



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1182974
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

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

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical 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

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1182974

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

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
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

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> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Sarah 1-25
Doc ID	1182974

Tops

Name	Top	Datum
Top Anhydrite	1313'	+762
Base Anhydrite	1359'	+716
Topeka	3090'	-1015
Heebner	3349'	-1274
Toronto	3368'	-1293
LKC	3396'	-1321
BKC	3638'	-1563
Arbuckle	3714'	-1639

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. 7500

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-17-13	25	14	19	Ellis	KS		5:15 PM

Location *Hays S major Rd 3 1/2 W Site*

Lease	Well No	Owner	
<i>Sarah</i>	<i>1-25</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.	
Contractor			
<i>Discovery #1</i>			
Type Job			
<i>Surface</i>			
Hole Size	T.D.	Charge To	
<i>12 1/4</i>	<i>1322</i>	<i>Downing / Nelson</i>	
Csg.	Depth	Street	
<i>8 5/8</i>	<i>1322</i>		
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	
<i>42'</i>	<i>42'</i>	<i>480 lbm 3/CC 2/6/12</i>	

Meas Line Displace *8 1/2 BCL*

EQUIPMENT

Pumptrk	No.	Cement Helper	
<i>5</i>		<i>Chris</i>	
Bulktrk	No.	Driver	
		<i>Rick</i>	
Bulktrk	No.	Driver	
<i>12</i>		<i>Doug</i>	

Common *480*
Poz. Mix
Gel. *9*
Calcium *17*

JOB SERVICES & REMARKS

Remarks:
Rat Hole
Mouse Hole
Centralizers
Baskets
D/V or Port Collar
8 5/8 in bottom Est. Circulation Mix
480 lbs Displace Plug
Cement did Circulate

Hulls
Salt
Flowseal
Kol-Seal
Mud CLR 48
CFL-117 or CD110 CAF 38
Sand
Handling *506*
Mileage

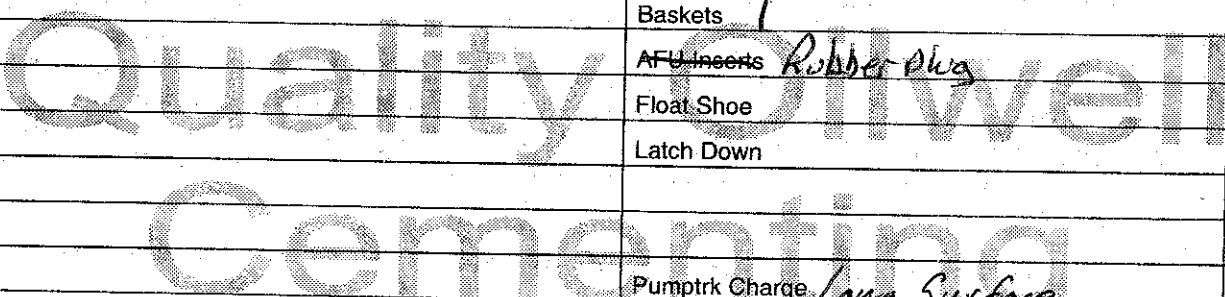
FLOAT EQUIPMENT

Guide Shoe *8 5/8*
Centralizer *Rattle Plate*
Baskets *1*
AFU Inserts *Rubber Plug*
Float Shoe
Latch Down

Pumptrk Charge *Long Surface*
Mileage *8*

X Signature *[Signature]*

Tax
Discount
Total Charge



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

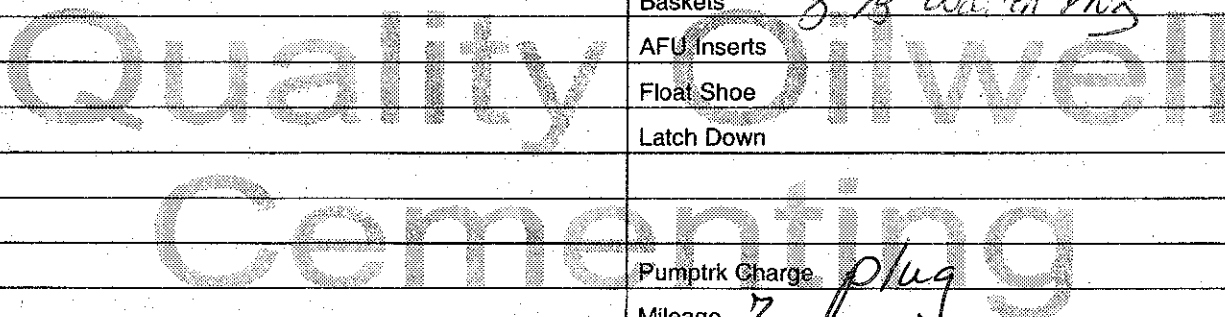
Phone 785-483-2025

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

No. 7711

Cell 785-324-1041

Date	1-10-14	Sec.	25	Twp.	14	Range	19	County	Ellis	State	KS	On Location		Finish	10:45A.m.	
Location <i>Navy's & Murray Rd 3 1/2 hrs W into</i>																
Lease	<i>Sarah</i>			Well No.	<i>1-25</i>			Owner								
Contractor <i>D. Scoville #1</i>								To Quality Oilwell Cementing, Inc.								
Type Job <i>Rotary Plug</i>								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>7 7/8</i>			T.D.	<i>3810</i>			Charge To	<i>Dwining/V. Jensen</i>							
Csg.				Depth				Street								
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	<i>215 60/40 4 1/2 1/2 1/4 #10</i>							
Meas Line				Displace												
EQUIPMENT																
Pumptrk	<i>18</i>	No.	<i>Cement</i>				Common	<i>129</i>								
			<i>Helper</i>				Poz. Mix	<i>86</i>								
Bulktrk		No.	<i>Driver</i>				Gel.	<i>8</i>								
Bulktrk	<i>14</i>	No.	<i>Driver</i>				Calcium									
JOB SERVICES & REMARKS																
Remarks:								Hulls								
Rat Hole	<i>30SK</i>							Salt								
Mouse Hole								Flowseal	<i>50 #</i>							
Centralizers								Kol-Seal								
Baskets								Mud CLR 48								
D/V or Port Collar								CFL-117 or CD110 CAF 38								
<i>1st</i>	<i>3700</i>	<i>50SK</i>					Sand									
<i>2nd</i>	<i>1375</i>	<i>40SK</i>					Handling	<i>223</i>								
<i>3rd</i>	<i>650</i>	<i>80SK</i>					Mileage									
<i>4th</i>	<i>40'</i>	<i>10SK</i>					FLOAT EQUIPMENT									
Guide Shoe																
Centralizer																
Baskets <i>8 1/2 water plug</i>																
AFU Inserts																
Float Shoe																
Latch Down																
Pumptrk Charge <i>plug</i>																
Mileage <i>7</i>																
Tax																
Discount																
Total Charge																
Signature <i>Cliff McFarland</i>																





DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Sarah #1-25

25-14s-19w Ellis,KS

Start Date: 2014.01.06 @ 17:30:00

End Date: 2014.01.07 @ 00:57:30

Job Ticket #: 55494 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.10 @ 09:57:50



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55494

DST#: 1

ATTN: Marc Dow ning

Test Start: 2014.01.06 @ 17:30:00

GENERAL INFORMATION:

Formation: **KC"C-D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:12:45

Time Test Ended: 00:57:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

Interval: 3400.00 ft (KB) To 3453.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3453.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8736

Inside

Press@RunDepth: 487.10 psig @ 3406.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.06

End Date:

2014.01.07

Last Calib.:

2014.01.07

Start Time: 17:30:05

End Time:

00:57:29

Time On Btm:

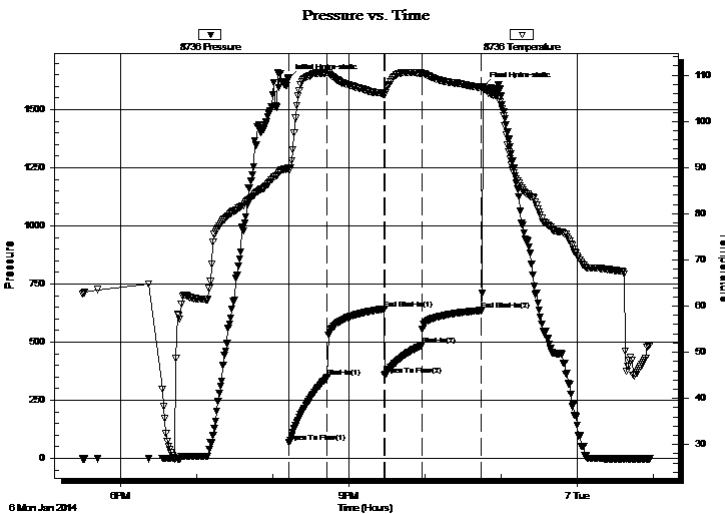
2014.01.06 @ 20:12:15

Time Off Btm:

2014.01.06 @ 22:45:45

TEST COMMENT: IF-BOB in 2 min
ISI-No blow
FF-BOB in 4 min
FSI-No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1635.43	89.85	Initial Hydro-static
1	68.65	89.45	Open To Flow (1)
31	348.31	110.53	Shut-In(1)
76	642.70	105.88	End Shut-In(1)
76	356.84	105.76	Open To Flow (2)
106	487.10	110.44	Shut-In(2)
152	636.32	107.30	End Shut-In(2)
154	1598.14	107.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
150.00	MW 35%M 65%W	2.10
860.00	Water	12.06

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.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55494

