



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1182801
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
-----------------------------------	-----------------	---

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: _____

1182801

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

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

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

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

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

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

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

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method: Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Remigia Quint 1-20
Doc ID	1182801

Tops

Name	Top	Datum
Top Anhydrite	1330'	+773
Base Anhydrite	1372'	+731
Topeka	3102'	-999
Heebner	3355'	-1252
Toronto	3377'	-1274
LKC	3404'	-1301
BKC	3634'	-1531
Arbuckle	3716'	-1613

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 783-483-2025
Cell 785-324-1041

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

No. 7209

Date	10-13-13	Sec.	20	Twp.	14	Range	18	County	ELLIS	State	KS	On Location		Finish	2:00PM
Lease								Location		Hays St to Mount Pleasant 2W, 34S					
Remigiq Quint								Well No.		1-20					
Contractor								Owner		En 2					
Discovery 3								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								Charge To		Downing Nelson					
Surface								Street							
Hole Size								T.D.		690					
12 1/4								Depth		689.86					
Csg.								Depth							
8 5/8								City		State					
Tbg. Size								The above was done to satisfaction and supervision of owner agent or contractor.							
Tool								Cement Amount Ordered		325 sx com 3%cc 2%gel					
Cement Left in Csg.								Shoe Joint		42.23					
Meas Line								Displace		41661					
EQUIPMENT								Common		325					
Pumptrk 5 No. Cementer								Poz. Mix							
Helper Lonnie W								Gel.		7					
Bulktrk 19 No. Driver								Calcium		12					
Driver Heath								Hulls							
Bulktrk PH No. Driver								Salt							
Driver Travis								Flowseal							
JOB SERVICES & REMARKS								Kol-Seal							
Remarks: Cement did circulate								Mud CLR 48							
Rat Hole								CFL-117 or CD110 CAF 38							
Mouse Hole								Sand							
Centralizers								Handling		344					
Baskets								Mileage							
D/V or Port Collar								FLOAT EQUIPMENT							
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down		1 1/2" Rubber plug 1 Baffle plate					
								Pumptrk Charge		Long Surface					
								Mileage		7					
								Tax							
								Discount							
								Total Charge							
Signature Peter Barber															

JOB LOG

SWIFT Services, Inc.

DATE 10-20-13 PAGE NO. 1

CUSTOMER: Dewing & Nelson WELL NO. #1-20 LEASE Remigo Quint JOB TYPE 2-Stage TICKET NO. 25144

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1000							on las/w FE
								RTD 3800' LTD 3801 5 1/2" x 14# x 3798' x 19 Cent. 1, 3, 5, 7, 9, 11, 59 Bask. 60 DV Tool 60 @ 1291'
	1135							Start FE
	1300							Break Circ
	1330	5	0			200		Start Preflushes ^{50 gal Mud} 20 bbl KCL Flush
	1335	5	32/10			200		Start 150 sks EA-2 Cement
	1342		36					End Cement Wash P/L
	1347							Drop LD Plug
	1347	6	0			200		Start Displacement
	1400	5	68			250		catch Cement KCL in last 20 bbl
	1405		92			200 1300		Land Plug Release Pressure Float Held
	1407							Drop Opening Plug
	1410	2	75					Plug RHYM 30/150 sks SMD cement
	1420					1100		Open DV Tool
	1421	5	0			150		Start SMD Cement 155 sks
	1438		86					End Cement Wash P/L Drop Closing Plug
	1444	5	0			150		Start Displacement
	1445	4	5			150		Circ Cement
	1452		31.5			55 1500		Land Plug Release Pressure D.V. Closed

Thank you
Nick, David E. & Isaac



DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS. 67601

ATTN: Al Downing

Remigia Quint #1-20

20-14s-18w Ellis,KS

Start Date: 2013.10.16 @ 14:25:01

End Date: 2013.10.16 @ 21:01:30

Job Ticket #: 53641 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.21 @ 09:24:34



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53641

DST#: 1

ATTN: Al Dow ning

Test Start: 2013.10.16 @ 14:25:01

GENERAL INFORMATION:

Formation: **Plattsmouth**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:13:30

Time Test Ended: 21:01:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Andy Carreira

Unit No: 68

Interval: 3310.00 ft (KB) To 3340.00 ft (KB) (TVD)

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3340.00 ft (KB) (TVD)

2094.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8372

Inside

Press @RunDepth: 36.52 psig @ 3311.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.16

