test Type:	Conventional Bottom Hole (Initial)
Time Tool Opened:	12:35:20			Tester:	Dustin Rash
Time Test Ended:	16:33:30			Unit No:	38
Interval:	3488.00 ft (KB) To 3536.00 ft (KB) (TVD)			Reference Elevations:	2139.00 ft (KB) 2131.00 ft (CF)
Total Depth:	3536.00 ft (KB) (TVD)			KB to GR/CF:	8.00 ft
Hole Diameter:	7.88 inches	Hole Condition: Fair			

Serial #: 8520	Outside				
Press @RunDepth:	psig @	3527.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2012.05.08	End Date:	2012.05.08	Last Calib.:	2012.05.08
Start Time:	11:08:45	End Time:	16:32:45	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: IF-Weak surface blow @ 18 minutes. Built to 1 1/2 inches.
 IS-No Return
 FF-Weak building blow . Built to 8 inches.
 FS-No Return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
30.00	15%Oil/85%Mud	0.42
0.00	93' G.I.P.	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.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47227

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 10:58:30

Tool Information

Drill Pipe:	Length: 3486.00 ft	Diameter: 3.80 inches	Volume: 48.90 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: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 20000.00 lb
			<u>Total Volume: 48.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3488.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	48.00 ft			
Tool Length:	68.00 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			3469.00	
Shut In Tool	5.00			3474.00	
Hydraulic tool	5.00			3479.00	
Packer	5.00			3484.00	20.00 Bottom Of Top Packer
Packer	4.00			3488.00	
Stubb	1.00			3489.00	
Perforations	5.00			3494.00	
Change Over Sub	1.00			3495.00	
Drill Pipe	31.00			3526.00	
Change Over Sub	1.00			3527.00	
Recorder	0.00	8354	Inside	3527.00	
Recorder	0.00	8520	Outside	3527.00	
Perforations	6.00			3533.00	
Bullnose	3.00			3536.00	48.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47227

DST#: 1

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 10:58:30

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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	15%Oil/85%Mud	0.421
0.00	93' G.I.P.	0.000

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

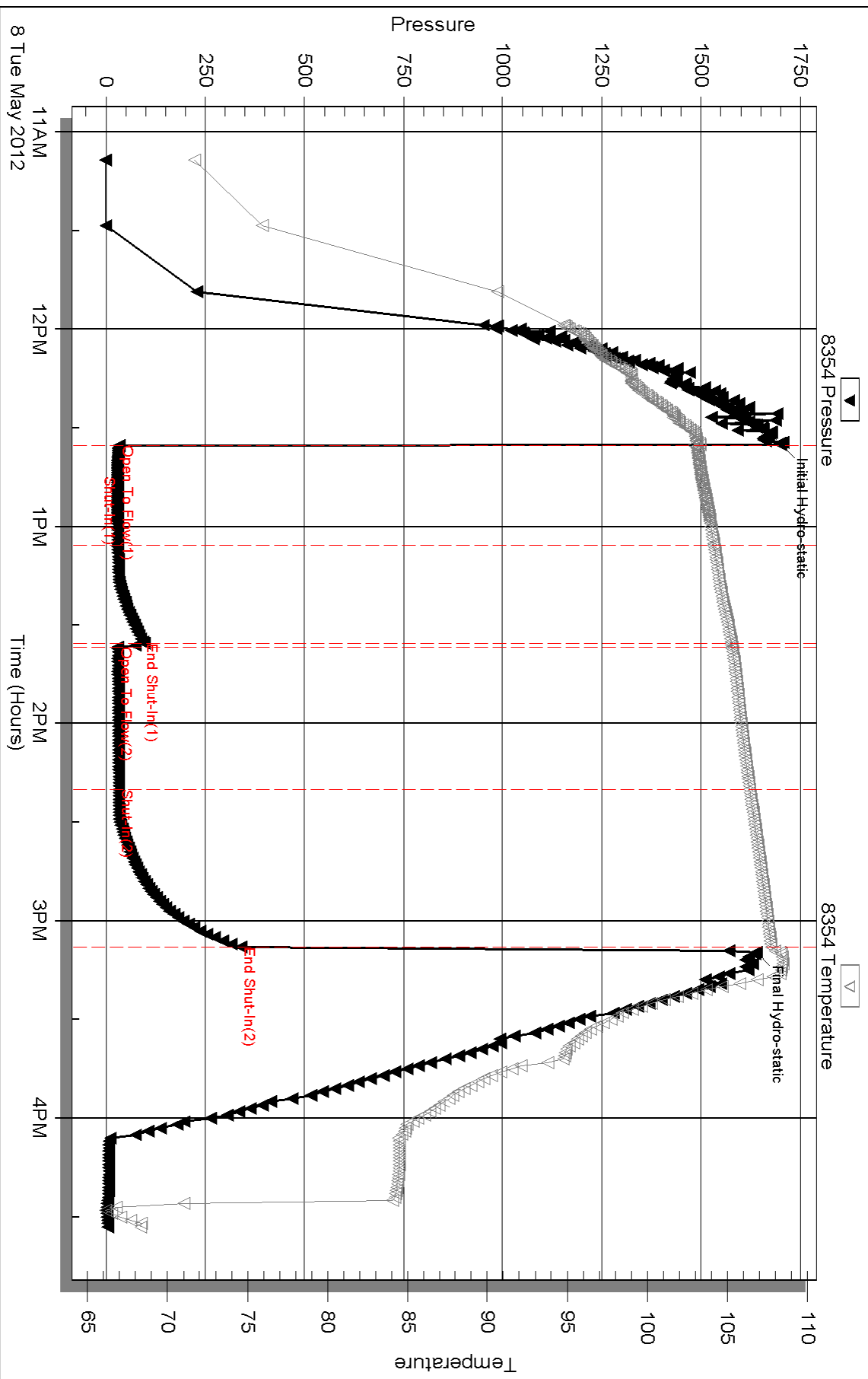
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

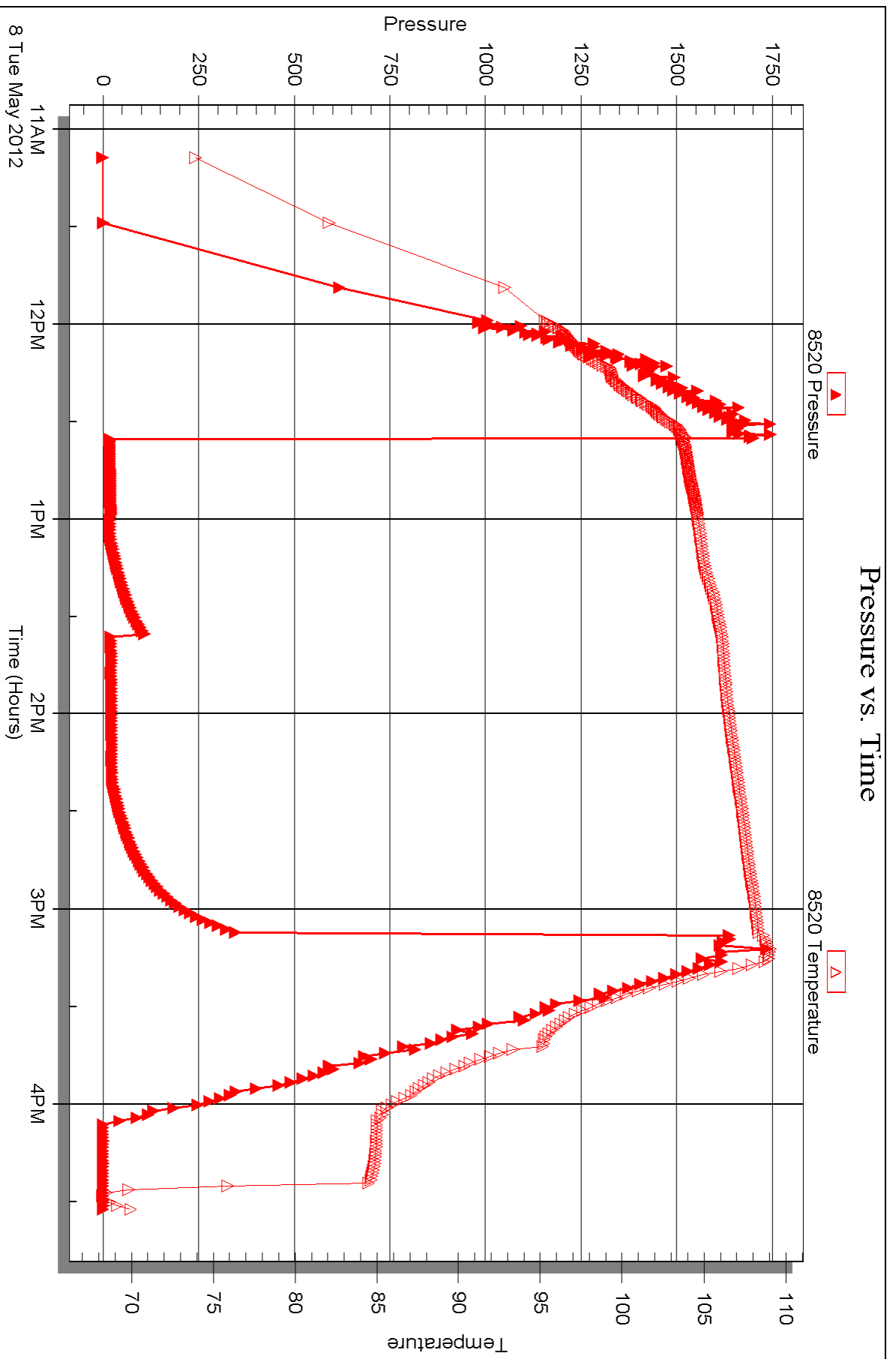


Serial #: 8520

Outside Dow nging-Nelson Oil Co., Inc.