DST#: 1

ATTN: Marc Dow ning

Test Start: 2014.01.06 @ 17:30:00

Tool Information

Drill Pipe:	Length: 3408.00 ft	Diameter: 3.80 inches	Volume: 47.81 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	2500.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume:</u> - bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3400.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	53.00 ft				
Tool Length:	74.00 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			3380.00	
Shut In Tool	5.00			3385.00	
Hydraulic tool	5.00			3390.00	
Packer	5.00			3395.00	21.00 Bottom Of Top Packer
Packer	5.00			3400.00	
Stubb	1.00			3401.00	
Perforations	5.00			3406.00	
Recorder	0.00	8736	Inside	3406.00	
Recorder	0.00	8018	Outside	3406.00	
Change Over Sub	1.00			3407.00	
Drill Pipe	32.00			3439.00	
Change Over Sub	1.00			3440.00	
Perforations	10.00			3450.00	
Bullnose	3.00			3453.00	53.00 Bottom Packers & Anchor

Total Tool Length: 74.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55494

DST#: 1

ATTN: Marc Dow ning

Test Start: 2014.01.06 @ 17:30:00

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:

70000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.97 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
150.00	MW 35%M 65%W	2.104
860.00	Water	12.064

Total Length: 1010.00 ft Total Volume: 14.168 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

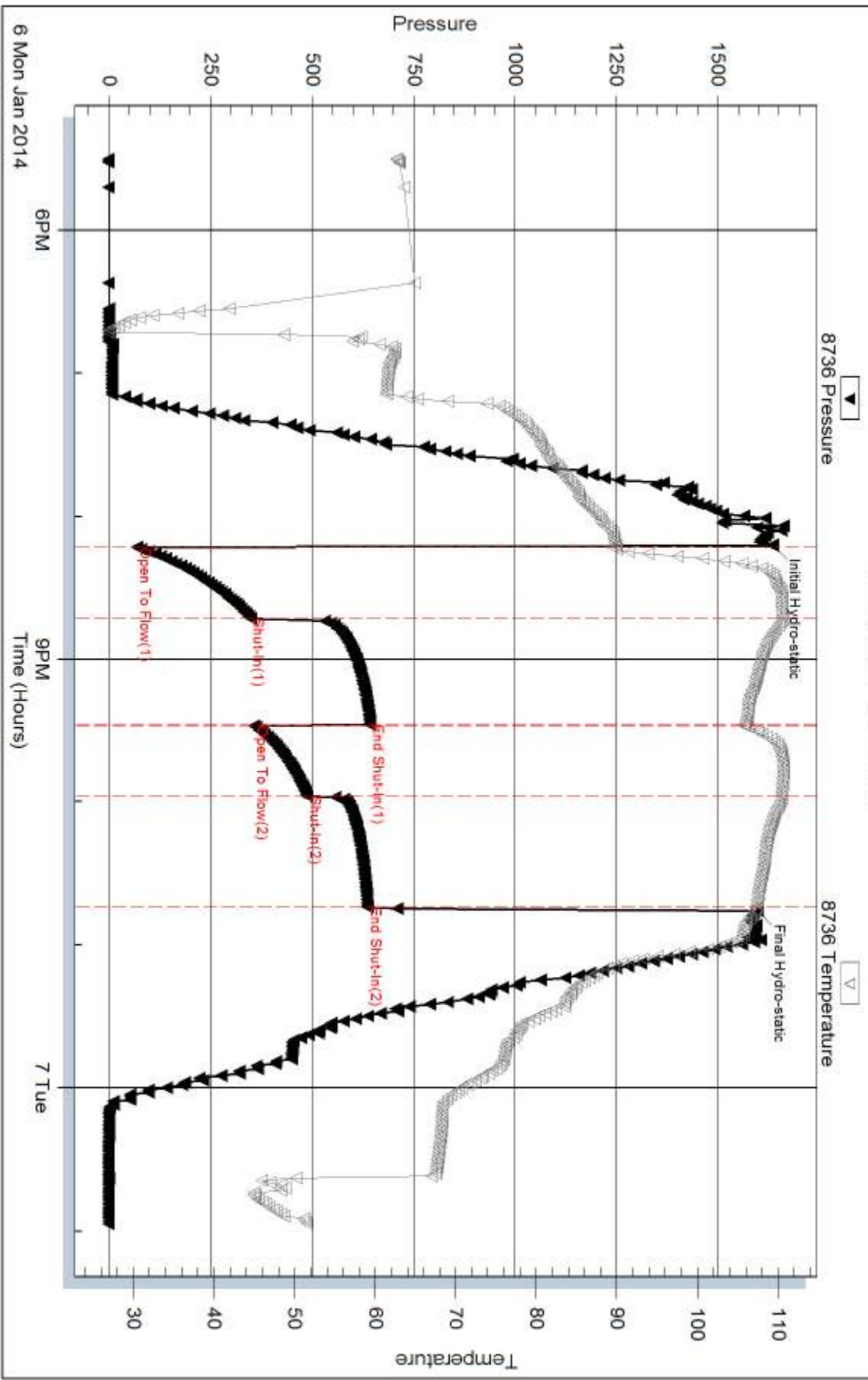
Serial #:

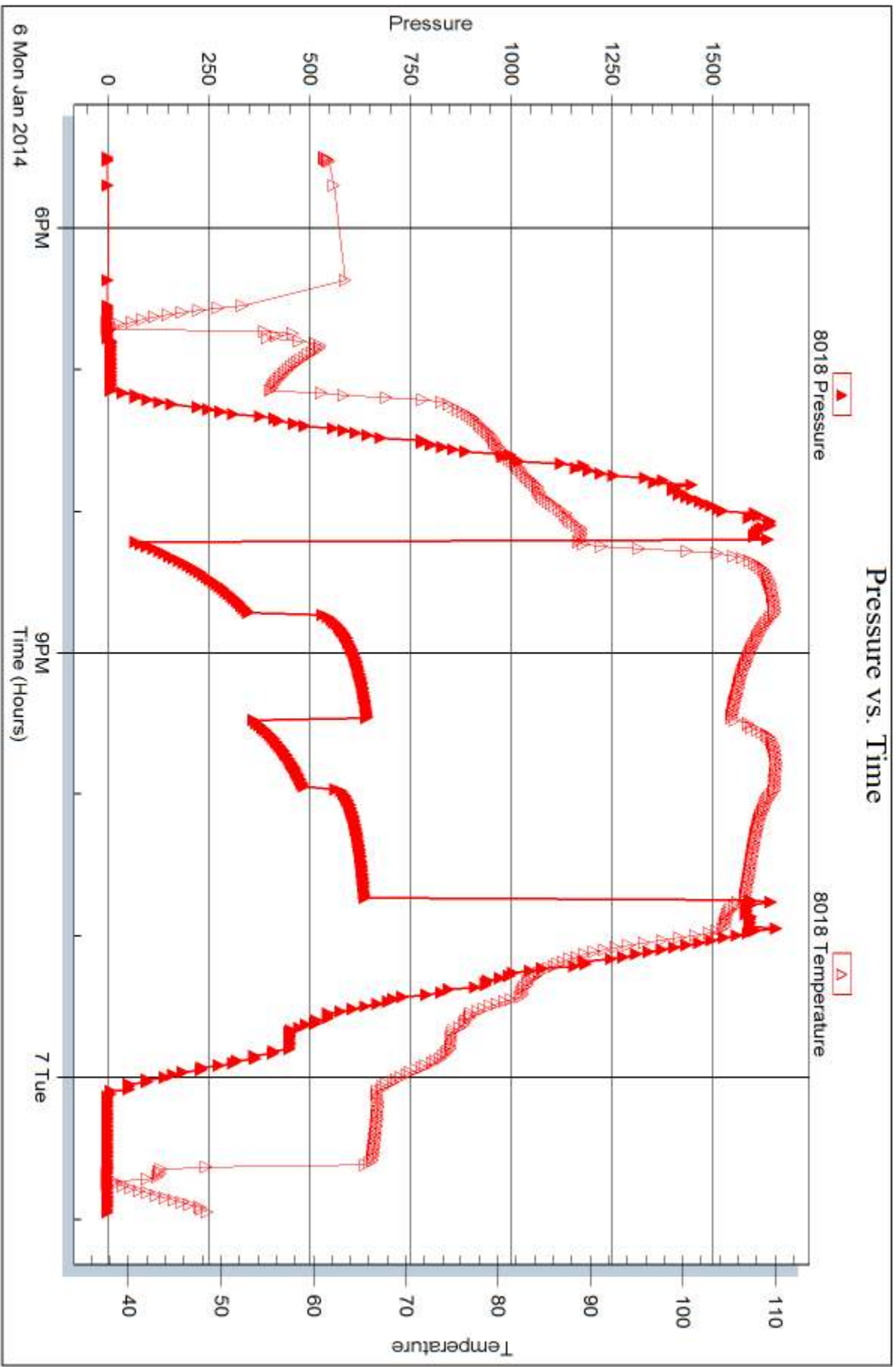
Laboratory Name:

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

Sarah #1-25

25-14s-19w Ellis,KS

Start Date: 2014.01.07 @ 07:29:52

End Date: 2014.01.07 @ 13:44:52

Job Ticket #: 55445 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.10 @ 09:57:26



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55445

DST#: 2

ATTN: Marc Dow ning

Test Start: 2014.01.07 @ 07:29:52

GENERAL INFORMATION:

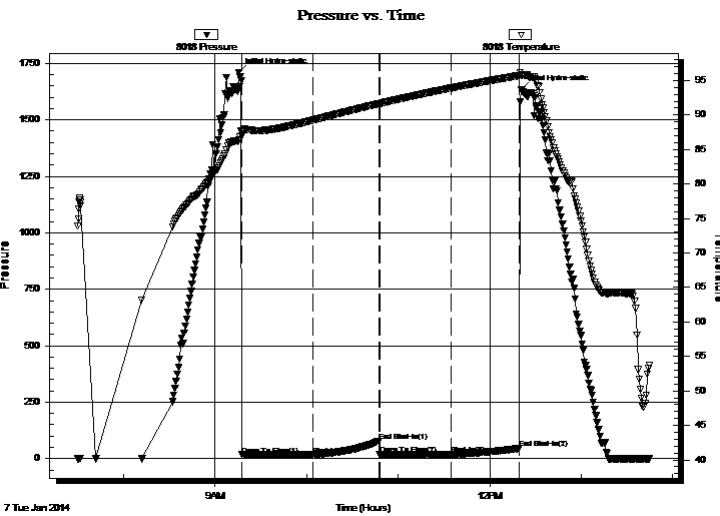
Formation: **LKC "E"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:17:37
 Time Test Ended: 13:44:52
 Interval: **3448.00 ft (KB) To 3471.00 ft (KB) (TVD)**
 Total Depth: 3471.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Brannan L
 Unit No: 59
 Reference Elevations: 2085.00 ft (KB)
 2077.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8018

Outside

Press@RunDepth: 18.05 psig @ 3458.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.01.07 End Date: 2014.01.07 Last Calib.: 2014.01.07
 Start Time: 07:29:57 End Time: 13:44:51 Time On Btm: 2014.01.07 @ 09:15:22
 Time Off Btm: 2014.01.07 @ 12:20:37

TEST COMMENT: 45- IF- Built very slow ly to 1 1/2"
 45- IS- Surface blow
 45- FF- Built to 3/4"
 45- FS- Surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1710.01	86.27	Initial Hydro-static
3	16.89	86.90	Open To Flow (1)
49	17.37	89.24	Shut-In(1)
92	78.45	91.62	End Shut-In(1)
93	17.69	91.66	Open To Flow (2)
140	18.05	93.89	Shut-In(2)
185	45.79	95.71	End Shut-In(2)
186	1635.34	95.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	M	0.07

* 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.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55445

DST#: 2

ATTN: Marc Dow ning

Test Start: 2014.01.07 @ 07:29:52

Tool Information

Drill Pipe:	Length: 3440.00 ft	Diameter: 3.80 inches	Volume: 48.25 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3448.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	23.00 ft				
Tool Length:	43.00 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			3429.00	
Shut In Tool	5.00			3434.00	
Hydraulic tool	5.00			3439.00	
Packer	5.00			3444.00	20.00 Bottom Of Top Packer
Packer	4.00			3448.00	
Stubb	1.00			3449.00	
Perforations	9.00			3458.00	
Recorder	0.00	8736	Inside	3458.00	
Recorder	0.00	8018	Outside	3458.00	
Perforations	10.00			3468.00	
Bullnose	3.00			3471.00	23.00 Bottom Packers & Anchor

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55445

DST#: 2

ATTN: Marc Dow ning

Test Start: 2014.01.07 @ 07:29:52

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 49.00 sec/qt

Water Loss: 8.78 in³

Resistivity: ohm.m

Salinity: 7000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	M	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

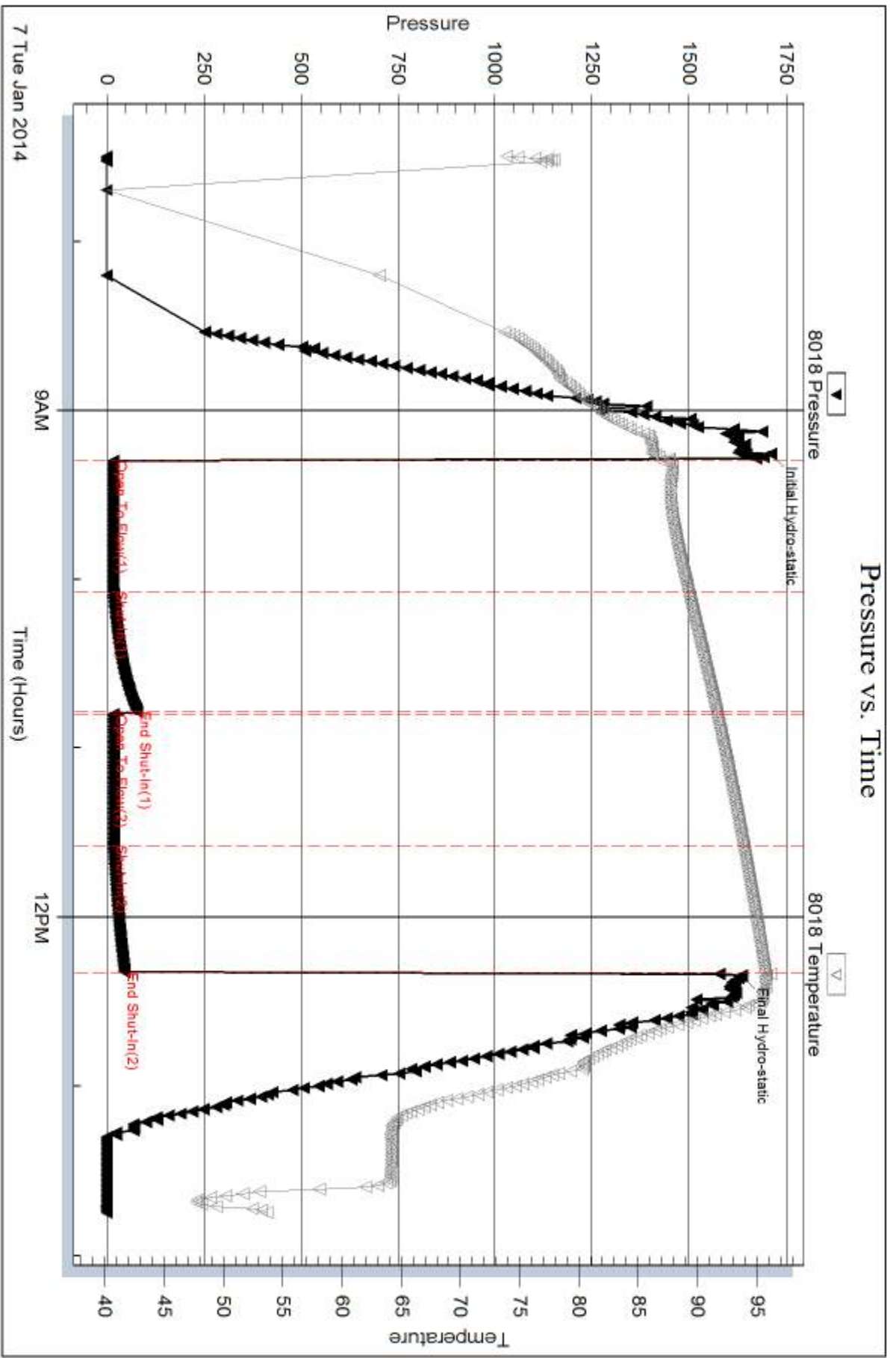
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



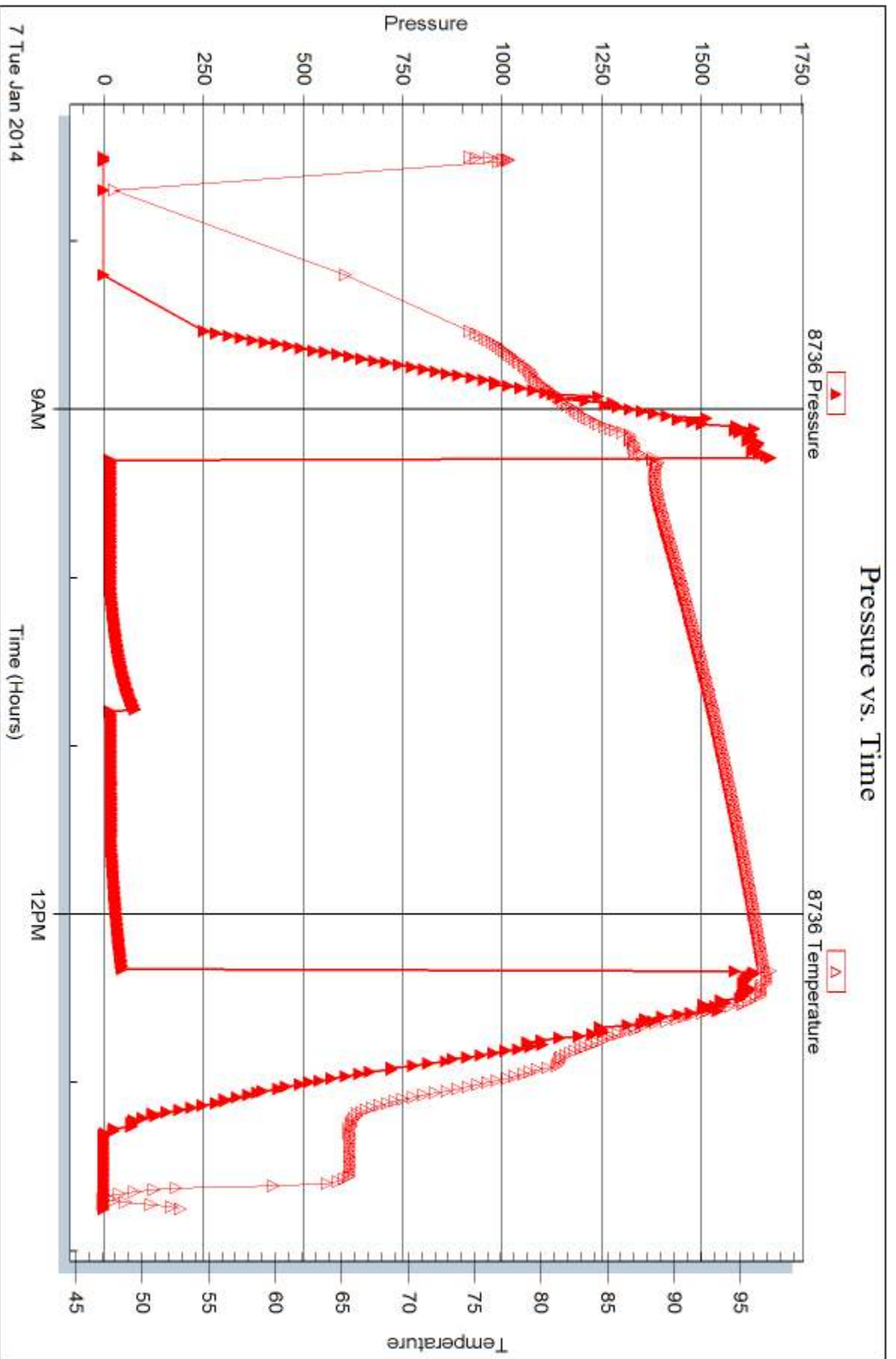
Serial #: 8736

Inside

Dow nng-Nelson Oil Co Inc.

