



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1182982
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: _____

1182982

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
--	---

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> _____
---	--

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	Gottschalk-Gerstner Unit 1-25
Doc ID	1182982

Tops

Name	Top	Datum
Top Anhydrite	1330'	+752
Base Anhydrite	1375'	+707
Topeka	3108'	-1026
Heebner	3364'	-1282
Toronto	3383'	-1301
LKC	3411'	-1329
BKC	3651'	-1569
Arbuckle	3730'	-1648

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

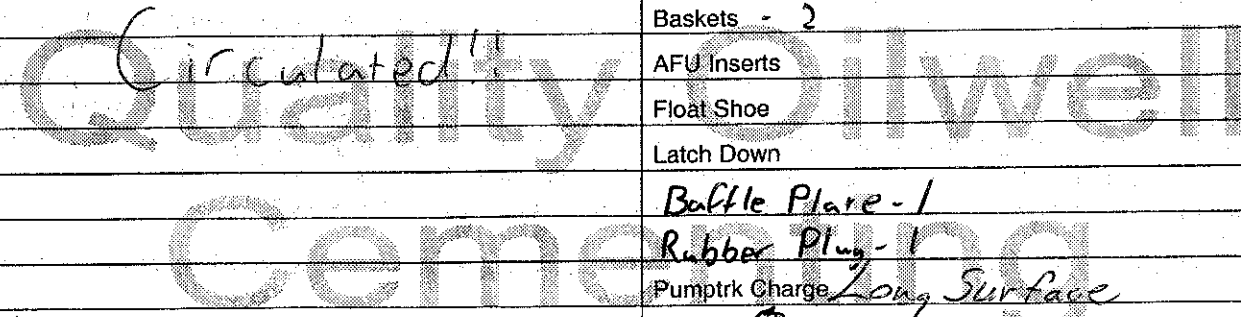
Home Office P.O. Box 32 Russell, KS 67665

No. 7046

Date	1-11-14	Sec.	25	Twp.	14	Range	19	County	Ellis	State	KS	On Location		Finish	12:30 Am
Location								Hays S to Munjor Rd 3w S into							
Lease	Gottschalk-Gerstner			Well No.	1-25			Owner							
Contractor	Discovery #4							To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Type Job	Surface							Charge To							
Hole Size	12 1/4			T.D.	1336			Dawning Nelson							
Csg.	8 5/8			Depth	1336'			Street							
Tbg. Size				Depth				City							
Tool				Depth				State							
Cement Left in Csg.	36.00			Shoe Joint	36.00			The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line				Displace	82 3/4 bbl			Cement Amount Ordered							
EQUIPMENT								Common							
Pumptrk	19	No.		Cementer				480							
				Helper	Cody			Poz. Mix							
Bulktrk	4	No.		Driver	Heath			Gel.							
				Driver	Brett			9							
Bulktrk	Pu	No.		Driver				Calcium							
				Driver				17							
JOB SERVICES & REMARKS								Hulls							
Remarks:								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling							
								506							
								Mileage							
								8 5/8							
								FLOAT EQUIPMENT							
								Guide Shoe							
								Centralizer - 2							
								Baskets - 2							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Baffle Plate - 1							
								Rubber Plug - 1							
								Pumptrk Charge							
								Long Surface							
								Mileage							
								8							
Signature								Tax							
Discourt								Total Charge							

Cement

Circulated



X Signature *Mike Schell*

QUALITY OILWELL CEMENTING, INC.

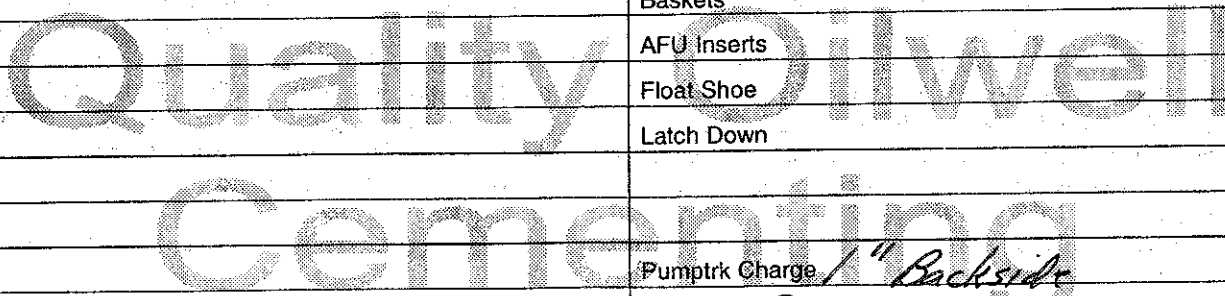
Federal Tax I.D.# 20-2886107

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

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

No. 7713

Date	Sec.	Twp.	Range	County	State	On Location	Finish
1-12-14	25	14	19	Ellis	KS		7:30 AM
Lease				Location			
Gottschalk GERSTNER				Hay 5.5 S major RD 3 1/2 W Sinto			
Well No. 1-25				Owner			
Contractor Discover / #4				To Quality Oilwell Cementing, Inc.			
Type Job 1" Backside				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. 1336		Charge To Downing / Nelson			
Csg. 8 5/8		Depth		Street			
Tbg. Size		Depth		City		State	
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.			
Cement Left in Csg.		Shoe Joint		Cement Amount Ordered 1500m 4/CC			
Meas Line		Displace		USED 40SK			
EQUIPMENT							
Pumptrk 18 No.		Cement Helper		Common 40			
Bulktrk		Driver		Poz. Mix			
Bulktrk 9 No.		Driver Clayton		Gel.			
				Calcium 1			
JOB SERVICES & REMARKS							
Remarks:				Hulls			
Rat Hole				Salt			
Mouse Hole				Flowseal			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
D/V or Port Collar				CFL-117 or CD110 CAF 38			
Ran 1" to 75 + mixed 40SK				Sand			
Cement Checked?				Handling 150			
Flushed 20 minutes & flushed clean.				Mileage			
FLOAT EQUIPMENT							
				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge 1" Backside			
				Mileage 8			
				Tax			
				Discount			
				Total Charge			
Signature Mike Diller							



JOB LOG

SWIFT Services, Inc.

DATE 1-19-14 PAGE NO.

CUSTOMER Downing Nelson WELL NO. 1-25 LEASE Grottschok - her stner unit JOB TYPE 5 1/2 Long string TICKET NO. 25273

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								TO 3825 SJ 18
								TP 3821 Insert 3803
								Centralizers 1, 3, 5, 8, 11, 13
								Basket 7
	1330							Start Pipe Rig Run FE
	1515							Drop Ball Break Circulation Rotate
	1700		7/4					Plug RH 30skt MH 15skt
		5	12				200	Start Mud Flush
		5	20				200	start KLL flush
		5	32				200	Start cement 130 skt EA:2
	1728							Drop Plug
								wash out Pump + Lines
	1730	6						Start Displacement
	1745	6	92.7				700 / 1500	Load Plug
								Release Dry
								wash up Back up
	1830							Job Complete Thank You Dale, Brian, Ousty



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS 67601

ATTN: Al Downing

25-14s-19w Ellis,KS

Gottschalk Gerstner Unit #1-25

Start Date: 2014.01.15 @ 22:22:20

End Date: 2014.01.16 @ 04:23:40

Job Ticket #: 56039 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.23 @ 09:50:08

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

25-14s-19w Ellis,KS

DST # 1

LKC E

2014.01.15



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56039

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.01.15 @ 22:22:20

GENERAL INFORMATION:

Formation: **LKC E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:19:30

Time Test Ended: 04:23:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 49

Interval: 3455.00 ft (KB) To 3478.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3478.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 17.58 psig @ 3456.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.15

End Date:

2014.01.16

Last Calib.:

2014.01.16

Start Time: 22:22:21

End Time:

04:23:40

Time On Btm:

2014.01.16 @ 00:19:20

Time Off Btm:

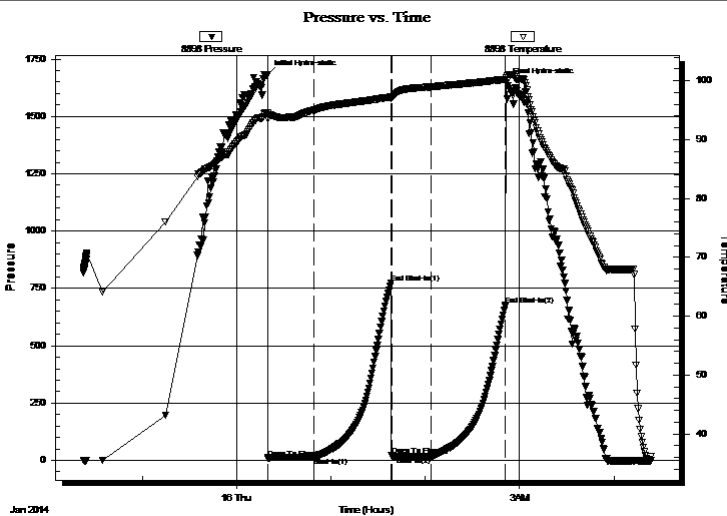
2014.01.16 @ 02:51:20

TEST COMMENT: Fair surface blow built to 4"

Dead no blow back

Weak surface blow built to 2 1/2"

Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1682.67	94.49	Initial Hydro-static
1	10.25	93.44	Open To Flow (1)
30	13.96	94.99	Shut-In(1)
79	772.34	97.21	End Shut-In(1)
79	21.79	96.97	Open To Flow (2)
105	17.58	98.94	Shut-In(2)
152	675.77	100.23	End Shut-In(2)
152	1645.74	100.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%O	0.03
20.00	30%O 70%M	0.28

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis, KS

Job Ticket: 56039

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.01.15 @ 22:22:20

GENERAL INFORMATION:

Formation: **LKC E**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:19:30

Time Test Ended: 04:23:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 49

Interval: 3455.00 ft (KB) To 3478.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3478.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8897

Inside

Press@RunDepth: psig @ 3456.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.15

End Date:

2014.01.16

Last Calib.:

2014.01.16

Start Time: 22:22:18

End Time:

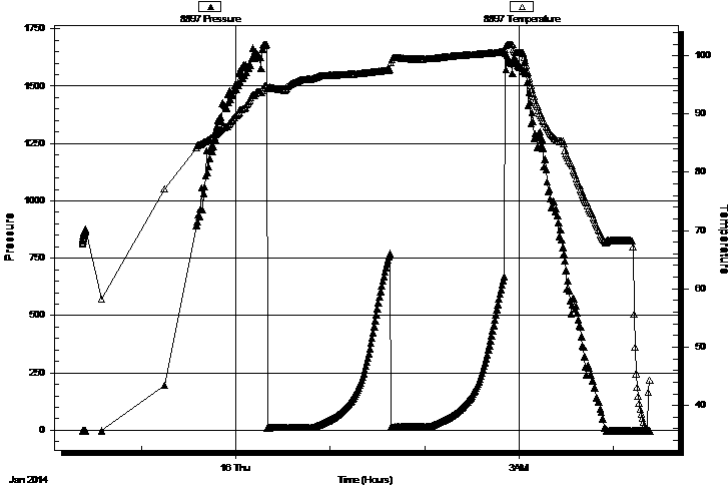
04:23:37

Time On Btm:

Time Off Btm:

TEST COMMENT: Fair surface blow built to 4"
Dead no blow back
Weak surface blow built to 2 1/2"
Dead no blow back

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%O	0.03
20.00	30%O 70%M	0.28

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56039

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.01.15 @ 22:22:20

Tool Information

Drill Pipe:	Length: 3441.00 ft	Diameter: 3.80 inches	Volume: 48.27 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 48.27 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3455.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	23.00 ft				
Tool Length:	43.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3440.00	
Hydraulic tool	5.00			3445.00	
Packer	5.00			3450.00	20.00 Bottom Of Top Packer
Packer	5.00			3455.00	
Stubb	1.00			3456.00	
Recorder	0.00	8897	Inside	3456.00	
Recorder	0.00	8898	Outside	3456.00	
Perforations	19.00			3475.00	
Bullnose	3.00			3478.00	23.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56039

DST#: 1

ATTN: Al Dow ning

Test Start: 2014.01.15 @ 22:22:20

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 70.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
2.00	100%O	0.028
20.00	30%O 70%M	0.281

Total Length: 22.00 ft Total Volume: 0.309 bbf

Num Fluid Samples: 0

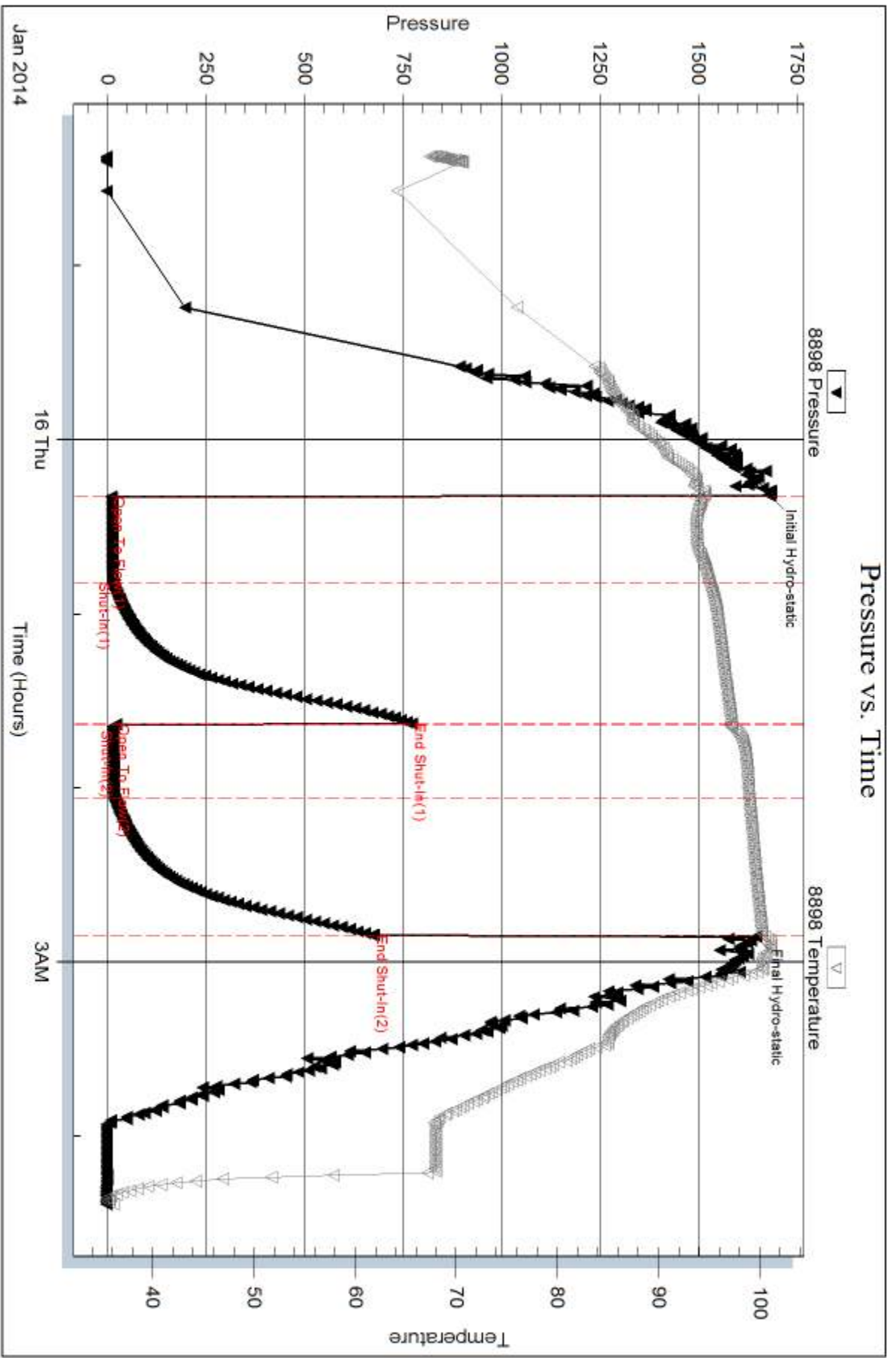
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



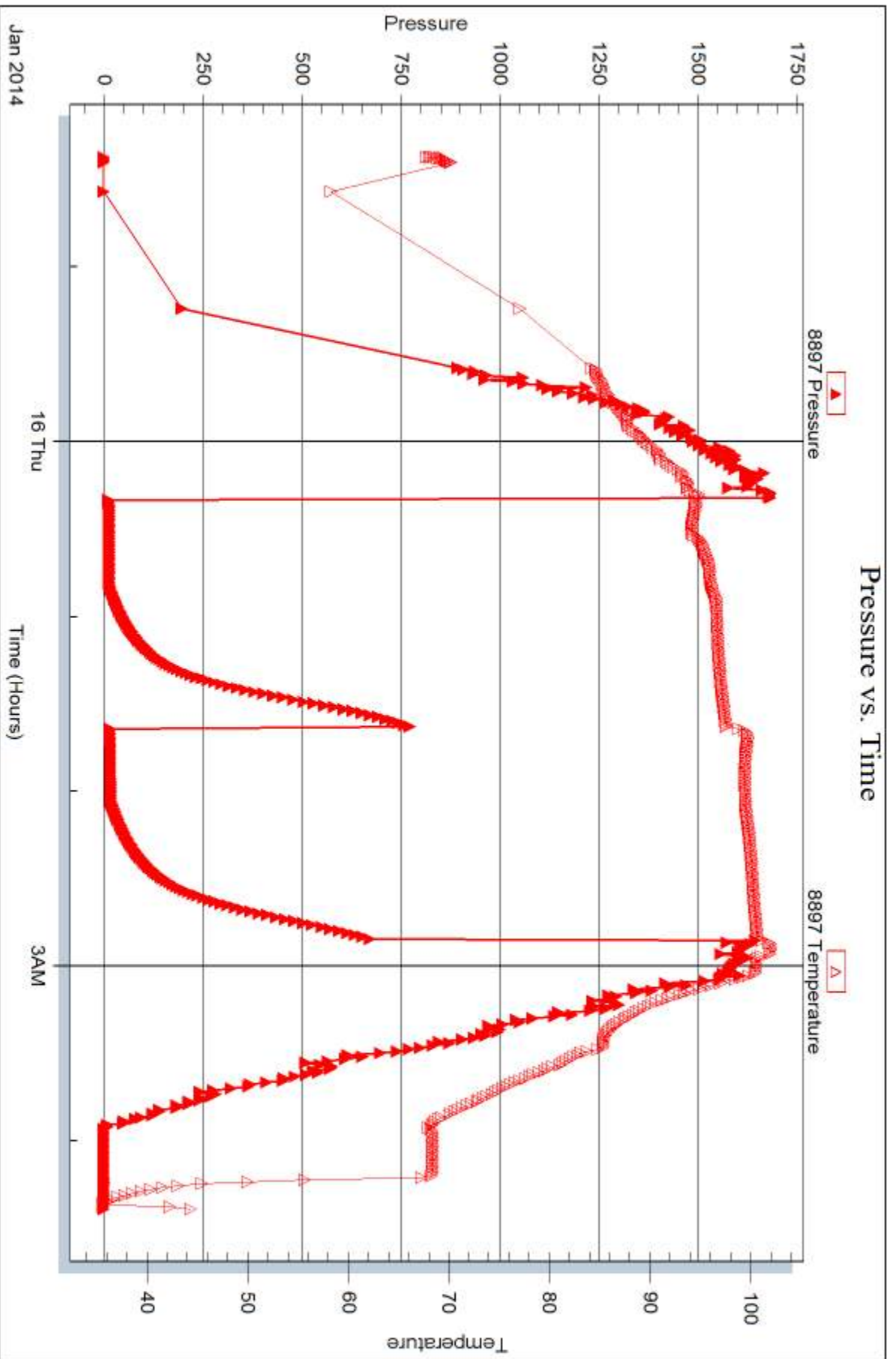
Serial #: 8897

Inside

Dow n ing Nelson Oil Co

25-14s-19w Ellis, KS

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56039

Printed: 2014.01.23 @ 09:50:10



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS 67601

ATTN: Al Downing

25-14s-19w Ellis,KS

Gottschalk Gerstner Unit #1-25

Start Date: 2014.01.16 @ 14:07:22

End Date: 2014.01.16 @ 20:34:52

Job Ticket #: 56040 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.23 @ 09:49:39

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

25-14s-19w Ellis,KS

DST # 2

LKC H

2014.01.16



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56040

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.01.16 @ 14:07:22

GENERAL INFORMATION:

Formation: **LKC H**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:11:12

Time Test Ended: 20:34:52

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3520.00 ft (KB) To 3550.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3550.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 92.07 psig @ 3521.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.16

