



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1204387
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: _____

1204387

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> <i>(Submit ACO-4)</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	Brenda 1-8
Doc ID	1204387

All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Porosity

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Brenda 1-8
Doc ID	1204387

Tops

Name	Top	Datum
Top Anhydrite	1372'	+816
Base Anhydrite	1398'	+790
Heebner	3696'	-1508
LKC	3744'	-1556
BKC	4046'	-1858
Fort Scott	4224'	-2036
Cherokee Shale	4243'	-2055
Mississippi	4306'	-2118
Osage	4332'	-2144

ALLIED OIL & GAS SERVICES, LLC 062873

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT:
Heartland

DATE <u>4-15-14</u>	SEC. <u>8</u>	TWP. <u>20</u>	RANGE <u>20</u>	CALLED OUT <u>1:00 PM</u>	ON LOCATION <u>3:00 PM</u>	JOB START <u>4:45 PM</u>	JOB FINISH <u>5:45 PM</u>
LEASE <u>Brenda</u>		WELL # <u>1-8</u>		LOCATION <u>Alexander 10 South</u>		COUNTY <u>Parmer</u>	STATE <u>Ky</u>
OLD OR NEW (Circle one)			<u>1/4 well, north into</u>				

CONTRACTOR Demco #3 OWNER Some

TYPE OF JOB Surface

HOLE SIZE 12 1/4" T.D. 1172 CEMENT AMOUNT ORDERED 475 lbs class A

CASING SIZE 8 5/8" DEPTH 1171 350cc 250 Mex

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX 400 MINIMUM 200

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 25.50'

PERFS.

DISPLACEMENT 23

EQUIPMENT

PUMP TRUCK	CEMENTER	<u>Tom Nelson</u>
# <u>3106</u>	HELPER	<u>Kevin Gady</u>
BULK TRUCK		
# <u>609-239</u>	DRIVER	<u>Don Cooper</u>
BULK TRUCK		
#	DRIVER	

COMMON	<u>475</u>	@ <u>17.90</u>	<u>8,502.50</u>
POZMIX		@	
GEL	<u>4</u>	@ <u>23.40</u>	<u>210.60</u>
CHLORIDE	<u>1337</u>	@ <u>.80</u>	<u>1071.20</u>
ASC		@	
Material Total			<u>\$ 9784.30</u>
Discount		@	<u>- \$ 2446.08</u>
(2446.08/25%)		@	
Service		@	
HANDLING	<u>513.74</u>	@ <u>2.48</u>	<u>1274.07</u>
MILEAGE	<u>23.44 X 30 X</u>	<u>2.60</u>	<u>1,828.07</u>

REMARKS:

Ran 1171' of 8 5/8" casing. Break circulation. Pumped 5 bbls H2O. Mixed 475 lbs class A, 350cc 250 Mex. Relieved plug. Replaced with H2O.

Cement did circulate

(Approx 28 bbls cement to pit)

DEPTH OF JOB	<u>1171'</u>		
PUMP TRUCK CHARGE		<u>2213.75</u>	
EXTRA FOOTAGE		@	
MILEAGE	<u>Hvm 30</u>	@ <u>7.70</u>	<u>231.00</u>
MANIFOLD		@	
	<u>hvm 30</u>	@ <u>4.40</u>	<u>132.00</u>

C. 1419.87/25%

TOTAL 5679.49
Disc. -1419.87

PLUG & FLOAT EQUIPMENT

<u>8 5/8 Baffle Plate</u>	@ <u>131.04</u>	<u>131.04</u>
<u>8 5/8 Rubber Plug</u>	@ <u>131.04</u>	<u>131.04</u>
<u>3- Cementizers</u>	@ <u>74.88</u>	<u>224.64</u>
	@	
	@	

0%

TOTAL 486.72

CHARGE TO: Demco - Nelson
STREET _____
CITY _____ STATE _____ ZIP _____

Demco

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME GALLEN GASCHGER

SIGNATURE Gallen Gaschger

SALES TAX (If Any) _____
TOTAL CHARGES 15,950.51
+3865.93 25%
DISCOUNT _____ IF PAID IN 30 DAYS

\$ 12,084.58

JOB LOG

SWIFT Services, Inc.

DATE 22 APR 14 PAGE NO. 1

CUSTOMER Downing & Nelson WELL NO. 1-8 LEASE Brenda JOB TYPE cement long string TICKET NO. 26145

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								175sk EA-2 cement w/ 4# floccule, 102jts 5 1/2" x 14" casing 4328' shoejt 21-2' TD 4336' packer shoe Centralizer 1, 3, 5, 7, 9, 11
	0800							on loc TRX 114
	0825							start 5 1/2" x 14" casing in well
	1030							circulate
	1100							Drop golden ball
	1105	4	12			200		Pump 500gal mud flush
			100			100		set packer shoe
		4	20			200		Pump 20 bbl KCL flush
	1120		7					Plug RH - MH 30sk - 20sk
	1128	4	35			200		Mix EA-2 cement 125sk @ 15.3 ppg
								Drop latch down plug
								wash out pump & line
	1143	6				200		Displace plug
		6	98			700		
	1200	6	105			1500		Land plug
	1205							Release pressure to truck - dried up
								wash truck
								Rack up
	1230							job complete
								flush Blaine, Fleet & Ross



DRILL STEM TEST REPORT

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

P.O. Box 1019
Hays, KS 67601

ATTN: Alan Downing

Brenda #1-8

8-20s-20w Pawnee,KS

Start Date: 2014.04.20 @ 06:09:00

End Date: 2014.04.20 @ 16:09:00

Job Ticket #: 57523 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.04.24 @ 15:07:44



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57523

DST#: 1

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 06:09:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:12:20

Time Test Ended: 16:09:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Phillip Gage

Unit No: 49

Interval: 4241.00 ft (KB) To 4317.00 ft (KB) (TVD)

Reference Elevations: 2196.00 ft (KB)

Total Depth: 4317.00 ft (KB) (TVD)

2188.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 47.91 psig @ 4250.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.20

End Date: 2014.04.20

Last Calib.: 2014.04.20

Start Time: 06:09:01

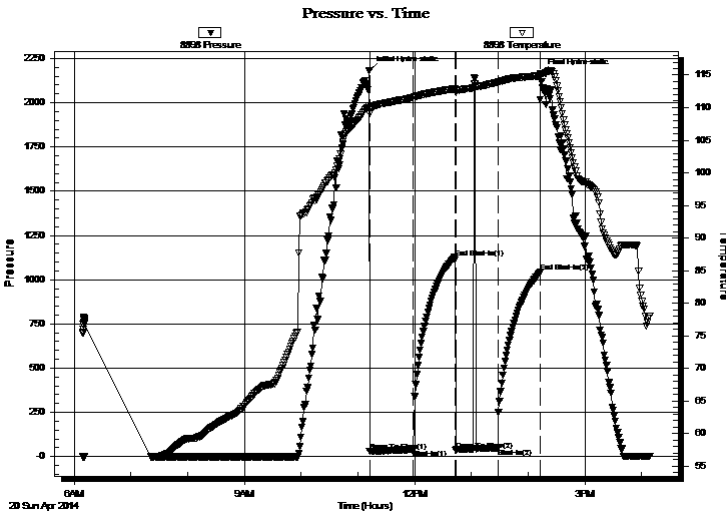
End Time: 16:09:00

Time On Btm: 2014.04.20 @ 11:12:09

Time Off Btm: 2014.04.20 @ 14:13:09

TEST COMMENT: 45-IF-Built to 1 1/4"
45-ISI-No Return
45-FF-Few bubbles, then died. Flushed tool at 13:04, built to 1/2".
45-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2182.60	110.24	Initial Hydro-static
1	30.60	109.05	Open To Flow (1)
47	38.85	111.55	Shut-In(1)
91	1123.09	112.90	End Shut-In(1)
91	34.02	112.31	Open To Flow (2)
136	47.91	113.88	Shut-In(2)
181	1041.42	114.90	End Shut-In(2)
181	2162.63	115.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
50.00	M, 100% m, w with skim of oil	0.43