Rita #1-18

DST Test Number: 1





DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Rita #1-18

18-13s-18w Ellis,KS

Start Date: 2012.05.08 @ 23:06:30

End Date: 2012.05.09 @ 04:07:30

Job Ticket #: 47228 DST #: 2

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

Printed: 2012.05.15 @ 08:58:19



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47228

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 23:06:30

GENERAL INFORMATION:

Formation: **LKC "E&F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:28:50

Time Test Ended: 04:07:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3532.00 ft (KB) To 3559.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3559.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press @RunDepth: 27.43 psig @ 3534.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.08

End Date:

2012.05.09

Last Calib.:

2012.05.09

Start Time: 23:16:30

End Time:

04:07:30

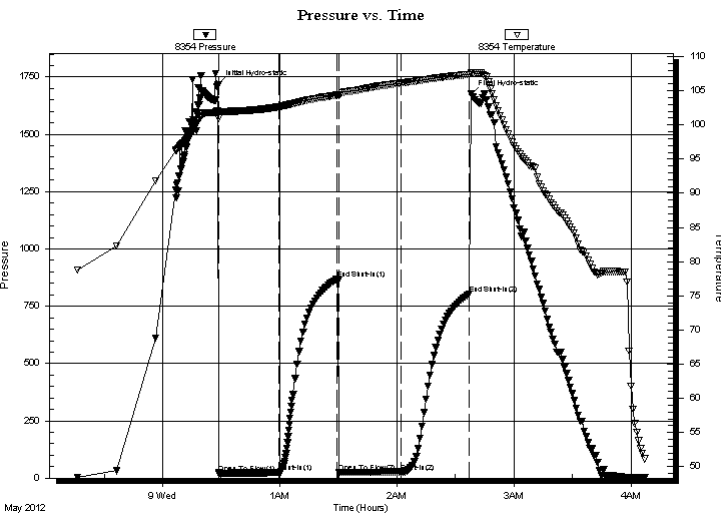
Time On Btm:

2012.05.09 @ 00:28:30

Time Off Btm:

2012.05.09 @ 02:38:00

TEST COMMENT: IF-Weak surface blow . Died @ 14 minutes.
IS- No Return.
FF-Weak surface blow . Died @ 4 minutes.
FS- No Return.



PRESSURE SUMMARY

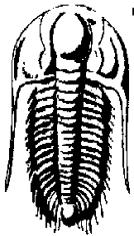
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1717.37	102.10	Initial Hydro-static
1	21.84	101.64	Open To Flow (1)
32	24.23	102.67	Shut-In(1)
61	868.61	104.37	End Shut-In(1)
62	25.11	104.33	Open To Flow (2)
94	27.43	106.12	Shut-In(2)
129	802.52	107.38	End Shut-In(2)
130	1674.84	107.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	100%Mud w/few oil specs	0.21

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47228

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 23:06:30

GENERAL INFORMATION:

Formation: **LKC "E&F"**

Deviated: **No** Whipstock: ft (KB)

Time Tool Opened: 00:28:50

Time Test Ended: 04:07:30

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Dustin Rash**

Unit No: **38**

Interval: 3532.00 ft (KB) To 3559.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3559.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8520

Outside

Press @RunDepth: psig @ 3534.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.08

End Date:

2012.05.09

Last Calib.:

2012.05.09

Start Time: 23:16:45

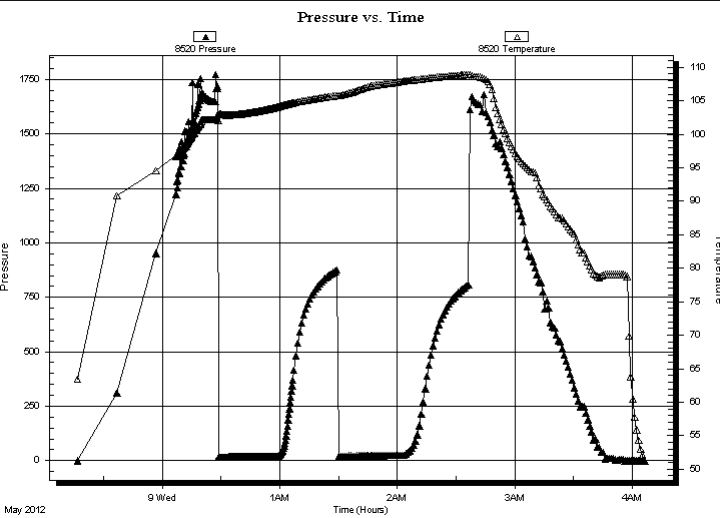
End Time:

04:06:45

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Weak surface blow . Died @ 14 minutes.
 IS-No Return.
 FF-Weak surface blow . Died @ 4 minutes.
 FS-No Return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	100%Mud w /few oil specs	0.21

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.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47228

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 23:06:30

Tool Information

Drill Pipe:	Length: 3519.00 ft	Diameter: 3.80 inches	Volume: 49.36 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 49.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3532.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	27.00 ft			
Tool Length:	47.00 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			3513.00	
Shut In Tool	5.00			3518.00	
Hydraulic tool	5.00			3523.00	
Packer	5.00			3528.00	20.00 Bottom Of Top Packer
Packer	4.00			3532.00	
Stubb	1.00			3533.00	
Perforations	1.00			3534.00	
Recorder	0.00	8354	Inside	3534.00	
Recorder	0.00	8520	Outside	3534.00	
Perforations	22.00			3556.00	
Bullnose	3.00			3559.00	27.00 Bottom Packers & Anchor

Total Tool Length: 47.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47228

DST#: 2

ATTN: Marc Dow ning

Test Start: 2012.05.08 @ 23:06:30

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: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
15.00	100%Mud w /few oil specs	0.210

Total Length: 15.00 ft Total Volume: 0.210 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

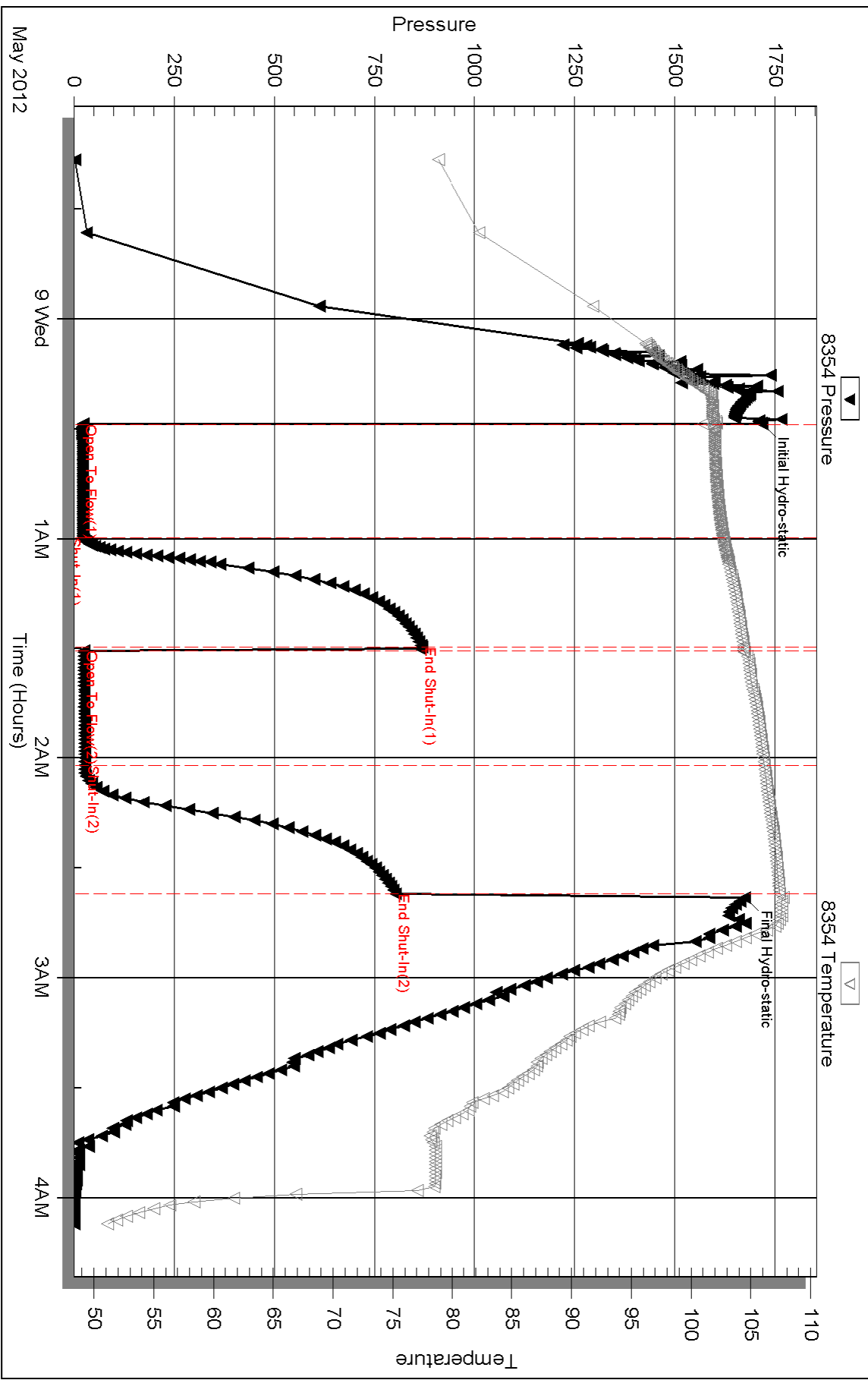
Serial #:

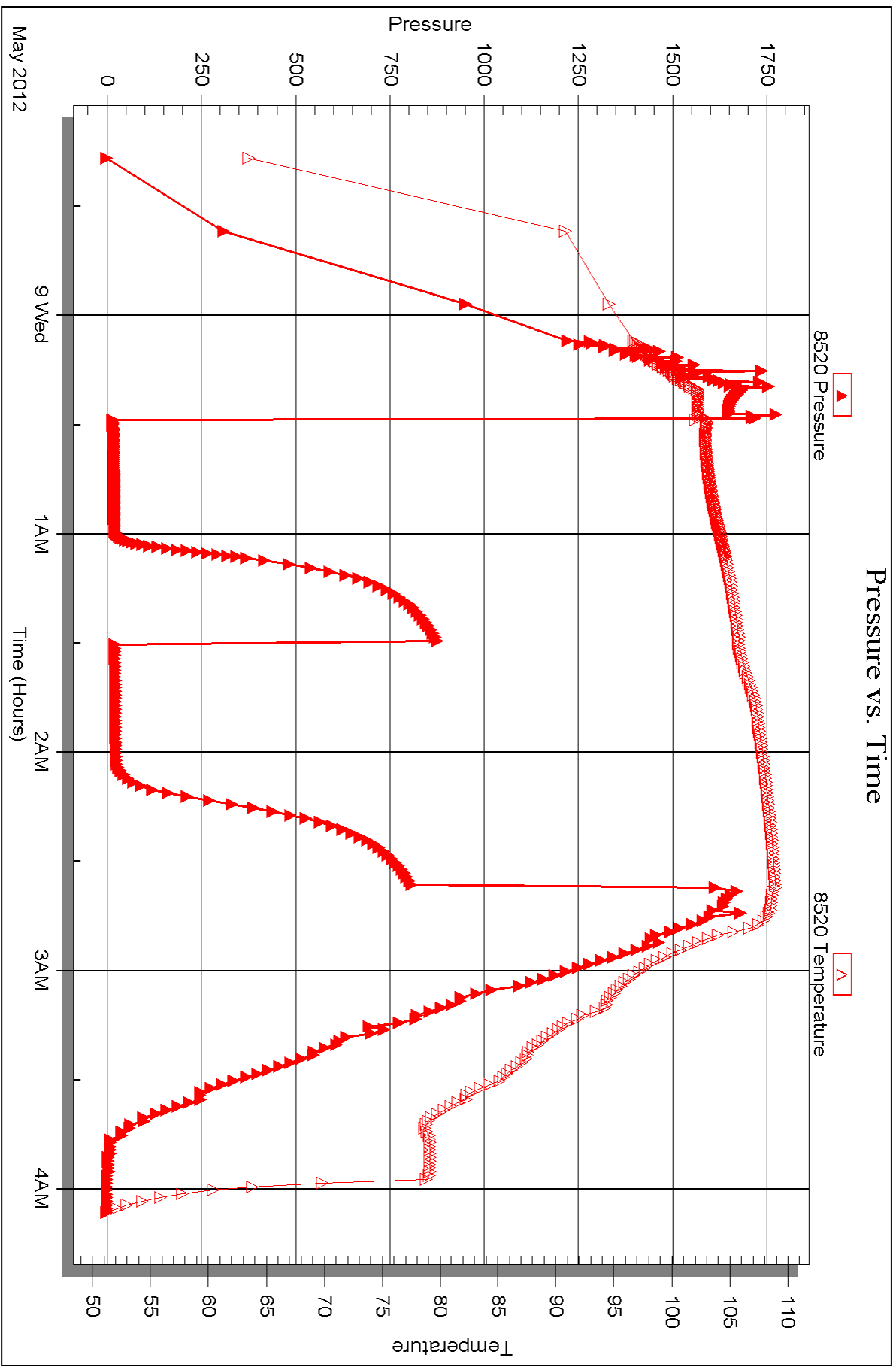
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Rita #1-18

18-13s-18w Ellis,KS

Start Date: 2012.05.09 @ 11:17:15

End Date: 2012.05.09 @ 17:50:15

Job Ticket #: 47229 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.05.15 @ 08:57:11



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47229

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.05.09 @ 11:17:15

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:11:45

Time Test Ended: 17:50:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3563.00 ft (KB) To 3595.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3595.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press @RunDepth: 120.86 psig @ 3565.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.09

End Date: 2012.05.09

Last Calib.: 2012.05.09

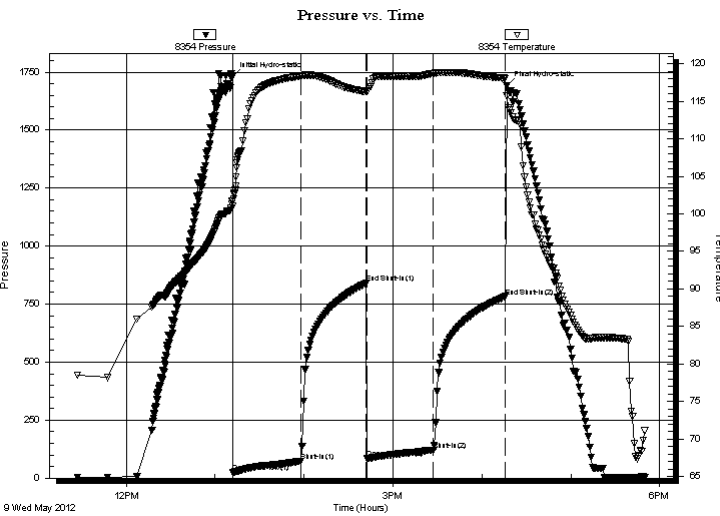
Start Time: 11:27:15

End Time: 17:50:15

Time On Btm: 2012.05.09 @ 13:11:35

Time Off Btm: 2012.05.09 @ 16:16:45

TEST COMMENT: IF-Weak building blow . BOB in 26 minutes.
 IS-No Return.
 FF-Very weak building blow . BOB in 43 minutes 30 seconds.
 FS-No Return.



PRESSURE SUMMARY

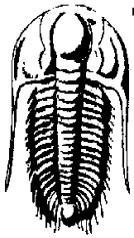
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1730.04	101.74	Initial Hydro-static
1	24.08	100.98	Open To Flow (1)
47	73.19	118.34	Shut-In(1)
91	839.34	116.26	End Shut-In(1)
92	83.67	116.35	Open To Flow (2)
136	120.86	118.68	Shut-In(2)
185	782.61	118.03	End Shut-In(2)
186	1692.46	115.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
290.00	90%Water/10%Mud	4.07

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47229

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.05.09 @ 11:17:15

GENERAL INFORMATION:

Formation: **LKC "G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:11:45

Time Test Ended: 17:50:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3563.00 ft (KB) To 3595.00 ft (KB) (TVD)

Total Depth: 3595.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2139.00 ft (KB)

2131.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8520 Outside

Press @ Run Depth: psig @ 3565.00 ft (KB)

Start Date: 2012.05.09 End Date: 2012.05.09

Start Time: 11:27:30 End Time: 17:50:00

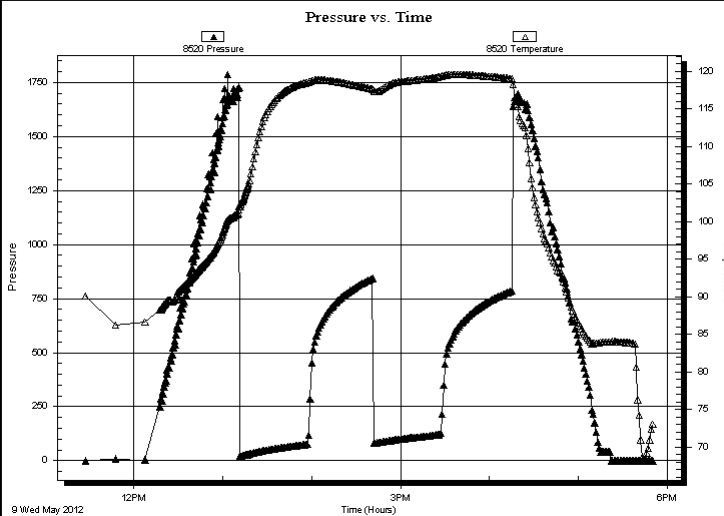
Capacity: 8000.00 psig

Last Calib.: 2012.05.09

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Weak building blow . BOB in 26 minutes.
IS-No Return.
FF-Very weak building blow . BOB in 43 minutes 30 seconds.
FS-No Return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
290.00	90%Water/10%Mud	4.07

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.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47229

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.05.09 @ 11:17:15

Tool Information

Drill Pipe:	Length: 3550.00 ft	Diameter: 3.80 inches	Volume: 49.80 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: 27000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 49.80 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3563.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	32.00 ft			
Tool Length:	52.00 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			3544.00	
Shut In Tool	5.00			3549.00	
Hydraulic tool	5.00			3554.00	
Packer	5.00			3559.00	20.00 Bottom Of Top Packer
Packer	4.00			3563.00	
Stubb	1.00			3564.00	
Perforations	1.00			3565.00	
Recorder	0.00	8354	Inside	3565.00	
Recorder	0.00	8520	Outside	3565.00	
Perforations	27.00			3592.00	
Bullnose	3.00			3595.00	32.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47229

DST#: 3

ATTN: Marc Dow ning

Test Start: 2012.05.09 @ 11:17:15

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:

52000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.11 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
290.00	90%Water/10%Mud	4.068

Total Length: 290.00 ft Total Volume: 4.068 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

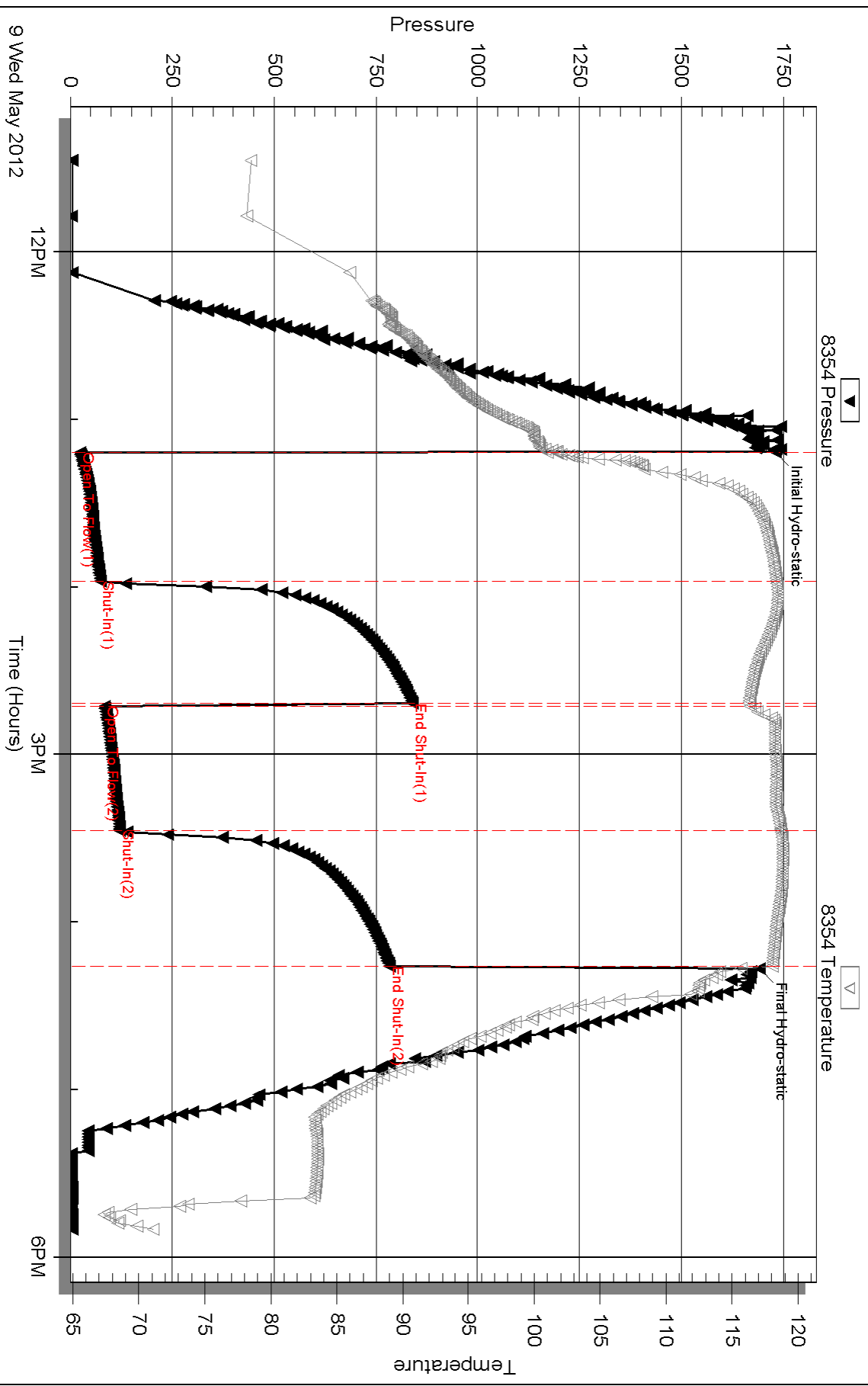
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