Sarah #1-25

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 55445

Printed: 2014.01.10 @ 09:57:29



DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Sarah #1-25

25-14s-19w Ellis,KS

Start Date: 2014.01.08 @ 01:08:48

End Date: 2014.01.08 @ 08:09:03

Job Ticket #: 55446 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.10 @ 09:56:58

Downing-Nelson Oil Co Inc.
25-14s-19w Ellis,KS
Sarah #1-25
DST # 3
LKC "H-I"
2014.01.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55446

DST#: 3

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 01:08:48

GENERAL INFORMATION:

Formation: **LKC "H-I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:09:18

Time Test Ended: 08:09:03

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 59

Interval: 3506.00 ft (KB) To 3562.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3562.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8736

Inside

Press@RunDepth: 35.18 psig @ 3515.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.08

End Date:

2014.01.08

Last Calib.:

2014.01.08

Start Time: 01:08:53

End Time:

08:09:02

Time On Btm:

2014.01.08 @ 03:07:48

Time Off Btm:

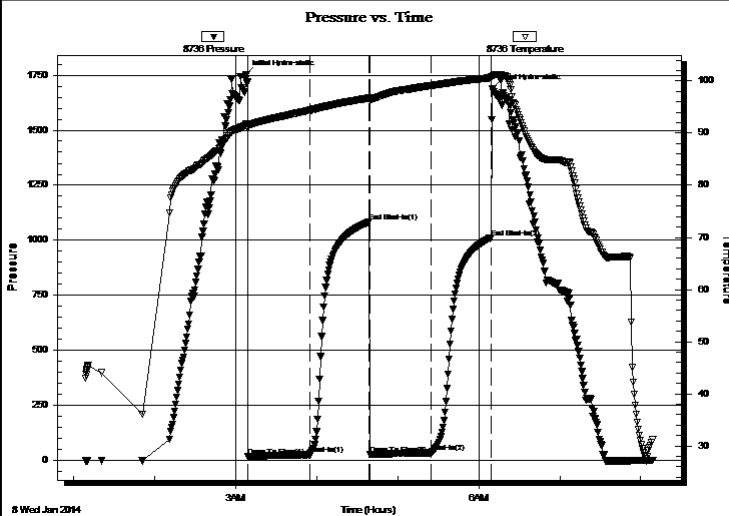
2014.01.08 @ 06:10:18

TEST COMMENT: 45- IF- Slow ly built to 2 1/2"

45- IS- No blow

45- FF- Built to 1"

45- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1753.58	91.69	Initial Hydro-static
2	16.82	90.98	Open To Flow (1)
47	26.45	94.35	Shut-In(1)
91	1082.81	96.72	End Shut-In(1)
92	27.42	96.44	Open To Flow (2)
137	35.18	99.12	Shut-In(2)
182	1011.25	100.59	End Shut-In(2)
183	1689.53	100.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	M	0.56

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.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55446

DST#: 3

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 01:08:48

Tool Information

Drill Pipe:	Length: 3504.00 ft	Diameter: 3.80 inches	Volume: 49.15 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial	57000.00 lb
Depth to Top Packer:	3506.00 ft			Final	57000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	56.00 ft				
Tool Length:	76.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

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

Change Over Sub	1.00			3487.00	
Shut In Tool	5.00			3492.00	
Hydraulic tool	5.00			3497.00	
Packer	5.00			3502.00	20.00 Bottom Of Top Packer
Packer	4.00			3506.00	
Stubb	1.00			3507.00	
Perforations	8.00			3515.00	
Recorder	0.00	8736	Inside	3515.00	
Recorder	0.00	8018	Outside	3515.00	
Change Over Sub	1.00			3516.00	
Drill Pipe	32.00			3548.00	
Change Over Sub	1.00			3549.00	
Perforations	10.00			3559.00	
Bullnose	3.00			3562.00	56.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55446

DST#: 3

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 01:08:48

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: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
40.00	M	0.561

