



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1182981
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: _____

1182981

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 <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 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
<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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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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	Virginia 1-30
Doc ID	1182981

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Neutron Density

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Virginia 1-30
Doc ID	1182981

Tops

Name	Top	Datum
Top Anhydrite	1295'	+767
Base Anhydrite	1338'	+724
Topeka	3068'	-1006
Heebner	3323'	-1261
Toronto	3341'	-1279
LKC	3370'	-1308
BKC	3602'	-1540
Marmaton	3636'	-1574
Arbuckle	3778'	-1716

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. 7697

Date	2-1-14	Sec.	30	Twp.	14	Range	18	County	Ellis	State	KS	On Location		Finish	10:30pm
------	--------	------	----	------	----	-------	----	--------	-------	-------	----	-------------	--	--------	---------

Location *Hays, 45 to Butterfield trail, 3W, Nn Z*

Lease *Virginia* Well No. *1-30* Owner

Contractor *Discovery #3*
Type Job *Surface*
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 *12 1/4* T.D. *1303* Charge To *Downing Nelson*

Csg. *8 5/8* Depth *1302.47* 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 *40.38* Cement Amount Ordered *485 sx com, 3%cc, 2%gel, 1/2# Flow*

Meas Line Displace *80 1/4 661*

EQUIPMENT Common *485*

Pumptrk <i>17</i>	No.	Cementer		Poz. Mix
		Helper <i>Nick</i>		

Bulktrk <i>12</i>	No.	Driver		Gel. <i>9</i>
		Driver <i>Lanniew</i>		

Bulktrk <i>Ph</i>	No.	Driver		Calcium <i>17</i>
		Driver <i>Travis</i>		

JOB SERVICES & REMARKS Hulls

Remarks: *Cement did circulate* Salt

Rat Hole Flowseal *242H*

Mouse Hole Kol-Seal

Centralizers Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

Handling *511*

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer *2*

Baskets

AFU Inserts

Float Shoe

Latch Down *1 8x Rubber plug*

1 baffle plate

Pumptrk Charge *Low Surface*

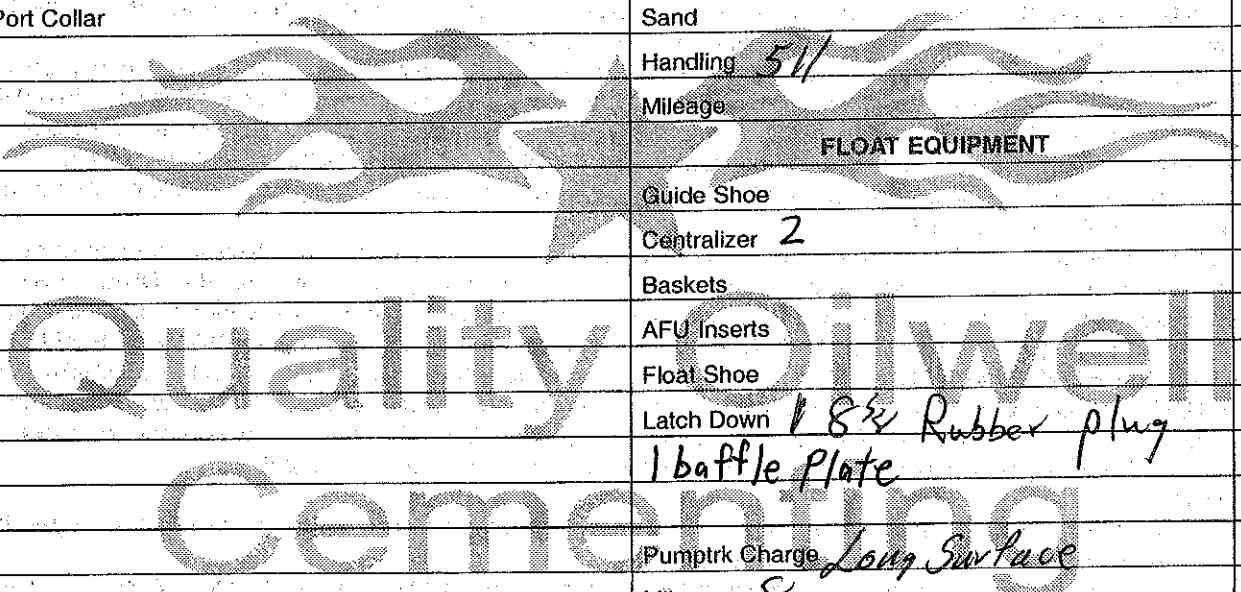
Mileage *8*

Tax

Discount

Total Charge

X Signature *John Ashler*



JOB LOG

SWIFT Services, Inc.

DATE 2-12-14 PAGE NO. 1

CUSTOMER Dwight J Nelson WELL NO. 1-30 LEASE Virginia JOB TYPE Cement Longstring TICKET NO. 25379

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		TO 3771	DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING		
	0345					14 [#] / ₄	5 1/2"		DN loc - F.E. - Rig L.D D. Collars
	0500								Start 5 1/2" 14 [#] / ₄ casing to 3770'
									Insert Foot Shoe w/ Auto fill
									L.D. Ball Pl - SJ - 22' @ 3740' = 91 1/2
									Cont - 1-3-5-7-9-11
									Drop Pull up ball 5 Jts out
	0615								Fin run casing
	0630								Tag & Log down w JT
	0645								St. CIR / Rotate
	0715								Fin air
			8 1/6						Plug RL - 30 SKS out / MH - 15 SKS out
		5	12				300		Pump 500 gal H2O flush
		5 1/2	20				300		Pump 20 BBI HCL flush
		4 1/2							Start 130 SKS EIT-2 out
			32						Fin out - Wash out Pump & Lines
									Drop L.D. Plug
		9 1/2					400		Start Displ
		9 1/2	75				500		Caught lift press.
		8	85				800		Slow rate
		7	90				700		
		6	91				800		
	0800		91 1/2				1500		Plug Down - Hold - Release & Hold
									Job Complete
									Wash up & Reelup
	0845								Thanks Don, Tom & Trace



DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.07 @ 22:08:00

End Date: 2014.02.08 @ 05:30:00

Job Ticket #: 50424 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.12 @ 11:21:41

Downing-Nelson Oil Co Inc
30 14s 18w Ellis,KS
Virginia #1-30
DST # 1
LKC " C "
2014.02.07



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50424

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.02.07 @ 22:08:00

GENERAL INFORMATION:

Formation: **LKC " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:02:30

Time Test Ended: 05:30:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 76

Interval: 3370.00 ft (KB) To 3400.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 541.25 psig @ 3372.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.07

End Date:

2014.02.08

Last Calib.:

2014.02.08

Start Time:

22:08:02

End Time:

05:30:15

Time On Btm:

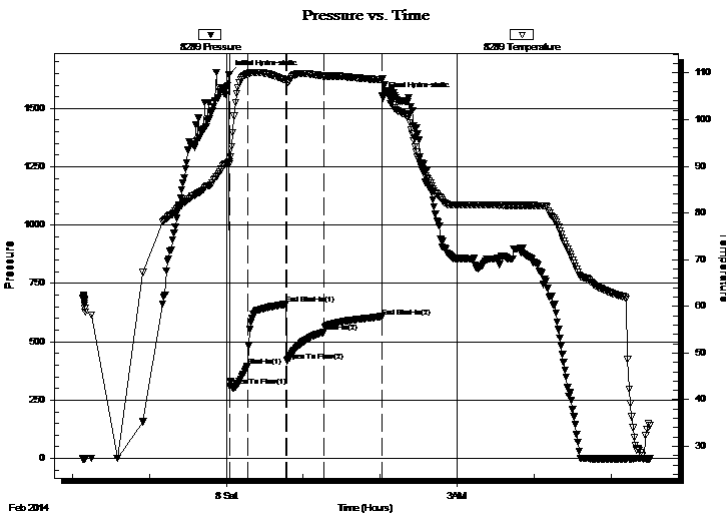
2014.02.08 @ 00:02:15

Time Off Btm:

2014.02.08 @ 02:01:45

TEST COMMENT: 15-IFP- BOB in 20 sec.
30-ISIP- BOB in 1min. 10sec.
30-FFP- BOB 15sec. Gas to Surface 8min.
45-FSIP- BOB in 1min. 15sec.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1644.21	90.99	Initial Hydro-static
1	310.63	90.60	Open To Flow (1)
15	395.00	109.79	Shut-In(1)
44	660.61	108.49	End Shut-In(1)
45	418.57	108.30	Open To Flow (2)
74	541.25	109.32	Shut-In(2)
120	607.77	108.48	End Shut-In(2)
120	1552.32	108.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1850.00	CO 100%	25.66

Gas Rates

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



DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50424

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.02.07 @ 22:08:00

GENERAL INFORMATION:

Formation: **LKC " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:02:30

Time Test Ended: 05:30:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 76

Interval: **3370.00 ft (KB) To 3400.00 ft (KB) (TVD)**

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3400.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8789 Inside

Press@RunDepth: psig @ 3372.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.07

End Date: 2014.02.08

Last Calib.: 2014.02.08

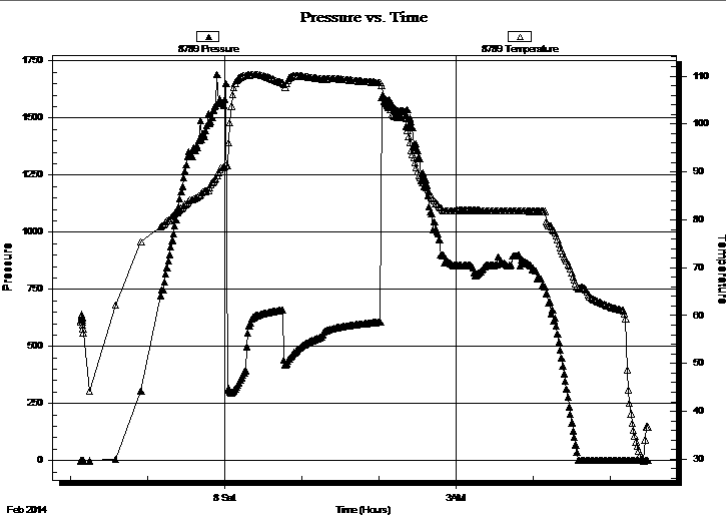
Start Time: 22:08:02

End Time: 05:30:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 15-IFP- BOB in 20 sec.
30-ISIP- BOB in 1min. 10sec.
30-FFP- BOB 15sec. Gas to Surrface 8min.
45-FSIP- BOB in 1min. 15sec.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1850.00	CO 100%	25.66

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

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50424

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.02.07 @ 22:08:00

Tool Information

Drill Pipe:	Length: 3324.00 ft	Diameter: 3.80 inches	Volume: 46.63 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose:	57000.00 lb
			<u>Total Volume: 46.79 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3370.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	30.00 ft				
Tool Length:	51.00 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			3350.00	
Shut In Tool	5.00			3355.00	
Hydraulic tool	5.00			3360.00	
Packer	5.00			3365.00	21.00 Bottom Of Top Packer
Packer	5.00			3370.00	
Stubb	1.00			3371.00	
Perforations	1.00			3372.00	
Recorder	0.00	8789	Inside	3372.00	
Recorder	0.00	8289	Outside	3372.00	
Perforations	25.00			3397.00	
Bullnose	3.00			3400.00	30.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50424

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.02.07 @ 22:08:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.67 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.50 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1850.00	CO 100%	25.659

Total Length: 1850.00 ft Total Volume: 25.659 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