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57523

DST#: 1

ATTN: Alan Dow ning

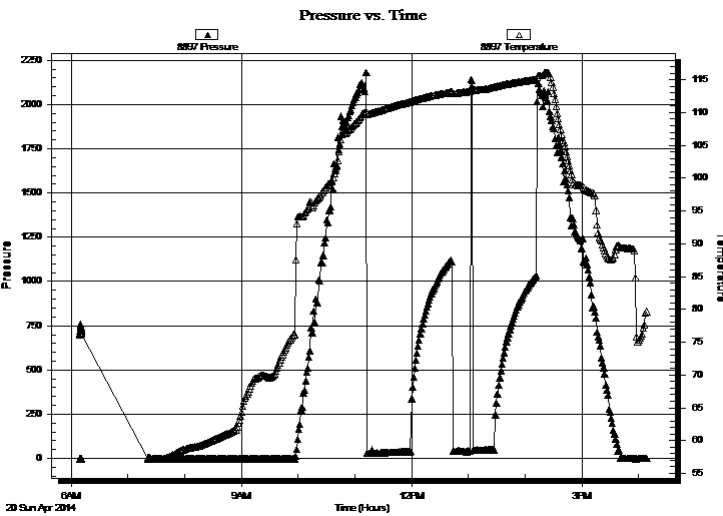
Test Start: 2014.04.20 @ 06:09:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:12:20
Time Test Ended: 16:09:00
Interval: 4241.00 ft (KB) To 4317.00 ft (KB) (TVD)
Total Depth: 4317.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Phillip Gage
Unit No: 49
Reference Elevations: 2196.00 ft (KB)
2188.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8897 **Inside**
Press@RunDepth: psig @ 4250.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2014.04.20 End Date: 2014.04.20 Last Calib.: 2014.04.20
Start Time: 06:09:01 End Time: 16:09:00 Time On Btm:
Time Off Btm:

TEST COMMENT: 45-IF-Built to 1 1/4"
45-ISI-No Return
45-FF-Few bubbles, then died. Flushed tool at 13:04, built to 1/2".
45-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
50.00	M, 100% m, with skim of oil	0.43

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

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57523

DST#: 1

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 06:09:00

Tool Information

Drill Pipe:	Length: 4216.00 ft	Diameter: 3.80 inches	Volume: 59.14 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 59.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4241.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	76.00 ft			
Tool Length:	103.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4219.00	
Hydraulic tool	5.00			4224.00	
Jars	5.00			4229.00	
Safety Joint	2.00			4231.00	
Packer	5.00			4236.00	27.00 Bottom Of Top Packer
Packer	5.00			4241.00	
Stubb	1.00			4242.00	
Perforations	8.00			4250.00	
Recorder	0.00	8897	Inside	4250.00	
Recorder	0.00	8898	Outside	4250.00	
Drill Pipe	63.00			4313.00	
Change Over Sub	1.00			4314.00	
Bullnose	3.00			4317.00	76.00 Bottom Packers & Anchor

Total Tool Length: 103.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57523

DST#: 1

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 06:09:00

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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	M, 100% m, with skim of oil	0.428

Total Length: 50.00 ft Total Volume: 0.428 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

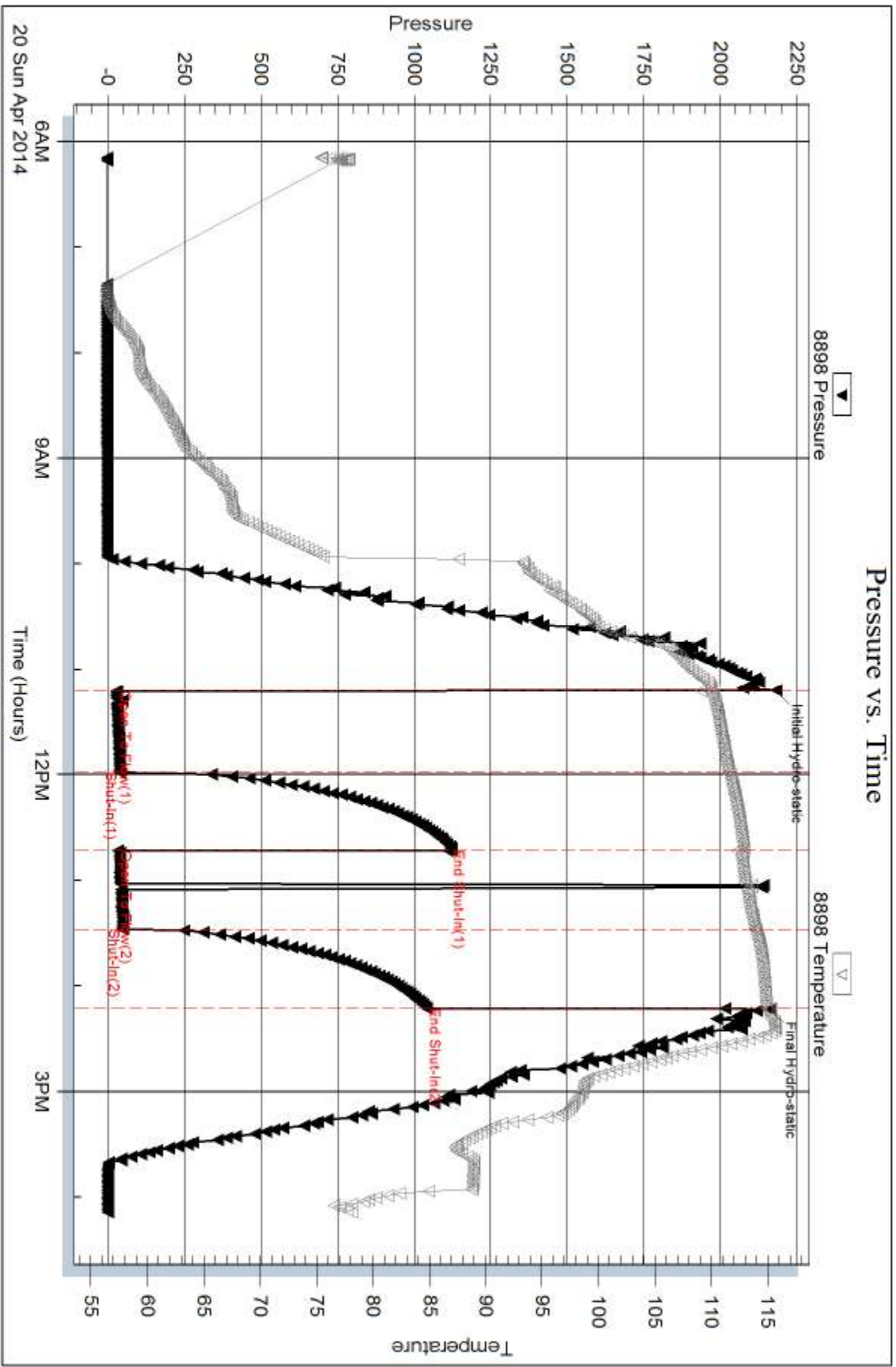
Recovery Comments:

Serial #: 8898

Outside Dow nrg-Nelson Oil Co, Inc

Brenda #1-8

DST Test Number: 1



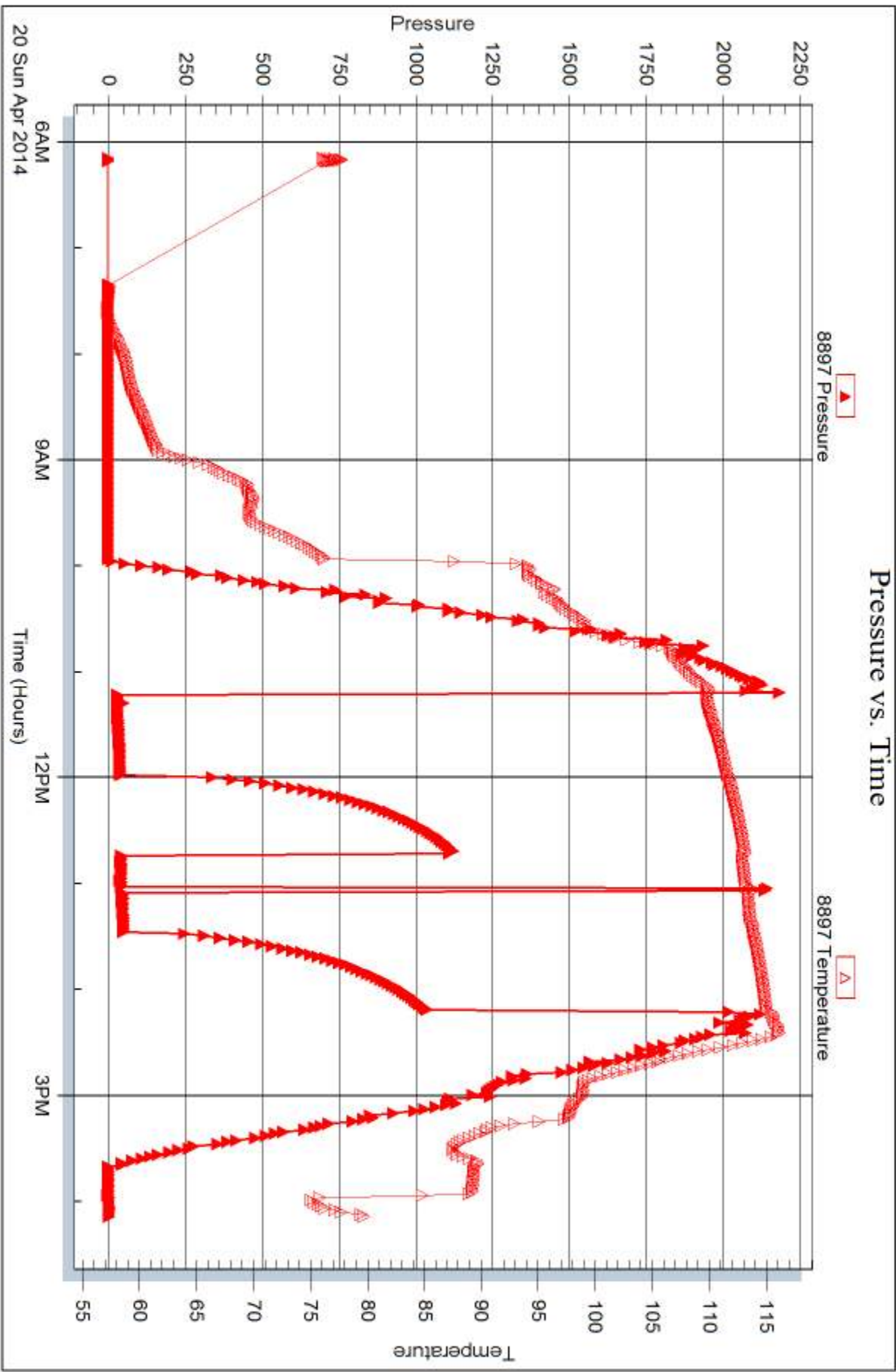
Serial #: 8897

Inside

Dow nrg-Nelson Oil Co, Inc

Brenda #1-8

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 57523

Printed: 2014.04.24 @ 15:07:45



DRILL STEM TEST REPORT

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

P.O. Box 1019
Hays, KS 67601

ATTN: Alan Downing

Brenda #1-8

8-20s-20w Pawnee,KS

Start Date: 2014.04.20 @ 21:22:00

End Date: 2014.04.21 @ 04:05:09

Job Ticket #: 57524 DST #: 2

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

Printed: 2014.04.24 @ 15:07:20



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57524

DST#: 2

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 21:22:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:17:40

Time Test Ended: 04:05:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 49

Interval: 4317.00 ft (KB) To 4327.00 ft (KB) (TVD)

Reference Elevations: 2196.00 ft (KB)

Total Depth: 4327.00 ft (KB) (TVD)

2188.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 33.34 psig @ 4318.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.20

End Date:

2014.04.21

Last Calib.: 2014.04.21

Start Time: 21:22:01

End Time:

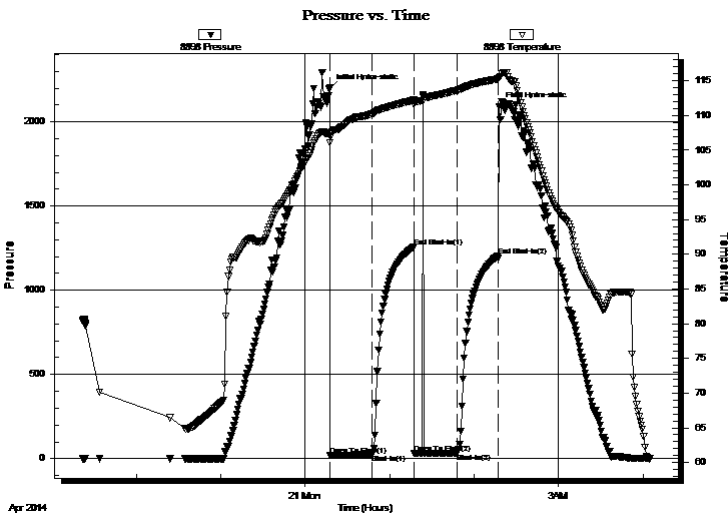
04:05:10

Time On Btm: 2014.04.21 @ 00:17:30

Time Off Btm: 2014.04.21 @ 02:17:50

TEST COMMENT: 30-IF-Built to 1 1/4"
30-ISI-No Return
30-FF-No blow , flushed tool @ 01:25, built to 1/4"
30-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2199.87	107.30	Initial Hydro-static
1	20.94	106.09	Open To Flow (1)
30	23.80	110.22	Shut-In(1)
60	1256.40	112.20	End Shut-In(1)
60	30.87	111.57	Open To Flow (2)
91	33.34	113.60	Shut-In(2)
120	1205.27	115.25	End Shut-In(2)
121	2089.59	115.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	M, 100% m, with oil spots	0.18

* 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
 P.O. Box 1019
 Hays, KS 67601
 ATTN: Alan Dow ning

8-20s-20w Pawnee,KS

Brenda #1-8

Job Ticket: 57524

DST#: 2

Test Start: 2014.04.20 @ 21:22:00

GENERAL INFORMATION:

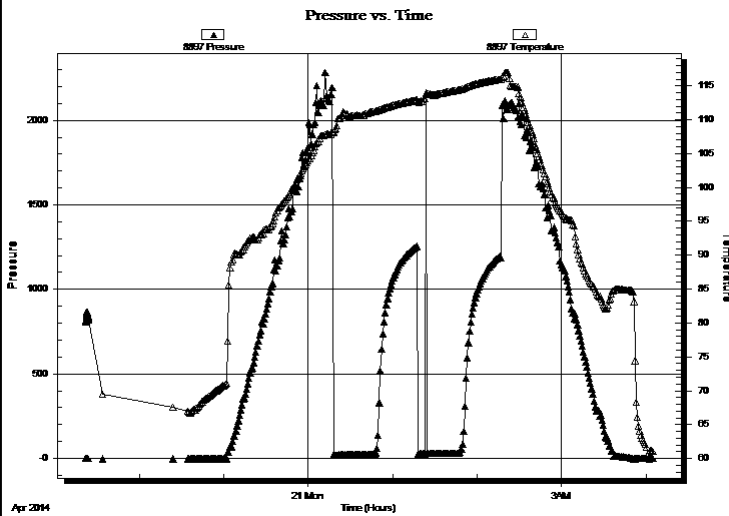
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:17:40
 Time Test Ended: 04:05:09
 Interval: **4317.00 ft (KB) To 4327.00 ft (KB) (TVD)**
 Total Depth: 4327.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Phillip Gage
 Unit No: 49
 Reference Elevations: 2196.00 ft (KB)
 2188.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8897

Inside

Press@RunDepth: psig @ 4318.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.04.20 End Date: 2014.04.21 Last Calib.: 2014.04.21
 Start Time: 21:22:01 End Time: 04:05:10 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30-IF-Built to 1 1/4"
 30-ISI-No Return
 30-FF-No blow , flushed tool @ 01:25, built to 1/4"
 30-FSI-No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
32.00	M, 100% m, with oil spots	0.18

* 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

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57524

DST#: 2

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 21:22:00

Tool Information

Drill Pipe:	Length: 4269.00 ft	Diameter: 3.80 inches	Volume: 59.88 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 60.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4317.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	10.00 ft			
Tool Length:	37.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4295.00	
Hydraulic tool	5.00			4300.00	
Jars	5.00			4305.00	
Safety Joint	2.00			4307.00	
Packer	5.00			4312.00	27.00 Bottom Of Top Packer
Packer	5.00			4317.00	
Stubb	1.00			4318.00	
Recorder	0.00	8897	Inside	4318.00	
Recorder	0.00	8898	Outside	4318.00	
Perforations	6.00			4324.00	
Bullnose	3.00			4327.00	10.00 Bottom Packers & Anchor

Total Tool Length: 37.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57524

DST#: 2

ATTN: Alan Dow ning

Test Start: 2014.04.20 @ 21:22:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
32.00	M, 100% m, with oil spots	0.176

Total Length: 32.00 ft Total Volume: 0.176 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

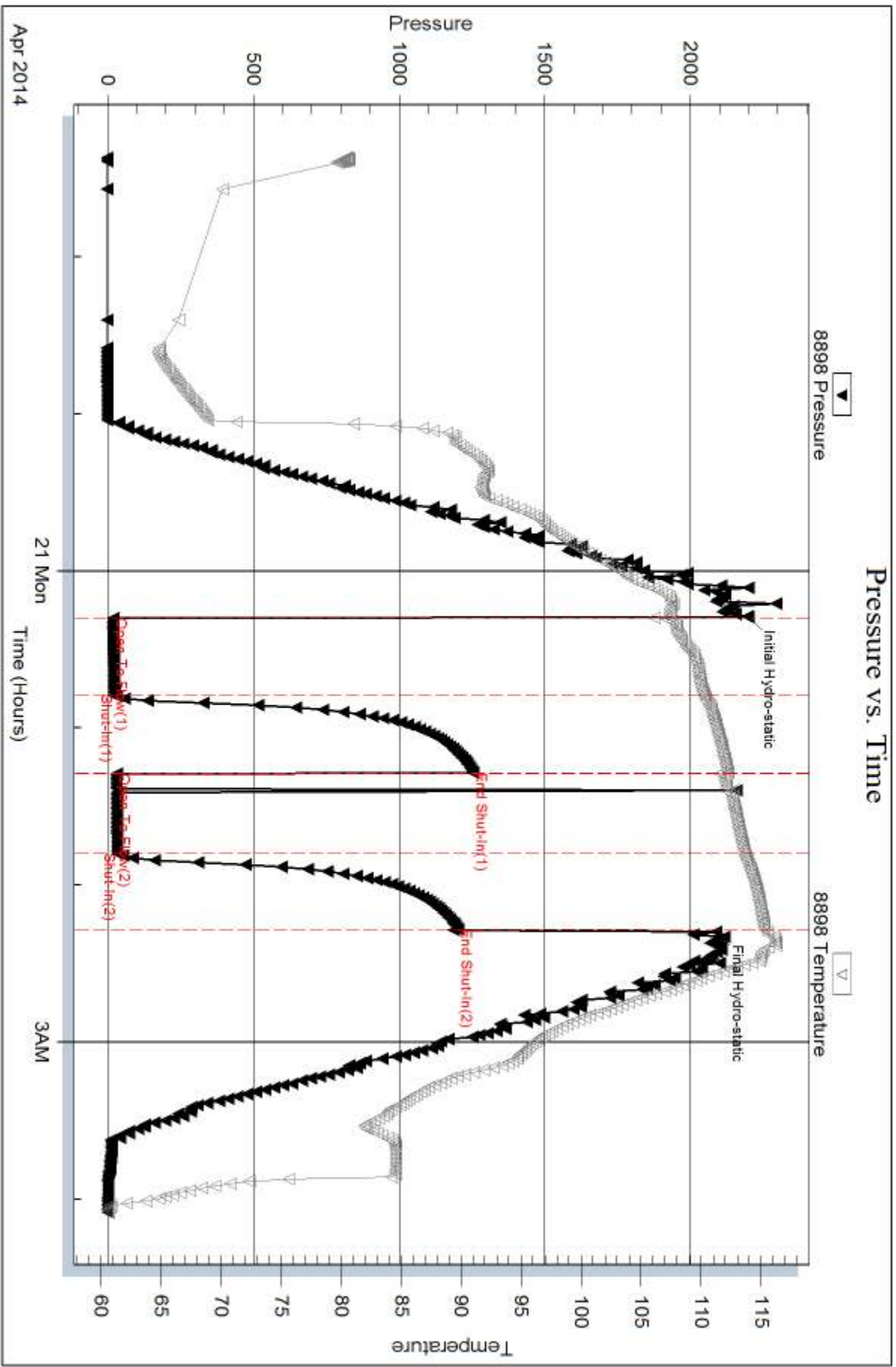
Recovery Comments:

Serial #: 8898

Outside Dow nting-Nelson Oil Co, Inc

Brenda #1-8

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 57524

Printed: 2014.04.24 @ 15:07:21

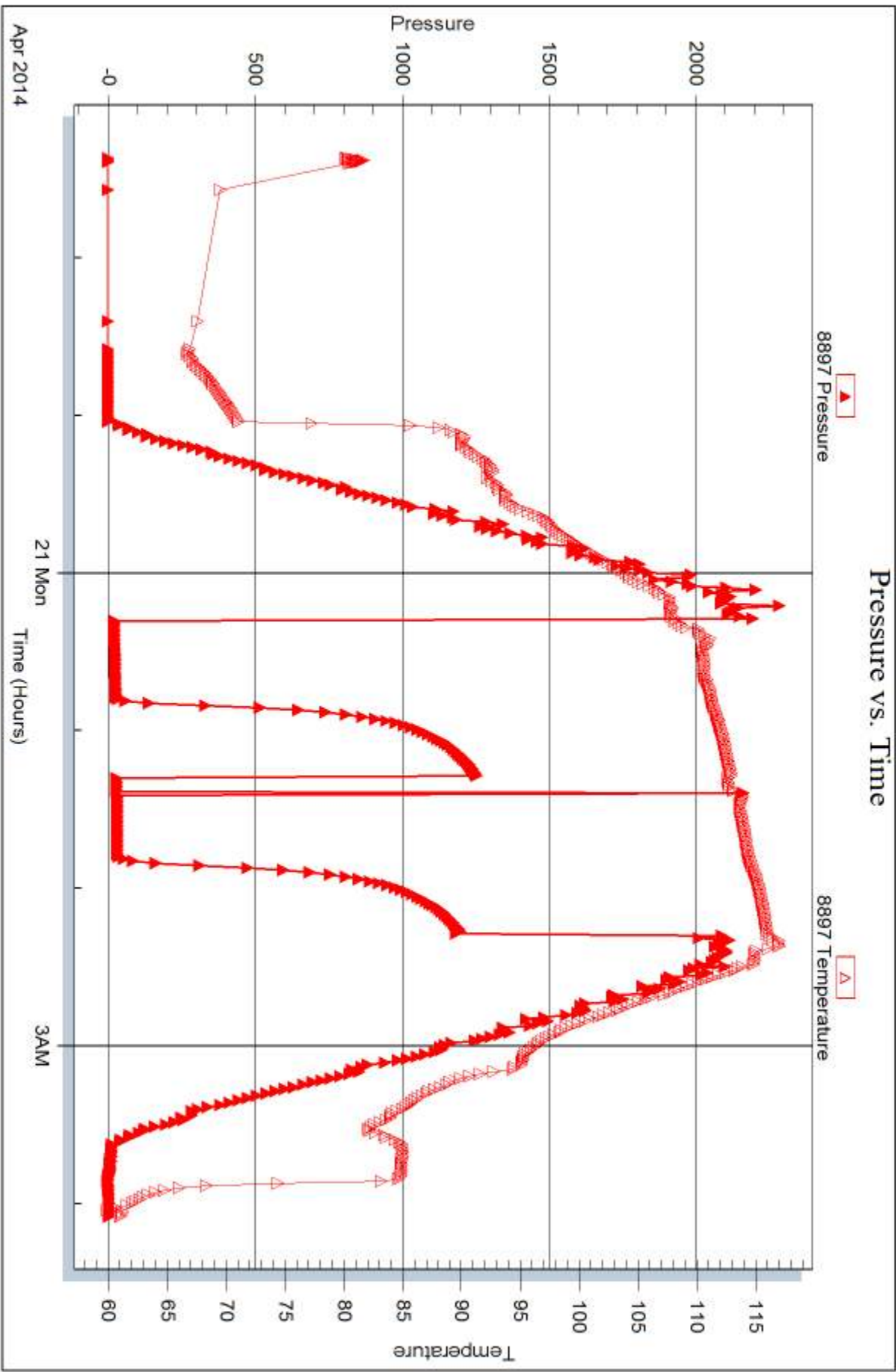
Serial #: 8897

Inside

Dow nrg-Nelson Oil Co, Inc

Brenda #1-8

DST Test Number: 2





DRILL STEM TEST REPORT

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

P.O. Box 1019
Hays, KS 67601

ATTN: Allen Downing

Brenda #1-8

8-20s-20w Pawnee,KS

Start Date: 2014.04.21 @ 09:38:00

End Date: 2014.04.21 @ 18:15:30

Job Ticket #: 57525 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.04.24 @ 15:05:39



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57525

DST#: 3

ATTN: Allen Dow ning

Test Start: 2014.04.21 @ 09:38:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:35:20

Time Test Ended: 18:15:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 49

Interval: 4324.00 ft (KB) To 4336.00 ft (KB) (TVD)

Reference Elevations: 2196.00 ft (KB)

Total Depth: 4336.00 ft (KB) (TVD)

2188.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 197.69 psig @ 4325.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.04.21

End Date:

2014.04.21

Last Calib.:

2014.04.21

Start Time: 09:38:01

End Time:

18:15:30

Time On Btm:

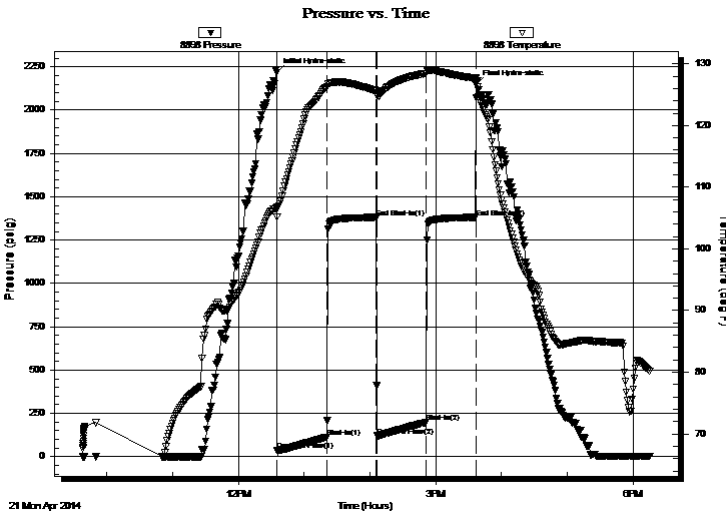
2014.04.21 @ 12:35:10

Time Off Btm:

2014.04.21 @ 15:36:50

TEST COMMENT: 45-IF-BOB in 15 mins.
45-ISI-2 3/8" Return
45-FF-BOB in 22 mins.
45-FSI-1" Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2217.81	106.79	Initial Hydro-static
1	35.15	105.21	Open To Flow (1)
46	113.52	126.27	Shut-In(1)
91	1381.36	125.62	End Shut-In(1)
91	120.13	125.01	Open To Flow (2)
136	197.69	128.47	Shut-In(2)
182	1380.69	127.61	End Shut-In(2)
182	2147.45	127.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
63.00	SOWGCM, 5%o, 5%w, 10%g, 80%m	0.61
63.00	SWGCMCO, 5%w, 5%g, 35%m, 55%o	0.88
315.00	SMGCO, 5%m, 20%g, 75%oil	4.42
40.00	O, 100%o	0.56
0.00	GIP-335'	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

P.O. Box 1019
Hays, KS 67601

ATTN: Allen Dow ning

8-20s-20w Pawnee,KS

Brenda #1-8

Job Ticket: 57525 **DST#: 3**

Test Start: 2014.04.21 @ 09:38:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:35:20

Time Test Ended: 18:15:30

Interval: **4324.00 ft (KB) To 4336.00 ft (KB) (TVD)**

Total Depth: 4336.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Reset)

Tester: Phillip Gage

Unit No: 49

Reference Elevations: 2196.00 ft (KB)

2188.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8897 Inside

Press@RunDepth: psig @ 4325.00 ft (KB)

Start Date: 2014.04.21

End Date: 2014.04.21

Start Time: 09:38:01

End Time: 18:15:30

Capacity: 8000.00 psig

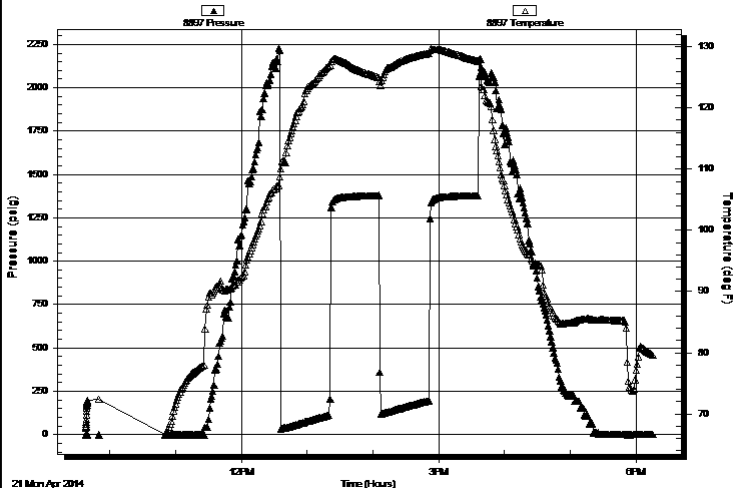
Last Calib.: 2014.04.21

Time On Btm:

Time Off Btm:

TEST COMMENT: 45-IF-BOB in 15 mins.
45-ISI-2 3/8" Return
45-FF-BOB in 22 mins.
45-FSI-1" Return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
63.00	SOWGCM, 5%o, 5%w, 10%g, 80%m	0.61
63.00	SWGMC0, 5%w, 5%g, 35%m, 55%o	0.88
315.00	SMGCO, 5%m, 20%g, 75%oil	4.42
40.00	O, 100%o	0.56
0.00	GIP-335'	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

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57525

DST#: 3

ATTN: Allen Dow ning

Test Start: 2014.04.21 @ 09:38:00

Tool Information

Drill Pipe:	Length: 4279.00 ft	Diameter: 3.80 inches	Volume: 60.02 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: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 60.17 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4324.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	12.00 ft			
Tool Length:	39.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4302.00	
Hydraulic tool	5.00			4307.00	
Jars	5.00			4312.00	
Safety Joint	2.00			4314.00	
Packer	5.00			4319.00	27.00 Bottom Of Top Packer
Packer	5.00			4324.00	
Stubb	1.00			4325.00	
Recorder	0.00	8897	Inside	4325.00	
Recorder	0.00	8898	Outside	4325.00	
Perforations	8.00			4333.00	
Bullnose	3.00			4336.00	12.00 Bottom Packers & Anchor

Total Tool Length: 39.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co, Inc

8-20s-20w Pawnee,KS

P.O. Box 1019
Hays, KS 67601

Brenda #1-8

Job Ticket: 57525

DST#: 3

ATTN: Allen Dow ning

Test Start: 2014.04.21 @ 09:38:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
63.00	SOWGCM, 5%o, 5%w, 10%g, 80%m	0.610
63.00	SWGMC0, 5%w, 5%g, 35%m, 55%o	0.884
315.00	SMGCO, 5%m, 20%g, 75%oil	4.419
40.00	O, 100%o	0.561
0.00	GIP-335'	0.000