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

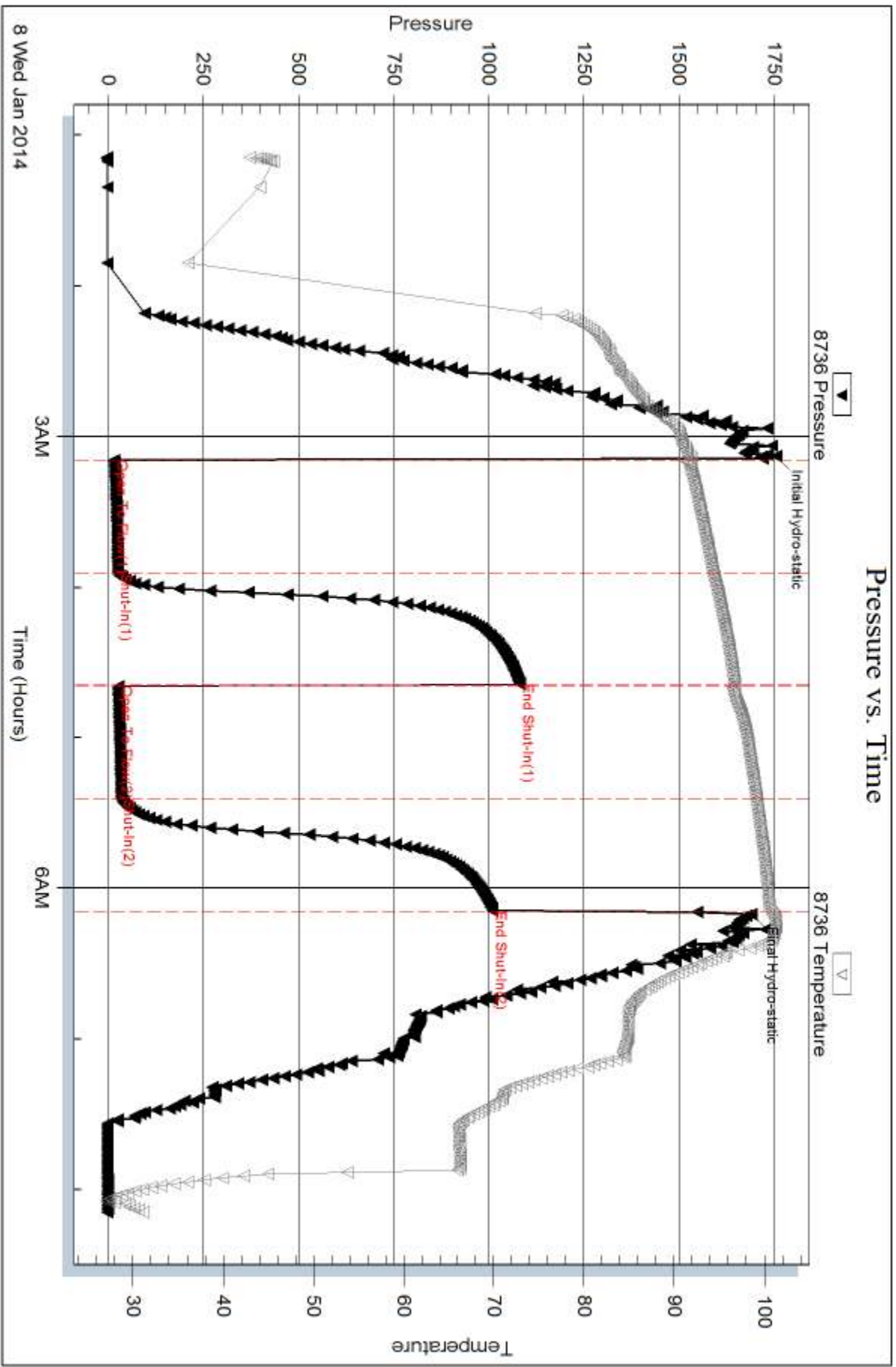
Num Gas Bombs: 0

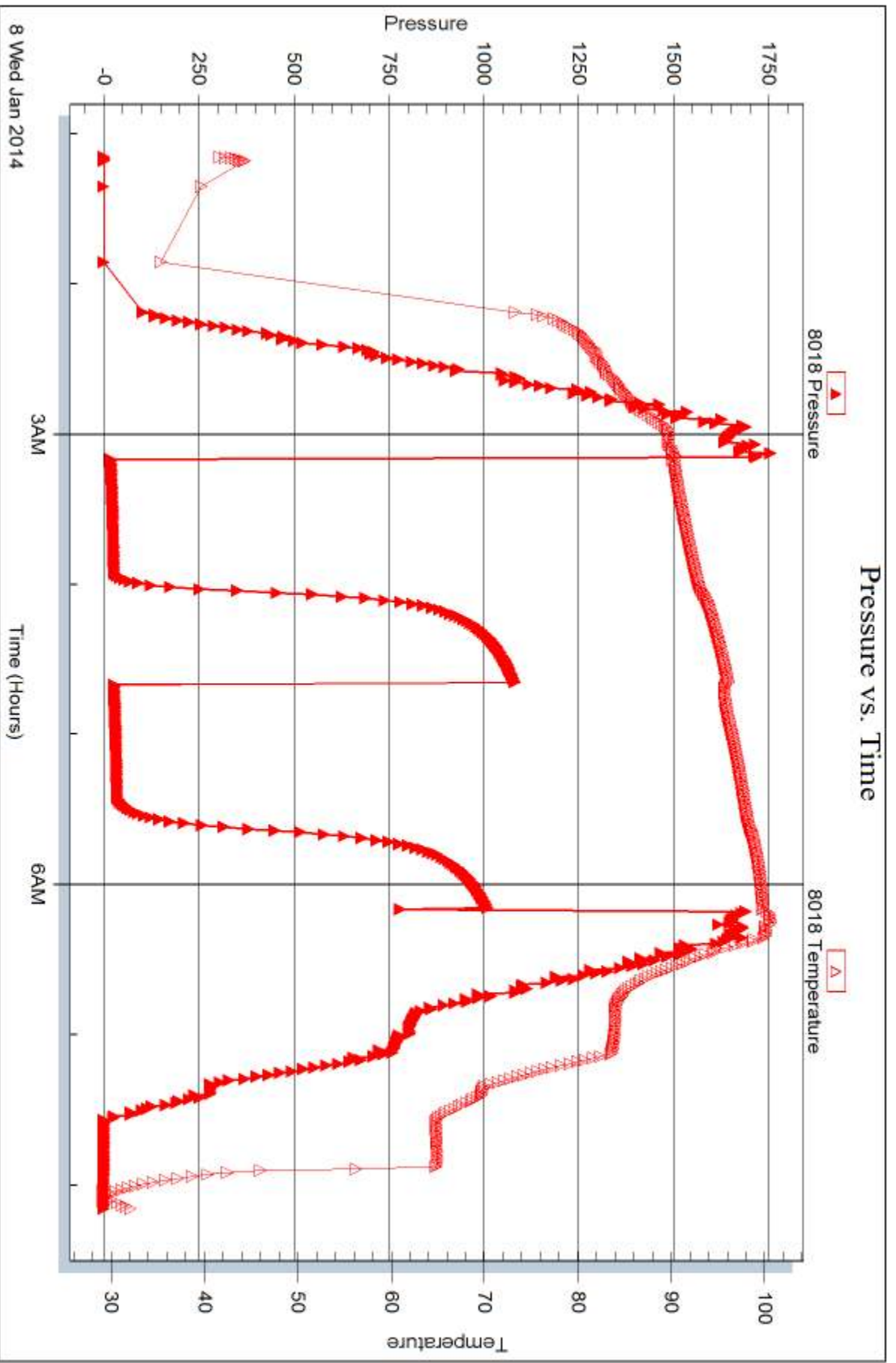
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Sarah #1-25

25-14s-19w Ellis,KS

Start Date: 2014.01.08 @ 22:15:45

End Date: 2014.01.09 @ 05:15:45

Job Ticket #: 55447 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.10 @ 09:56:32



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55447

DST#: 4

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 22:15:45

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:20:30

Time Test Ended: 05:15:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan L

Unit No: 59

Interval: 3683.00 ft (KB) To 3729.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3729.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8736 Inside

Press@RunDepth: 44.00 psig @ 3692.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.08

End Date: 2014.01.09

Last Calib.: 2014.01.09

Start Time: 22:15:50

End Time: 05:15:44

Time On Btm: 2014.01.09 @ 00:19:00

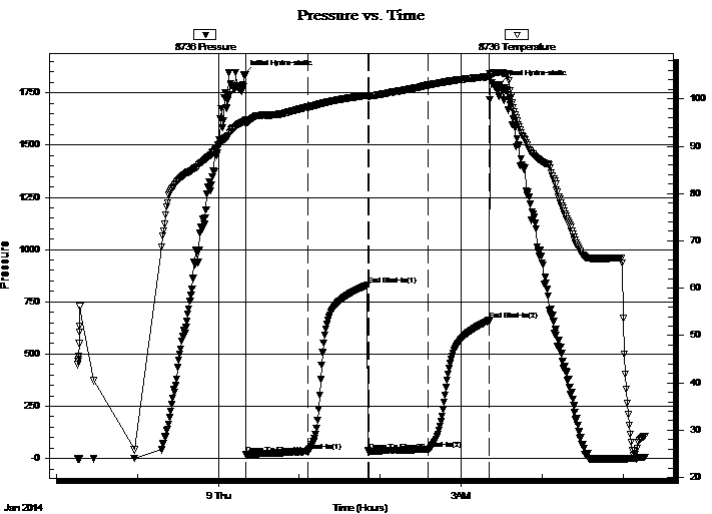
Time Off Btm: 2014.01.09 @ 03:28:15

TEST COMMENT: 45- IF- Built to 1" in 3 mins and maintained blow throughout

45- IS- No blow

45- FF- Built to 1" in 6 mins and maintained

45- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1839.32	95.24	Initial Hydro-static
2	19.25	94.81	Open To Flow (1)
47	33.21	98.22	Shut-In(1)
92	829.81	100.75	End Shut-In(1)
93	34.56	100.57	Open To Flow (2)
136	44.00	102.88	Shut-In(2)
182	660.92	104.69	End Shut-In(2)
190	1789.04	105.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	MCO, 50%O	0.42
40.00	O	0.56

* 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.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55447

DST#: 4

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 22:15:45

Tool Information

Drill Pipe:	Length: 3695.00 ft	Diameter: 3.80 inches	Volume: 51.83 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3683.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	46.00 ft			
Tool Length:	66.00 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			3664.00	
Shut In Tool	5.00			3669.00	
Hydraulic tool	5.00			3674.00	
Packer	5.00			3679.00	20.00 Bottom Of Top Packer
Packer	4.00			3683.00	
Stubb	1.00			3684.00	
Perforations	8.00			3692.00	
Recorder	0.00	8736	Inside	3692.00	
Recorder	0.00	8018	Outside	3692.00	
Change Over Sub	1.00			3693.00	
Drill Pipe	32.00			3725.00	
Change Over Sub	1.00			3726.00	
Bullnose	3.00			3729.00	46.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55447

DST#: 4

ATTN: Marc Dow ning

Test Start: 2014.01.08 @ 22:15:45

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
30.00	MCO, 50%O	0.421
40.00	O	0.561