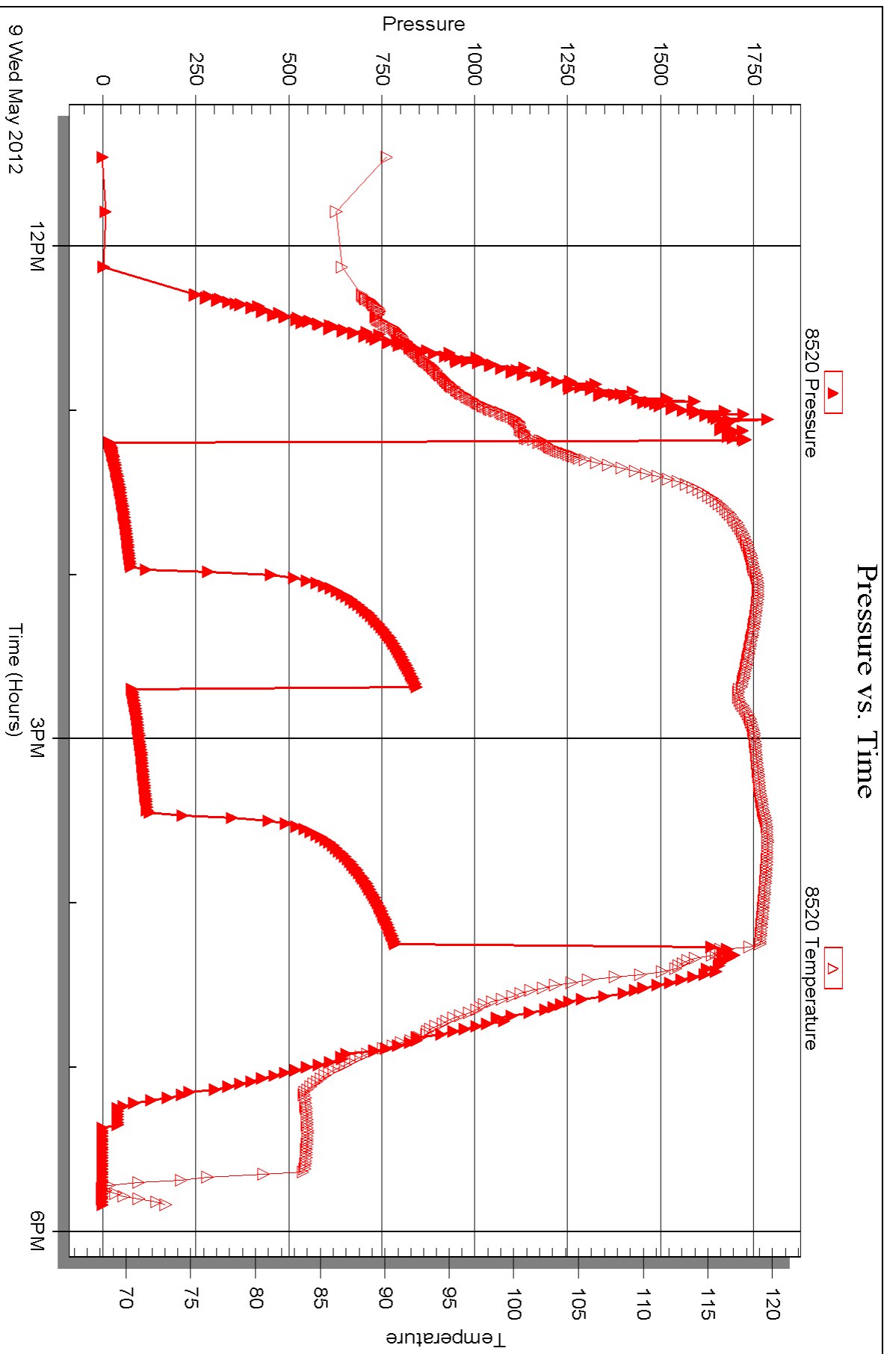


Serial #: 8520

Outside Dow nting-Nelson Oil Co., Inc.

Rita #1-18

DST Test Number: 3





DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Rita #1-18

18-13s-18w Ellis,KS

Start Date: 2012.05.10 @ 03:05:15

End Date: 2012.05.10 @ 09:33:15

Job Ticket #: 47230 DST #: 4

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

Printed: 2012.05.15 @ 08:56:34



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47230

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.05.10 @ 03:05:15

GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:48:45

Time Test Ended: 09:33:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3590.00 ft (KB) To 3654.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3654.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8354

Inside

Press @RunDepth: 69.98 psig @ 3630.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.10

End Date:

2012.05.10

Last Calib.:

2012.05.10

Start Time: 03:15:15

End Time:

09:33:15

Time On Btm:

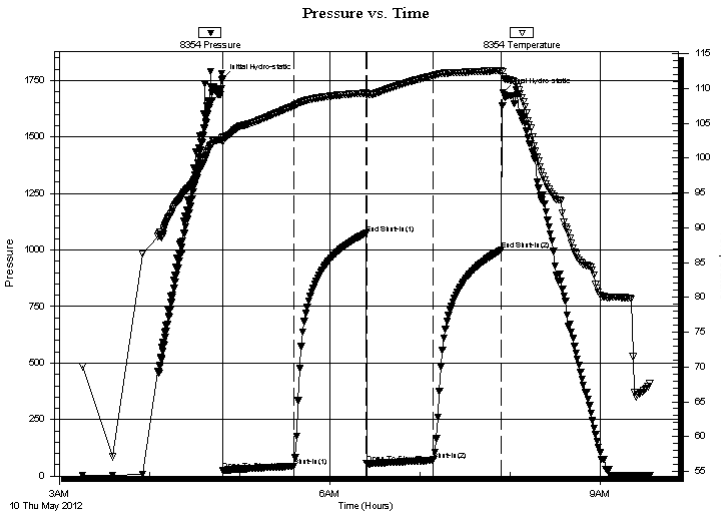
2012.05.10 @ 04:48:35

Time Off Btm:

2012.05.10 @ 07:55:15

TEST COMMENT: IF-Very weak building blow . Built to 5&1/2 inches.
IS-No Return.
FF-Very weak building blow . Built to 4&1/4 inches.
FS-No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.51	103.13	Initial Hydro-static
1	26.18	102.35	Open To Flow (1)
48	43.75	107.51	Shut-In(1)
96	1073.23	109.35	End Shut-In(1)
96	55.16	109.03	Open To Flow (2)
140	69.98	111.82	Shut-In(2)
186	999.03	112.59	End Shut-In(2)
187	1696.05	111.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
115.00	80%Water/20%Mud	1.61

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47230

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.05.10 @ 03:05:15

GENERAL INFORMATION:

Formation: **LKC "H-J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:48:45

Time Test Ended: 09:33:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3590.00 ft (KB) To 3654.00 ft (KB) (TVD)

Total Depth: 3654.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2139.00 ft (KB)

2131.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8520 Outside

Press @RunDepth: psig @ 3630.00 ft (KB)

Start Date: 2012.05.10

End Date: 2012.05.10

Start Time: 03:15:30

End Time: 09:33:00

Capacity: 8000.00 psig

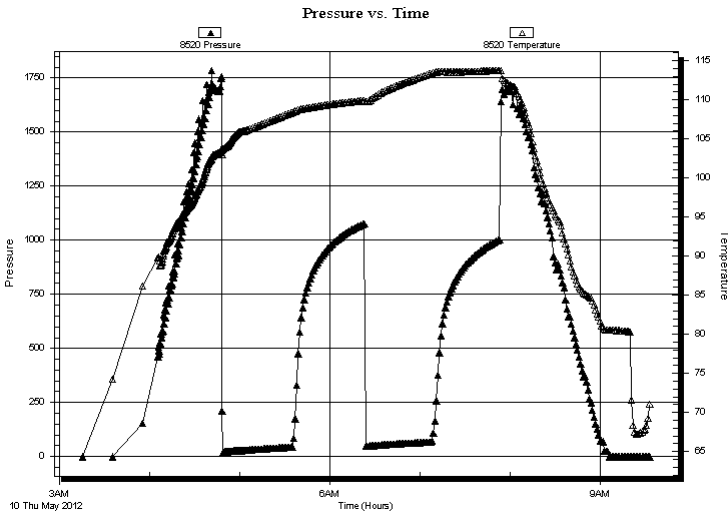
Last Calib.: 2012.05.10

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Very weak building blow . Built to 5&1/2 inches.
IS-No Return.
FF-Very weak building blow . Built to 4&1/4 inches.
FS-No Return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
115.00	80%Water/20%Mud	1.61

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.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47230