End Date: 2014.01.16

Last Calib.: 2014.01.16

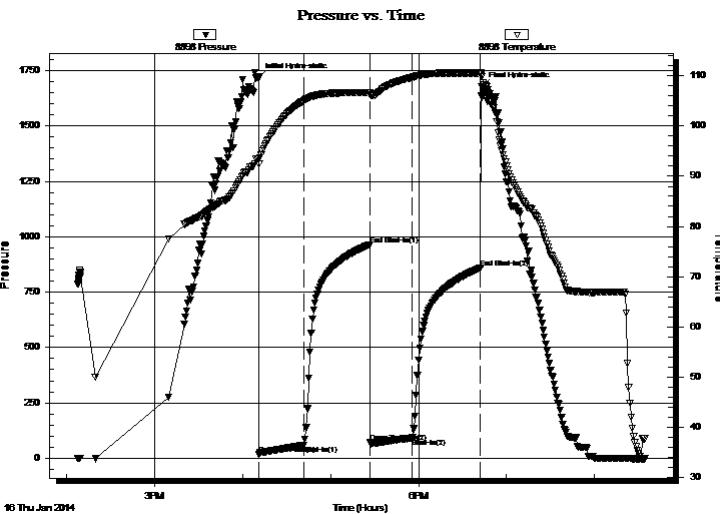
Start Time: 14:07:23

End Time: 20:34:52

Time On Btm: 2014.01.16 @ 16:11:02

Time Off Btm: 2014.01.16 @ 18:43:01

TEST COMMENT: B.O.B. In 20 mins
Weak surface blow back built to 3"
B.O.B. In 5 mins
Weak surface blow backilt to 3"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1719.73	93.43	Initial Hydro-static
1	19.28	92.44	Open To Flow (1)
31	58.09	105.05	Shut-In(1)
76	964.31	106.63	End Shut-In(1)
76	71.66	106.29	Open To Flow (2)
105	92.07	109.67	Shut-In(2)
152	859.41	110.45	End Shut-In(2)
152	1678.90	110.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1140 GIP	0.00
70.00	30%G 70%O	0.98
120.00	30%G 20%O 50%M	1.68

* 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

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56040

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.01.16 @ 14:07:22

Tool Information

Drill Pipe:	Length: 3505.00 ft	Diameter: 3.80 inches	Volume: 49.17 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	55000.00 lb
			<u>Total Volume: 49.17 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3520.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	11.00 ft				
Tool Length:	31.00 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			3505.00	
Hydraulic tool	5.00			3510.00	
Packer	5.00			3515.00	20.00 Bottom Of Top Packer
Packer	5.00			3520.00	
Stubb	1.00			3521.00	
Recorder	0.00	8897	Inside	3521.00	
Recorder	0.00	8898	Outside	3521.00	
Perforations	7.00			3528.00	
Bullnose	3.00			3531.00	11.00 Bottom Packers & Anchor
Total Tool Length:	31.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56040

DST#: 2

ATTN: Al Dow ning

Test Start: 2014.01.16 @ 14:07:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	1140 GIP	0.000
70.00	30%G 70%O	0.982
120.00	30%G 20%O 50%M	1.683

Total Length: 190.00 ft Total Volume: 2.665 bbf

Num Fluid Samples: 0

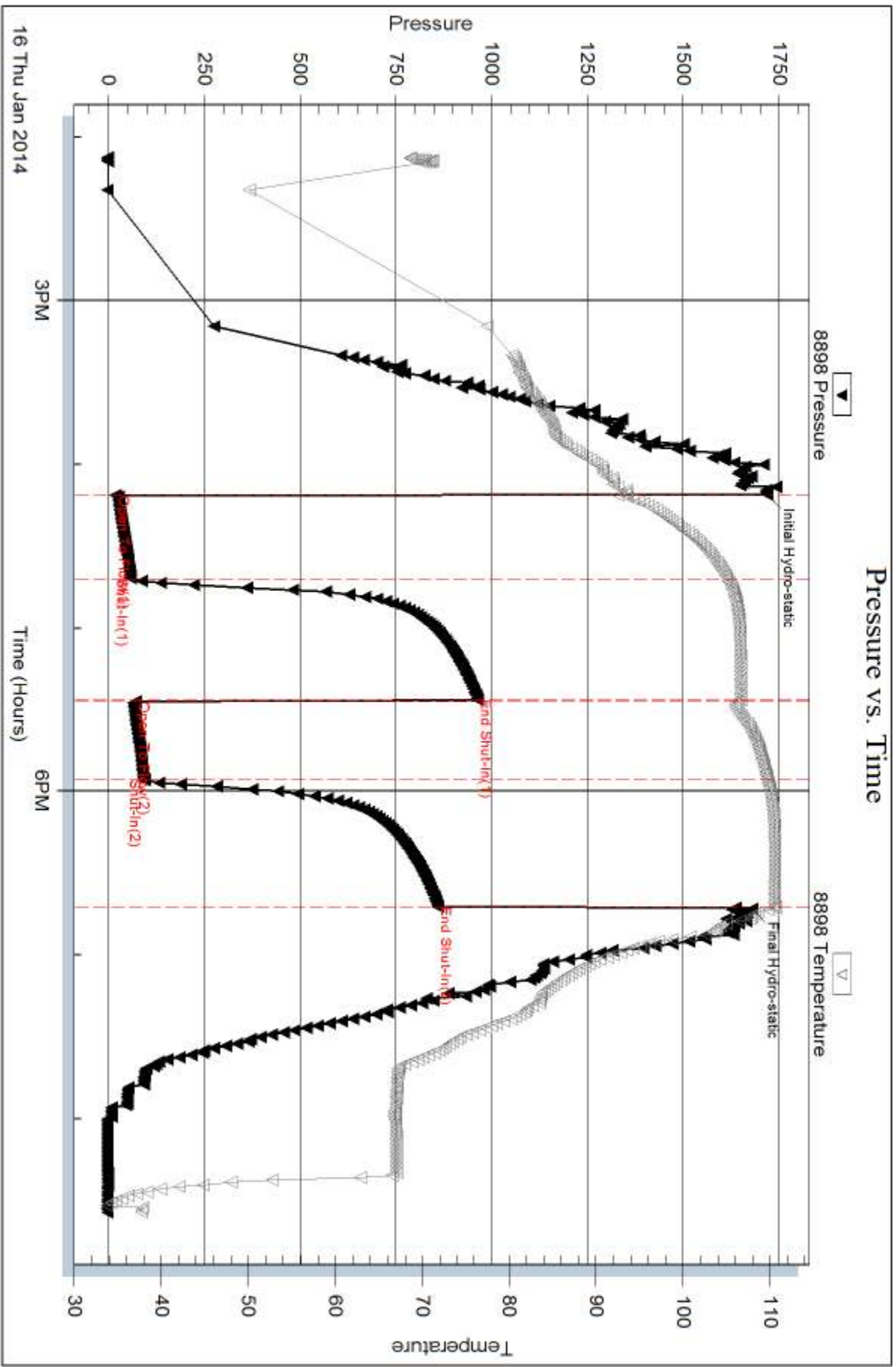
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



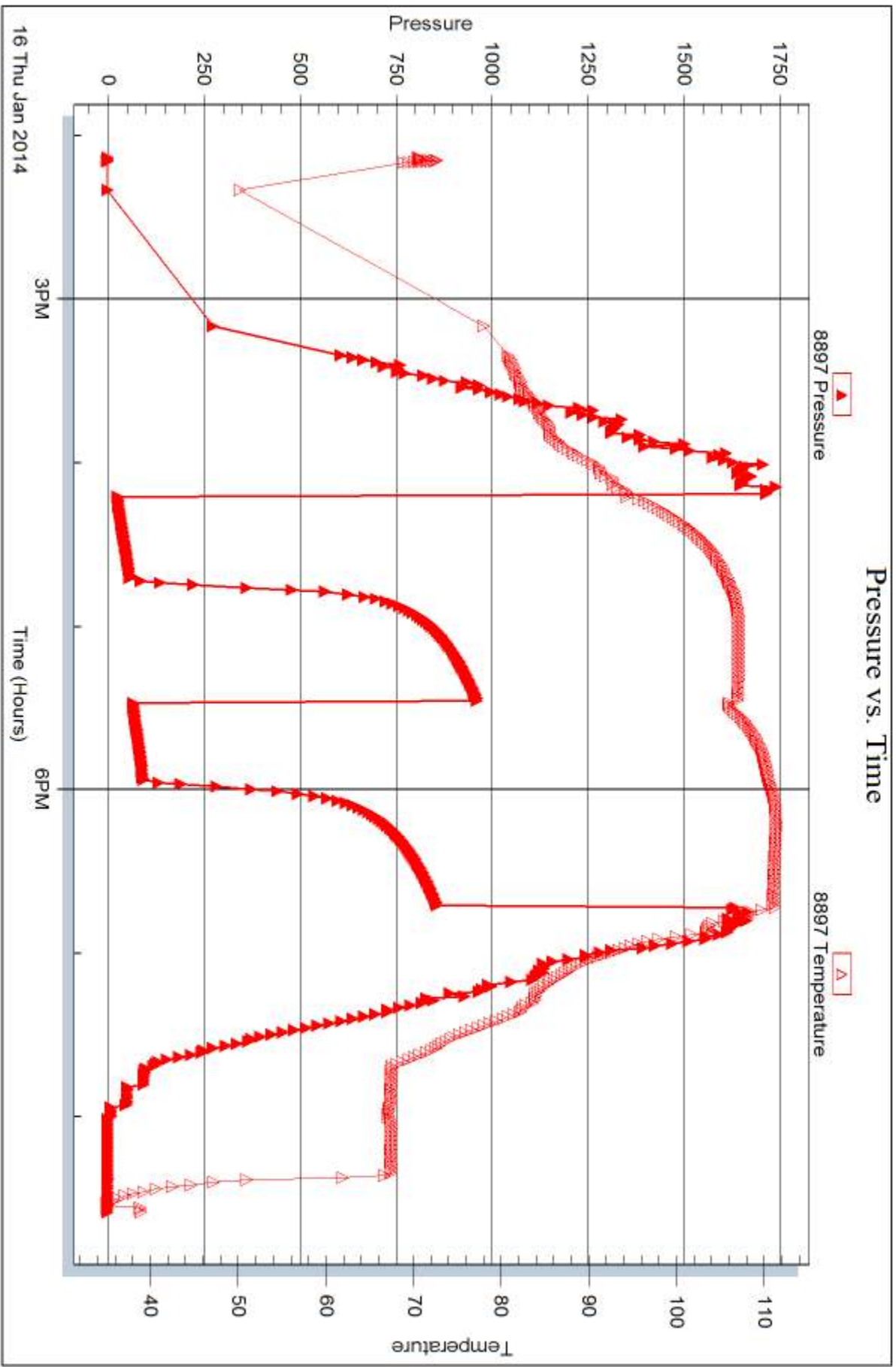
Serial #: 8897

Inside

Dow nng Nelson Oil Co

25-14s-19w Ellis, KS

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 56040

Printed: 2014.01.23 @ 09:49:41



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS 67601

ATTN: Al Downing

25-14s-19w Ellis,KS

Gottschalk Gerstner Unit #1-25

Start Date: 2014.01.17 @ 04:47:46

End Date: 2014.01.17 @ 11:19:16

Job Ticket #: 56041 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.23 @ 09:49:10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56041