Total Length: 481.00 ft

Total Volume: 6.474 bbf

Num Fluid Samples: 0

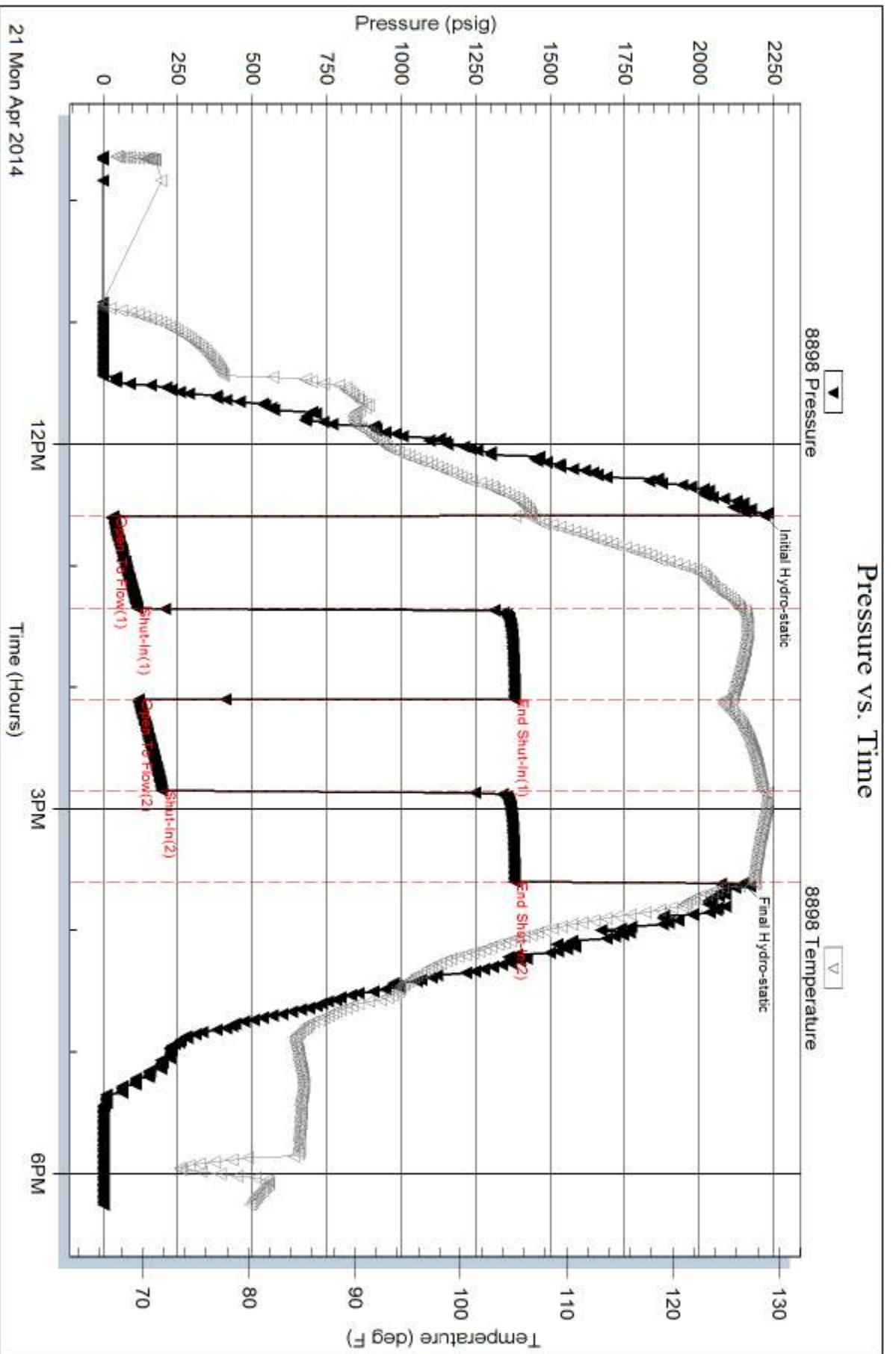
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



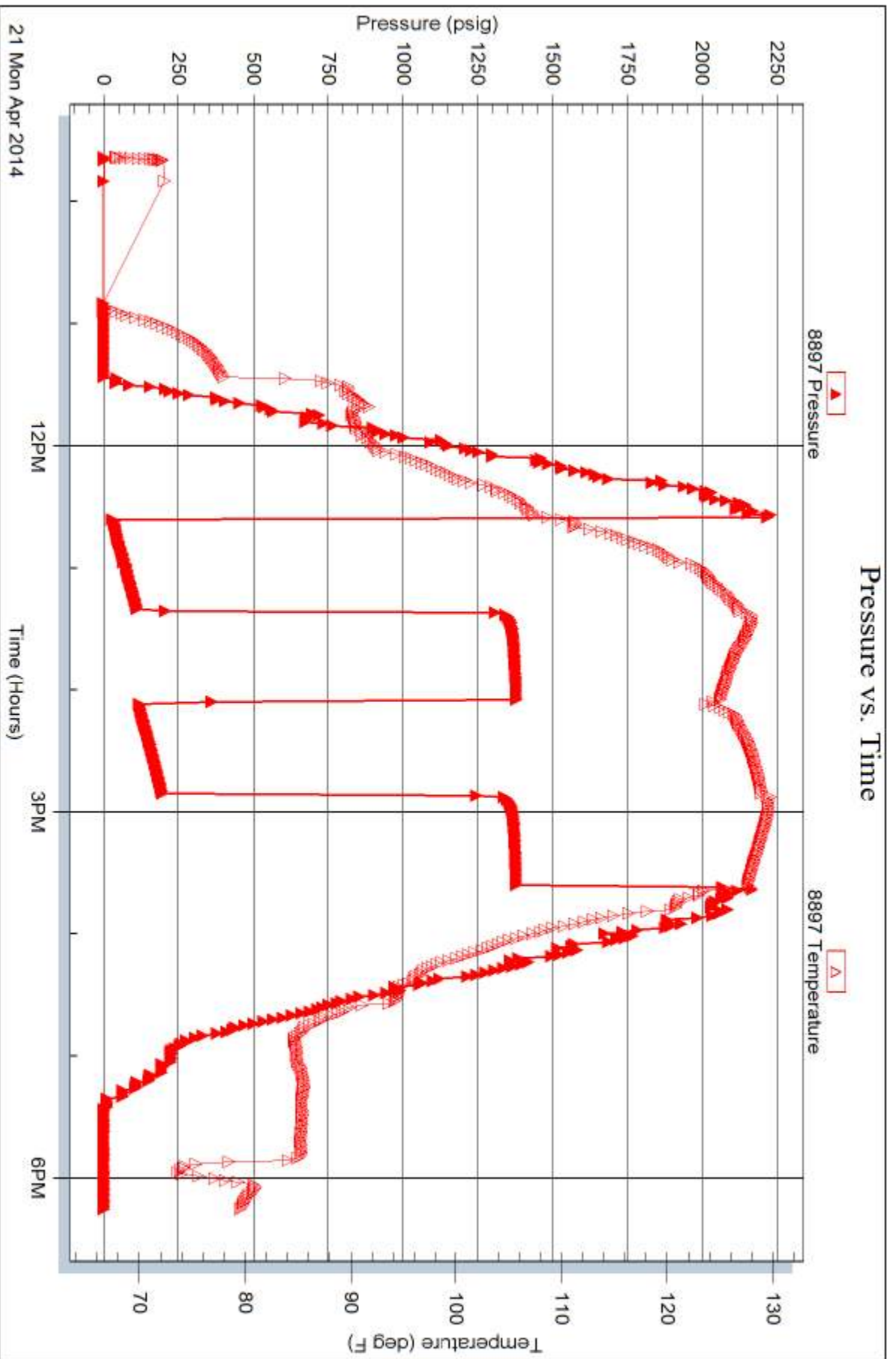
Serial #: 8897

Inside

Dow nrg-Nelson Oil Co, Inc

Brenda #1-8

DST Test Number: 3



Tribble Testing, Inc

Ref. No: 57525

Printed: 2014.04.24 @ 15:05:40



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57523

4/10

Well Name & No. Brenda #1-8 Test No. 1 Date 4-20-14
 Company Downing-Nelson Oil Co. Inc Elevation 27762196 KB 2188 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Allen Downing Rig Discovery Rig #3
 Location: Sec. 8 Twp. 20s Rge. 20w Co. Pawnee State KS