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.05.10 @ 03:05:15

Tool Information

Drill Pipe:	Length: 3581.00 ft	Diameter: 3.80 inches	Volume: 50.23 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: 26000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 50.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3590.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	64.00 ft			
Tool Length:	84.00 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			3571.00	
Shut In Tool	5.00			3576.00	
Hydraulic tool	5.00			3581.00	
Packer	5.00			3586.00	20.00 Bottom Of Top Packer
Packer	4.00			3590.00	
Stubb	1.00			3591.00	
Perforations	5.00			3596.00	
Change Over Sub	1.00			3597.00	
Drill Pipe	32.00			3629.00	
Change Over Sub	1.00			3630.00	
Recorder	0.00	8354	Inside	3630.00	
Recorder	0.00	8520	Outside	3630.00	
Perforations	21.00			3651.00	
Bullnose	3.00			3654.00	64.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47230

DST#: 4

ATTN: Marc Dow ning

Test Start: 2012.05.10 @ 03:05:15

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:

36000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: 0.18 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
115.00	80%Water/20%Mud	1.613

Total Length: 115.00 ft

Total Volume: 1.613 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

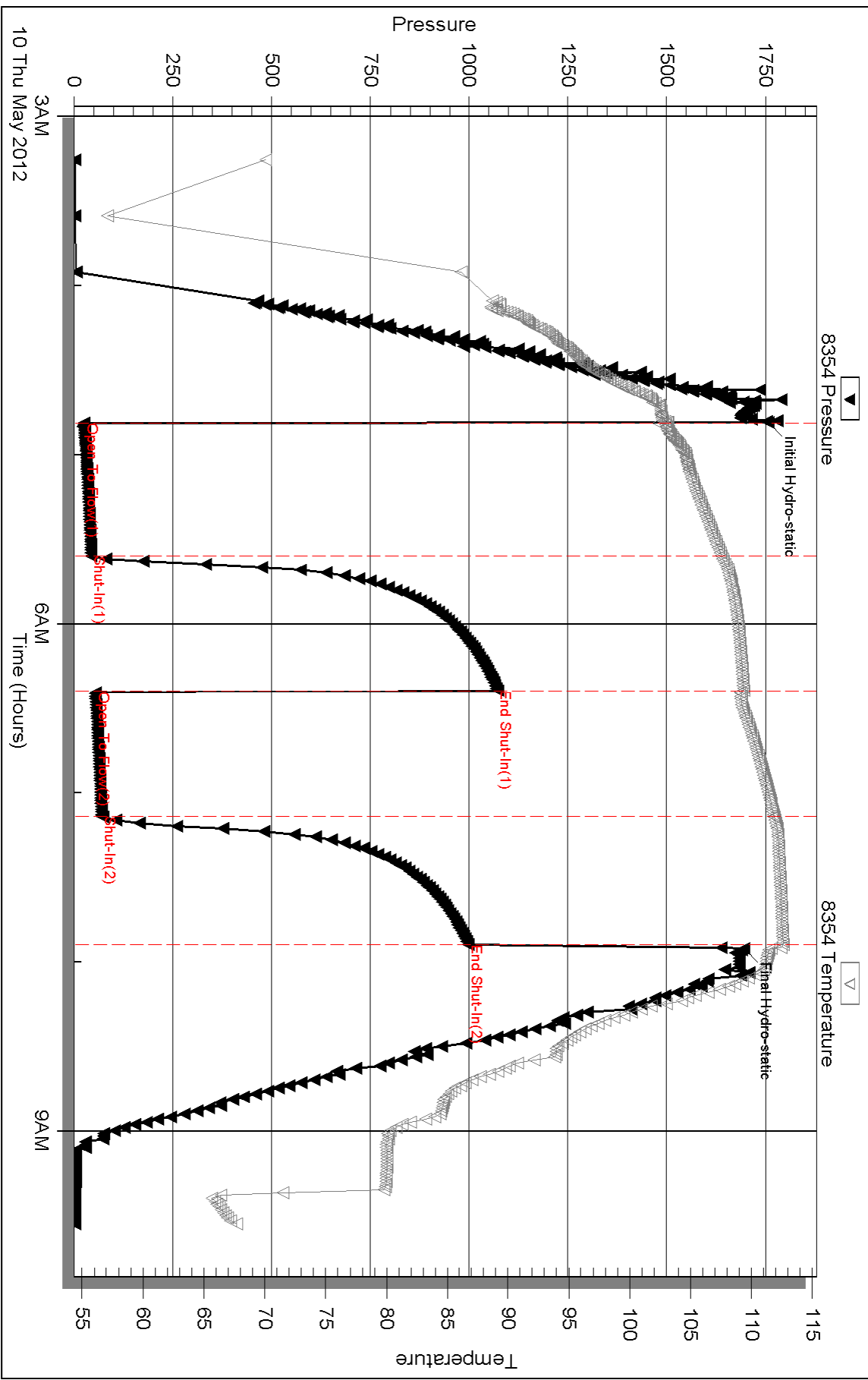
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

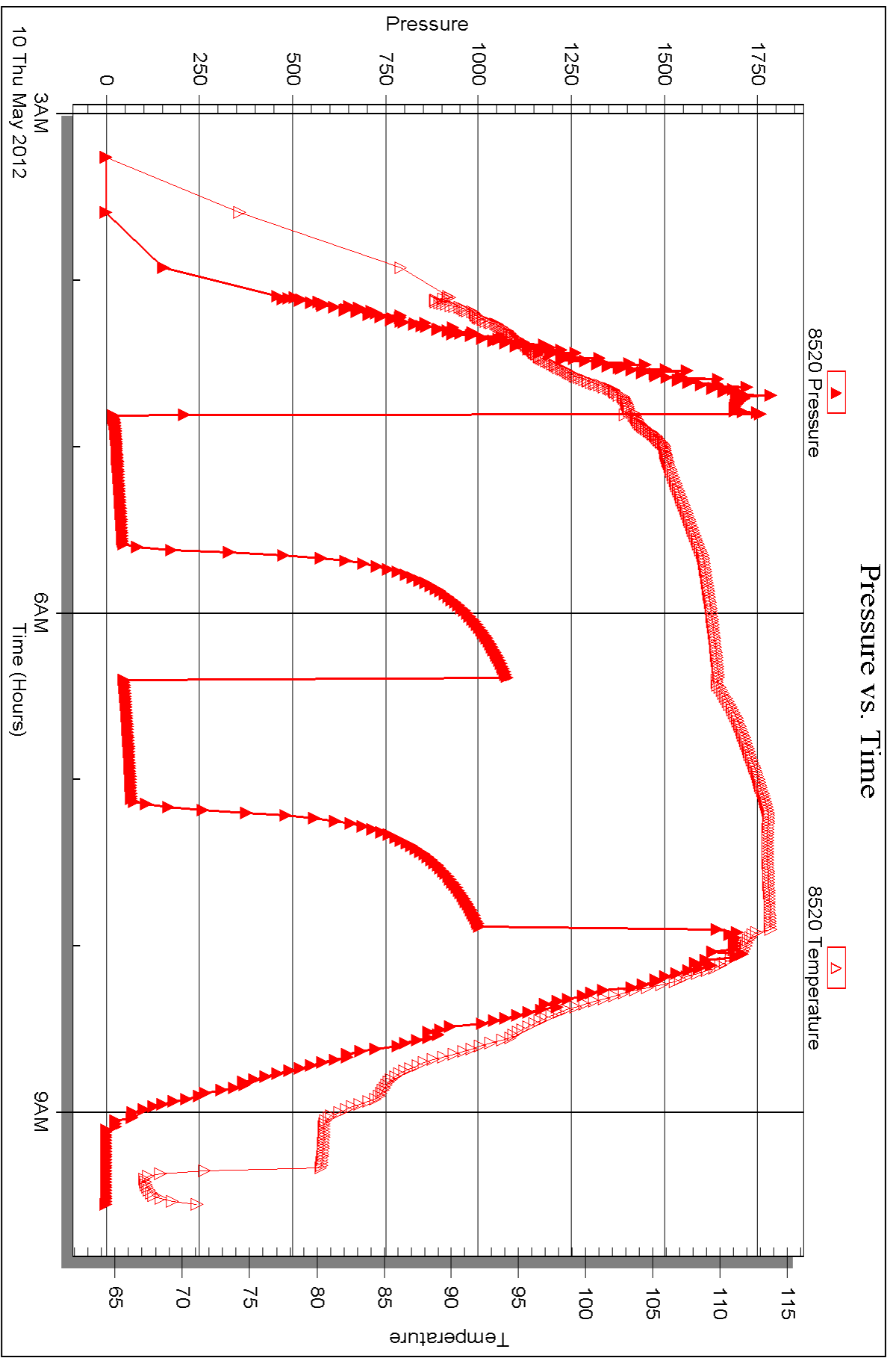


Serial #: 8520

Outside Dow nung-Nelson Oil Co., Inc.

Rita #1-18

DST Test Number: 4





DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Rita #1-18

18-13s-18w Ellis,KS

Start Date: 2012.05.11 @ 06:22:15

End Date: 2012.05.11 @ 12:10:45

Job Ticket #: 47231 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.05.15 @ 08:55:47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47231

DST#: 5

ATTN: Marc Dow ning

Test Start: 2012.05.11 @ 06:22:15

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:46:05

Time Test Ended: 12:10:45

Test Type: Conventional Straddle (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3741.00 ft (KB) To 3778.00 ft (KB) (TVD)

Total Depth: 3850.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2139.00 ft (KB)

2131.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8354 Inside

Press @RunDepth: 23.84 psig @ 3742.00 ft (KB)

Start Date: 2012.05.11

End Date: 2012.05.11

Start Time: 06:32:15

End Time: 12:10:45

Capacity: 8000.00 psig

Last Calib.: 2012.05.11

Time On Btm: 2012.05.11 @ 07:45:45

Time Off Btm: 2012.05.11 @ 10:21:45

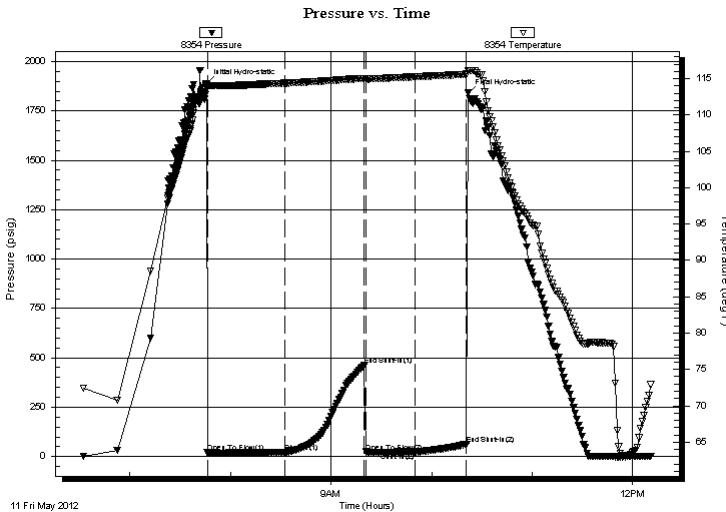
TEST COMMENT: IF-Very weak but building blow . Built to 2&1/2 inches. Died to 1&1/2 inches.