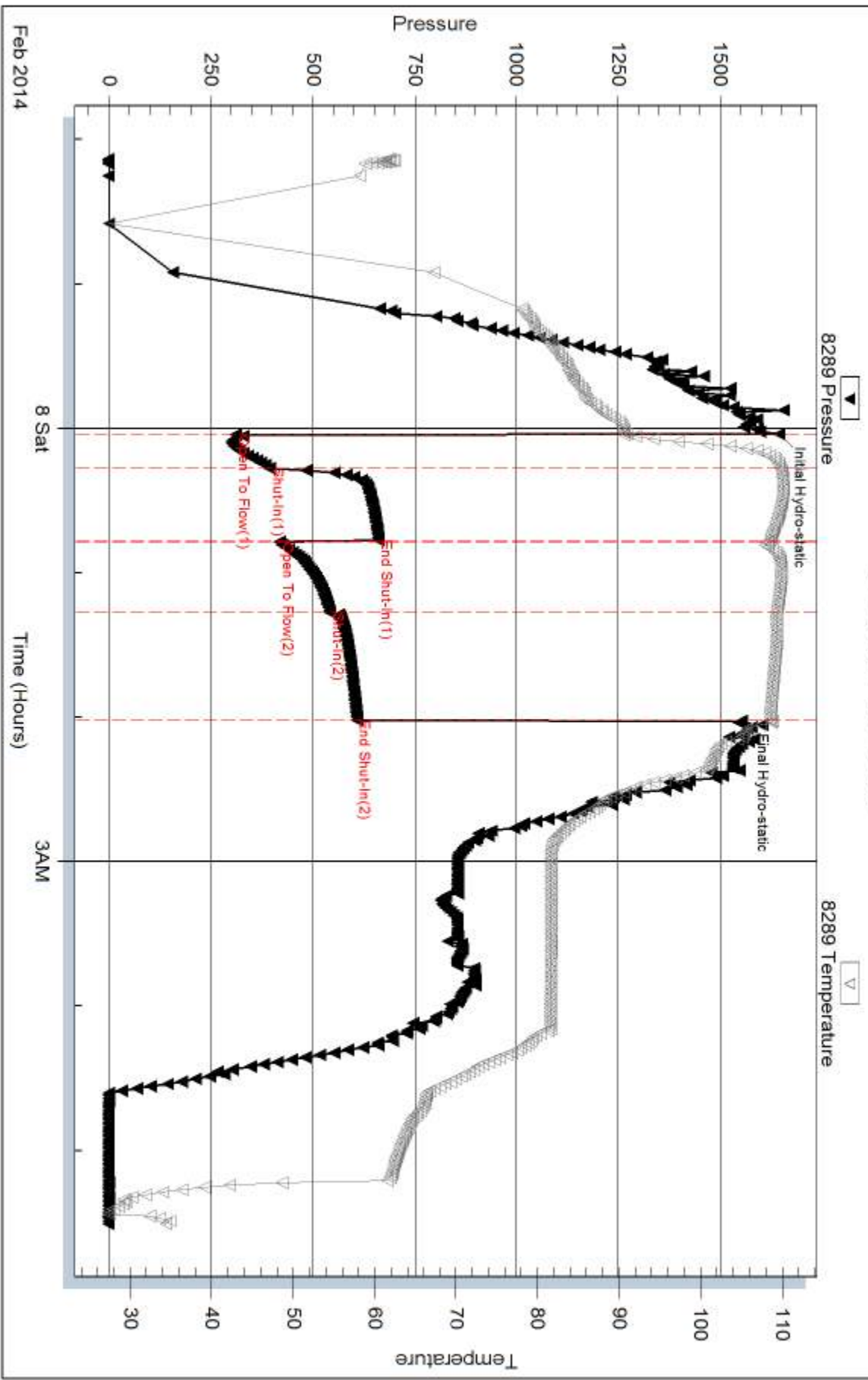
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gas to Surface 8 min. into Second Open

Pressure vs. Time



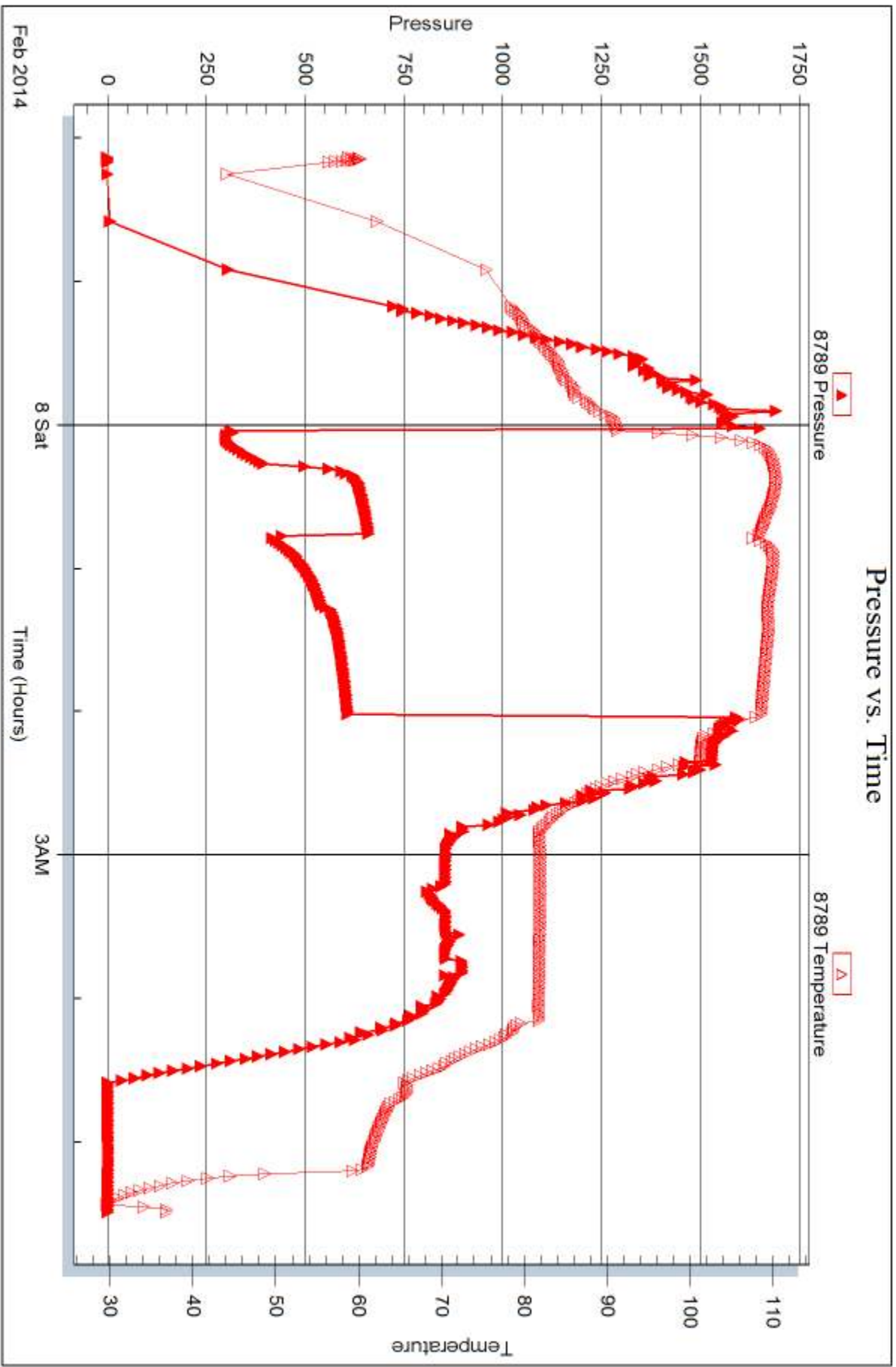
Serial #: 8789

Inside

Dow nng-Nelson Oil Co Inc

Virginia #1-30

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 50424

Printed: 2014.02.12 @ 11:21:43



DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.08 @ 11:20:00

End Date: 2014.02.08 @ 17:36:00

Job Ticket #: 50425 DST #: 2

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

Printed: 2014.02.12 @ 11:21:15

Downing-Nelson Oil Co Inc
30 14s 18w Ellis,KS
Virginia #1-30
DST # 2
LKC " D "
2014.02.08



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50425

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.02.08 @ 11:20:00

GENERAL INFORMATION:

Formation: **LKC " D "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:29:00

Time Test Ended: 17:36:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3397.00 ft (KB) To 3420.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3420.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 69.12 psig @ 3399.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.08

End Date:

2014.02.08

Last Calib.:

2014.02.08

Start Time: 11:20:02

End Time:

17:35:45

Time On Btm:

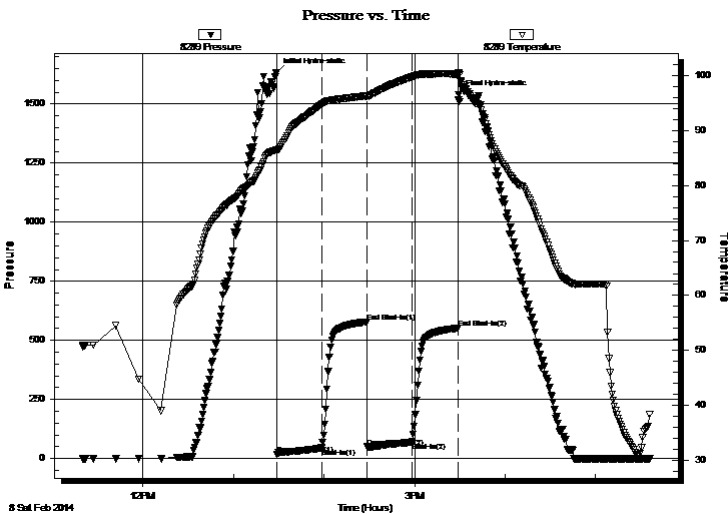
2014.02.08 @ 13:28:30

Time Off Btm:

2014.02.08 @ 15:29:15

TEST COMMENT: 30-IFP- BOB in 7 min.
30-ISIP- Surface Blow Building to 2 1/2" in 20 min.
30-FFP- BOB in 8 min.
30-FSIP- Surface Blow Building to 4". in 22 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1633.75	86.58	Initial Hydro-static
1	18.18	86.31	Open To Flow (1)
30	45.03	94.70	Shut-In(1)
60	578.46	96.31	End Shut-In(1)
61	49.30	96.14	Open To Flow (2)
90	69.12	99.74	Shut-In(2)
121	551.75	100.16	End Shut-In(2)
121	1539.02	100.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	GWMCO 25%g 10%w 30%m 35%o	0.62
65.00	GOWCM 10%g 25%o 30%w 35%m	0.91
0.00	508 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50425 **DST#: 2**

ATTN: Al Dow ning

Test Start: 2014.02.08 @ 11:20:00

GENERAL INFORMATION:

Formation: **LKC " D "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:29:00

Time Test Ended: 17:36:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3397.00 ft (KB) To 3420.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3420.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8789 Inside

Press@RunDepth: psig @ 3399.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.08 End Date: 2014.02.08

Last Calib.: 2014.02.08

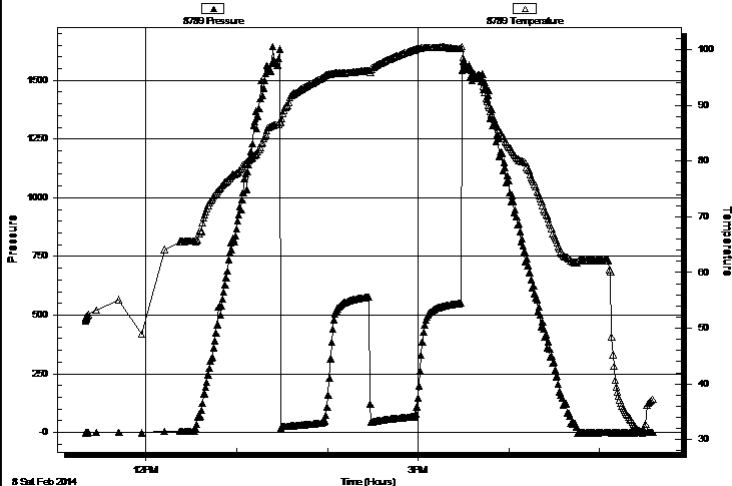
Start Time: 11:20:02 End Time: 17:35:30

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 7 min.
30-ISIP- Surface Blow Building to 2 1/2" in 20 min.
30-FFP- BOB in 8 min.
30-FSIP- Surface Blow Building to 4". in 22 min.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
65.00	GWMCO 25%g 10%w 30%m 35%o	0.62
65.00	GOWCM 10%g 25%o 30%w 35%m	0.91
0.00	508 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50425

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.02.08 @ 11:20:00

Tool Information

Drill Pipe:	Length: 3358.00 ft	Diameter: 3.80 inches	Volume: 47.10 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose:	57000.00 lb
			<u>Total Volume: 47.26 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	3397.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	23.00 ft				
Tool Length:	44.00 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			3377.00	
Shut In Tool	5.00			3382.00	
Hydraulic tool	5.00			3387.00	
Packer	5.00			3392.00	21.00 Bottom Of Top Packer
Packer	5.00			3397.00	
Stubb	1.00			3398.00	
Perforations	1.00			3399.00	
Recorder	0.00	8789	Inside	3399.00	
Recorder	0.00	8289	Outside	3399.00	
Perforations	18.00			3417.00	
Bullnose	3.00			3420.00	23.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 50425