Total Length: 70.00 ft Total Volume: 0.982 bbf

Num Fluid Samples: 0

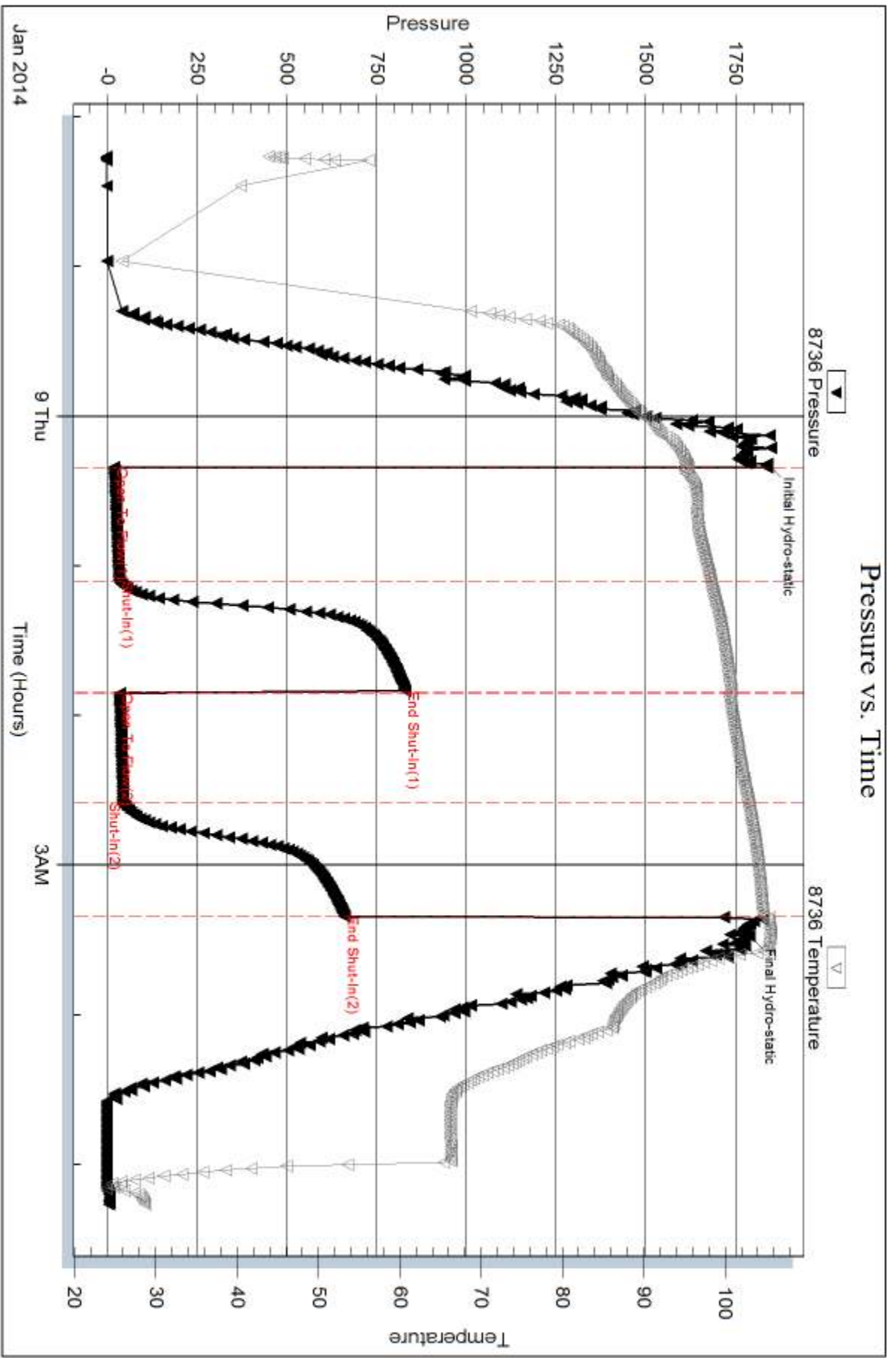
Num Gas Bombs: 0

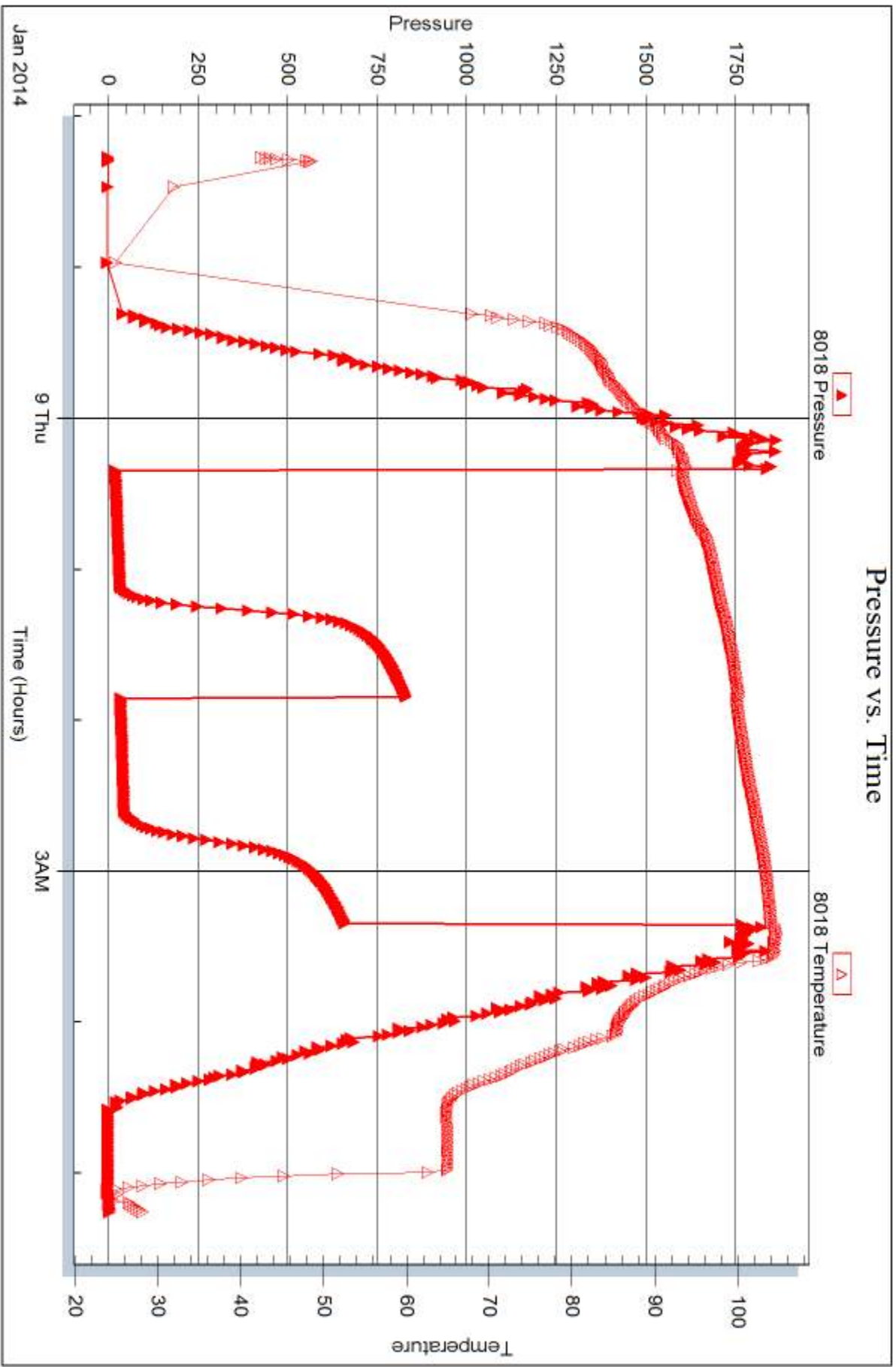
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 1019
Hays KS 67601

ATTN: Marc Downing

Sarah #1-25

25-14s-19w Ellis,KS

Start Date: 2014.01.09 @ 19:15:16

End Date: 2014.01.10 @ 03:55:31

Job Ticket #: 55448 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.10 @ 09:56:02



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55448

DST#: 5

ATTN: Marc Dow ning

Test Start: 2014.01.09 @ 19:15:16

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:45:16

Time Test Ended: 03:55:31

Test Type: Conventional Straddle (Reset)

Tester: Brannan L

Unit No: 59

Interval: 3728.00 ft (KB) To 3747.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3810.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8018 Outside

Press@RunDepth: 335.23 psig @ 3743.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.09

End Date: 2014.01.10

Last Calib.: 2014.01.10

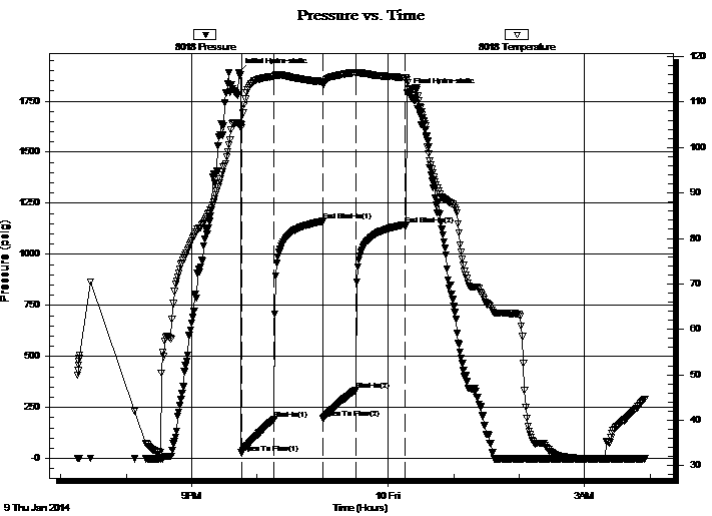
Start Time: 19:15:21

End Time: 03:55:31

Time On Btm: 2014.01.09 @ 21:43:01

Time Off Btm: 2014.01.10 @ 00:17:01

TEST COMMENT: 30- IF- BOB 5 mins
45- IS- Surface blow
30- FF- BOB 6 mins
45- FS- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1890.75	105.22	Initial Hydro-static
3	27.59	104.33	Open To Flow (1)
33	193.12	115.65	Shut-In(1)
77	1161.88	114.46	End Shut-In(1)
78	197.41	113.91	Open To Flow (2)
107	335.23	116.39	Shut-In(2)
153	1145.21	115.28	End Shut-In(2)
154	1793.19	114.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
715.00	MW, 80%W	10.03

* 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.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55448

DST#: 5

ATTN: Marc Dow ning

Test Start: 2014.01.09 @ 19:15:16

Tool Information

Drill Pipe:	Length: 3727.00 ft	Diameter: 3.80 inches	Volume: 52.28 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial	58000.00 lb
Depth to Top Packer:	3728.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	3747.00 ft				
Interval betw een Packers:	19.00 ft				
Tool Length:	102.00 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			3709.00	
Shut In Tool	5.00			3714.00	
Hydraulic tool	5.00			3719.00	
Packer	5.00			3724.00	20.00 Bottom Of Top Packer
Packer	4.00			3728.00	
Stubb	1.00			3729.00	
Perforations	14.00			3743.00	
Recorder	0.00	8736	Inside	3743.00	
Recorder	0.00	8018	Outside	3743.00	
Blank Off Sub	1.00			3744.00	
Blank Spacing	3.00			3747.00	19.00 Tool Interval
Packer	1.00			3748.00	
Blank Spacing	1.00			3749.00	
Perforations	24.00			3773.00	
Change Over Sub	1.00			3774.00	
Drill Pipe	32.00			3806.00	
Recorder	0.00	8319	Below	3806.00	
Change Over Sub	1.00			3807.00	
Bullnose	3.00			3810.00	63.00 Bottom Packers & Anchor

Total Tool Length: 102.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc.

25-14s-19w Ellis,KS

PO Box 1019
Hays KS 67601

Sarah #1-25

Job Ticket: 55448

DST#: 5

ATTN: Marc Dow ning

Test Start: 2014.01.09 @ 19:15:16

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 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
715.00	MW, 80%W	10.030