End Date: 2013.10.16

Last Calib.: 2013.10.16

Start Time: 14:25:01

End Time: 21:01:30

Time On Btm: 2013.10.16 @ 16:13:00

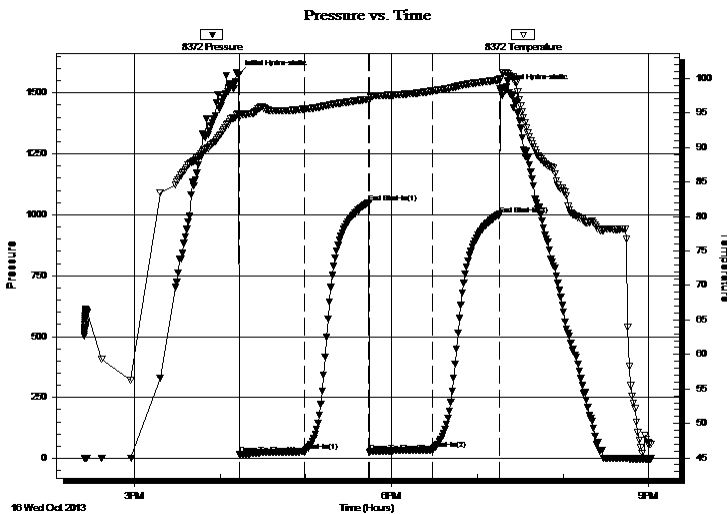
Time Off Btm: 2013.10.16 @ 19:16:00

TEST COMMENT: IF:(45min) 1" blow in 5 min. 2" in 20 min. Built to 3"

IS:(45min) No Return

FF:(45min) 1" blow in 1 min. 2" in 7 min. 3" in 16 min. 4" in 25 min. Built to 5"

FS:(45min) No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1574.39	94.90	Initial Hydro-static
1	15.68	94.30	Open To Flow (1)
46	28.31	95.57	Shut-In(1)
91	1049.22	96.97	End Shut-In(1)
92	26.12	96.82	Open To Flow (2)
136	36.52	98.19	Shut-In(2)
183	1001.66	99.77	End Shut-In(2)
183	1517.61	99.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
55.00	SOCGM g=5% o=5% m=90%	0.50
0.00	GIP=5 ft	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53641

DST#: 1

ATTN: Al Downing

Test Start: 2013.10.16 @ 14:25:01

Tool Information

Drill Pipe:	Length: 3264.00 ft	Diameter: 3.80 inches	Volume: 45.79 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 45.94 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3310.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3291.00	
Shut In Tool	5.00			3296.00	
Hydraulic tool	5.00			3301.00	
Packer	5.00			3306.00	20.00 Bottom Of Top Packer
Packer	4.00			3310.00	
Stubb	1.00			3311.00	
Recorder	0.00	8372	Inside	3311.00	
Recorder	0.00	8321	Outside	3311.00	
Perforations	26.00			3337.00	
Bullnose	3.00			3340.00	30.00 Bottom Packers & Anchor
Total Tool Length:	50.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53641

DST#: 1

ATTN: Al Dow ning

Test Start: 2013.10.16 @ 14:25:01

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.93 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
55.00	SOCGM g=5% o=5% m=90%	0.498
0.00	GIP=5 ft	0.000

Total Length: 55.00 ft Total Volume: 0.498 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