ISI-No Return.

FF-No Blow .

FSI-No Return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1887.19	114.24	Initial Hydro-static
1	19.56	113.79	Open To Flow (1)
47	21.36	114.38	Shut-In(1)
94	463.17	115.05	End Shut-In(1)
95	23.95	114.98	Open To Flow (2)
125	23.84	115.27	Shut-In(2)
155	63.25	115.61	End Shut-In(2)
156	1839.68	116.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
12.00	10%Oil/90%Mud	0.17
8.00	10%Gas/90%Oil	0.11

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47231

DST#: 5

ATTN: Marc Dow ning

Test Start: 2012.05.11 @ 06:22:15

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:46:05

Time Test Ended: 12:10:45

Test Type: Conventional Straddle (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: 3741.00 ft (KB) To 3778.00 ft (KB) (TVD)

Reference Elevations: 2139.00 ft (KB)

Total Depth: 3850.00 ft (KB) (TVD)

2131.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8653 Below (Straddle)

Press @RunDepth: psig @ 3783.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.11 End Date: 2012.05.11

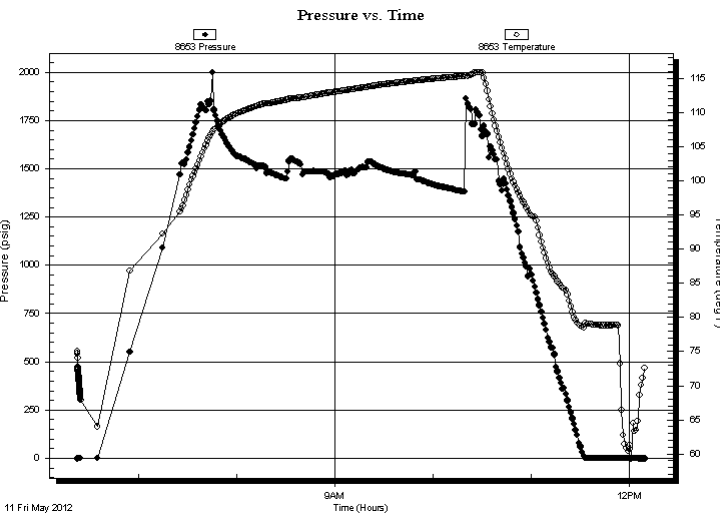
Last Calib.: 2012.05.11

Start Time: 06:22:46 End Time: 12:09:15

Time On Btm:

Time Off Btm:

TEST COMMENT: IF-Very weak but building blow . Built to 2&1/2 inches. Died to 1&1/2 inches.
IS- No Return.
FF- No Blow .
FS- No Return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
12.00	10%Oil/90%Mud	0.17
8.00	10%Gas/90%Oil	0.11

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.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47231

DST#: 5

ATTN: Marc Dow ning

Test Start: 2012.05.11 @ 06:22:15

Tool Information

Drill Pipe:	Length: 3741.00 ft	Diameter: 3.80 inches	Volume: 52.48 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 52.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3741.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	3778.00 ft			
Interval betw een Packers:	37.00 ft			
Tool Length:	131.00 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			3722.00	
Shut In Tool	5.00			3727.00	
Hydraulic tool	5.00			3732.00	
Packer	5.00			3737.00	20.00 Bottom Of Top Packer
Packer	4.00			3741.00	
Stubb	1.00			3742.00	
Recorder	0.00	8354	Inside	3742.00	
Recorder	0.00	8520	Outside	3742.00	
Perforations	32.00			3774.00	
Blank Off Sub	1.00			3775.00	
Blank Spacing	3.00			3778.00	37.00 Tool Interval
Packer	2.00			3780.00	
Stubb	1.00			3781.00	
Perforations	1.00			3782.00	
Change Over Sub	1.00			3783.00	
Recorder	0.00	8653	Below	3783.00	
Drill Pipe	63.00			3846.00	
Change Over Sub	1.00			3847.00	
Perforations	2.00			3849.00	
Bullnose	3.00			3852.00	74.00 Bottom Packers & Anchor

Total Tool Length: 131.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

18-13s-18w Ellis,KS

PO Box 1019
Hays, KS 67601

Rita #1-18

Job Ticket: 47231

DST#: 5

ATTN: Marc Dow ning

Test Start: 2012.05.11 @ 06:22:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
12.00	10%Oil/90%Mud	0.168
8.00	10%Gas/90%Oil	0.112

Total Length: 20.00 ft Total Volume: 0.280 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8354

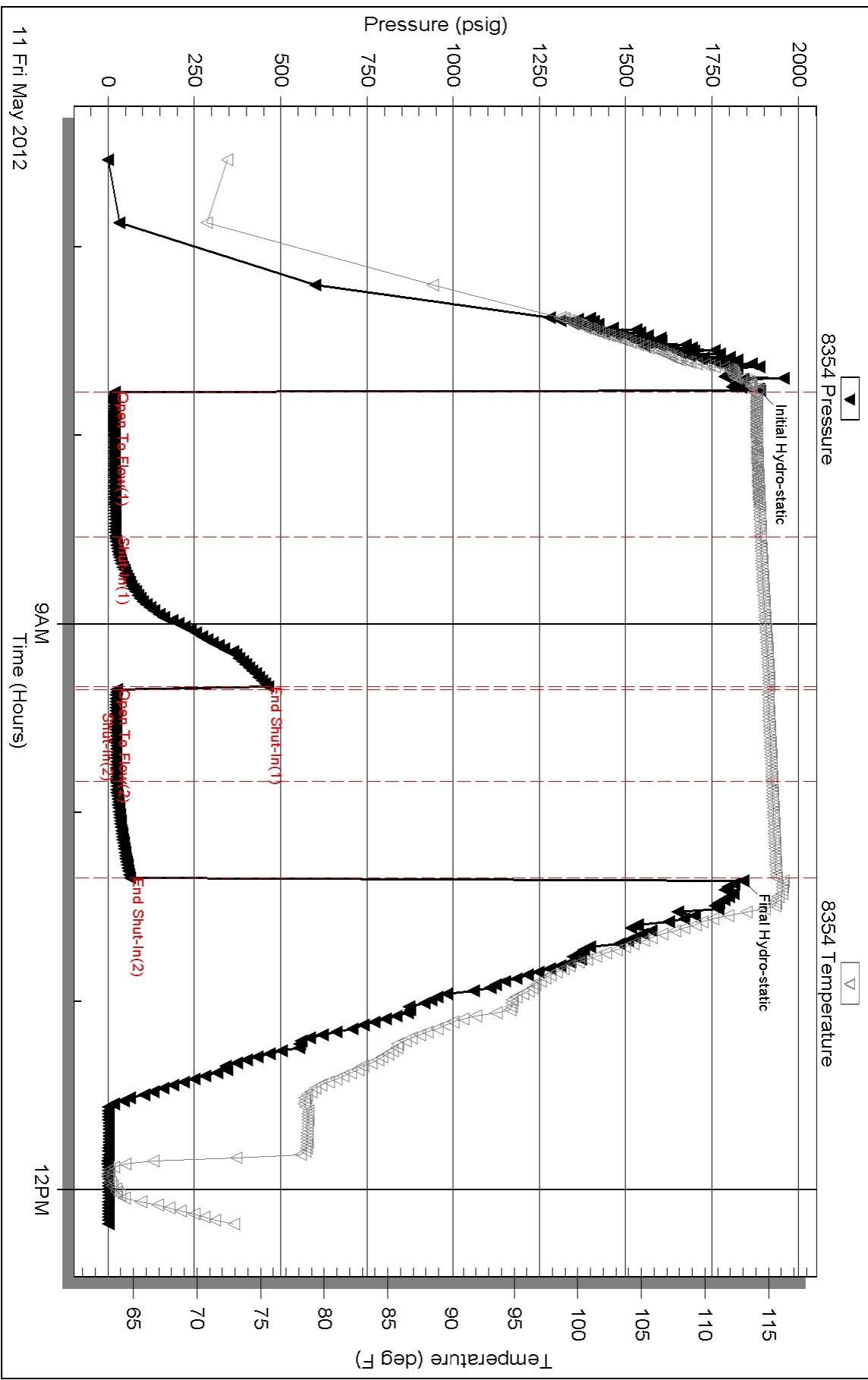
Inside

Dow nging-Nelson Oil Co., Inc.