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.01.17 @ 04:47:46

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:45:26

Time Test Ended: 11:19:16

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3550.00 ft (KB) To 3595.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3595.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 41.01 psig @ 3559.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.17

End Date:

2014.01.17

Last Calib.:

2014.01.17

Start Time:

04:47:47

End Time:

11:19:16

Time On Btm:

2014.01.17 @ 06:45:16

Time Off Btm:

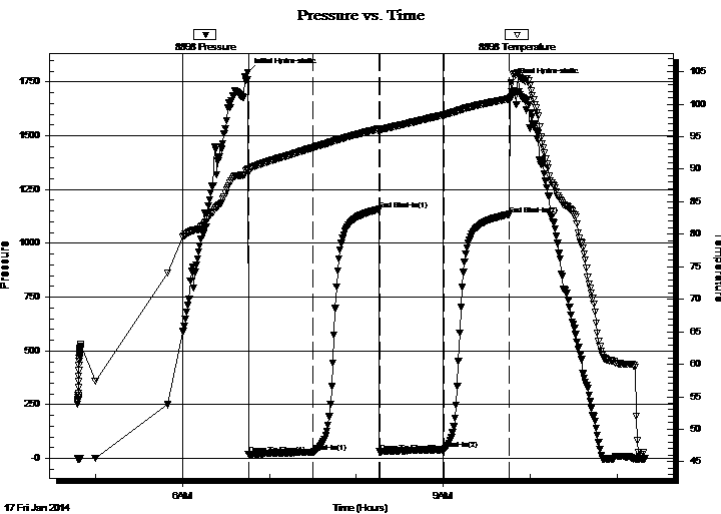
2014.01.17 @ 09:46:36

TEST COMMENT: Weak surface blow built to 2 1/2"

Dead no blow back

Weak surface blow built to 3"

Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1794.71	90.09	Initial Hydro-static
1	18.03	89.42	Open To Flow (1)
45	29.90	93.33	Shut-In(1)
91	1157.83	96.21	End Shut-In(1)
91	30.41	95.80	Open To Flow (2)
135	41.01	98.37	Shut-In(2)
181	1134.51	100.83	End Shut-In(2)
182	1745.81	101.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%O	0.07
45.00	100%M With oil spots	0.63

* 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

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56041

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.01.17 @ 04:47:46

GENERAL INFORMATION:

Formation: **LKC I-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:45:26

Time Test Ended: 11:19:16

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3550.00 ft (KB) To 3595.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3595.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8897

Inside

Press@RunDepth: psig @ 3559.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.17

End Date:

2014.01.17

Last Calib.:

2014.01.17

Start Time: 04:47:39

End Time:

11:19:08

Time On Btm:

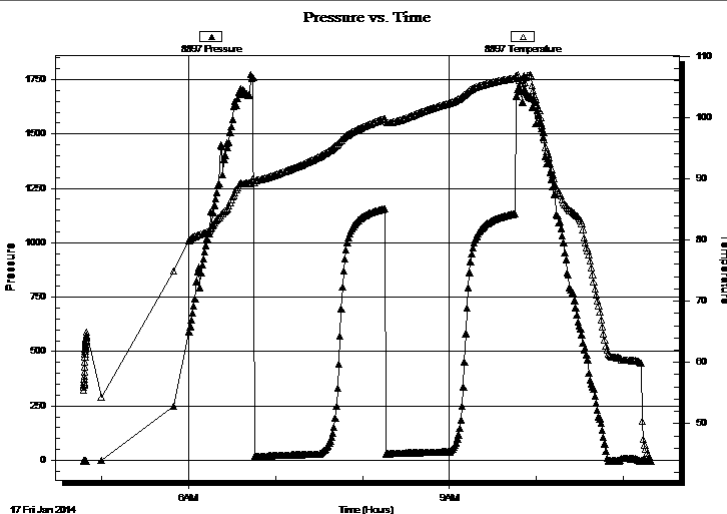
Time Off Btm:

TEST COMMENT: Weak surface blow built to 2 1/2"

Dead no blow back

Weak surface blow built to 3"

Dead no blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100%O	0.07
45.00	100%M With oil spots	0.63

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56041

DST#: 3

ATTN: Al Downing

Test Start: 2014.01.17 @ 04:47:46

Tool Information

Drill Pipe:	Length: 3536.00 ft	Diameter: 3.80 inches	Volume: 49.60 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 49.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3550.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	65.00 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			3535.00	
Hydraulic tool	5.00			3540.00	
Packer	5.00			3545.00	20.00 Bottom Of Top Packer
Packer	5.00			3550.00	
Stubb	1.00			3551.00	
Perforations	8.00			3559.00	
Recorder	0.00	8897	Inside	3559.00	
Recorder	0.00	8898	Outside	3559.00	
Change Over Sub	1.00			3560.00	
Drill Pipe	31.00			3591.00	
Change Over Sub	1.00			3592.00	
Bullnose	3.00			3595.00	45.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56041

DST#: 3

ATTN: Al Dow ning

Test Start: 2014.01.17 @ 04:47:46

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 8.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
5.00	100%O	0.070
45.00	100%M With oil spots	0.631

Total Length: 50.00 ft Total Volume: 0.701 bbf

Num Fluid Samples: 0

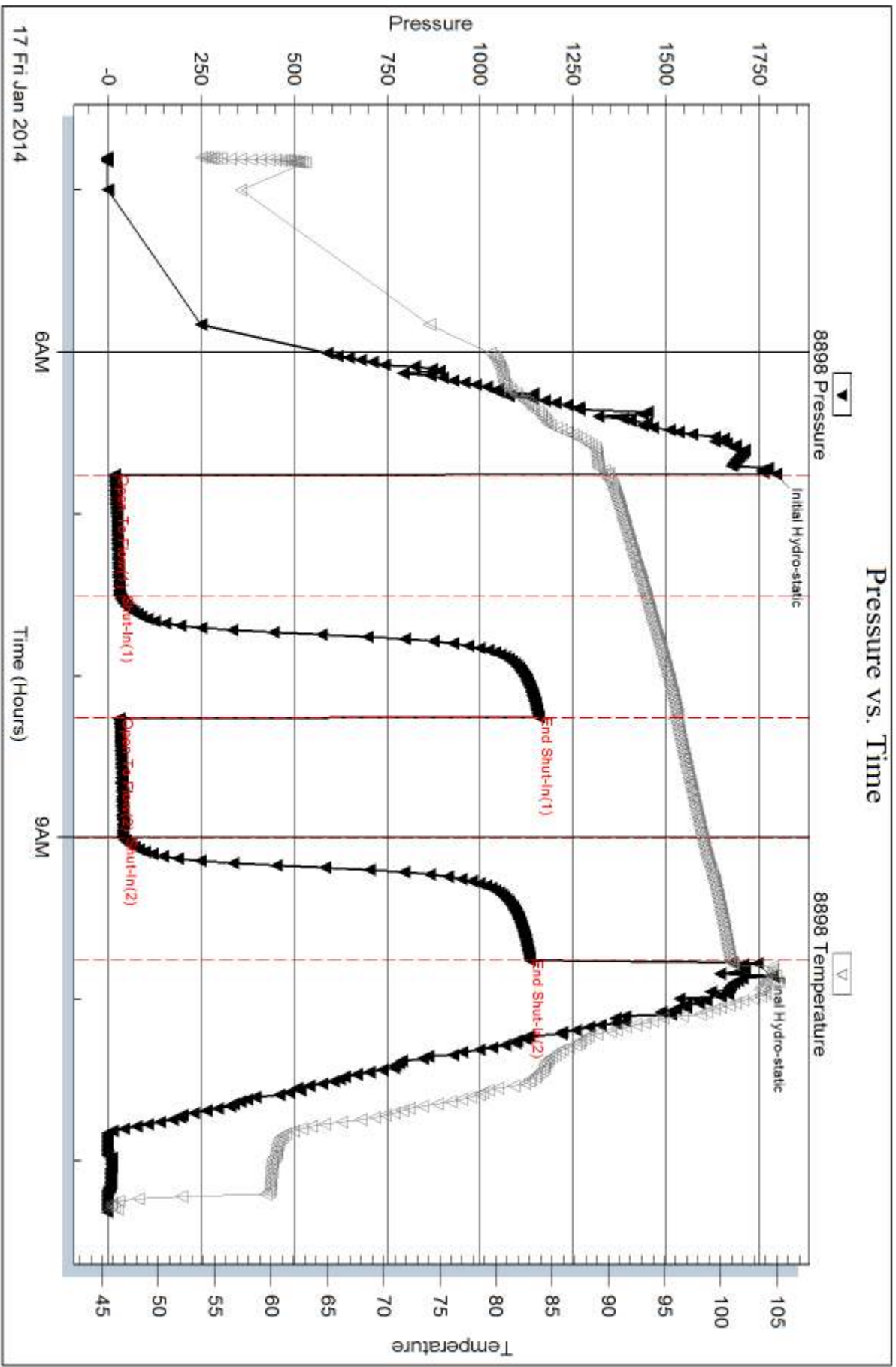
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