Total Length: 715.00 ft Total Volume: 10.030 bbl

Num Fluid Samples: 0

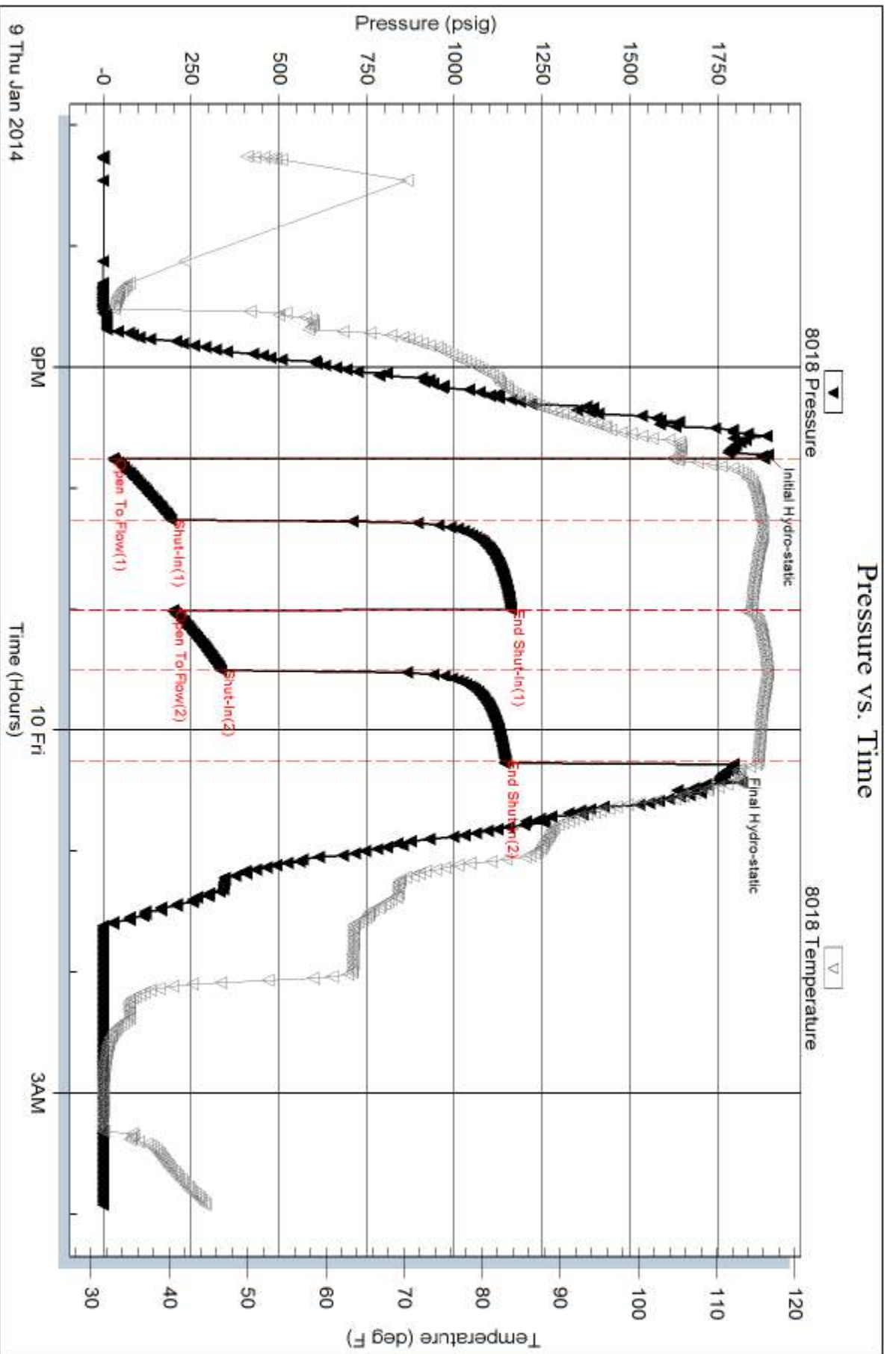
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



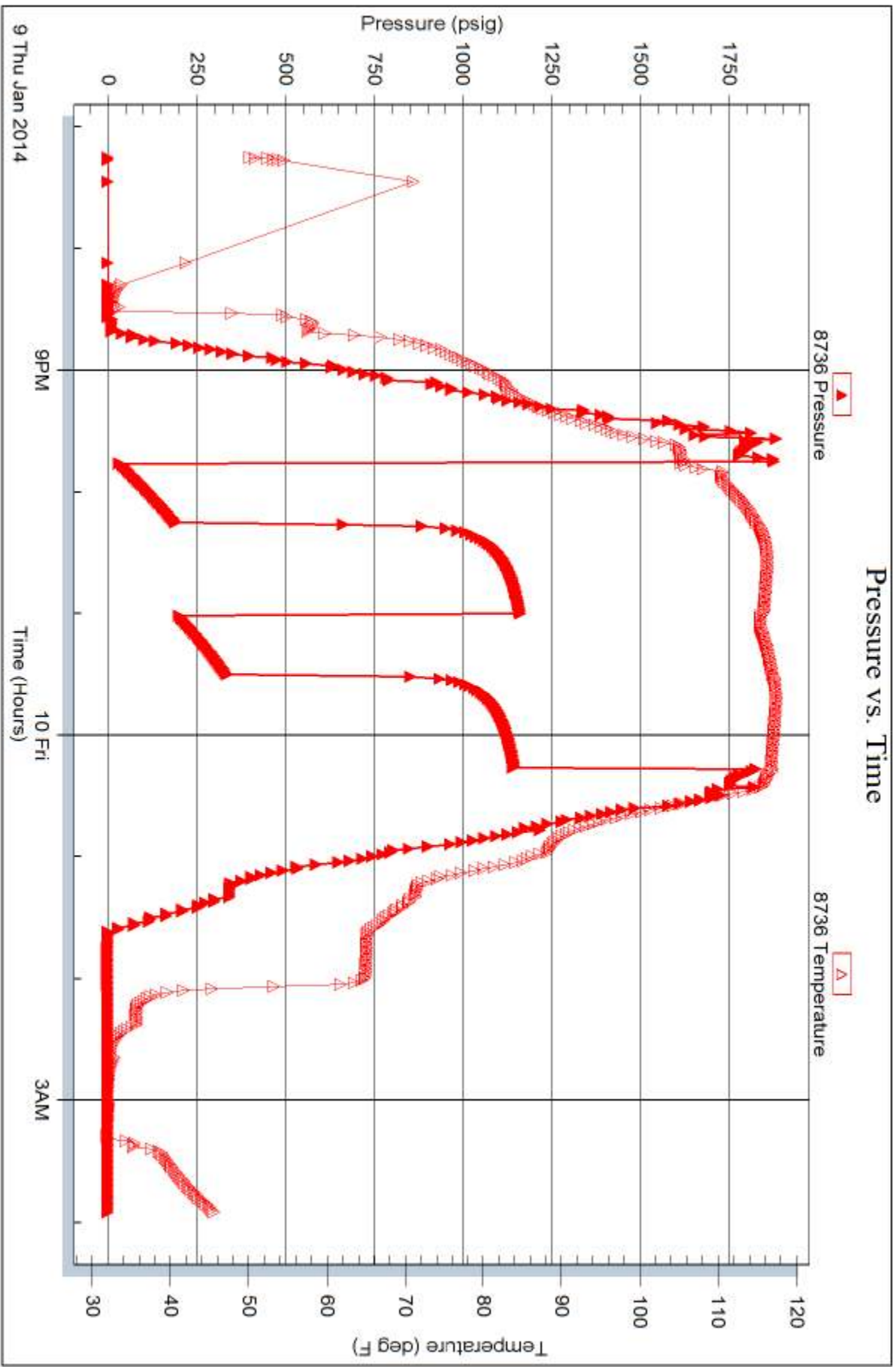
Serial #: 8736

Inside

Dow nrg-Nelson Oil Co Inc.

Sarah #1-25

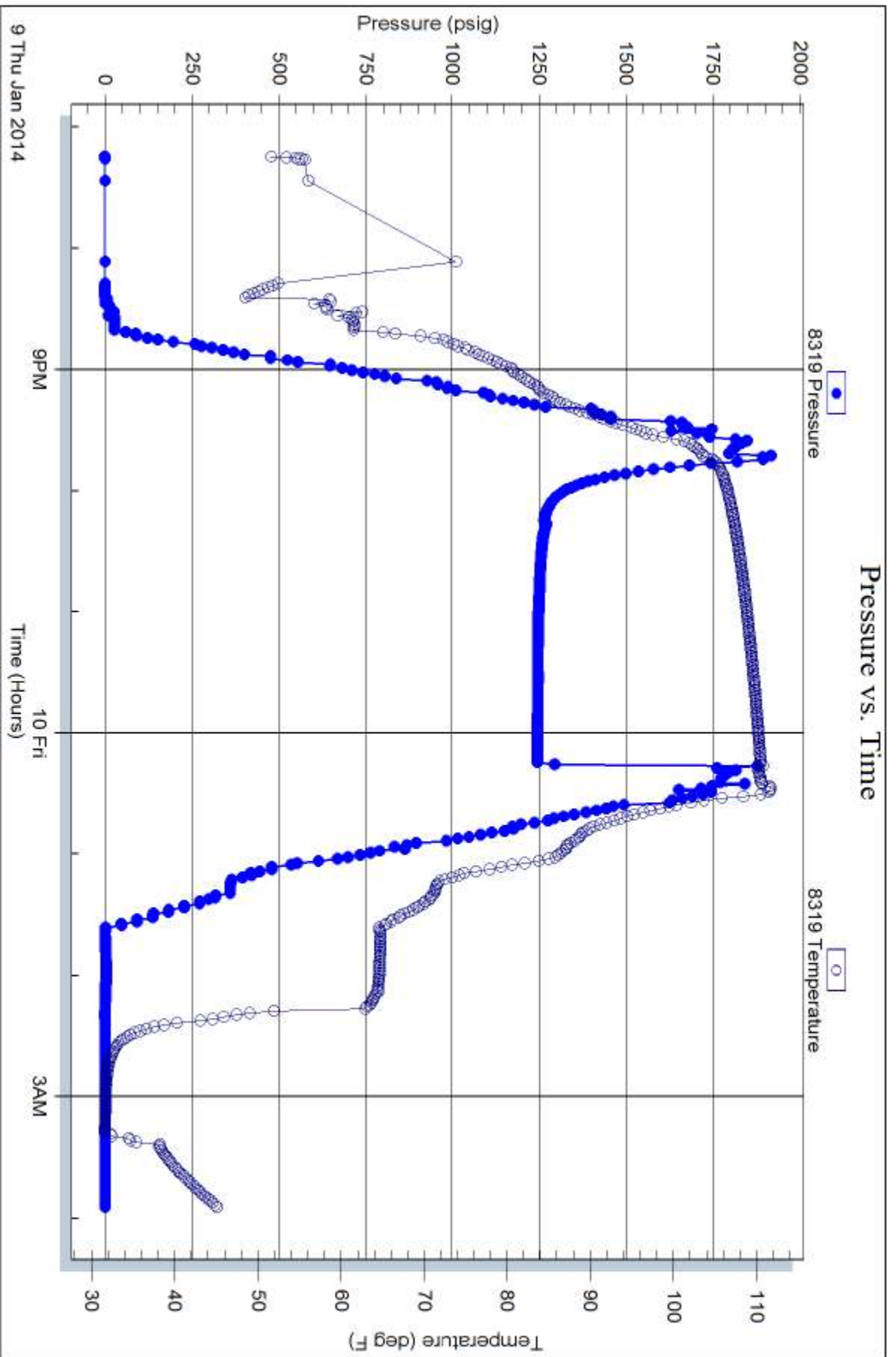
DST Test Number: 5

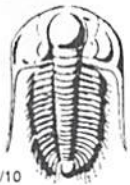


Trilobite Testing, Inc

Ref. No: 55448

Printed: 2014.01.10 @ 09:56:05





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55494

Well Name & No. Sarah # 1-25 Test No. 1 Date 1/6/14
 Company Downing-Nelson Oil Co Inc. Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. Marc D Rig Discovery #1
 Location: Sec. 25 Twp. 14 Rge. 19 Co. Ellis State KS