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.02.08 @ 11:20:00

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:

95000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.91 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.25 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
65.00	GWMCO 25%g 10%w 30%m 35%o	0.620
65.00	GOWCM 10%g 25%o 30%w 35%m	0.912
0.00	508 GIP	0.000

Total Length: 130.00 ft

Total Volume: 1.532 bbl

Num Fluid Samples: 0

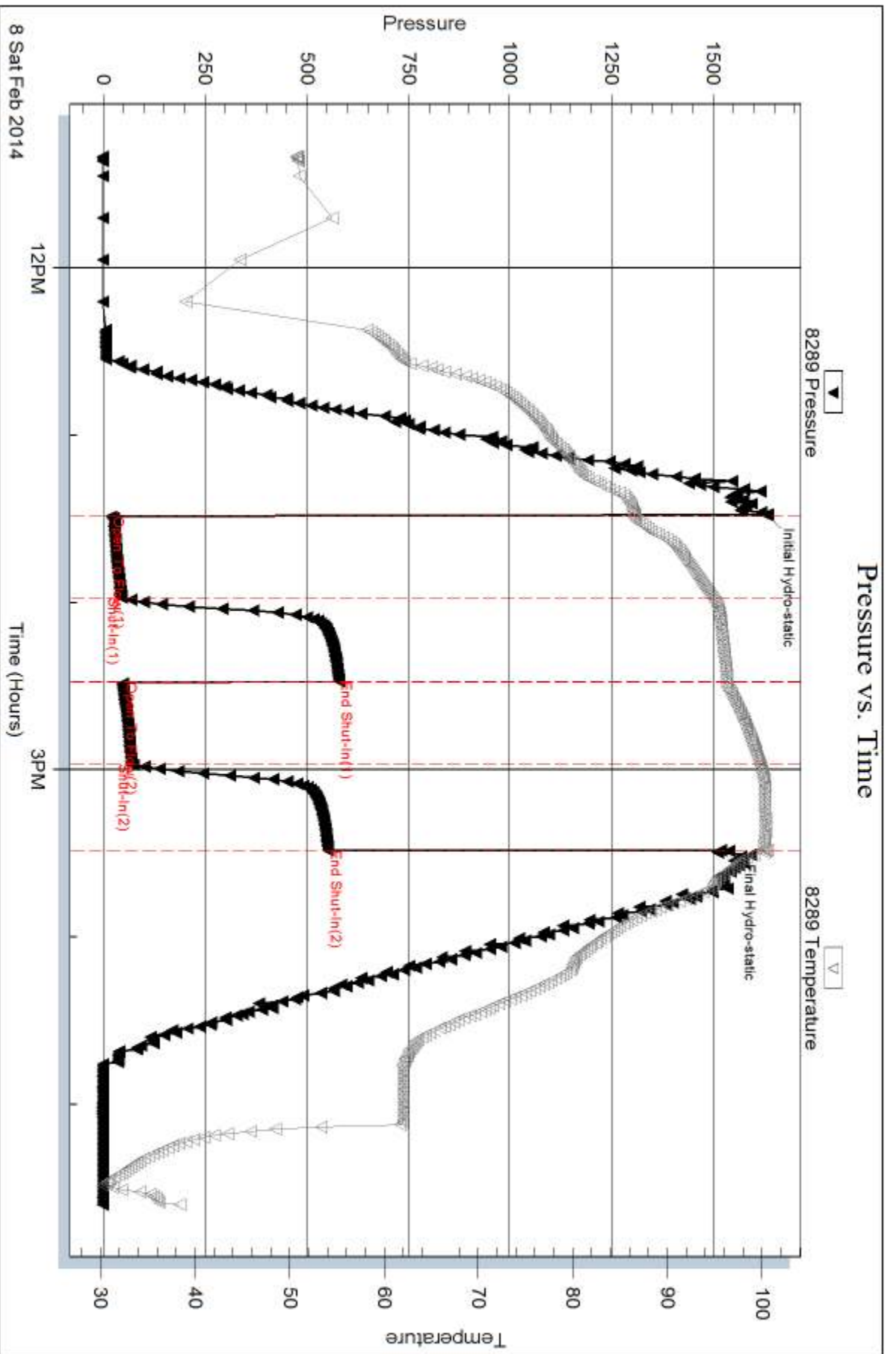
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .202 @ 32



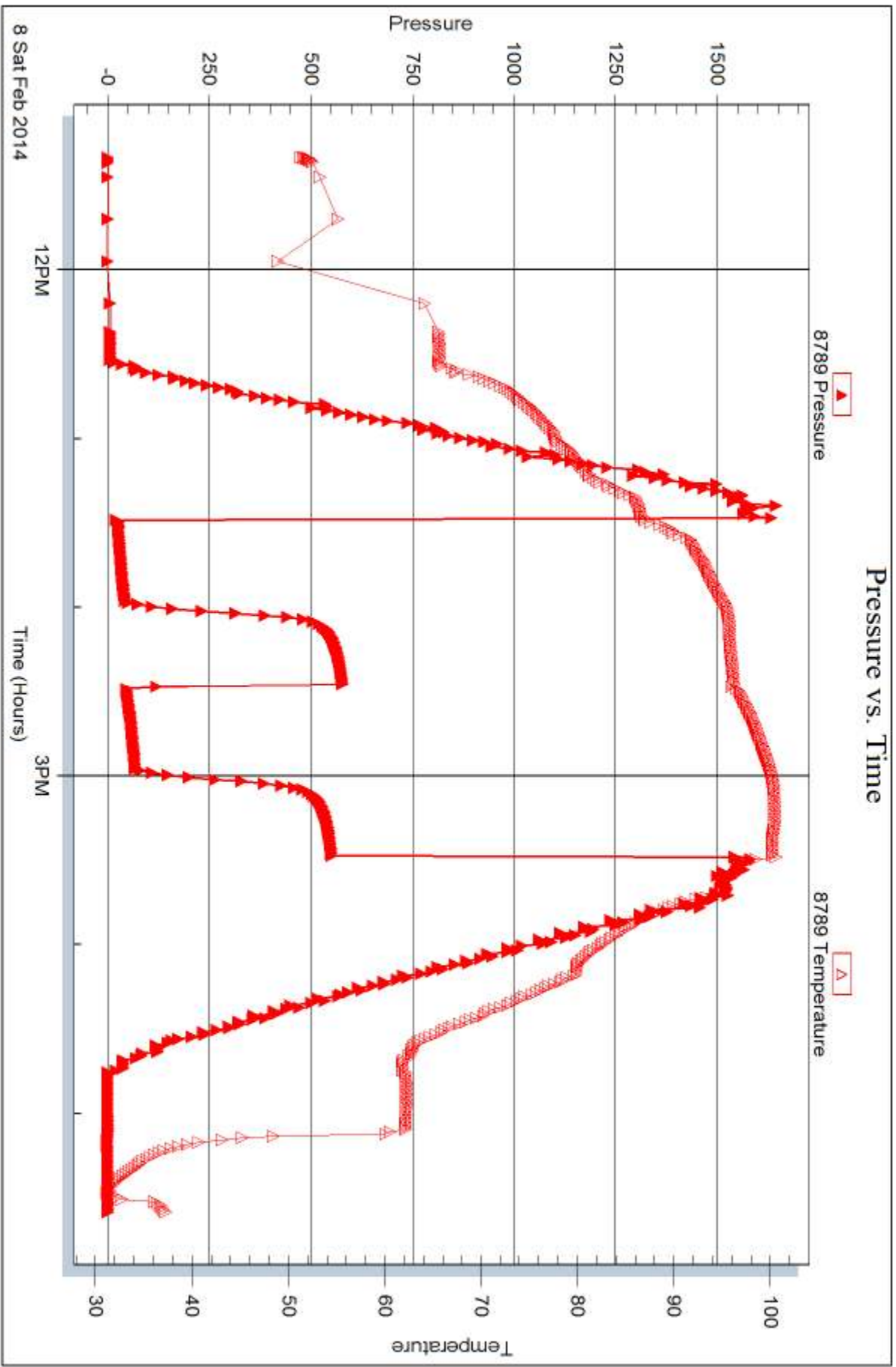
Serial #: 8789

Inside

Dow nng-Nelson Oil Co Inc

Virginia #1-30

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 50425

Printed: 2014.02.12 @ 11:21:18



DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.09 @ 04:00:00

End Date: 2014.02.09 @ 10:38:00

Job Ticket #: 56001 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.12 @ 10:35:12



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56001

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 04:00:00

GENERAL INFORMATION:

Formation: **LKC " H & I "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:11:30

Time Test Ended: 10:38:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3477.00 ft (KB) To 3531.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3531.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 114.91 psig @ 3479.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.09

End Date:

2014.02.09

Last Calib.:

2014.02.09

Start Time:

04:00:02

End Time:

10:38:00

Time On Btm:

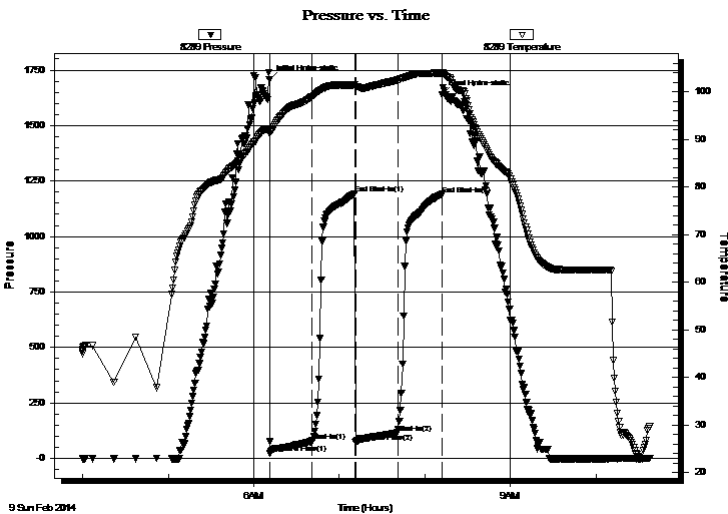
2014.02.09 @ 06:11:00

Time Off Btm:

2014.02.09 @ 08:12:00

TEST COMMENT: 30-IFP- BOB in 6 1/2 min.
30-ISIP- 1/4" Blow Back
30-FFP- BOB in 2 min.
30-FSIP- Surface Blow Building to 3 1/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1708.22	92.15	Initial Hydro-static
1	24.31	91.57	Open To Flow (1)
30	76.25	98.98	Shut-In(1)
60	1192.79	101.42	End Shut-In(1)
61	72.59	100.92	Open To Flow (2)
90	114.91	102.43	Shut-In(2)
121	1190.44	103.90	End Shut-In(2)
121	1639.94	104.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
245.00	GOCM 20%g 25%o 55%m	3.15
0.00	698 GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56001

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 04:00:00

GENERAL INFORMATION:

Formation: **LKC "H & I"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:11:30

Time Test Ended: 10:38:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3477.00 ft (KB) To 3531.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3531.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8789 Inside

Press@RunDepth: psig @ 3479.00 ft (KB)

Start Date: 2014.02.09

End Date:

2014.02.09

Start Time: 04:00:02

End Time:

10:37:45

Capacity: 8000.00 psig

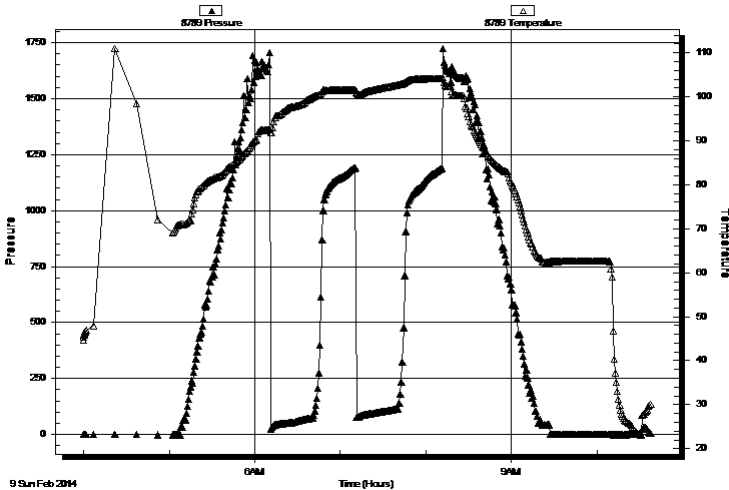
Last Calib.: 2014.02.09

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 6 1/2 min.
30-ISIP- 1/4" Blow Back
30-FFP- BOB in 2 min.
30-FSIP- Surface Blow Building to 3 1/4"