Interval Tested 4241-4317 Zone Tested Miss
 Anchor Length 76' Drill Pipe Run 4216 Mud Wt. 9.1
 Top Packer Depth 4236 Drill Collars Run 30 Vis 65
 Bottom Packer Depth 4241 Wt. Pipe Run --- WL 8
 Total Depth 4317 Chlorides 3,000 ppm System LCM 1

Blow Description IF- Buite to 1 1/4"
ISI- No Return
FF- Few bubbles, then stopped. Flushed tool @ 13:04, buite to 1/2"
FSI- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>50'</u>	<u>M, with skin of oil</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

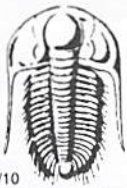
Rec Total 50 BHT 115 Gravity --- API RW --- @ --- °F Chlorides --- ppm

(A) Initial Hydrostatic 2182 Test 1250 T-On Location 05:18
 (B) First Initial Flow 30 Jars 250 T-Started 06:09
 (C) First Final Flow 38 Safety Joint 75 T-Open 11:13
 (D) Initial Shut-In 1123 Circ Sub _____ T-Pulled ~~07:13~~ 14:13
 (E) Second Initial Flow 34 Hourly Standby _____ T-Out 16:09
 (F) Second Final Flow 47 Mileage 112 RT 173.60 Comments _____
 (G) Final Shut-In 1041 Sampler _____
 (H) Final Hydrostatic 2162 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 1748.60
 Final Shut-In 45 Accessibility _____ MP/DST Disc't _____
 Sub Total 1748.60

Approved By _____ Our Representative Allen Downing "Thank You"

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. 57524

Well Name & No. Brendy #1-8 Test No. 2 Date 4-20-14
 Company Downing-Nelson Oil Co. Inc Elevation 2196 KB 2188 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Allen Downing Rig Discovery Drilling Rig # 3
 Location: Sec. 8 Twp. 20s Rge. 20w Co. Pawnee State KS

Interval Tested 4317-4327 Zone Tested Miss
 Anchor Length 10' Drill Pipe Run 4269 Mud Wt. 9.5
 Top Packer Depth 4312 Drill Collars Run 30 Vis 69
 Bottom Packer Depth 4317 Wt. Pipe Run — WL 8.8
 Total Depth 4327 Chlorides 5,000 ppm System LCM 1

Blow Description IF - Built to 1 1/4"
ISI - No Return
FF - No Blow, Flushed tool at 01:25, built to 1 1/4"
FSE - No Return

Rec	Feet of	%gas	%oil	%water	%mud
32	M, with oil spots				100%

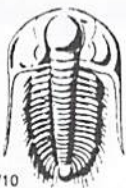
Rec Total 32 BHT 115 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2199 Test 1250 T-On Location 21:30
 (B) First Initial Flow 20 Jars 250 T-Started 21:22
 (C) First Final Flow 23 Safety Joint 75 T-Open 00:18
 (D) Initial Shut-In 1256 Circ Sub T-Pulled 02:18
 (E) Second Initial Flow 30 Hourly Standby T-Out 04:06
 (F) Second Final Flow 33 Mileage 112 RT 173.60 Comments
 (G) Final Shut-In 1205 Sampler
 (H) Final Hydrostatic 2089 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1748.60
 Accessibility MP/DST Disc't
 Sub Total 1748.60

Approved By _____

Our Representative Phil's Log 'Thank You'

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. 57525

Well Name & No. Brenda # 1-8 Test No. 3 Date 4-21-14
 Company Downing-Nelson Oil Co, Inc Elevation 2196 KB 2188 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Allen Downing Rig Discovery Drilling Rig #3
 Location: Sec. 8 Twp. 20s Rge. 20w Co. Lawrence State KS

Interval Tested 4324 - 4336 Zone Tested MISS
 Anchor Length 12' Drill Pipe Run 4279 Mud Wt. 9.5
 Top Packer Depth 4319 Drill Collars Run 30 Vis 69
 Bottom Packer Depth 4324 Wt. Pipe Run --- WL 8.8
 Total Depth 4336 Chlorides 5,000 ppm System LCM 1

Blow Description IF - BOB in 15 mhs.
ISI - 2 3/8" Return
PF - BOB in 22 mhs.
FSI 1" Return

Rec	Feet of	%gas	%oil	%water	%mud
63	SOWGCM	10	5	5	80
63	SWGMLC	5	55	5	35
315	SMGLO	20	75		5
40'	Oil		100		
350	GIP - 335'	100			

Rec Total 481 BHT 128 Gravity 39 API RW @ °F Chlorides --- ppm
 (A) Initial Hydrostatic 2217 Test 1250 T-On Location 09:27
 (B) First Initial Flow 35 Jars 250 T-Started 09:38
 (C) First Final Flow 113 Safety Joint 75 T-Open 12:36
 (D) Initial Shut-In 1381 Circ Sub --- T-Pulled 15:36
 (E) Second Initial Flow 120 Hourly Standby --- T-Out 18:16
 (F) Second Final Flow 197 Mileage 112 RT 173.60 Comments ---
 (G) Final Shut-In 1380 Sampler ---
 (H) Final Hydrostatic 2147 Straddle --- Ruined Shale Packer ---
 Shale Packer --- Ruined Packer ---
 Extra Packer --- Extra Copies ---
 Extra Recorder --- Sub Total 0
 Day Standby --- Total 1748.60
 Accessibility --- MP/DST Disc't ---

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Sub Total 1748.60

Approved By _____ Our Representative Phil Gray "Thank You"

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.

COMPANY: Downing-Nelson Oil & Inc
WELL: Brenda #1-B
FIELD: Evans Grove

LOCATION: 1370' EX - 2310' FEL
SEC. 8 TWP. 20S RGE. 20W
COUNTY: TADUSET
STATE: KANSAS

PRODUCTION: Miss Oxyg
ELEVATION: KB 2188
DF: 2186
GL: 2188 LB

OPERATOR: EXLOCI
CONTRACTOR: Dispersion Digs. Pkg # 3
COMM. 4-14-74 COMP. 4-23-74

SUNF: 85/8" - 1178 PROD. 5/12 - 4330
TOTAL DEPTH DRILLERS: 4336
TOTAL DEPTH LOG: 4337

FORMATION TOPS AND STRUCTURAL POSITION
FORMATION: SAMPLE ELECTRICAL LOG SUB-SEA DEPTH STRUCTURAL POSITION

FORMATION	SAMPLE	ELECTRICAL LOG	SUB-SEA DEPTH	STRUCTURAL POSITION
Anhydrite Base	1376	1372	+ 796	-1
Hebner	3697	3696	-1508	-6
Lansing	3747	3744	-1554	-8
RVC	4049	4046	-1858	-1
H. Scott	4225	4224	-2034	-1
Cherokee	4243	4243	-2055	-2
Miss	4304	4304	-2118	-8
OSAGE	4331	4332	-2144	+1

REFERENCE WELL FOR STRUCTURE: Bell Bros.
Ray L. Miller #1 SW-SE-SE
Sec 8-20s-20w TADUSET Co. 1, KS

DRILL STEM TESTS

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

REMARKS AND RECOMMENDATIONS

LEGEND