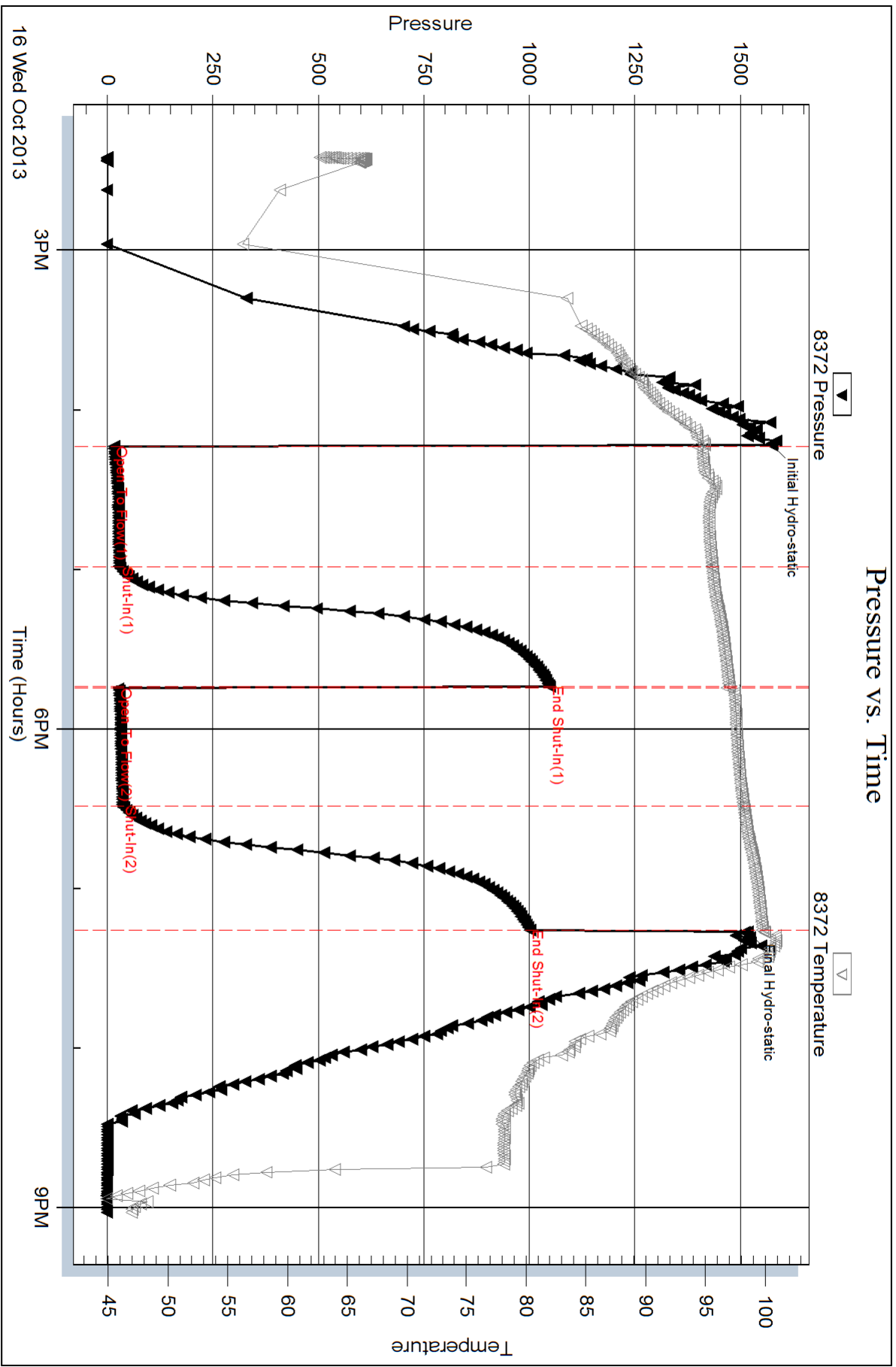
Serial #: 8372

Inside

Downing Nelson Oil Co

Rennigia Quint #1-20

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 53641

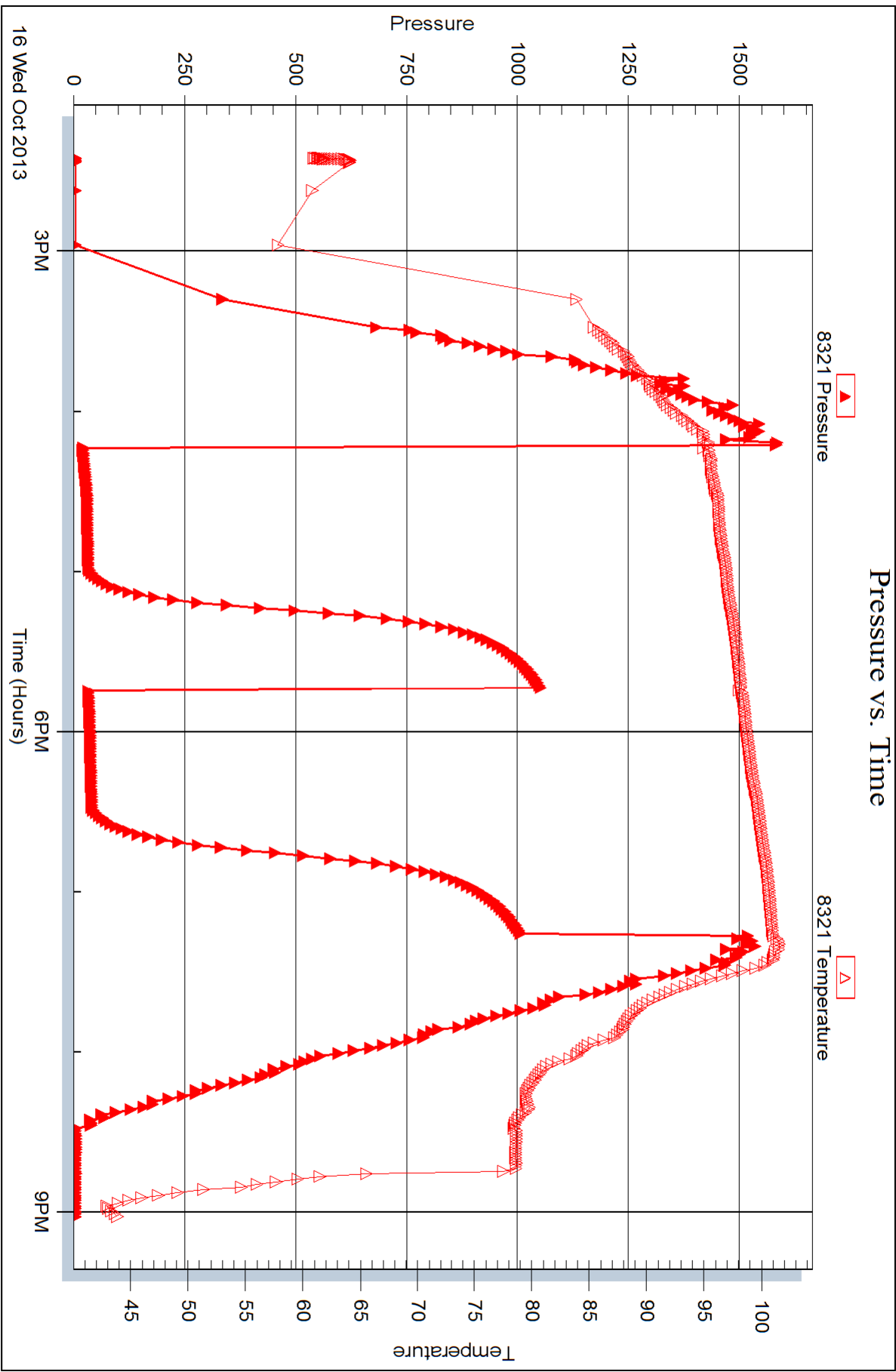
Printed: 2013.10.21 @ 09:24:35

Serial #: 8321

Outside Dow nting Nelson Oil Co

Rennigia Quint #1-20

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS. 67601

ATTN: Al Downing

Remigia Quint #1-20

20-14s-18w Ellis,KS

Start Date: 2013.10.17 @ 06:15:01

End Date: 2013.10.17 @ 13:00:00

Job Ticket #: 53642 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.21 @ 09:24:00



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53642

DST#: 2

ATTN: Al Dow ning