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
245.00	GOCM 20%g 25%o 55%m	3.15
0.00	698 GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56001

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 04:00:00

Tool Information

Drill Pipe:	Length: 3452.00 ft	Diameter: 3.80 inches	Volume: 48.42 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 57000.00 lb
			<u>Total Volume: 48.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3477.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	54.00 ft			
Tool Length:	75.00 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			3457.00	
Shut In Tool	5.00			3462.00	
Hydraulic tool	5.00			3467.00	
Packer	5.00			3472.00	21.00 Bottom Of Top Packer
Packer	5.00			3477.00	
Stubb	1.00			3478.00	
Perforations	1.00			3479.00	
Recorder	0.00	8789	Inside	3479.00	
Recorder	0.00	8289	Outside	3479.00	
Perforations	15.00			3494.00	
Change Over Sub	1.00			3495.00	
Blank Spacing	32.00			3527.00	
Change Over Sub	1.00			3528.00	
Bullnose	3.00			3531.00	54.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56001

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 04:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.25 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
245.00	GOCM 20%g 25%o 55%m	3.145
0.00	698 GIP	0.000

Total Length: 245.00 ft Total Volume: 3.145 bbf

Num Fluid Samples: 0

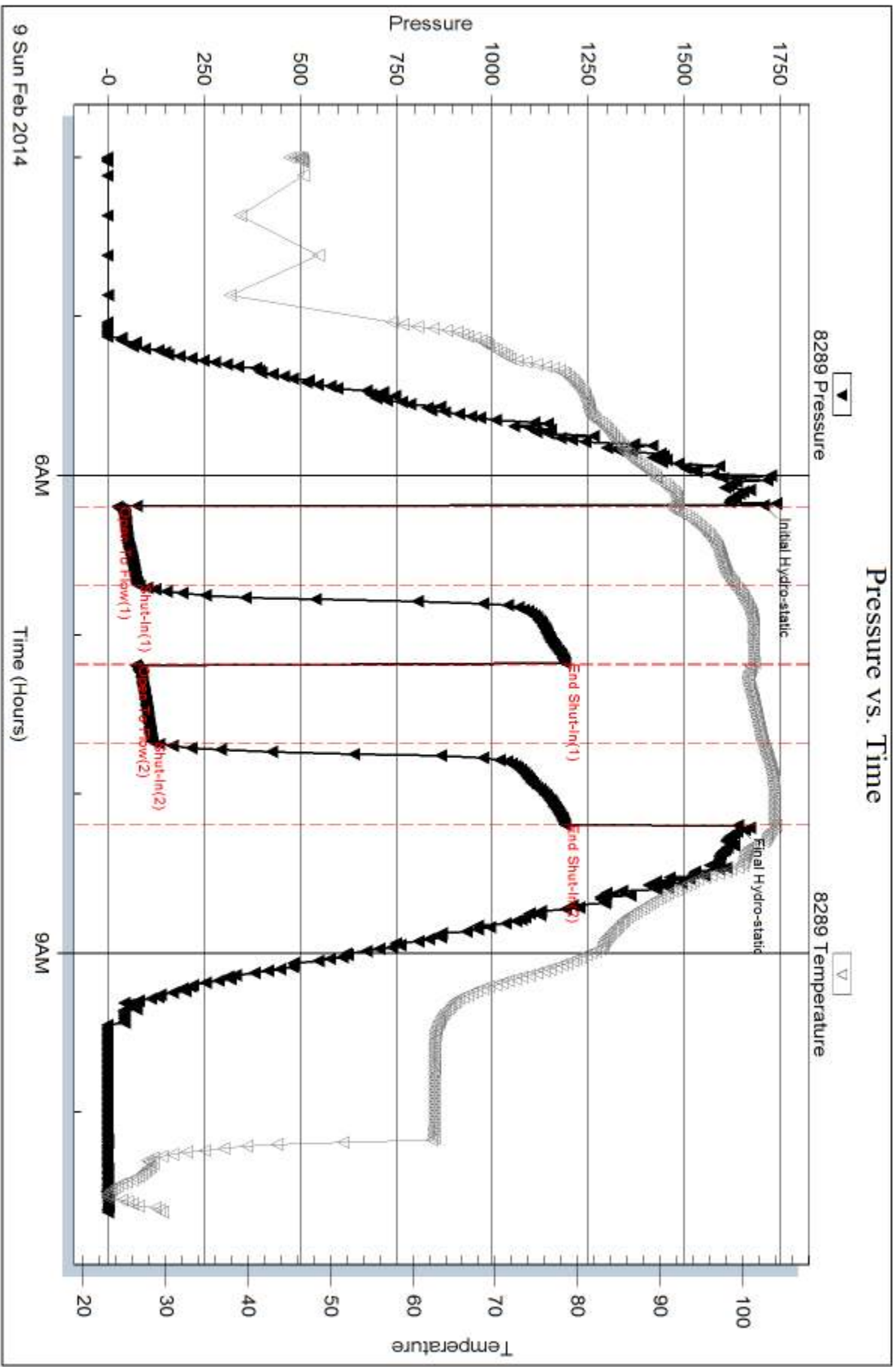
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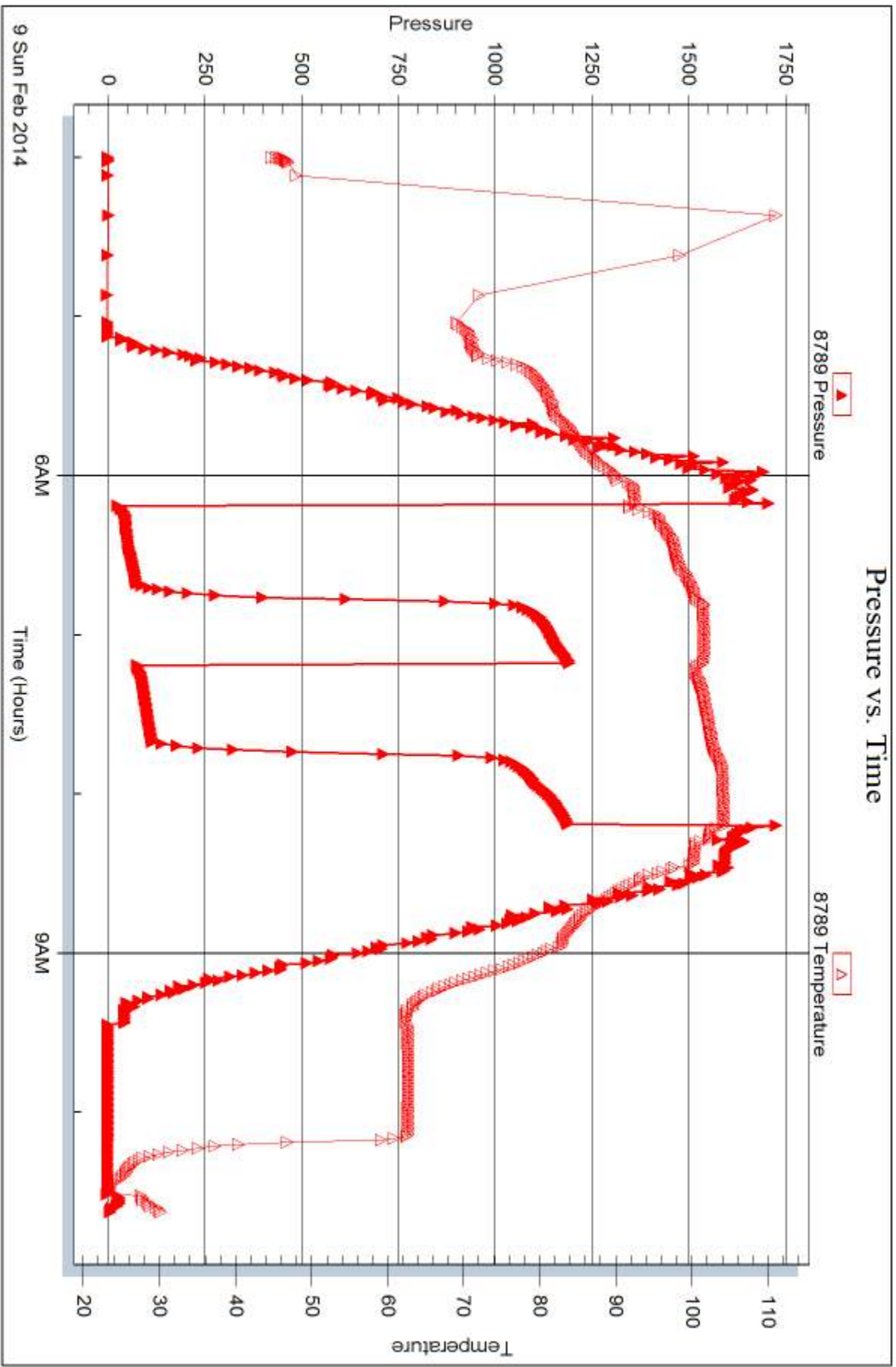
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.09 @ 16:25:00

End Date: 2014.02.09 @ 23:40:00

Job Ticket #: 56002 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.12 @ 10:33:52

Downing-Nelson Oil Co Inc
30 14s 18w Ellis,KS
Virginia #1-30
DST # 4
LKC " J "
2014.02.09



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56002

DST#: 4

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 16:25:00

GENERAL INFORMATION:

Formation: **LKC " J "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:28:15

Time Test Ended: 23:40:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3526.00 ft (KB) To 3549.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3549.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 50.85 psig @ 3528.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.09 End Date: 2014.02.09

Last Calib.: 2014.02.09

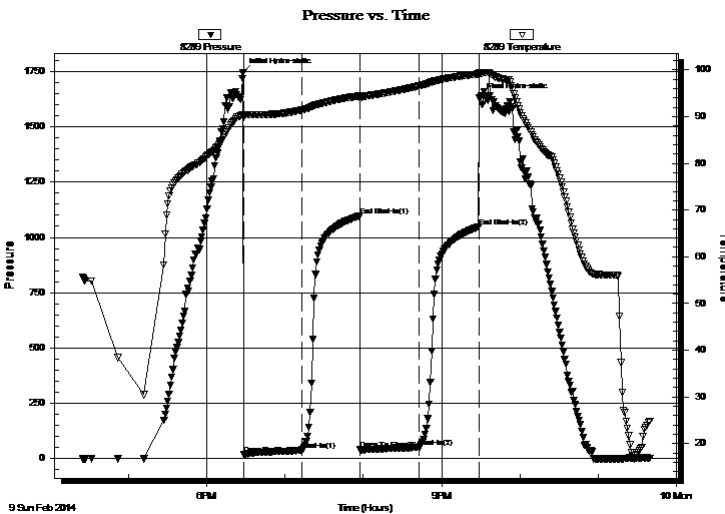
Start Time: 16:25:02 End Time: 23:40:00

Time On Btm: 2014.02.09 @ 18:28:00

Time Off Btm: 2014.02.09 @ 21:29:00

TEST COMMENT: 45-IFP- Surface Blow Building to 6 1/2"
45-ISIP- Surface Blow
45-FFP- Surface Blow Building to 5"
45-FSIP- Weak Surface Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1746.33	90.49	Initial Hydro-static
1	18.22	89.89	Open To Flow (1)
45	36.90	91.41	Shut-In(1)
90	1098.16	94.44	End Shut-In(1)
90	41.02	93.86	Open To Flow (2)
135	50.85	96.58	Shut-In(2)
181	1049.02	99.12	End Shut-In(2)
181	1633.47	99.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	OSMCW 1%o 40%m 59%w	0.83