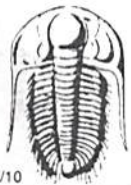
Interval Tested 3400-3453 Zone Tested KC "C+D"
 Anchor Length 53 Drill Pipe Run _____ Mud Wt. 9.0
 Top Packer Depth ~~3395~~ 3395 Drill Collars Run 30 Vis 50
 Bottom Packer Depth 3400 Wt. Pipe Run _____ WL 8.0
 Total Depth 3453 Chlorides 4,000 ppm System LCM 1 1/2 #
 Blow Description IF - BOB in 2 min
ISF - No blow
FF - BOB in 4 min
FSF - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>MW</u>			<u>65</u>	<u>35</u>
<u>860</u>	<u>Water</u>				
____	____				
____	____				
____	____				

Rec Total 1010 BHT 90 Gravity _____ API RW 2 @ 70 °F Chlorides 70,000 ppm
 (A) Initial Hydrostatic 1635 1,754 Test 1150 T-On Location 16:05
 (B) First Initial Flow 69 15 Jars _____ T-Started 17:30
 (C) First Final Flow 348 14 Safety Joint _____ T-Open 20:10
 (D) Initial Shut-In 642 570 Circ Sub _____ T-Pulled 22:40
 (E) Second Initial Flow 357 15 Hourly Standby _____ T-Out 00:55
 (F) Second Final Flow 487 15 Mileage 22 RT 34.10 Comments _____
 (G) Final Shut-In 636 467 Sampler _____
 (H) Final Hydrostatic 1598 1656 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1184.10
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1184.10

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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55445

Well Name & No. Sarah #1-25 Test No. 2 Date 1/7/14
 Company Downing-Nelson Oil Co. Inc. Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery 1
 Location: Sec. 25 Twp. 14s Rge. 19w Co. Ellis State KS

Interval Tested 3448-3471 Zone Tested LKC "E"
 Anchor Length 23' Drill Pipe Run 3440 Mud Wt. 9.0
 Top Packer Depth 3443 Drill Collars Run --- Vis 49
 Bottom Packer Depth 3448 Wt. Pipe Run --- WL 8.8
 Total Depth 3471 Chlorides 3,000 ppm System LCM 2#

Blow Description IF - Built very slowly to 1 1/2"
ISI - Surface Blow
FF - Built to 3/4"
FSI - Surface Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>M</u>				

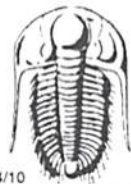
Rec Total 5' BHT 96° Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 1710 Test 1150 T-On Location 0720
 (B) First Initial Flow 17 Jars --- T-Started 0730
 (C) First Final Flow 17 Safety Joint --- T-Open 0917
 (D) Initial Shut-In 78 Circ Sub --- T-Pulled 1217
 (E) Second Initial Flow 18 Hourly Standby --- T-Out 1345
 (F) Second Final Flow 18 Mileage 22 RT 34.10
 (G) Final Shut-In 46 Sampler ---
 (H) Final Hydrostatic 1635 Straddle ---
 Shale Packer ---
 Extra Packer ---
 Extra Recorder ---
 Day Standby ---
 Accessibility ---

Initial Open 45 Ruined Shale Packer ---
 Initial Shut-In 45 Ruined Packer ---
 Final Flow 45 Extra Copies ---
 Final Shut-In 45 Sub Total 0
 Total 1184.10
 MP/DST Disc't ---
 Sub Total 1184.10

Approved By _____ Our Representative Brannan L

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55446

Well Name & No. Sarah #1-25 Test No. 3 Date 1/7/14
 Company Downing-Nelson Oil Co Inc Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery 1
 Location: Sec. 25 Twp. 14S Rge. 19w Co. Ellis State KS

Interval Tested 3506-3562 Zone Tested LKC "H+I"
 Anchor Length 56' Drill Pipe Run 3504 Mud Wt. 9.0
 Top Packer Depth 3501 Drill Collars Run — Vis 49
 Bottom Packer Depth 3506 Wt. Pipe Run — WL 8.8
 Total Depth 3562 Chlorides 3000 ppm System LCM 2#

Blow Description IF - Built slowly to 2 1/2"
ISI - No Blow
FF - Built to 1"
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>40</u>	<u>M</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

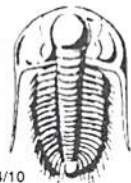
Rec Total 40' BHT 101° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 1754 Test 1150 T-On Location 0103
 (B) First Initial Flow 17 Jars — T-Started 0109
 (C) First Final Flow 26 Safety Joint — T-Open 0309
 (D) Initial Shut-In 1083 Circ Sub — T-Pulled 0609
 (E) Second Initial Flow 27 Hourly Standby — T-Out 0809
 (F) Second Final Flow 35 Mileage 22 RT 34.10 Comments —
 (G) Final Shut-In 1011 Sampler —
 (H) Final Hydrostatic 1690 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer —
 Extra Packer — Extra Copies —
 Extra Recorder — Sub Total 0
 Day Standby — Total 1184.10
 Accessibility — MP/DST Disc't —

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Sub Total 1184.10

Approved By — Our Representative Braman L

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55447

Well Name & No. Sarah #1-25 Test No. 4 Date 1/8/14
 Company Downing-Nelson Oil Co. Inc. Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays, KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery 1
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

Interval Tested 3683-3729 Zone Tested Arbuckle
 Anchor Length 46' Drill Pipe Run 3695 Mud Wt. 8.9
 Top Packer Depth 3678 Drill Collars Run --- Vis 55
 Bottom Packer Depth 3683 Wt. Pipe Run --- WL 8.0
 Total Depth 3729 Chlorides 2000 ppm System LCM 1#

Blow Description IF - Built to 1" in 3 mins & maintained flow
ISI - No flow
FF - Built to 1" in 6 mins & maintained
FSI - No flow

Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>MCO</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>
<u>40</u>	<u>0</u>	<u>100</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
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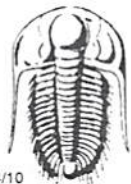
Rec Total 70' BHT 1050 Gravity 29 API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 1839 Test 1150 T-On Location 2209
 (B) First Initial Flow 19 Jars --- T-Started 2216
 (C) First Final Flow 33 Safety Joint --- T-Open 0021
 (D) Initial Shut-In 830 Circ Sub --- T-Pulled 0321
 (E) Second Initial Flow 35 Hourly Standby --- T-Out 0516
 (F) Second Final Flow 44 Mileage 22 RT 34.10
 (G) Final Shut-In 661 Sampler ---
 (H) Final Hydrostatic 1789 Straddle --- Ruined Shale Packer ---
 Shale Packer --- Ruined Packer ---

Initial Open 45 Extra Packer --- Extra Copies ---
 Initial Shut-In 45 Extra Recorder --- Sub Total 0
 Final Flow 45 Day Standby --- Total 1184.10
 Final Shut-In 45 Accessibility --- MP/DST Disc't ---
 Sub Total 1184.10

Approved By --- Our Representative Bannan L

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 55448

Well Name & No. Sarah[#]1-25 Test No. 5 Date 1/9/14
 Company Downing - Nelson Oil Co Inc. Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays, KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery 1
 Location: Sec. 25 Twp. 14s Rge. 19w Co. Ellis State KS

Interval Tested 3728-3747 Zone Tested Arbuckle
 Anchor Length 63' tail 19' anchor Drill Pipe Run 3727 Mud Wt. 9.0
 Top Packer Depth 3723-3728 Drill Collars Run --- Vis 55
 Bottom Packer Depth 3747 Wt. Pipe Run --- WL 8.0
 Total Depth 3810 Chlorides 3,000 ppm System LCM 2#

Blow Description IF-BOB 5 mins
ISI-Surface blow
FF-BOB 6 mins
FSI-No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>715</u>	<u>MW</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	Feet of	%gas	%oil	%water	%mud

Rec Total 715 BHT 115° Gravity --- API RW 31 @ 33 °F Chlorides 52,000 ppm

(A) Initial Hydrostatic 1891 Test 1150 T-On Location 1900
 (B) First Initial Flow 28 Jars _____ T-Started 1915
 (C) First Final Flow 193 Safety Joint _____ T-Open 2145
 (D) Initial Shut-In 1162 Circ Sub _____ T-Pulled 0015
 (E) Second Initial Flow 197 Hourly Standby _____ T-Out 0355
 (F) Second Final Flow 335 Mileage 22 RT 34.10 Comments _____
 (G) Final Shut-In 1145 Sampler _____
 (H) Final Hydrostatic 1793 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 45 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1784.10
 Final Shut-In 45 Accessibility _____ MP/DST Disc't _____
 Sub Total 1784.10

Approved By _____ Our Representative Brannon L

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