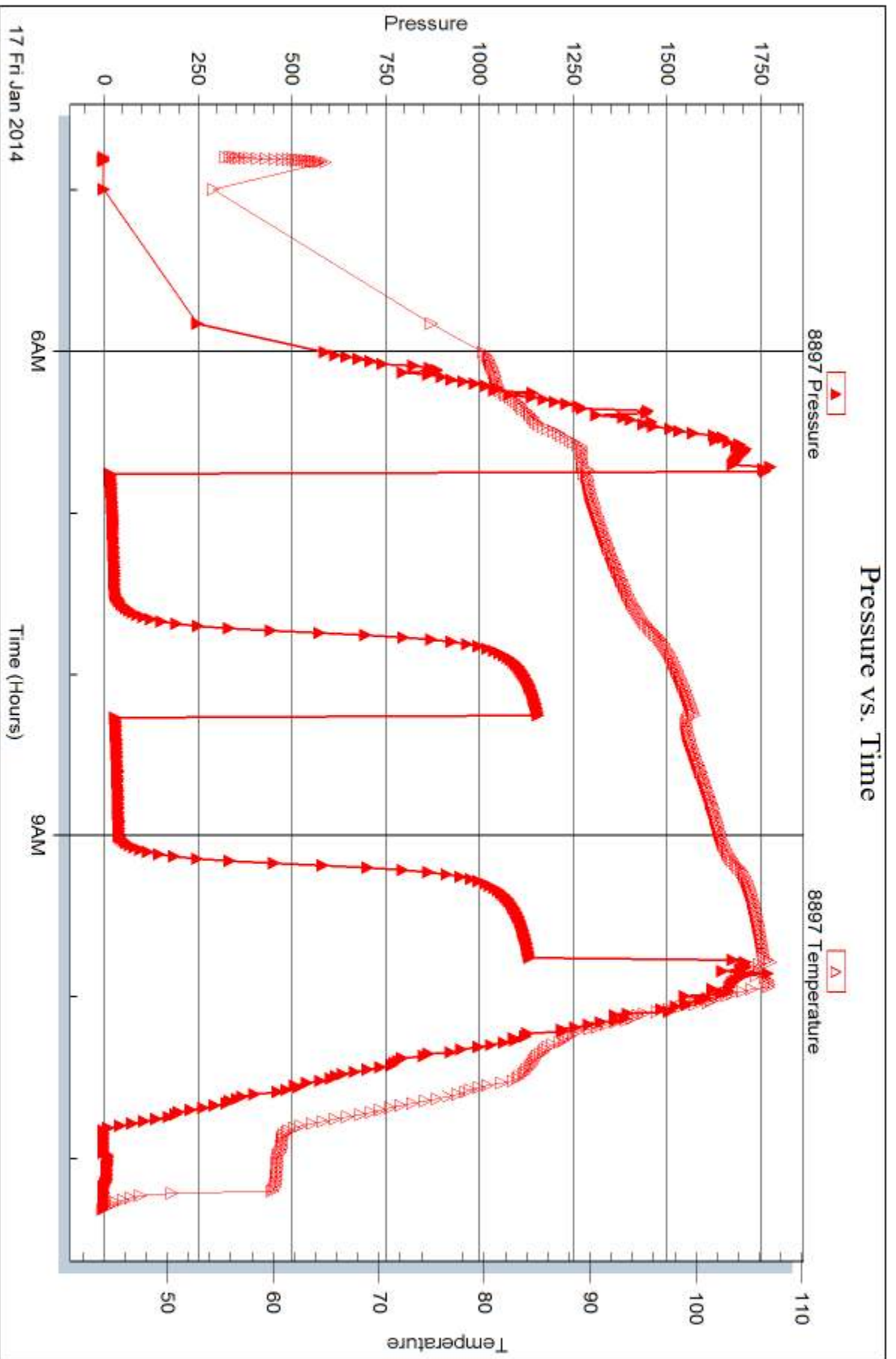
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Inside

Dow n ing Nelson Oil Co

25-14s-19w Ellis, KS

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 56041

Printed: 2014.01.23 @ 09:49:13



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS 67601

ATTN: Al Downing

25-14s-19w Ellis,KS

Gottschalk Gerstner Unit #1-25

Start Date: 2014.01.18 @ 02:30:39

End Date: 2014.01.18 @ 08:54:09

Job Ticket #: 56042 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.23 @ 09:48:18

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

25-14s-19w Ellis,KS

DST # 4

Arbuckle

2014.01.18



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56042

DST#: 4

ATTN: Al Dow ning

Test Start: 2014.01.18 @ 02:30:39

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:28:09

Time Test Ended: 08:54:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3688.00 ft (KB) To 3729.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3729.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 38.45 psig @ 3693.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.18

End Date:

2014.01.18

Last Calib.: 2014.01.18

Start Time: 02:30:40

End Time:

08:54:09

Time On Btm: 2014.01.18 @ 04:27:49

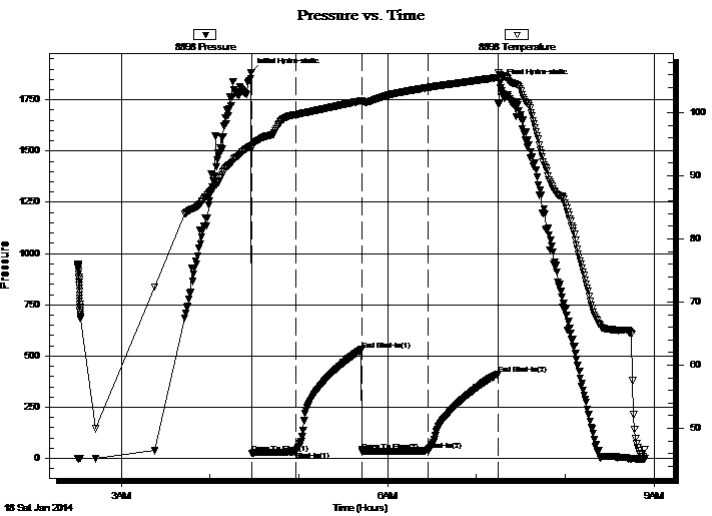
Time Off Btm: 2014.01.18 @ 07:16:09

TEST COMMENT: Slid 8' Weak surface blow started at 2" Built to 4"

Dead no blow

Weak surface blow built to 2"

Dead no blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1883.87	94.74	Initial Hydro-static
1	24.46	94.28	Open To Flow (1)
30	33.14	99.66	Shut-In(1)
75	530.14	101.86	End Shut-In(1)
75	36.35	101.69	Open To Flow (2)
120	38.45	103.97	Shut-In(2)
167	411.71	105.55	End Shut-In(2)
169	1831.40	106.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	100% Heavy Oil	0.21
45.00	10%O 90%M	0.63

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56042

DST#: 4

ATTN: Al Downing

Test Start: 2014.01.18 @ 02:30:39

Tool Information

Drill Pipe:	Length: 3691.00 ft	Diameter: 3.80 inches	Volume: 51.78 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 51.78 bbl</u>	Tool Chased 8.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3688.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	61.00 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			3673.00	
Hydraulic tool	5.00			3678.00	
Packer	5.00			3683.00	20.00 Bottom Of Top Packer
Packer	5.00			3688.00	
Stubb	1.00			3689.00	
Perforations	4.00			3693.00	
Recorder	0.00	8897	Inside	3693.00	
Recorder	0.00	8898	Outside	3693.00	
Change Over Sub	1.00			3694.00	
Drill Pipe	31.00			3725.00	
Bullnose	3.00			3728.00	
Change Over Sub	1.00			3729.00	41.00 Bottom Packers & Anchor

Total Tool Length: 61.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56042

DST#: 4

ATTN: Al Dow ning

Test Start: 2014.01.18 @ 02:30:39

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: 50.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	100% Heavy Oil	0.210
45.00	10%O 90%M	0.631

Total Length: 60.00 ft Total Volume: 0.841 bbl

Num Fluid Samples: 0

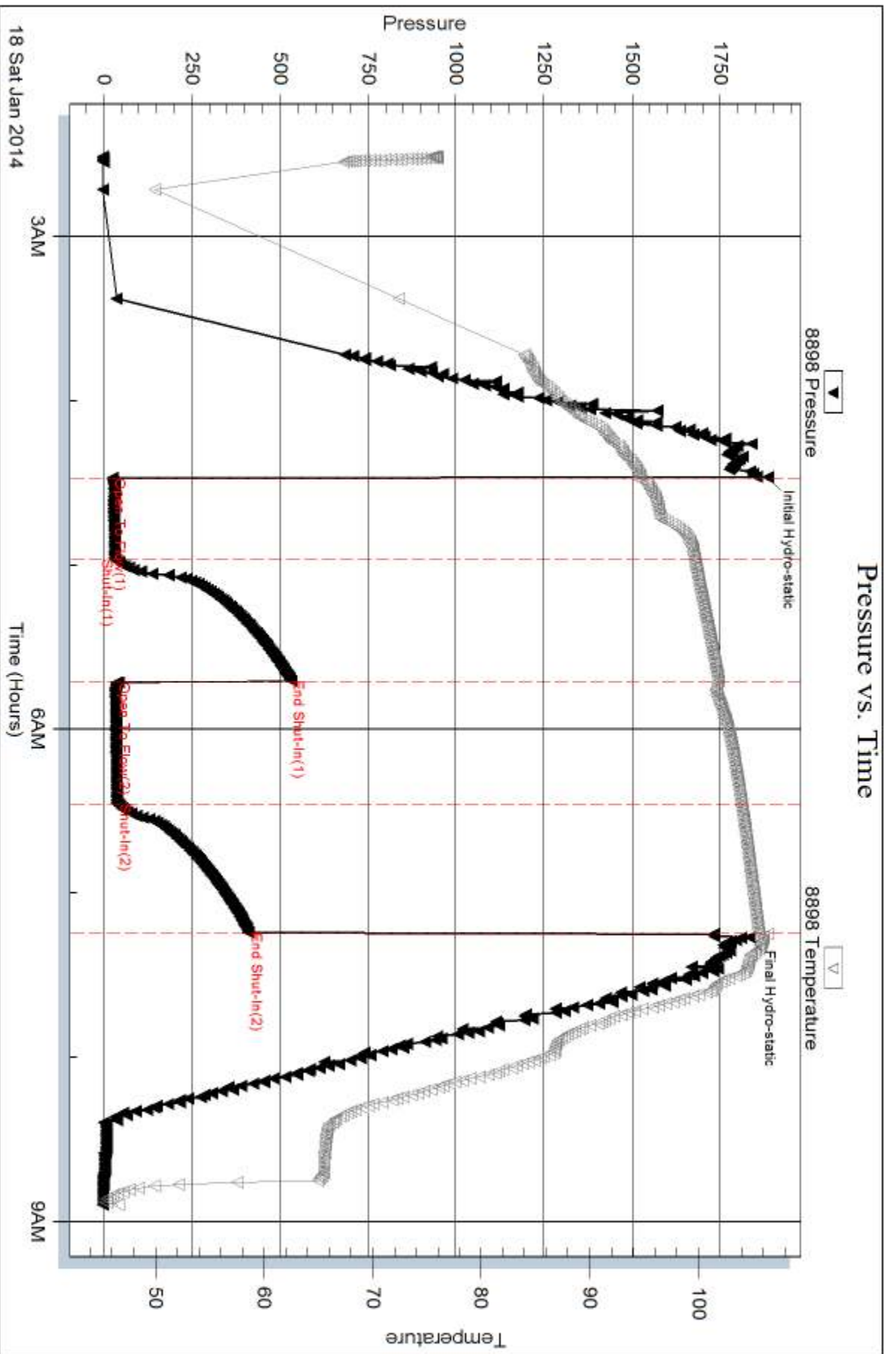
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