* 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

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56002

DST#: 4

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 16:25:00

Tool Information

Drill Pipe:	Length: 3484.00 ft	Diameter: 3.80 inches	Volume: 48.87 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 57000.00 lb
			<u>Total Volume: 49.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3526.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	23.00 ft			
Tool Length:	44.00 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			3506.00	
Shut In Tool	5.00			3511.00	
Hydraulic tool	5.00			3516.00	
Packer	5.00			3521.00	21.00 Bottom Of Top Packer
Packer	5.00			3526.00	
Stubb	1.00			3527.00	
Perforations	1.00			3528.00	
Recorder	0.00	8789	Inside	3528.00	
Recorder	0.00	8289	Outside	3528.00	
Perforations	18.00			3546.00	
Bullnose	3.00			3549.00	23.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56002

DST#: 4

ATTN: Al Dow ning

Test Start: 2014.02.09 @ 16:25:00

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:

80000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 0.25 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
80.00	OSMCW 1%o 40%m 59%w	0.831

Total Length: 80.00 ft Total Volume: 0.831 bbf

Num Fluid Samples: 0

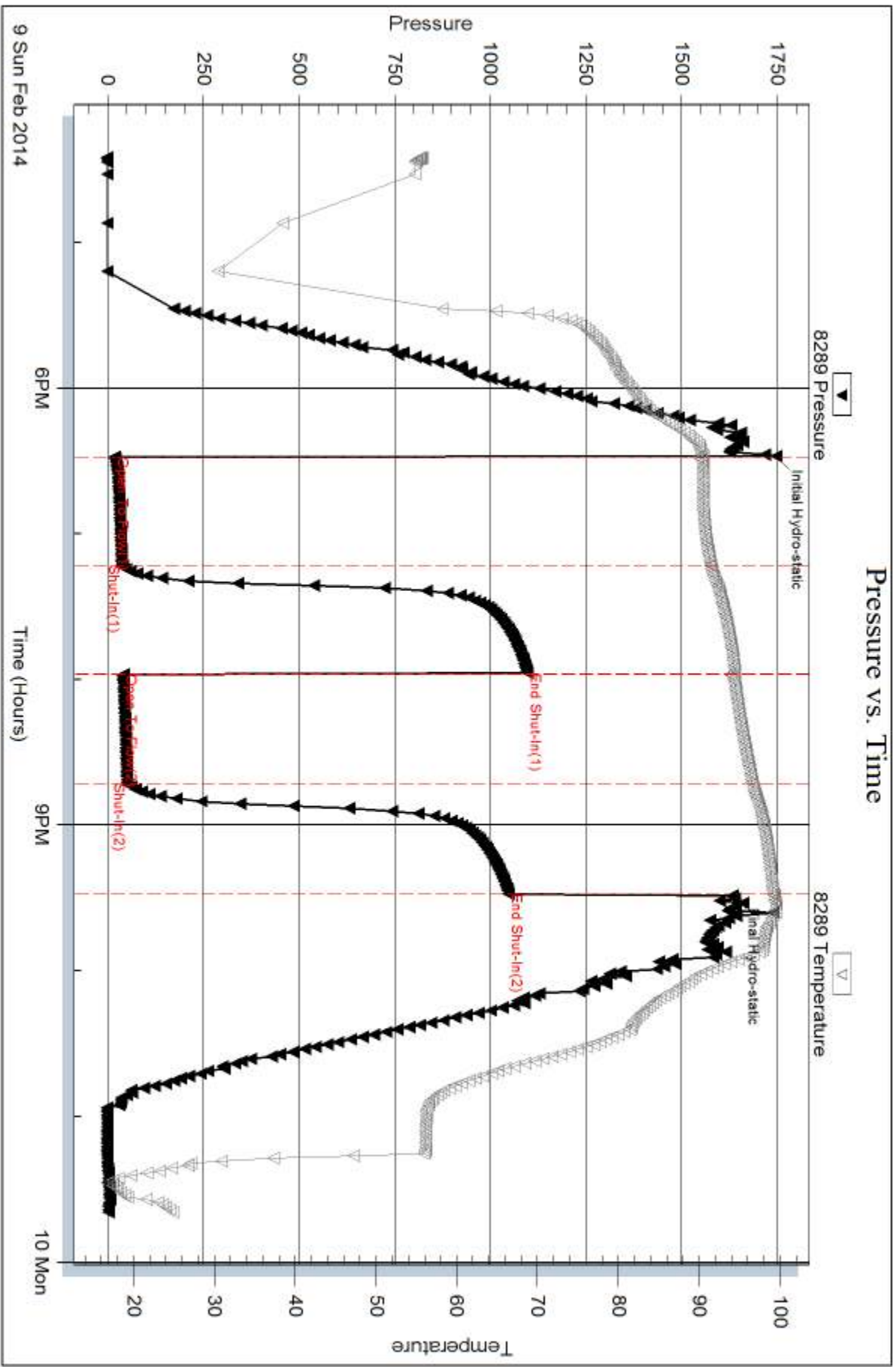
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .400 @ 15



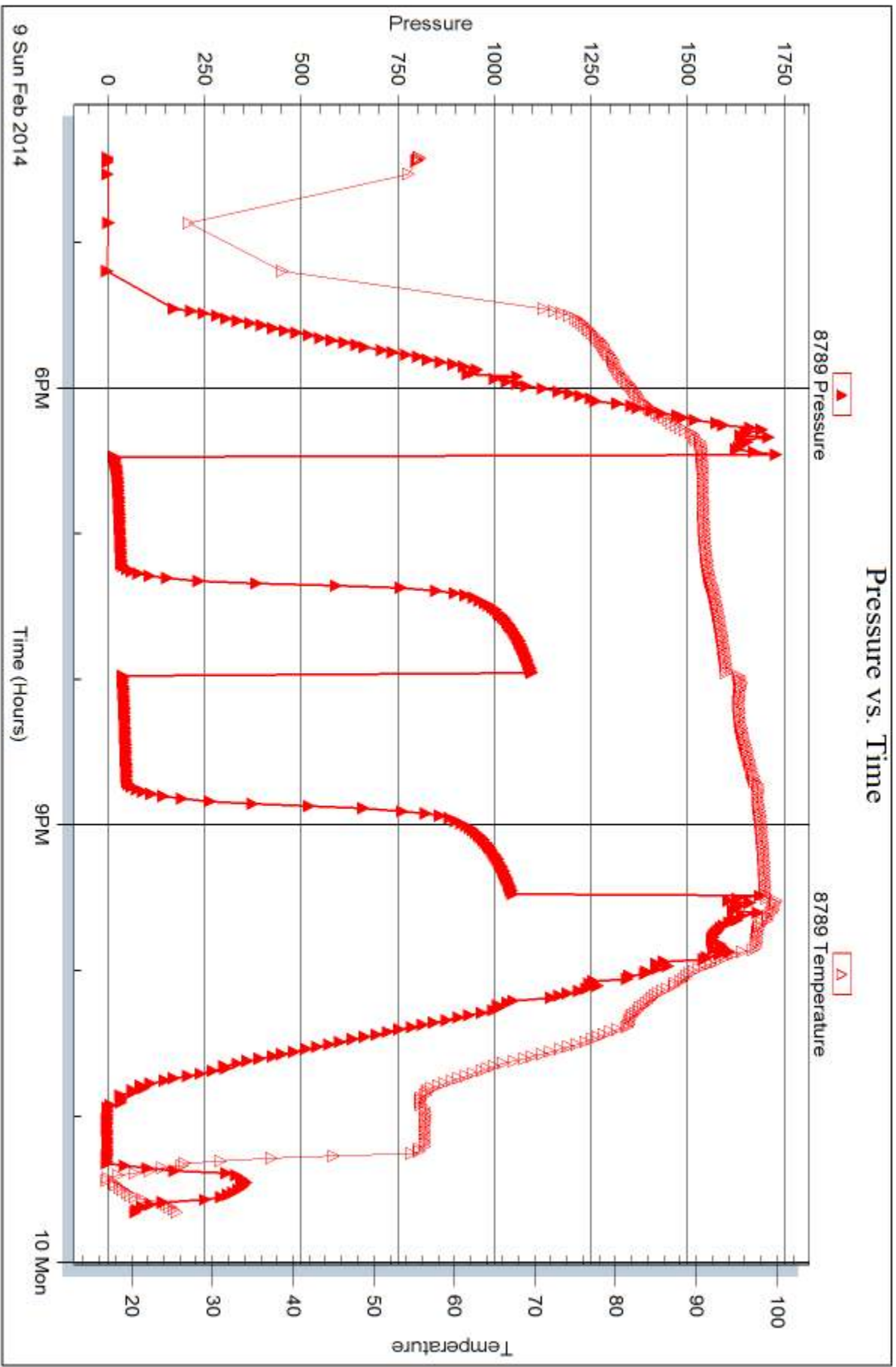
Serial #: 8789

Inside

Dow nng-Nelson Oil Co Inc

Virginia #1-30

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 56002

Printed: 2014.02.12 @ 10:33:54



DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.10 @ 06:14:00

End Date: 2014.02.10 @ 12:53:00

Job Ticket #: 56003 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.12 @ 10:33:23



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56003

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 06:14:00

GENERAL INFORMATION:

Formation: **LKC " K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:35:30

Time Test Ended: 12:53:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3547.00 ft (KB) To 3575.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3575.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 128.38 psig @ 3554.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.10 End Date: 2014.02.10

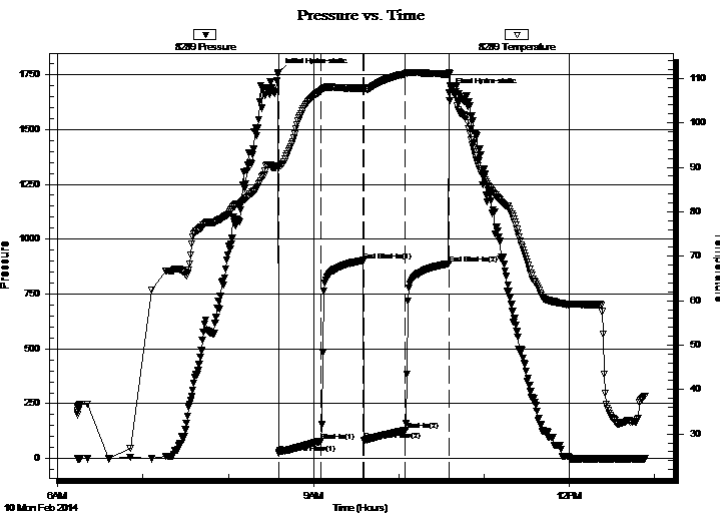
Last Calib.: 2014.02.10

Start Time: 06:14:02 End Time: 12:53:15

Time On Btm: 2014.02.10 @ 08:35:15

Time Off Btm: 2014.02.10 @ 10:35:30

TEST COMMENT: 30-IFP- BOB in 4 min.
30-ISIP- Surface Blow Building to 4 1/2"
30-FFP- BOB in 6 min.
30-FSIP- BOB in 18 min. Gas to Surface 25 min. into Shut in



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.28	90.39	Initial Hydro-static
1	25.36	89.90	Open To Flow (1)
30	78.98	107.20	Shut-In(1)
60	902.88	107.81	End Shut-In(1)
61	81.82	107.58	Open To Flow (2)
90	128.38	111.01	Shut-In(2)
120	888.73	110.91	End Shut-In(2)
121	1669.54	111.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
95.00	GOMCW 5%g 5%o 10%m 80%w	1.04
143.00	GMWCO 10%g 10%m 10%w 70%o	2.01
30.00	CO 100%	0.42
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56003

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 06:14:00

GENERAL INFORMATION:

Formation: **LKC " K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:35:30

Time Test Ended: 12:53:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3547.00 ft (KB) To 3575.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3575.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8789

Inside

Press@RunDepth: psig @ 3554.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.10