Rita #1-18

DST Test Number: 5

Pressure vs. Time

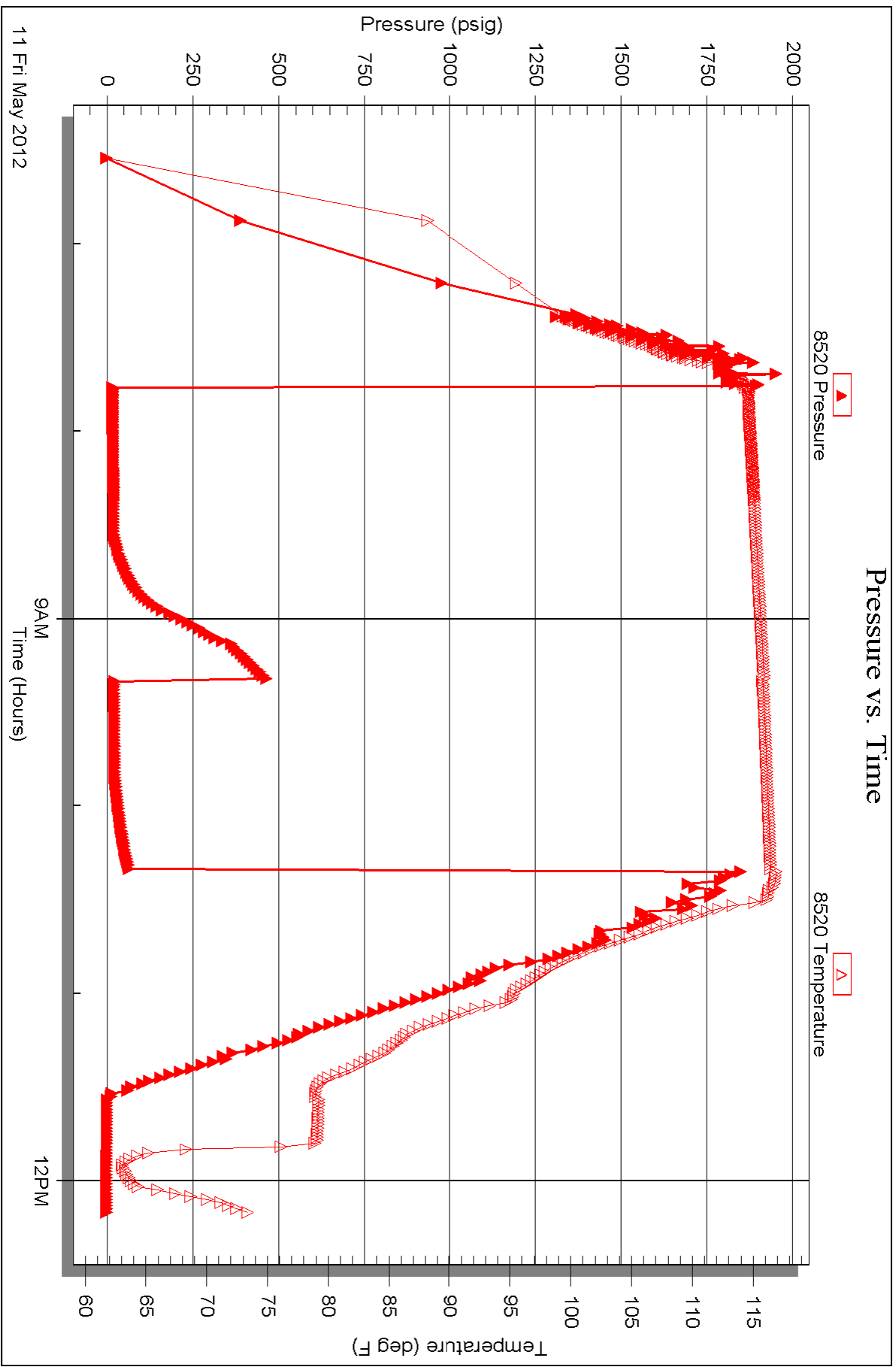


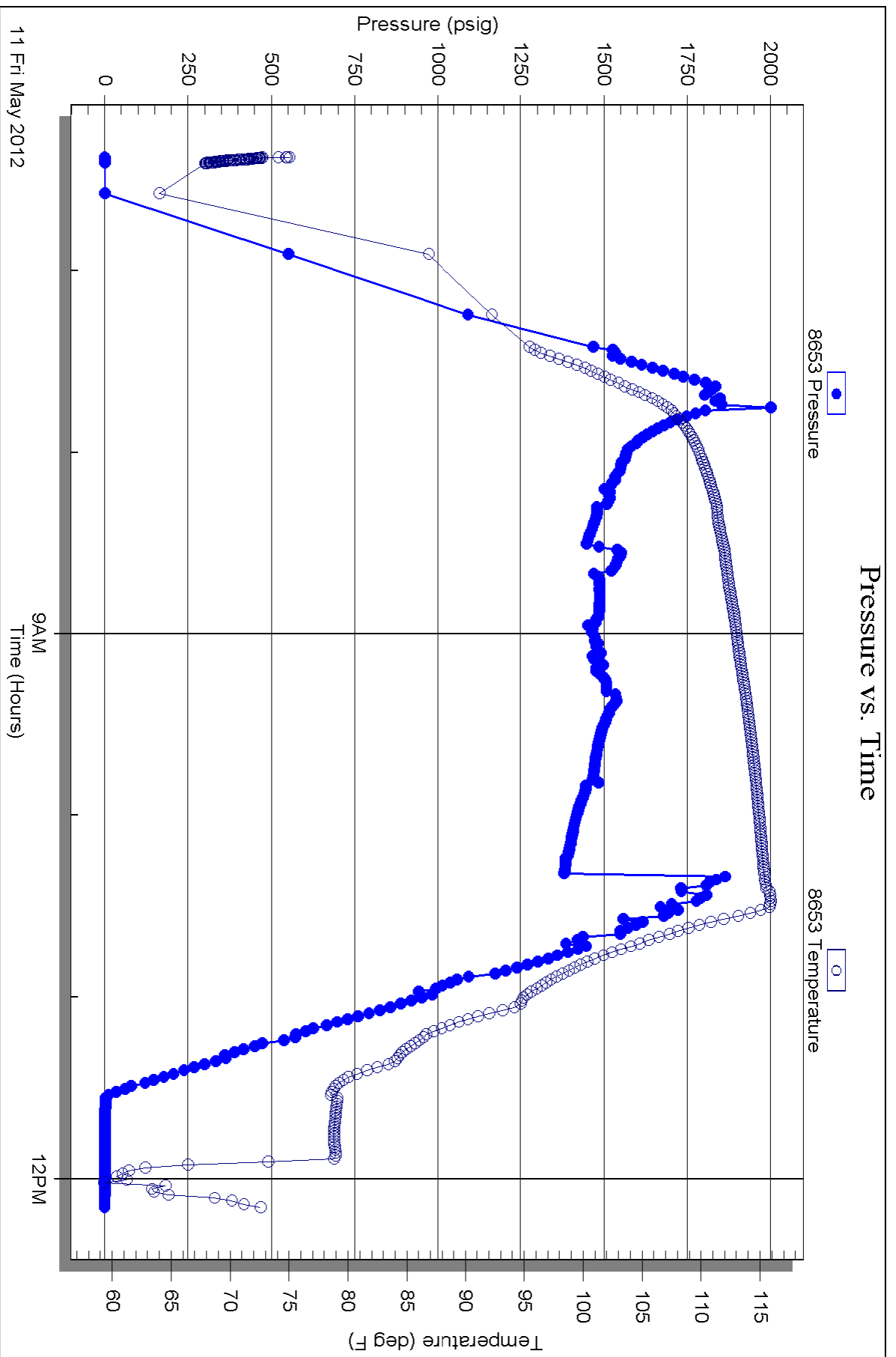
Serial #: 8520

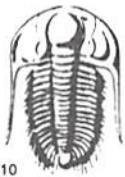
Outside Dow nging-Nelson Oil Co., Inc.

Rita #1-18

DST Test Number: 5







TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47227

Well Name & No. Rita #1-18 Test No. 7 Date 5-8-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2139 KB 2131 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Maac Downing Rig Discovery 3
 Location: Sec. 18 Twp. 13S Rge. 18W Co. Ellis State KS

Interval Tested 3488-3536 Zone Tested LKC "C#D"
 Anchor Length 48' Drill Pipe Run 3486 Mud Wt. 8.8
 Top Packer Depth 3483 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3488 Wt. Pipe Run 0 WL 8.8
 Total Depth 3536 Chlorides 2000 ppm System LCM 2#

Blow Description IF - Weak surface blow @ 18 minutes. Built to 1 1/2 inches.
IST - No Return.
FF - Weak building blow. Built to 8 inches.
FST - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>OCM</u>	<u>15</u>		<u>85</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	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 1700 Test 1150 T-On Location 1015
 (B) First Initial Flow 34 Jars T-Started 1100
 (C) First Final Flow 29 Safety Joint T-Open 1235
 (D) Initial Shut-In 96 Circ Sub T-Pulled 1505
 (E) Second Initial Flow 29 Hourly Standby T-Out 1630
 (F) Second Final Flow 32 Mileage 5X2 15.50 Comments BATT-1058
 (G) Final Shut-In 340 Sampler
 (H) Final Hydrostatic 1639 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1165.50
 Accessibility MP/DST Disc't
 Sub Total 1165.50

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47228

Well Name & No. Rita #1-18 Test No. 2 Date 5-8-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2139 KB 2131 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Maic Downing Rig Discovery 3
 Location: Sec. 18 Twp. 13S Rge. 18W Co. Ellis State KS

Interval Tested 3532-3559 Zone Tested LKC "E+F"
 Anchor Length 27' Drill Pipe Run 3519 Mud Wt. 8.8
 Top Packer Depth 3527 Drill Collars Run 0 Vis 51
 Bottom Packer Depth 3532 Wt. Pipe Run 0 WL 8.8
 Total Depth ~~3532~~ 3559 Chlorides 2000 ppm System LCM 2#

Blow Description IF-Weak surface blow, Dried @ 14 minutes,
FST- No Return,
FF-Weak surface blow, Dried @ 4 minutes,
FST- No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>Mud w/Few oil specks</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 108 Gravity 1150 API RW @ 1150 °F Chlorides 2000 ppm

(A) Initial Hydrostatic 1717 Test 1150 T-On Location 2230
 (B) First Initial Flow 22 Jars 2315
 (C) First Final Flow 24 Safety Joint 0029
 (D) Initial Shut-In 869 Circ Sub 0235
 (E) Second Initial Flow 25 Hourly Standby 0400
 (F) Second Final Flow 27 Mileage 5X2 15.50 Comments Bar 2306
 (G) Final Shut-In 803 Sampler
 (H) Final Hydrostatic 1675 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1165.50
 Accessibility MP/DST Disc't
 Sub Total 1165.50

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. '47229

4/10

Well Name & No. Rita #118 Test No. 3 Date 5-9-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2139 KB 2131 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Malc Downing Rig Discovery 3
 Location: Sec. 18 Twp. 13S Rge. 18W Co. Ellis State KS

Interval Tested 3563-3595 Zone Tested LKC "G"
 Anchor Length 32' Drill Pipe Run 3550 Mud Wt. 9.0
 Top Packer Depth 3558 Drill Collars Run 0 Vis 56
 Bottom Packer Depth 3563 Wt. Pipe Run 0 WL 8.0
 Total Depth 3595 Chlorides 3500 ppm System LCM 2#