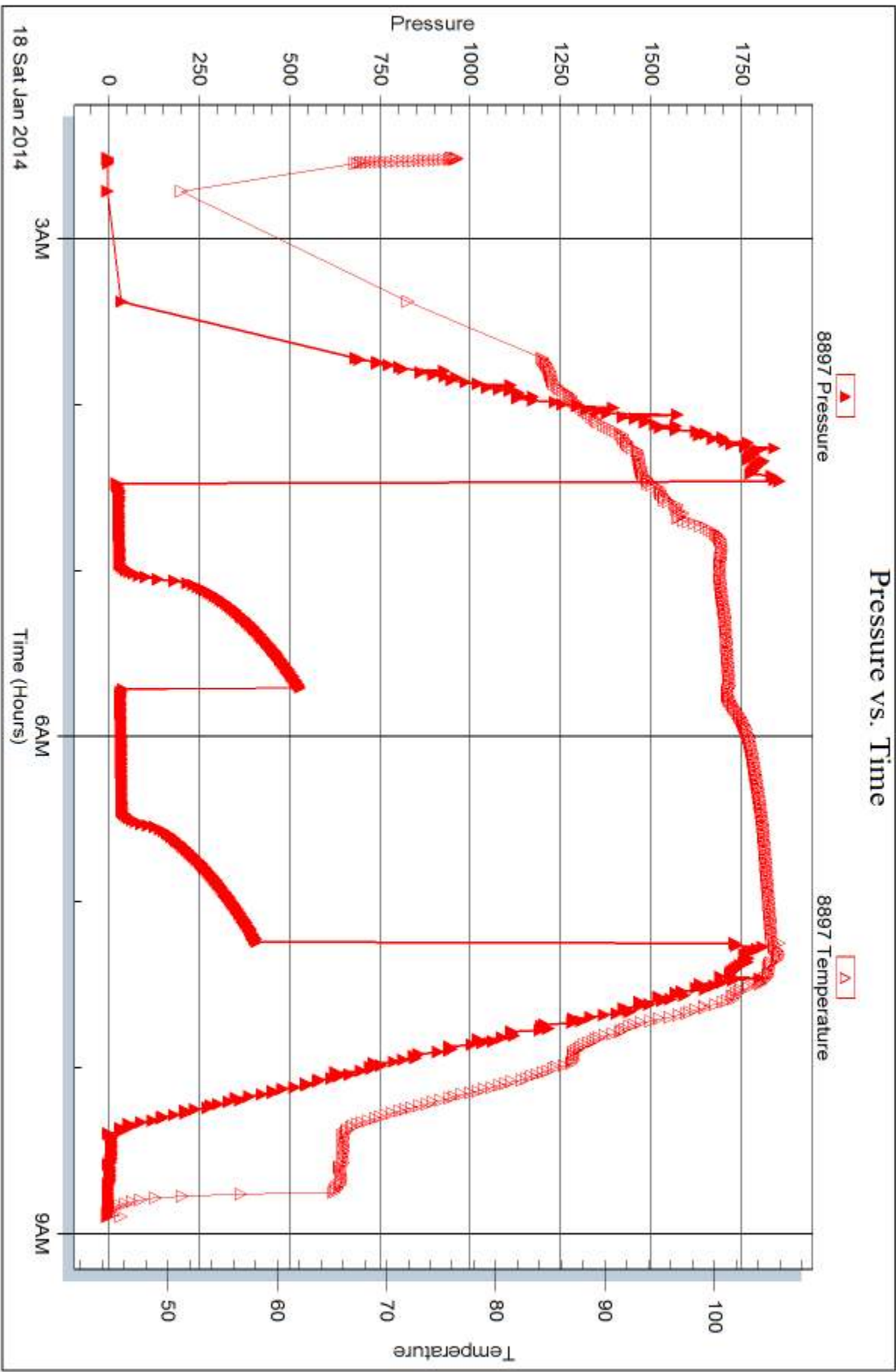
Serial #: 8897

Inside

Dow nIn Nelson Oil Co

25-14s-19w Ellis, KS

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 56042

Printed: 2014.01.23 @ 09:48:21



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS 67601

ATTN: Al Downing

25-14s-19w Ellis,KS

Gottschalk Gerstner Unit #1-25

Start Date: 2014.01.19 @ 00:02:54

End Date: 2014.01.19 @ 06:13:24

Job Ticket #: 56043 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2014.01.23 @ 09:47:35



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56043

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.01.19 @ 00:02:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:32:34

Time Test Ended: 06:13:24

Test Type: Conventional Straddle (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3731.00 ft (KB) To 3742.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3825.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8898 Outside

Press@RunDepth: 118.64 psig @ 3732.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.19

End Date:

2014.01.19

Last Calib.:

2014.01.19

Start Time: 00:02:55

End Time:

06:13:24

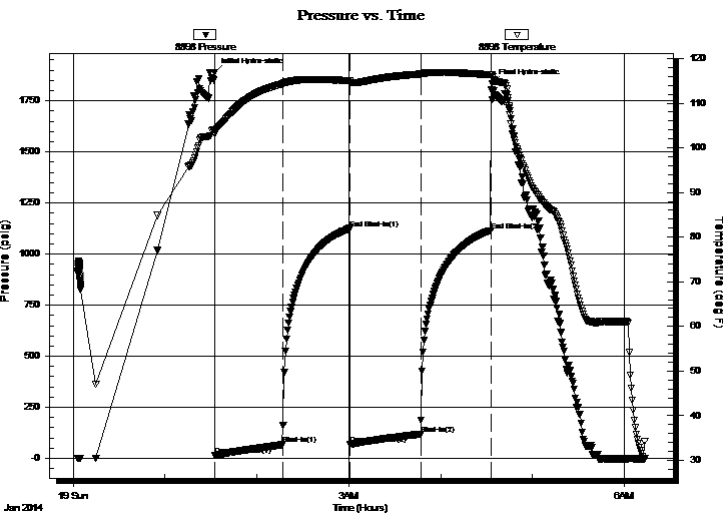
Time On Btm:

2014.01.19 @ 01:32:24

Time Off Btm:

2014.01.19 @ 04:33:33

TEST COMMENT: Fair surace blow built to 6"
Dead no blow back
Fair surface blow built to 5"
Dead no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1889.18	104.05	Initial Hydro-static
1	13.95	103.04	Open To Flow (1)
45	67.53	114.32	Shut-In(1)
89	1125.37	115.00	End Shut-In(1)
89	68.33	114.52	Open To Flow (2)
135	118.64	116.53	Shut-In(2)
181	1115.69	116.35	End Shut-In(2)
182	1833.93	116.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	95%W 5%M	3.37

* 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

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56043

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.01.19 @ 00:02:54

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:32:34

Time Test Ended: 06:13:24

Test Type: Conventional Straddle (Reset)

Tester: Tate Lang

Unit No: 49

Interval: 3731.00 ft (KB) To 3742.00 ft (KB) (TVD)

Reference Elevations: 2085.00 ft (KB)

Total Depth: 3825.00 ft (KB) (TVD)

2077.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8354 Below (Straddle)

Press@RunDepth: psig @ 3762.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.01.19

End Date:

2014.01.19

Last Calib.:

2014.01.19

Start Time: 00:02:09

End Time:

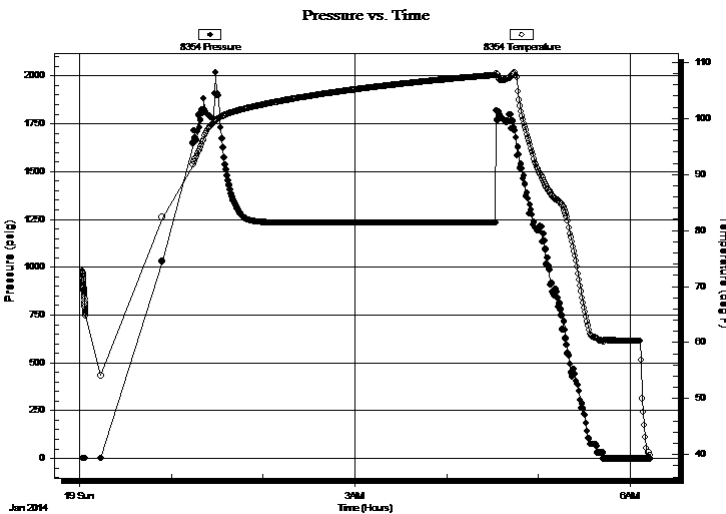
06:12:38

Time On Btm:

Time Off Btm:

TEST COMMENT: Fair surace blow built to 6"
Dead no blow back
Fair surface blow built to 5"
Dead no blow back

PRESSURE SUMMARY



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

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
240.00	95%W 5%M	3.37

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

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56043

DST#: 5

ATTN: Al Dow ning

Test Start: 2014.01.19 @ 00:02:54

Tool Information

Drill Pipe:	Length: 3726.00 ft	Diameter: 3.80 inches	Volume: 52.27 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 52.27 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3731.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	3742.00 ft				
Interval betw een Packers:	11.00 ft				
Tool Length:	119.00 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			3716.00		
Hydraulic tool	5.00			3721.00		
Packer	5.00			3726.00	20.00	Bottom Of Top Packer
Packer	5.00			3731.00		
Stubb	1.00			3732.00		
Recorder	0.00	8897	Inside	3732.00		
Recorder	0.00	8898	Outside	3732.00		
perforations	6.00			3738.00		
Blank Off Sub	1.00			3739.00		
Blank Spacing	3.00			3742.00	11.00	Tool Interval
Packer	5.00			3747.00		
Stubb	1.00			3748.00		
Perforations	14.00			3762.00		
Recorder	0.00	8354	Below	3762.00		
Change Over Sub	1.00			3763.00		
Blank Spacing	63.00			3826.00		
Change Over Sub	1.00			3827.00		
Bullnose	3.00			3830.00	88.00	Bottom Packers & Anchor

Total Tool Length: 119.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co

Gottschalk Gerstner Unit #1-25

PO Box 1019
Hays KS 67601

25-14s-19w Ellis,KS

Job Ticket: 56043

DST#: 5

ATTN: Al Downing

Test Start: 2014.01.19 @ 00:02:54

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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	95%W 5%M	3.367