End Date: 2014.02.10

Last Calib.: 2014.02.10

Start Time: 06:14:02

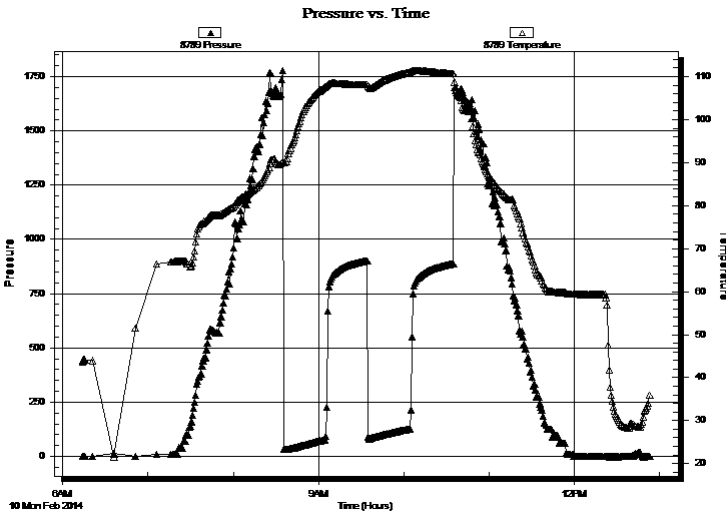
End Time: 12:53:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 4 min.
30-ISIP- Surface Blow Building to 4 1/2"
30-FFP- BOB in 6 min.
30-FSIP- BOB in 18 min. Gas to Surface 25 min. into Shut in

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
95.00	GOMCW 5%g 5%o 10%m 80%w	1.04
143.00	GMWCO 10%g 10%m 10%w 70%o	2.01
30.00	CO 100%	0.42
0.00	GTS	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56003

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 06:14:00

Tool Information

Drill Pipe:	Length: 3517.00 ft	Diameter: 3.80 inches	Volume: 49.33 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose: 57000.00 lb
			<u>Total Volume: 49.49 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3547.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	28.00 ft			
Tool Length:	49.00 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			3527.00	
Shut In Tool	5.00			3532.00	
Hydraulic tool	5.00			3537.00	
Packer	5.00			3542.00	21.00 Bottom Of Top Packer
Packer	5.00			3547.00	
Stubb	1.00			3548.00	
Perforations	6.00			3554.00	
Recorder	0.00	8789	Inside	3554.00	
Recorder	0.00	8289	Outside	3554.00	
Perforations	18.00			3572.00	
Bullnose	3.00			3575.00	28.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56003

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 06:14:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

90000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 0.25 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
95.00	GOMCW 5%g 5%o 10%m 80%w	1.041
143.00	GMWCO 10%g 10%m 10%w 70%o	2.006
30.00	CO 100%	0.421
0.00	GTS	0.000

Total Length: 268.00 ft

Total Volume: 3.468 bbf

Num Fluid Samples: 0

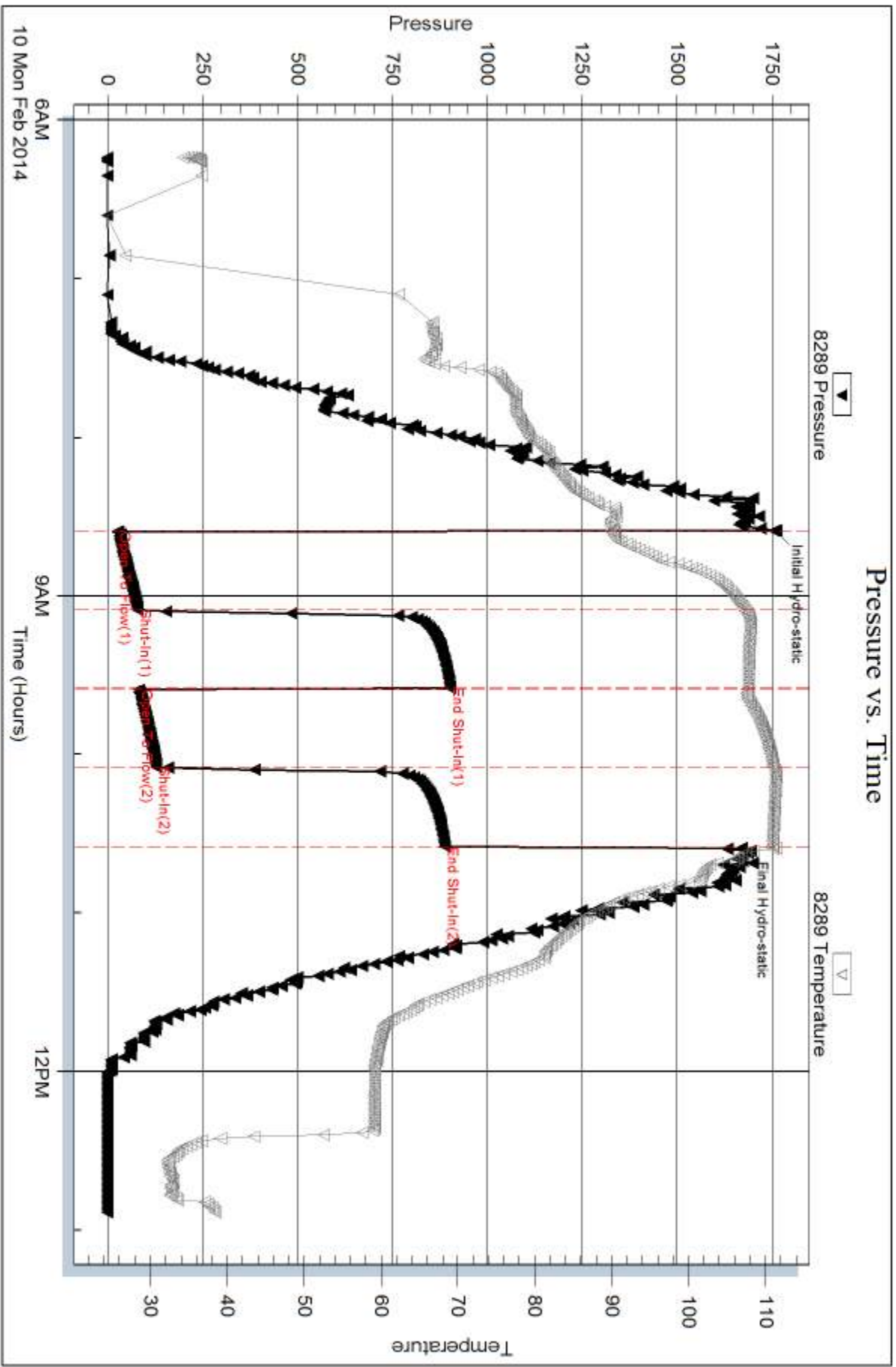
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .248 @ 25



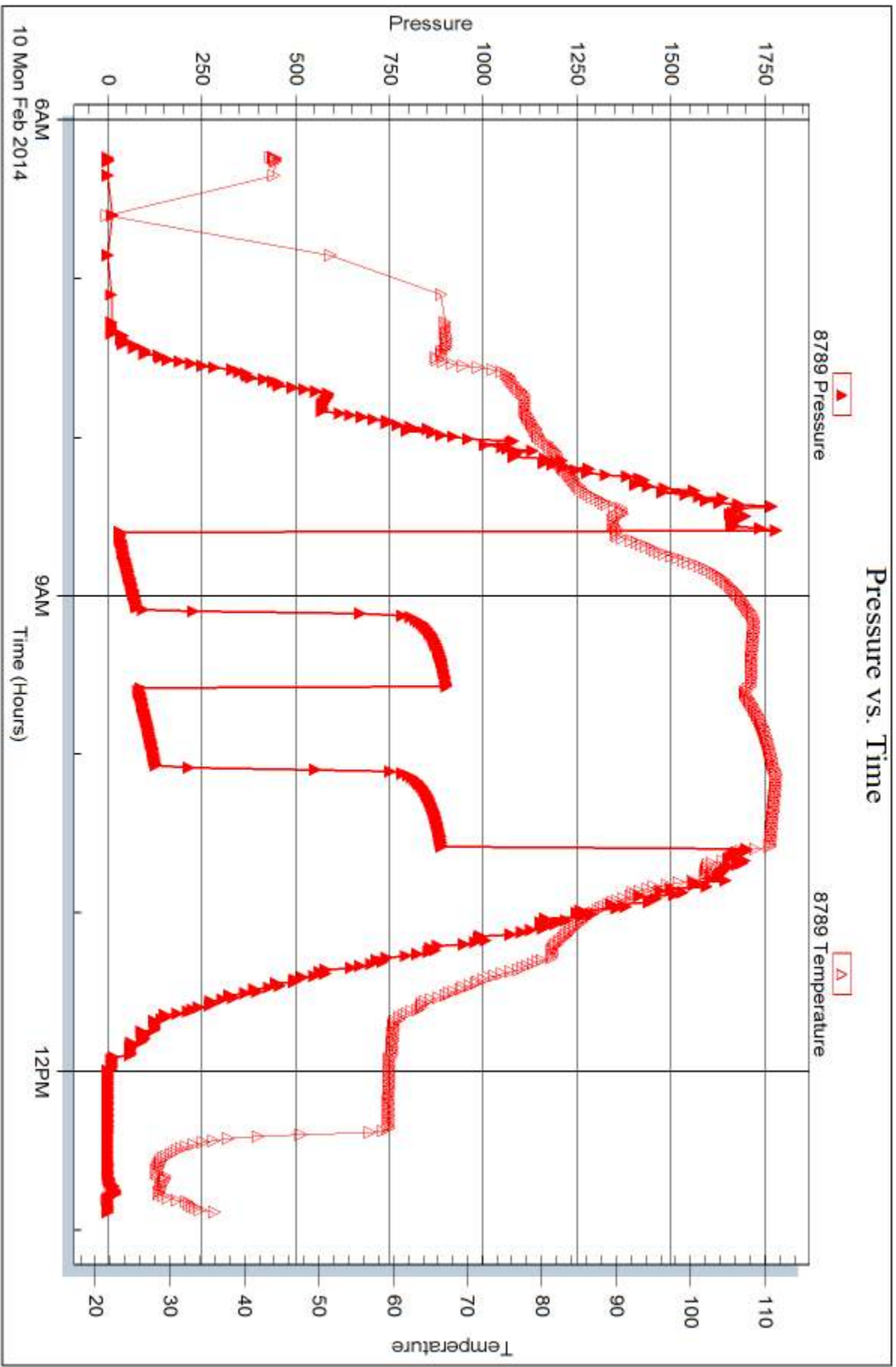
Serial #: 8789

Inside

Dow nng-Nelson Oil Co Inc

Virginia #1-30

DST Test Number: 5



Tribble Testing, Inc

Ref. No: 56003

Printed: 2014.02.12 @ 10:33:25



DRILL STEM TEST REPORT

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

P.O Box 1019
Hays KS 67601

ATTN: Al Downing

Virginia #1-30

30 14s 18w Ellis,KS

Start Date: 2014.02.10 @ 23:58:00

End Date: 2014.02.11 @ 07:37:00

Job Ticket #: 56004 DST #: 6

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.02.12 @ 10:32:31



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56004

DST#: 6

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 23:58:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:00:00

Time Test Ended: 07:37:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 3643.00 ft (KB) To 3682.00 ft (KB) (TVD)

Reference Elevations: 2061.00 ft (KB)

Total Depth: 3682.00 ft (KB) (TVD)

2054.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8289 Outside

Press@RunDepth: 402.56 psig @ 3646.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.02.10

End Date:

2014.02.11

Last Calib.:

2014.02.11

Start Time: 23:58:02

End Time:

07:37:00

Time On Btm:

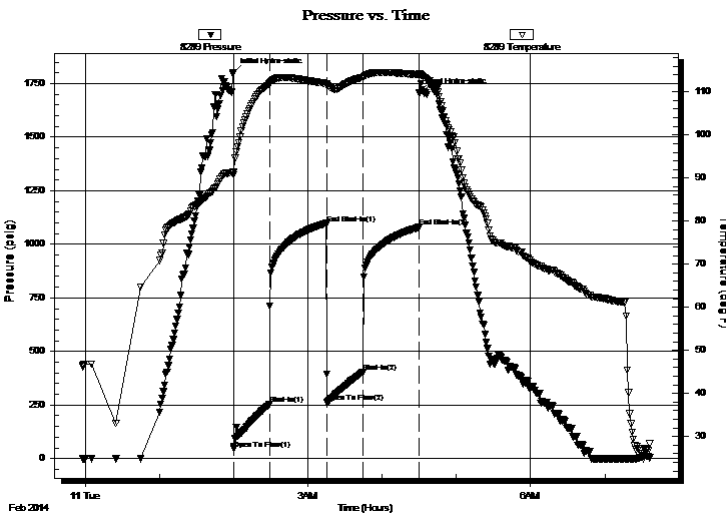
2014.02.11 @ 01:59:45

Time Off Btm:

2014.02.11 @ 04:30:15

TEST COMMENT: 30-IFP- BOB in 2 1/2 min.
45-ISIP- Surface Blow Building to 6 1/2"
30-FFP- BOB in 2 1/2 min. Gas to Surface at end FFP
45-FSIP- Surface Blow Building to 2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1802.25	91.44	Initial Hydro-static
1	45.39	90.85	Open To Flow (1)
30	253.74	111.85	Shut-In(1)
76	1097.56	111.94	End Shut-In(1)
76	264.31	111.66	Open To Flow (2)
105	402.56	113.43	Shut-In(2)
150	1079.55	113.95	End Shut-In(2)
151	1705.96	114.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
190.00	GMCO 5% m 20% g 75% o	2.37
840.00	CO 100%	11.78
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56004

DST#: 6

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 23:58:00

GENERAL INFORMATION:

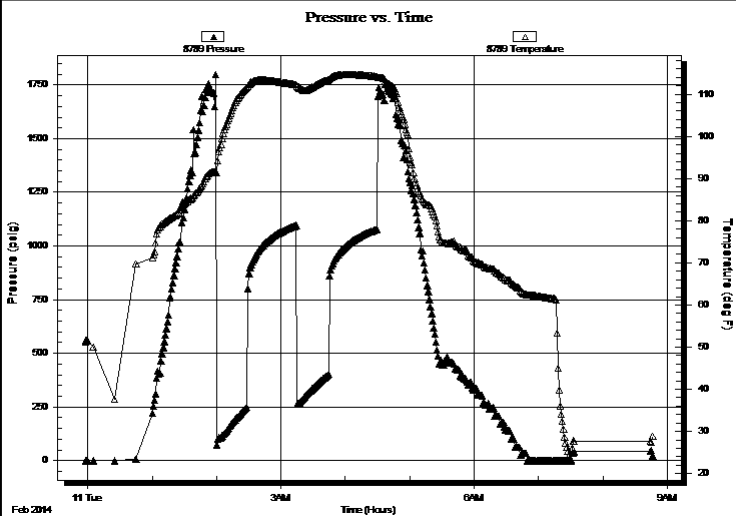
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:00:00
 Time Test Ended: 07:37:00
 Interval: **3643.00 ft (KB) To 3682.00 ft (KB) (TVD)**
 Total Depth: 3682.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jim Svaty
 Unit No: 76
 Reference Elevations: 2061.00 ft (KB)
 2054.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8789

Inside

Press@RunDepth: psig @ 3646.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.02.10 End Date: 2014.02.11 Last Calib.: 2014.02.11
 Start Time: 23:58:02 End Time: 08:46:45 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IFP- BOB in 2 1/2 min.
 45-ISIP- Surface Blow Building to 6 1/2"
 30-FFP- BOB in 2 1/2 min. Gas to Surface at end FFP
 45-FSIP- Surface Blow Building to 2"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
190.00	GMCO 5% m 20% g 75% o	2.37
840.00	CO 100%	11.78
0.00	GTS	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56004

DST#: 6

ATTN: Al Dow ning

Test Start: 2014.02.10 @ 23:58:00

Tool Information

Drill Pipe:	Length: 3611.00 ft	Diameter: 3.80 inches	Volume: 50.65 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 32.00 ft	Diameter: 2.25 inches	Volume: 0.16 bbl	Weight to Pull Loose:	57000.00 lb
			<u>Total Volume: 50.81 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3643.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	39.00 ft				
Tool Length:	60.00 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			3623.00	
Shut In Tool	5.00			3628.00	
Hydraulic tool	5.00			3633.00	
Packer	5.00			3638.00	21.00 Bottom Of Top Packer
Packer	5.00			3643.00	
Stubb	1.00			3644.00	
Perforations	1.00			3645.00	
Change Over Sub	1.00			3646.00	
Recorder	0.00	8789	Inside	3646.00	
Recorder	0.00	8289	Outside	3646.00	
Blank Spacing	32.00			3678.00	
Change Over Sub	1.00			3679.00	
Bullnose	3.00			3682.00	39.00 Bottom Packers & Anchor

Total Tool Length: 60.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co Inc

30 14s 18w Ellis,KS

P.O Box 1019
Hays KS 67601

Virginia #1-30

Job Ticket: 56004

DST#: 6

ATTN: Al Downing

Test Start: 2014.02.10 @ 23:58:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

32 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 0.50 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
190.00	GMCO 5%m 20%g 75%o	2.374
840.00	CO 100%	11.783
0.00	GTS	0.000

Total Length: 1030.00 ft Total Volume: 14.157 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

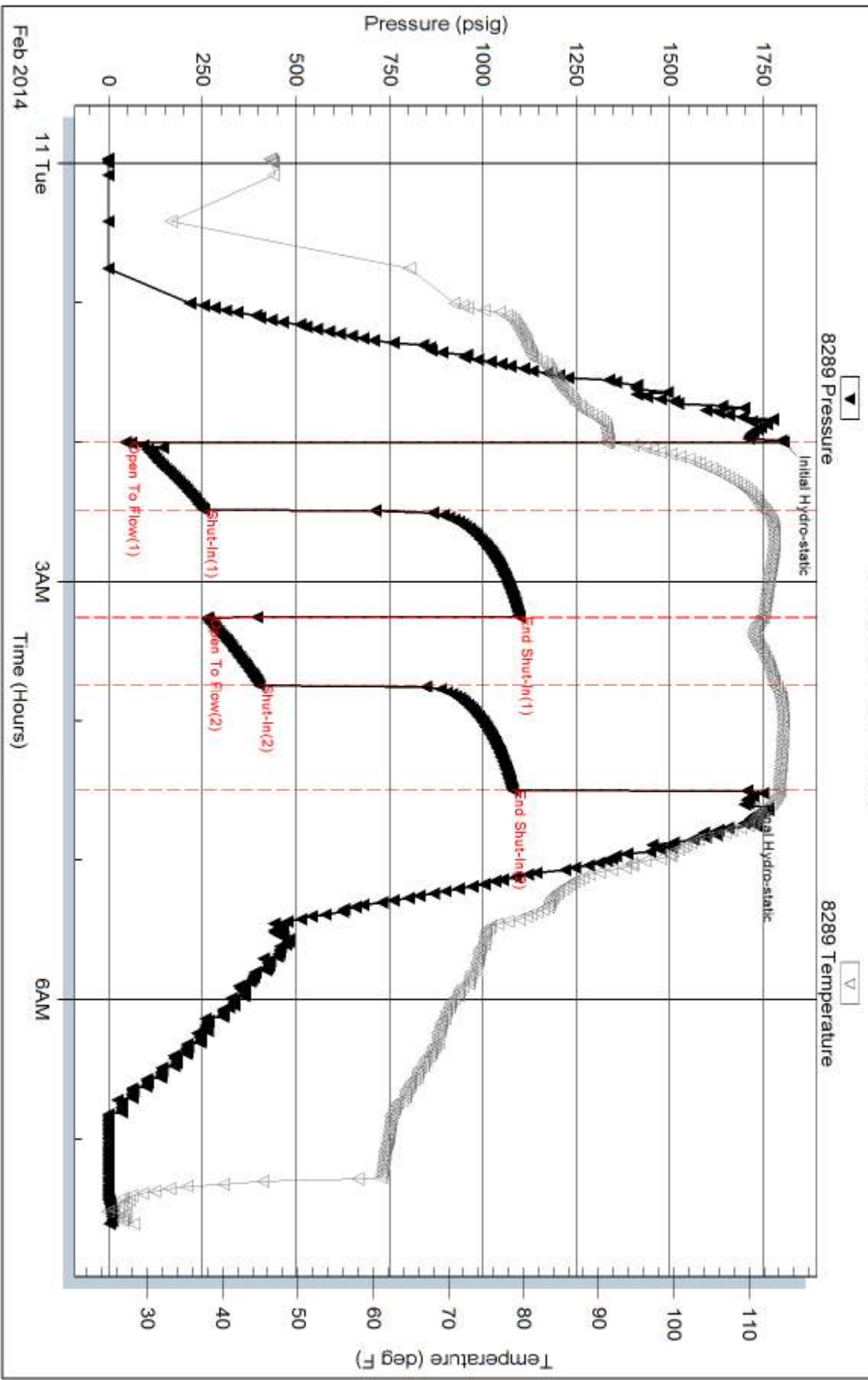
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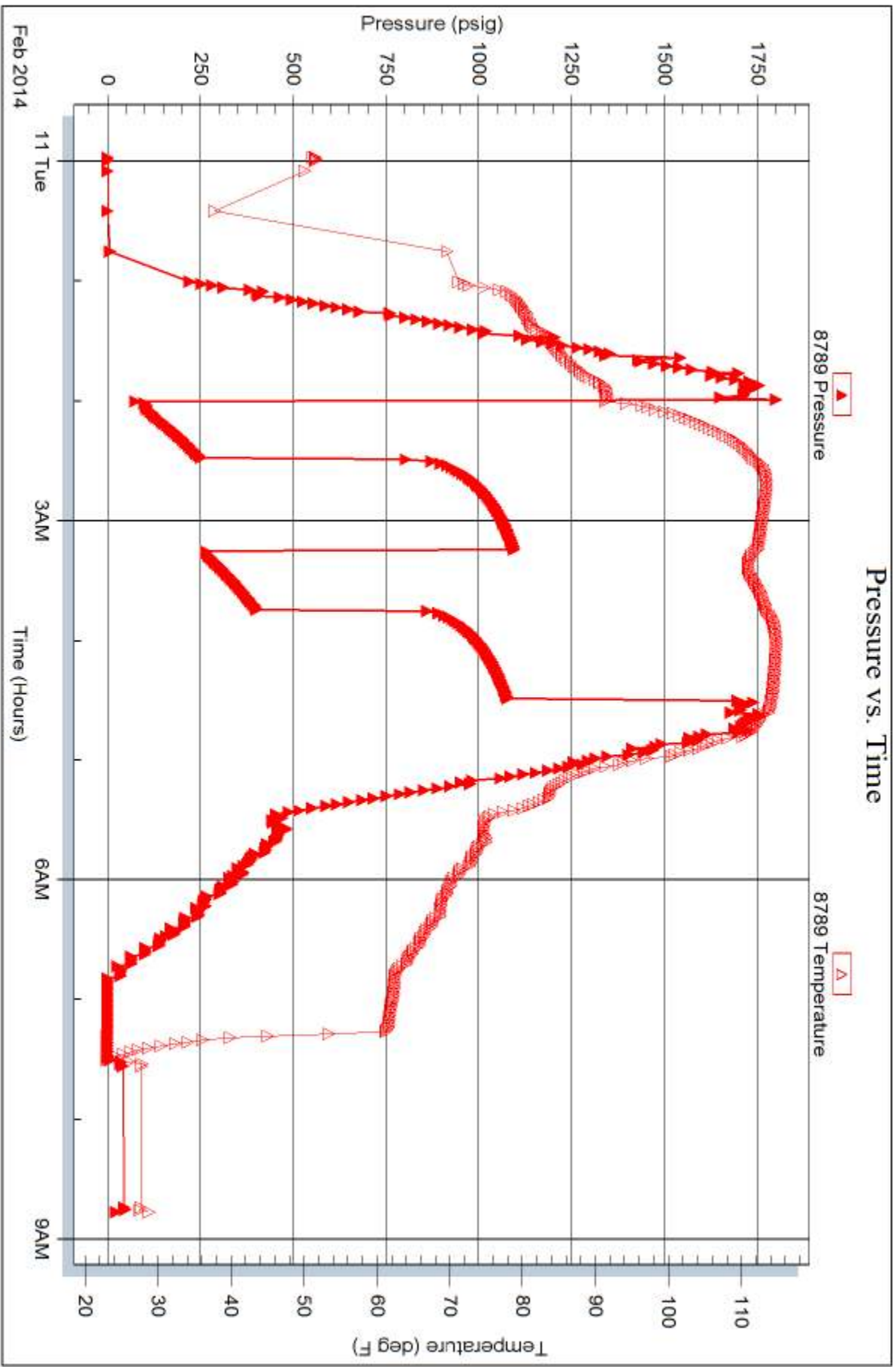
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50424