Blow Description IF-Weak building blow, BOB in 26 minutes,
ISF- No Return,
FF-Very weak building blow, BOB in 43 minutes 30 seconds,
FST- No Return,

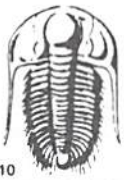
Rec	Feet of	%gas	%oil	%water	%mud
<u>290</u>	<u>Muddy water</u>			<u>90</u>	<u>10</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 290 BHT 119 Gravity API RW 114 @ 88 ° F Chlorides 52000 ppm
 (A) Initial Hydrostatic 1730 Test 1150 T-On Location 1045
 (B) First Initial Flow 24 Jars T-Started 1130
 (C) First Final Flow 73 Safety Joint T-Open 1312
 (D) Initial Shut-In 839 Circ Sub T-Pulled 1615
 (E) Second Initial Flow 84 Hourly Standby T-Out 1750
 (F) Second Final Flow 121 Mileage 5X2 15.50 Comments BATT-1117
 (G) Final Shut-In 783 Sampler
 (H) Final Hydrostatic 1692 Straddle Ruined Shale Packer

Initial Open 45 Shale Packer Ruined Packer
 Initial Shut-In 4.5 Extra Packer Extra Copies
 Final Flow 45 Extra Recorder Sub Total 0
 Final Shut-In 45 Day Standby Total 1165.50
 Accessibility MP/DST Disc't
 Sub Total 1165.50

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47230

Well Name & No. Rita #1-18 Test No. 4 Date 5-10-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2139 KB 2131 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery 3
 Location: Sec. 18 Twp. 13S Rge. 18W Co. Ellis State KS

Interval Tested 3590-3654 Zone Tested LKC "H-J"
 Anchor Length 64' Drill Pipe Run 3581 Mud Wt. 9.0
 Top Packer Depth 3585 Drill Collars Run 0 Vis 56
 Bottom Packer Depth 3590 Wt. Pipe Run 0 WL 8.0
 Total Depth 3654 Chlorides 3500 ppm System LCM 2#

Blow Description IF - Very weak building blow, Built to 5 1/2 inches,
ISF - No Return,
FF - Very weak building blow, Built to 4 1/4 inches,
FSF - No Return,

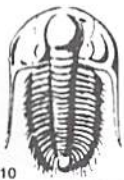
Rec	Feet of	%gas	%oil	%water	%mud
<u>115</u>	<u>Muddy Water</u>			<u>80%</u>	<u>20%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 115 BHT 113 Gravity API RW .180 @ 77 °F Chlorides 36,000 ppm

(A) Initial Hydrostatic 1758 Test 1150 T-On Location 0215
 (B) First Initial Flow 26 Jars _____ T-Started 0315
 (C) First Final Flow 44 Safety Joint _____ T-Open 0450
 (D) Initial Shut-In 1073 Circ Sub _____ T-Pulled 0750
 (E) Second Initial Flow 55 Hourly Standby _____ T-Out 0930
 (F) Second Final Flow 70 Mileage 5X2 15.50 Comments BHT-0.305
 (G) Final Shut-In 999 Sampler _____
 (H) Final Hydrostatic 1696 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1165.50
 Accessibility _____ MP/DST Disc _____
 Sub Total 1165.50

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47231

Well Name & No. Rita # 1-18 Test No. 5 Date 5-11-12
 Company Downing-Nelson Oil Co, Inc. Elevation 2139 KB 2131 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Male Downing Rig Discovery 3
 Location: Sec. 18 Twp. 13S Rge. 18W Co. Ellis State KS

Interval Tested 3741-3778 Zone Tested Aubuckle
 Anchor Length 37' 72' TP Drill Pipe Run 3741 Mud Wt. 8.9
 Top Packer Depth 3736 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3741 Wt. Pipe Run 0 WL 8.8
 Total Depth 3850 Chlorides 4000 ppm System LCM 1 1/2 #

Blow Description IF - Very weak but building blow. Built to 2 1/2 inches. Died to 1 1/2 inches.
ISI - No Return.
FF - No Blow.
FBI - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>08</u>	<u>Gassy Oil</u>	<u>10</u>	<u>90</u>		
<u>12</u>	<u>OCM</u>		<u>10</u>		<u>90</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT _____ Gravity 28 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1887 Test 1150 T-On Location 0445
 (B) First Initial Flow 20 Jars _____ T-Started 0630
 (C) First Final Flow 21 Safety Joint _____ T-Open 0746
 (D) Initial Shut-In 463 Circ Sub _____ T-Pulled 1020
 (E) Second Initial Flow 24 Hourly Standby _____ T-Out 1215
 (F) Second Final Flow 24 Mileage 5X2 15.50 Comments BATT-0622
 (G) Final Shut-In 63 Sampler _____
 (H) Final Hydrostatic 1840 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1765.50
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1765.50

Approved By _____ Our Representative D. Rash

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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. 414

Date	5-11-12	Sec.	18	Twp.	13	Range	18	County	Ellis	State	Ks	On Location		Finish	6:15 PM
Lease	Rita	Well No.	1-18		Location Hays, Ks - Exit 157 + I-90, 3/4 N, WJ5										
Contractor	Discovery #3				Owner										
Type Job	Plug				To Quality Oilwell Cementing, Inc.										
Hole Size	7 7/8"				You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.										
Csg.					Charge To Downing - Nelson										
Tbg. Size	4 1/2" D.P.				Street										
Tool					City State										
Cement Left in Csg.					The above was done to satisfaction and supervision of owner agent or contractor.										
Meas Line					Displace H2O/mud Cement Amount Ordered 245 5x 60/40 4% Gel 1/4#FS.										

EQUIPMENT

Pumptrk	9	No.	Cementer	Matt	Common	147
			Helper			
Bulktrk	10	No.	Driver	Lonnie	Poz. Mix	98
			Driver			
Bulktrk	pin.	No.	Driver	Rick	Gel.	9
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 60#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
3738' - 255X	Sand
1475' - 255X	Handling 25#
760' - 1005X	Mileage

FLOAT EQUIPMENT

40' - 10 5X w/ plug	Guide Shoe
Rathole - 30 5X	Centralizer
Mousehole - 15 5X	Baskets
Cement did Circulate.	AFU Inserts
	Float Shoe
	Latch Down
	1 - Dry hole plug
	Pumptrk Charge Plug
	Mileage 25 min

	Tax
	Discount
	Total Charge

X Signature *[Signature]*

WELL Name #1-18
 FIELD Widdcat
 LOCATION ZS35 Fw + L&S F&L
 SEC. 19 TWP. 13S RGE. 18W
 COUNTY Ellis
 STATE Kansas

PRODUCTION Oil
 ELEVATION KB 2140
 DF 2132
 OPERATOR DASCO I
 CONTRACTOR Downsco Drilling Rig #3
 CASING RECORD 5 1/2" 12
 SLURF 5 1/2" @ 220
 TOTAL DEPTH DRILLERS 3858
 TOTAL DEPTH LOG 3861

Drilling Method From: MB
 Drilling Speed From: 3250 To: 3250
 Drilling Time From: 3250 To: 3250
 Sample Coring From: 3250 To: 3250
 Geological Description From: 3250 To: 3250
 Well Description: None
 Well Name: None
 Well No: None
 Well Type: None
 Well Status: None
 Well Depth: None
 Well Diameter: None
 Well Completion: None
 Well Production: None
 Well Operator: None
 Well Contractor: None
 Well Record: None
 Well Slurfs: None
 Well Total Depth: None
 Well Total Depth Log: None

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	ELECTRIC LOG	SURFACE	STRUCTURAL POSITION
Top Anhydrite	NA	1450	1450	43
Base Anhydrite	NA	1450	1450	43
Tapoka	3191	3190	-1055	-9
Heenan	3430	3429	-1250	-9
Toronto	3447	3447	-1301	-9
L&C	3477	3477	-1336	-9
B&C	3701	3701	-1520	-9
Atankle	3760	3760	-1619	-9

REFERENCE WELL FOR STRUCTURE DASSI
 Kossie #3-71 335 F&L + 1485 F&L Sec. 1-13-18a

DAILY PENETRATION

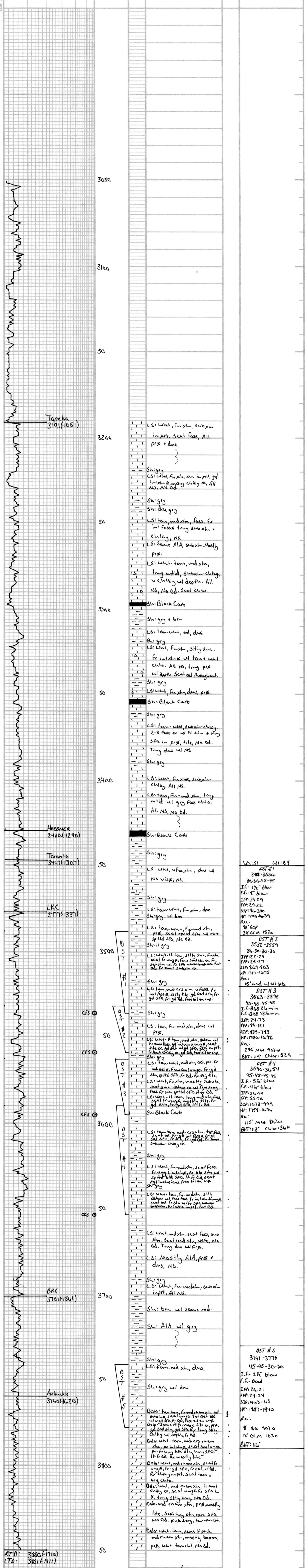
DATE	DEPTH	NO.	SIZE	WELL	TYPE	DEPTH	FEET	REMARKS

DRILL STEM TESTS

No.	Interval	IPP/Min	ISIP/Min	FFP/Min	FBP/Min	HR/Min	REMARKS

LEGEND

Symbol	Material
[Grid]	Anhydrite
[Dotted]	Salt
[Horizontal Lines]	Sandstone
[Vertical Lines]	Shale
[Diagonal Lines]	Carb sh
[Stippled]	Limestone
[Cross-hatched]	Oil. Lime
[Wavy]	Chert
[Diagonal Lines]	Dolomite



Downing