Total Length: 240.00 ft

Total Volume: bbl

Num Fluid Samples: 0

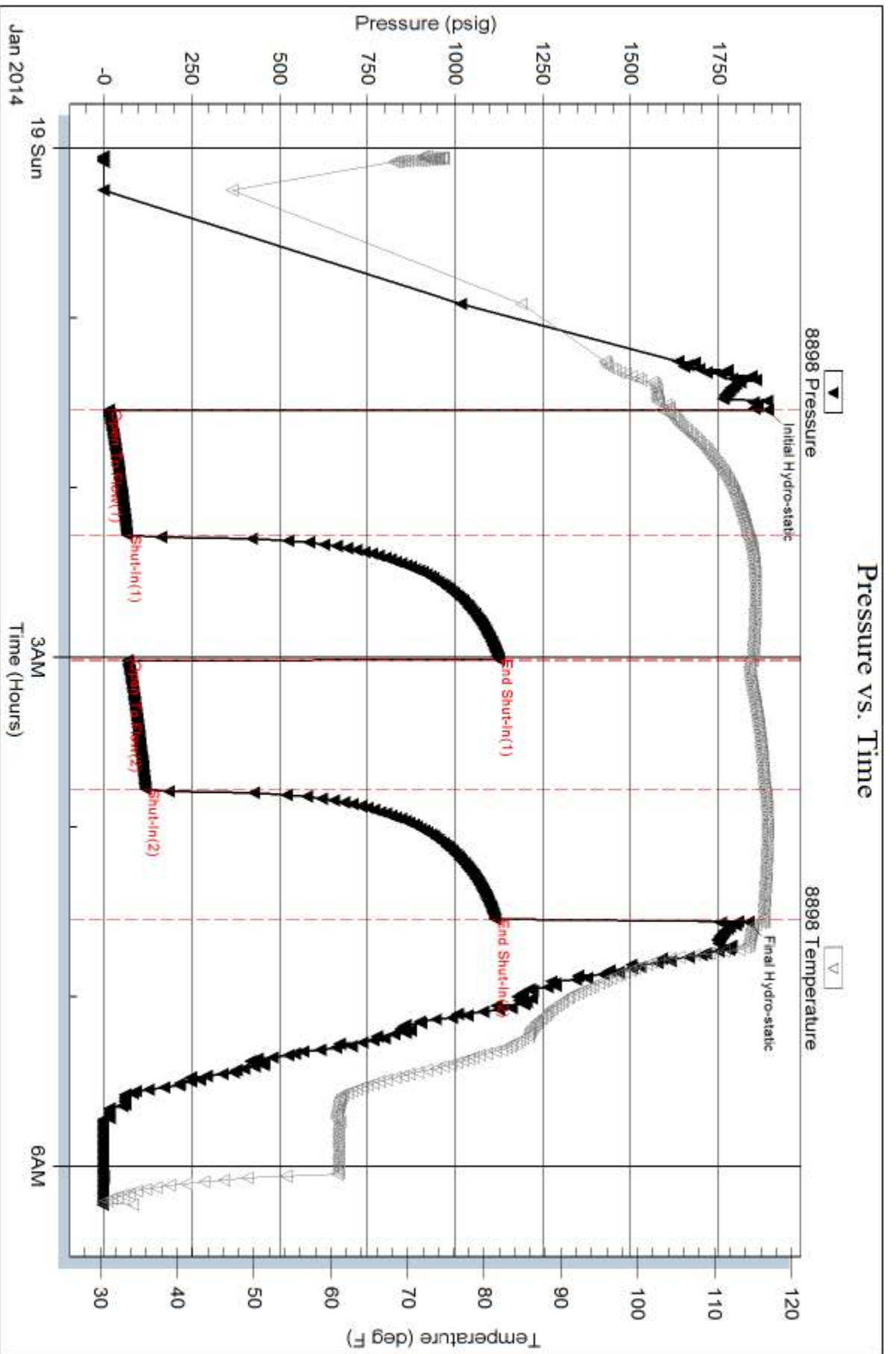
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



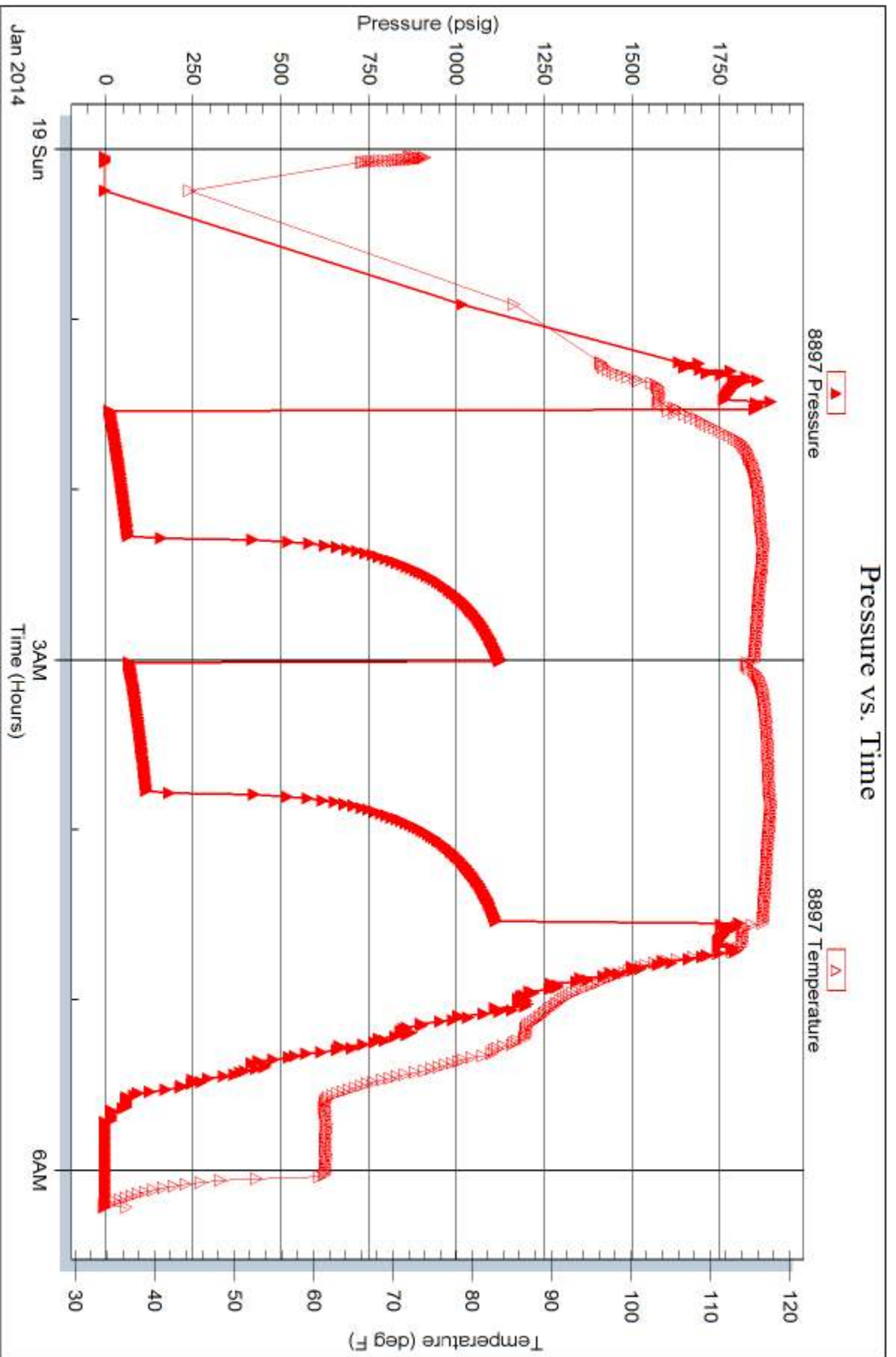
Serial #: 8897

Inside

Dow nng Nelson Oil Co

25-14s-19w Ellis, KS

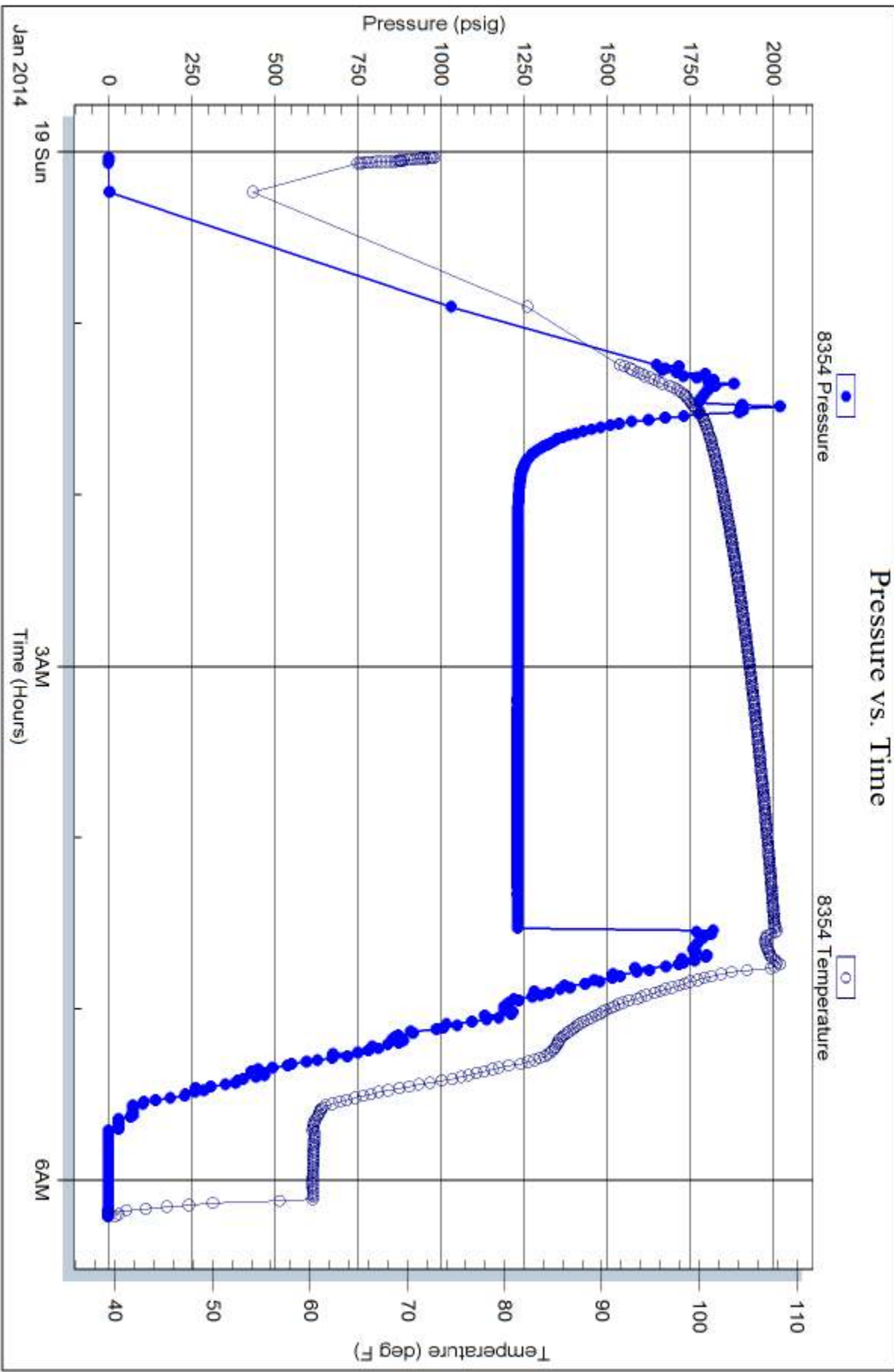
DST Test Number: 5

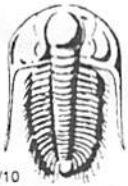


Tribble Testing, Inc

Ref. No: 56043

Printed: 2014.01.23 @ 09:47:37





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56039

Well Name & No. Gottschalk - Gastro Unit #1-25 Test No. 1 Date 1-15-14/1-16-14
 Company Downing-Nelson Oil Co. Inc Elevation 2085 KB 2087 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. AI Rig Discovery #4
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