Well Name & No. Virginia # 1-30 Test No. 1 Date 2-3-14
 Company Downing-Nelson Oil Co Inc Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #3
 Location: Sec. 30 Twp. 14 Rge. 18^w Co. Ellis State KS

Interval Tested 3370-3400 Zone Tested LRC "C"
 Anchor Length 30 Drill Pipe Run 3324 Mud Wt. 8.8
 Top Packer Depth 3365 Drill Collars Run 32 Vis 46
 Bottom Packer Depth 3370 Wt. Pipe Run Ø WL 8.8
 Total Depth 3400 Chlorides 3000 ppm System LCM 1.5

Blow Description FFP - BOB in 20sec,
ISIP - BOB in 1min 10sec,
FFP - BOB in 15sec, DAS to Surface 8min,
FSIP - BOB in 1min 15sec,

Rec	Feet of	%gas	%oil	%water	%mud
<u>1850</u>	<u>CO</u>		<u>100</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>DAS to Surface</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1850 BHT 108 Gravity 40 API RW @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic	<u>1644</u>	<input checked="" type="checkbox"/> Test	<u>1150</u>	T-On Location	<u>21:20</u>
(B) First Initial Flow	<u>310</u>	<input type="checkbox"/> Jars		T-Started	<u>22:08</u>
(C) First Final Flow	<u>395</u>	<input type="checkbox"/> Safety Joint		T-Open	<u>00:02</u>
(D) Initial Shut-In	<u>660</u>	<input checked="" type="checkbox"/> Circ Sub	<u>50</u>	T-Pulled	<u>02:02</u>
(E) Second Initial Flow	<u>418</u>	<input type="checkbox"/> Hourly Standby		T-Out	<u>05:30</u>
(F) Second Final Flow	<u>541</u>	<input checked="" type="checkbox"/> Mileage	<u>21 RT</u> 32.55	Comments	
(G) Final Shut-In	<u>607</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic	<u>1552</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	
Initial Open	<u>15</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Ruined Packer	
Initial Shut-In	<u>30</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow	<u>30</u>	<input type="checkbox"/> Extra Recorder		Sub Total	<u>0</u>
Final Shut-In	<u>45</u>	<input type="checkbox"/> Day Standby		Total	<u>1232.55</u>
		<input type="checkbox"/> Accessibility		MP/DST Disc't	
		Sub Total	<u>1232.55</u>		

Approved By _____ Our Representative [Signature]
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 50425

4/10

Well Name & No. Virginia # 1-30 Test No. 2 Date 2-8-14
 Company Downing-Nelson Oil Co. Inc. Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery # 3
 Location: Sec. 30 Twp. 14^s Rge. 18^w Co. Ellis State KS

Interval Tested 3397-3420 Zone Tested LKC "D"
 Anchor Length 23 Drill Pipe Run 3358 Mud Wt. 8.6
 Top Packer Depth 3392 Drill Collars Run 32 Vis 51
 Bottom Packer Depth 3397 Wt. Pipe Run 0 WL 8.0
 Total Depth 3420 Chlorides 6000 ppm System LCM 125

Blow Description IFP-BOB in 7min.
ISIP-Surface Blow Building to 2 1/2" in 20min.
FFP-BOB in 8min.
F5IP-Surface Blow Building to 4" in 22min.

Rec <u>65</u>	Feet of <u>AWMCO</u>	<u>25</u> %gas	<u>35</u> %oil	<u>10</u> %water	<u>30</u> %mud
Rec <u>65</u>	Feet of <u>20WCM</u>	<u>10</u> %gas	<u>25</u> %oil	<u>30</u> %water	<u>35</u> %mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud
Rec _____	Feet of <u>508 QIP</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

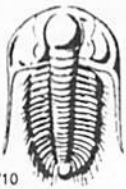
Rec Total 130 BHT 100 Gravity _____ API RW 202 @ 32 °F Chlorides 95000 ppm

(A) Initial Hydrostatic <u>1633</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>10:58</u>
(B) First Initial Flow <u>18</u>	<input type="checkbox"/> Jars _____	T-Started <u>11:20</u>
(C) First Final Flow <u>45</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>13:29</u>
(D) Initial Shut-In <u>578</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>15:29</u>
(E) Second Initial Flow <u>49</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>17:36</u>
(F) Second Final Flow <u>69</u>	<input checked="" type="checkbox"/> Mileage <u>21 RT</u> 32.55	Comments _____
(G) Final Shut-In <u>551</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>1539</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1182.55</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1182.55</u>	

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56001

Well Name & No. Virginia # 1-30 Test No. 3 Date 2-9-14
 Company Downing-Nelson Oil Co. Inc. Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery #3
 Location: Sec. 30 Twp. 14th Rge. 18^W Co. Ellis State KS

Interval Tested 3477-3531 Zone Tested LKC "H & I"
 Anchor Length 54 Drill Pipe Run 3452 Mud Wt. 8.6
 Top Packer Depth 3472 Drill Collars Run 32 Vis 51
 Bottom Packer Depth 3477 Wt. Pipe Run ⊗ WL 8.0
 Total Depth 3531 Chlorides 6000 ppm System LCM .25

Blow Description IFP- BOB in 6 1/2 min.
ISIP- 1/4 Blow Back
FFP- BOB in 2 min.
FSIP- Surface Blow Building to 3 1/4 in.

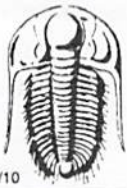
Rec	Feet of	%gas	%oil	%water	%mud
<u>245</u>	<u>20 cm</u>	<u>20</u>	<u>25</u>	<u>55</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>698 DIP</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 245 BHT 104 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1708 Test 1150 T-On Location 03:30
 (B) First Initial Flow 24 Jars _____ T-Started 04:00
 (C) First Final Flow 76 Safety Joint _____ T-Open 06:11
 (D) Initial Shut-In 1192 Circ Sub _____ T-Pulled 08:11
 (E) Second Initial Flow 72 Hourly Standby _____ T-Out 10:38
 (F) Second Final Flow 114 Mileage 32.55 Comments _____
 (G) Final Shut-In 1190 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 1182.55
 Accessibility _____ MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 30
 Sub Total 1182.55

Approved By _____ Our Representative [Signature]
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56002

Well Name & No. Virginia # 1-30 Test No. 4 Date 2-9-14
 Company Downing-Nelson Oil Co. Inc. Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS, 67601
 Co. Rep / Geo. Al Downing Rig Discovery #3
 Location: Sec. 30 Twp. 14^s Rge. 18^w Co. Ellis State KS

Interval Tested 3526 - 3549 Zone Tested LKC "J"
 Anchor Length 23 Drill Pipe Run 3484 Mud Wt. 9.1
 Top Packer Depth 3521 Drill Collars Run 32 Vis 56
 Bottom Packer Depth 3526 Wt. Pipe Run 0 WL 8.8
 Total Depth 3549 Chlorides 7000 ppm System LCM .25

Blow Description IFP - Surface Blow Building to 6 1/2 in
ISIP - Surface Blow
FFP - Surface Blow Building to 5 in.
FSIP - Near Surface Blow

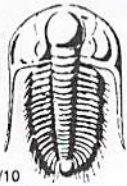
Rec	Feet of	%gas	%oil	%water	%mud
<u>80</u>	<u>OSMCW</u>	<u>1</u>	<u>59</u>	<u>40</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 80 BHT 99 Gravity API RW .400 @ 15° F Chlorides 80000 ppm
 (A) Initial Hydrostatic 1746 Test 1150 T-On Location 15:48
 (B) First Initial Flow 18 Jars _____ T-Started 16:25
 (C) First Final Flow 36 Safety Joint _____ T-Open 18:28
 (D) Initial Shut-In 1098 Circ Sub _____ T-Pulled 21:28
 (E) Second Initial Flow 41 Hourly Standby _____ T-Out 23:40
 (F) Second Final Flow 50 Mileage _____ Comments _____
 (G) Final Shut-In 1049 Sampler _____
 (H) Final Hydrostatic 1633 Straddle 32.55 Ruined Shale Packer _____

Initial Open 45 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 45 Extra Packer _____ Extra Copies _____
 Final Flow 45 Extra Recorder _____ Sub Total 0
 Final Shut-In 45 Day Standby _____ Total 1182.55
 Sub Total 1182.55 Accessibility _____ MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56003

Well Name & No. Virginia # 1-30 Test No. 5 Date 2-10-14
 Company Downing-Nelson Oil Co INC. Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery #3
 Location: Sec. 30 Twp. 14^s Rge. 18^w Co. Ellis State KS

Interval Tested 3547-3575 Zone Tested LKC "K"
 Anchor Length 28 Drill Pipe Run 3517 Mud Wt. 9.1
 Top Packer Depth 3542 Drill Collars Run 32 Vis 56
 Bottom Packer Depth 3547 Wt. Pipe Run 0 WL 8.8
 Total Depth 3575 Chlorides 7000 ppm System LCM 1.25

Blow Description IFP - BOB in 4min.
ISIP - Surface Blow Building to 4 1/2 in.

Rec	Feet of	%gas	%oil	%water	%mud
<u>95</u>	<u>20 MCW</u>	<u>5</u>	<u>5</u>	<u>80</u>	<u>10</u>
<u>143</u>	<u>2 MCW CO</u>	<u>10</u>	<u>70</u>	<u>10</u>	<u>10</u>
<u>30</u>	<u>CO</u>		<u>100</u>		
<u> </u>	<u>As to Surface</u>				
<u> </u>	<u> </u>				

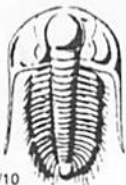
Rec Total 268 BHT 111 Gravity 32 API RW .248 @ 25 °F Chlorides 90,000 ppm

(A) Initial Hydrostatic <u>1760</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>06:14</u>
(B) First Initial Flow <u>25</u>	<input type="checkbox"/> Jars	T-Started <u>06:14</u>
(C) First Final Flow <u>78</u>	<input type="checkbox"/> Safety Joint	T-Open <u>08:35</u>
(D) Initial Shut-In <u>902</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>10:35</u>
(E) Second Initial Flow <u>81</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>12:53</u>
(F) Second Final Flow <u>128</u>	<input checked="" type="checkbox"/> Mileage <u>32.55</u>	Comments
(G) Final Shut-In <u>888</u>	 	
(H) Final Hydrostatic <u>1669</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1182.55</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1182.55</u>	

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. 56004

Well Name & No. Virginia #1-30 Test No. 6 Date 2-10-14
 Company Downing-Nelson Oil Co. Inc Elevation 2061 KB 2054 GL
 Address P.O. Box 1019 Hays KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery #3
 Location: Sec. 30 Twp. #7S Rge. 18W Co. Ellis State KS

Interval Tested 3643-3682 Zone Tested Arbuckle
 Anchor Length 39 Drill Pipe Run 3611 Mud Wt. 9.1
 Top Packer Depth 3638 Drill Collars Run 32 Vis 54
 Bottom Packer Depth 3643 Wt. Pipe Run 0 WL 8.8
 Total Depth 3682 Chlorides 7000 ppm System LCM 0.50

Blow Description IFP - BOB in 2 1/2 min
ISIP - Surface Blow Building to 6 1/2 in
FFP - BOB in 2 1/2 min. Gas to Surface at End of Flow
FSIP - Surface Blow Building to 2 in.

Rec	Feet of	%gas	%oil	%water	%mud
<u>190</u>	<u>AMCO</u>	<u>20</u>	<u>75</u>	<u>5</u>	
<u>840</u>	<u>CO</u>		<u>100</u>		
	<u>Gas to Surface</u>				

Rec Total 1030 BHT 114 Gravity 32 API RW @ _____ °F Chlorides _____ ppm
 (A) Initial Hydrostatic 1802 Test 1150 T-On Location 23:18
 (B) First Initial Flow 45 Jars _____ T-Started 23:58
 (C) First Final Flow 253 Safety Joint _____ T-Open 02:00
 (D) Initial Shut-In 1097 Circ Sub _____ T-Pulled 04:30
 (E) Second Initial Flow 264 Hourly Standby _____ T-Out 07:37
 (F) Second Final Flow 402 Mileage 32.55 Comments _____
 (G) Final Shut-In 1079 Sampler _____
 (H) Final Hydrostatic 1705 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1182.55
 Accessibility _____ MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 45
 Sub Total 1182.55

Approved By _____ Our Representative [Signature]

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