Interval Tested 3455 3478 Zone Tested E Zone
 Anchor Length 23' Drill Pipe Run 3441 Mud Wt. 8.5
 Top Packer Depth 3451 Drill Collars Run 0 Vis 70
 Bottom Packer Depth 3455 Wt. Pipe Run 0 WL 8.0
 Total Depth 3478 Chlorides 3000 ppm System LCM 2#
 Blow Description Fair surface blow built to 4in.
Dead no blow back
Well surface blow built to 2 1/2
Dead no blow back

Rec	Feet of	%gas	%oil	%water	%mud
2	Clear Oil		100		
20	OCM		30		70

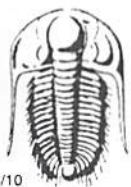
Rec Total 22 BHT 100 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1683 Test 1150 T-On Location 20:45
 (B) First Initial Flow 10 Jars _____ T-Started 22:22
 (C) First Final Flow 14 Safety Joint _____ T-Open 00:21
 (D) Initial Shut-In 772 Circ Sub _____ T-Pulled 02:51
 (E) Second Initial Flow 72 Hourly Standby _____ T-Out 04:25
 (F) Second Final Flow 78 Mileage 22 RT 34.10 Comments _____
 (G) Final Shut-In 1676 Sampler _____
 (H) Final Hydrostatic 1646 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 30 Extra Copies _____
 Final Shut-In 45 Sub Total 0
 Total 1184.10
 Sub Total 1184.10 MP/DST Disc't _____

Approved By _____ Our Representative [Signature] Thanks

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. 56040

Well Name & No. Gottshalk-Gerstner Unit #1-25 Test No. 2 Date 1-16-14
 Company Downing-Nelson Oil Co Inc Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. AI Rig Discovery #4
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

Interval Tested 3520 3550 Zone Tested H Zone
 Anchor Length 30 Drill Pipe Run 3505 Mud Wt. 8.5
 Top Packer Depth 3516 Drill Collars Run 0 Vis 6.5
 Bottom Packer Depth 3520 Wt. Pipe Run 0 WL 8.0
 Total Depth 3550 Chlorides 3000 ppm System LCM 2

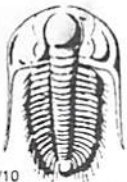
Blow Description B, D, B 20 mins
Weak surface blow back built to 3in
B, D, B, 5 mins
Weak surface blow back built to 3in

Rec	Feet of	%gas	%oil	%water	%mud
0	1140 GIP	100			
70	60	30	70		
120	60cm	30	20		50

Rec Total 190 BHT 110 Gravity 37 API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1720 Test 1150 T-On Location 13:30
 (B) First Initial Flow 19 Jars - T-Started 14:07
 (C) First Final Flow 58 Safety Joint - T-Open 16:11
 (D) Initial Shut-In 964 Circ Sub - T-Pulled 18:41
 (E) Second Initial Flow 72 Hourly Standby - T-Out 20:35
 (F) Second Final Flow 92 Mileage 22RH 34.10 Comments -
 (G) Final Shut-In 959 Sampler -
 (H) Final Hydrostatic 1679 Straddle - Ruined Shale Packer -
 Shale Packer - Ruined Packer -
 Extra Packer - Extra Copies -
 Initial Open 30 Extra Recorder - Sub Total 0
 Initial Shut-In 45 Day Standby - Total 1184.10
 Final Flow 30 Accessibility - MP/DST Disc't -
 Final Shut-In 45 Sub Total 1184.10

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

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **56041**

4/10

Well Name & No. Gottshall - Goster Unit #25 Test No. 3 Date 1-17-14
 Company Downing Nelson Oil Co Inc Elevation 2085 KB 2079 GL
 Address Po Box 1019 Hays KS 67601
 Co. Rep / Geo. AL Rig Discovery #24
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

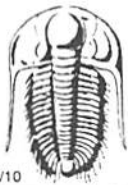
Interval Tested 3550 3595 Zone Tested F&S
 Anchor Length 45' Drill Pipe Run 3536 Mud Wt. 8.5
 Top Packer Depth 3546 Drill Collars Run 0 Vis 65
 Bottom Packer Depth 3550 Wt. Pipe Run 0 WL 8.0
 Total Depth 3595 Chlorides 3000 ppm System LCM 2
 Blow Description Weak surface blow built 2 1/2 in
Dead no blow back
Weak surface blow built to 3 in
Dead no blow back

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>5</u>	Feet of <u>Free Oil</u>		<u>100</u>		
Rec <u>45</u>	Feet of <u>Mud / Oil spots</u>			<u>20</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 50 BHT 96 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1795 Test 1150 T-On Location 04:15
 (B) First Initial Flow 18 Jars _____ T-Started 04:47
 (C) First Final Flow 30 Safety Joint _____ T-Open 06:45
 (D) Initial Shut-In 1158 Circ Sub _____ T-Pulled 09:45
 (E) Second Initial Flow 30 Hourly Standby _____ T-Out 11:18
 (F) Second Final Flow 41 Mileage 22 R/V 34.10 Comments _____
 (G) Final Shut-In 1135 Sampler _____
 (H) Final Hydrostatic 1746 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1184.10
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1184.10

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

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56042

Well Name & No. Gottschalk-Gerstner Unit #1-25 Test No. 4 Date 1-18-14
 Company Downing Nelson Oil Co Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. Marc Downing Rig Discovery #24
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

Interval Tested 3698 3729 Zone Tested Arbuckle
 Anchor Length 41 Drill Pipe Run 3691 Mud Wt. 9.0
 Top Packer Depth 3684 Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3688 Wt. Pipe Run 0 WL 8.8
 Total Depth 3729 Chlorides 5000 ppm System LCM 2

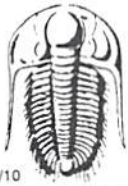
Blow Description Sld 8ft Weak surface blow started @ 2in built to 4in.
Dead w/o blow back
Weak surface blow built to 2in
Dead w/o blow back

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>15</u>	Feet of <u>Heavy Oil</u>	%gas	<u>100</u> %oil	%water	%mud
Rec <u>45</u>	Feet of <u>OCM</u>	%gas <u>10</u>	%oil	%water <u>90</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 60 BHT 106 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1884 Test 1150 T-On Location 01:45
 (B) First Initial Flow 24 Jars _____ T-Started 02:30
 (C) First Final Flow 33 Safety Joint _____ T-Open 04:27
 (D) Initial Shut-In 530 Circ Sub _____ T-Pulled 07:12
 (E) Second Initial Flow 36 Hourly Standby _____ T-Out 09:54
 (F) Second Final Flow 38 Mileage 22RT 34.10 Comments _____
 (G) Final Shut-In 412 Sampler _____
 (H) Final Hydrostatic 1831 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1184.10
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1184.10

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

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56043

Well Name & No. Gottshalk-Gostner Unit #1-25 Test No. 5 Date 1-18-14
 Company Downing Nelson Oil Co Elevation 2085 KB 2077 GL
 Address PO Box 1019 Hays KS 67601
 Co. Rep / Geo. Marc Rig Discovery #4
 Location: Sec. 25 Twp. 14S Rge. 19W Co. Ellis State KS

Interval Tested 3731 3742 Zone Tested Arbuckle
 Anchor Length 11' 83' Tail Drill Pipe Run 3724 Mud Wt. 88
 Top Packer Depth 3727 Drill Collars Run 0 Vis 55
 Bottom Packer Depth 3731 Wt. Pipe Run 0 WL 8.4
 Total Depth 3825 Chlorides 5000 ppm System LCM 2#
 Blow Description Fair surface blow built to 6in
Dead no blow
Fair surface blow built to 5in
Dead no blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>240</u>	<u>MCW</u>			<u>95</u>	<u>5</u>

Rec Total 240 BHT 116 Gravity _____ API RW 14/2 @ 20° F Chlorides 62000 ppm
 (A) Initial Hydrostatic 1889 Test 1150 T-On Location 22:30
 (B) First Initial Flow 14 Jars _____ T-Started 00:02
 (C) First Final Flow 68 Safety Joint _____ T-Open 01:33
 (D) Initial Shut-In 1125 Circ Sub _____ T-Pulled 04:33
 (E) Second Initial Flow 68 Hourly Standby _____ T-Out 06:13
 (F) Second Final Flow 119 Mileage 22.24 34.10 Comments _____
 (G) Final Shut-In 1116 Sampler _____
 (H) Final Hydrostatic 1834 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 45 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1784.10
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1784.10

Approved By _____ Our Representative [Signature]
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Marc A. Downing		Geologic Report	
Consulting Petroleum Geologist		Drilling Time and Sample Log	
Operator Downing-Nelson Oil Co., Inc.		Elevation	
Lease Gottschalk-Gerstner No. 1-25		KB 2082	
API # 15-051-26652-0000		DF 2080	
Field Wildcat		GL 2074	
Location 605' FNL & 2520' FWL		Casing Record Surface	
Sec. 25 Twp. 14s Rge. 19w		8 5/8" @ 1336'	
County Ellis State Kansas		Production	
Formation		Sample tops	Log Tops
Datum		Electrical Surveys	
Struct Comp		CNDL, DIL, MEL	
Top Anhydrite	1326	1330	+752
Base Anhydrite	1366	1375	+707
Topoka	3104	3108	-1026
Heebner	3359	3364	-1282
Toronto	3380	3383	-1301
LKC	3408	3411	-1329
BKC	3646	3651	-1569
Arbuckle	3724	3730	-1648
Total Depth	3825	3828	-1746
Reference Well For Structural Comparison J.S.G. Oil Corporation			
Dechant #25-1 NW-NE-NE Sec. 25-14s-19w			

Drilling Contractor	Completed	Discovery Drilling, Rig #4
Commenced	1-10-14	1-19-14
Samples Saved From	3200	To RTD
Drilling Time Kept From	3050	To RTD
Samples Examined From	3200	To RTD
Geological Supervision From	3200	To RTD

Summary and Recommendations			
Due to structural position, DST recovery, and log evaluation, it was decided to set 5 1/2" production casing for completion.			
Perforate:			
LKC "H" zone:	3541-3544		

Respectfully Submitted,

Marc A. Downing