Test Start: 2013.10.17 @ 06:15:01

GENERAL INFORMATION:

Formation: **LKC"C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:43:00

Time Test Ended: 13:00:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Andy Carreira

Unit No: 68

Interval: 3412.00 ft (KB) To 3441.00 ft (KB) (TVD)

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3441.00 ft (KB) (TVD)

2094.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8372

Inside

Press @RunDepth: 105.88 psig @ 3413.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.17

End Date:

2013.10.17

Last Calib.:

2013.10.17

Start Time: 06:15:01

End Time:

13:00:00

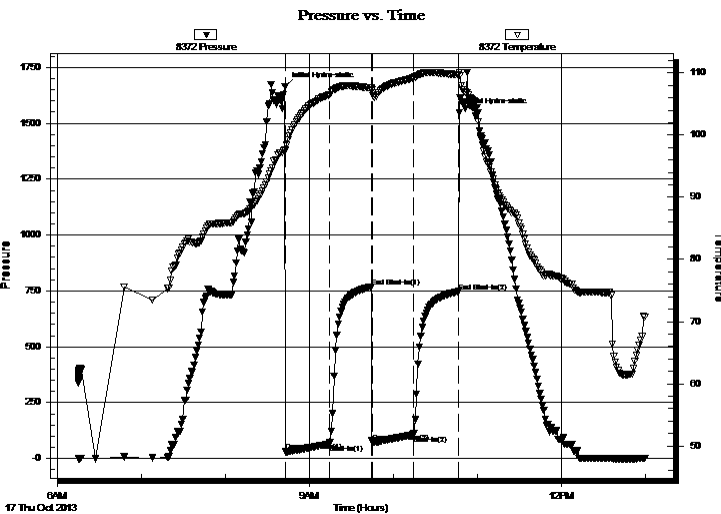
Time On Btm:

2013.10.17 @ 08:42:30

Time Off Btm:

2013.10.17 @ 10:47:00

TEST COMMENT: IF:(30min) 6" blow in 2 min. BOB in 7 min.
IS:(30min) No Return
FF:(30min) 6" blow in 5 min. BOB in 12 min.
FS:(30min) Intermittent return surface blow . 1 min. after bled off.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1663.04	97.64	Initial Hydro-static
1	31.18	97.54	Open To Flow (1)
32	64.71	106.47	Shut-In(1)
62	768.54	107.55	End Shut-In(1)
63	72.87	106.74	Open To Flow (2)
92	105.88	109.18	Shut-In(2)
124	747.13	109.72	End Shut-In(2)
125	1548.35	110.00	Final Hydro-static

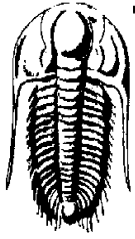
Recovery

Length (ft)	Description	Volume (bbl)
120.00	HOCGM g=40% o=20% m=40%	1.41
140.00	GO g=10% o=90%	1.96
0.00	GIP= 2800 ft	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

ATTN: Al Dow ning

Job Ticket: 53642

DST#: 2

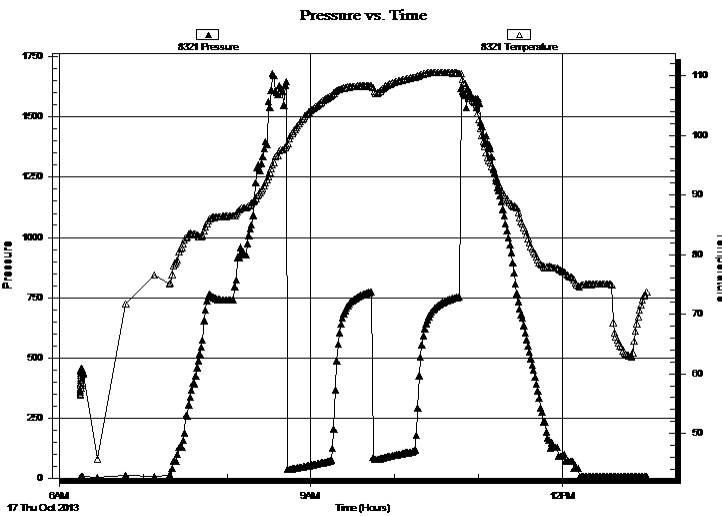
Test Start: 2013.10.17 @ 06:15:01

GENERAL INFORMATION:

Formation: **LKC"C"**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:43:00 Tester: Andy Carreira
 Time Test Ended: 13:00:00 Unit No: 68
Interval: 3412.00 ft (KB) To 3441.00 ft (KB) (TVD) Reference Elevations: 2102.00 ft (KB)
 Total Depth: 3441.00 ft (KB) (TVD) 2094.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 8.00 ft

Serial #: 8321 Outside
 Press @ Run Depth: psig @ 3413.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2013.10.17 End Date: 2013.10.17 Last Calib.: 2013.10.17
 Start Time: 06:15:01 End Time: 13:00:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF:(30min) 6" blow in 2 min. BOB in 7 min.
 IS:(30min) No Return
 FF:(30min) 6" blow in 5 min. BOB in 12 min.
 FS:(30min) Intermittent return surface blow . 1 min. after bled off.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	HOCGM g=40% o=20% m=40%	1.41
140.00	GO g=10% o=90%	1.96
0.00	GIP= 2800 ft	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53642

DST#: 2

ATTN: Al Dow ning

Test Start: 2013.10.17 @ 06:15:01

Tool Information

Drill Pipe:	Length: 3390.00 ft	Diameter: 3.80 inches	Volume: 47.55 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.70 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3412.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	29.00 ft			
Tool Length:	49.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3393.00	
Shut In Tool	5.00			3398.00	
Hydraulic tool	5.00			3403.00	
Packer	5.00			3408.00	20.00 Bottom Of Top Packer
Packer	4.00			3412.00	
Stubb	1.00			3413.00	
Recorder	0.00	8372	Inside	3413.00	
Recorder	0.00	8321	Outside	3413.00	
Perforations	25.00			3438.00	
Bullnose	3.00			3441.00	29.00 Bottom Packers & Anchor
Total Tool Length:	49.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53642

DST#: 2

ATTN: Al Dow ning

Test Start: 2013.10.17 @ 06:15:01

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
120.00	HOCGM g=40% o=20% m=40%	1.410
140.00	GO g=10% o=90%	1.964
0.00	GIP= 2800 ft	0.000

Total Length: 260.00 ft Total Volume: 3.374 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

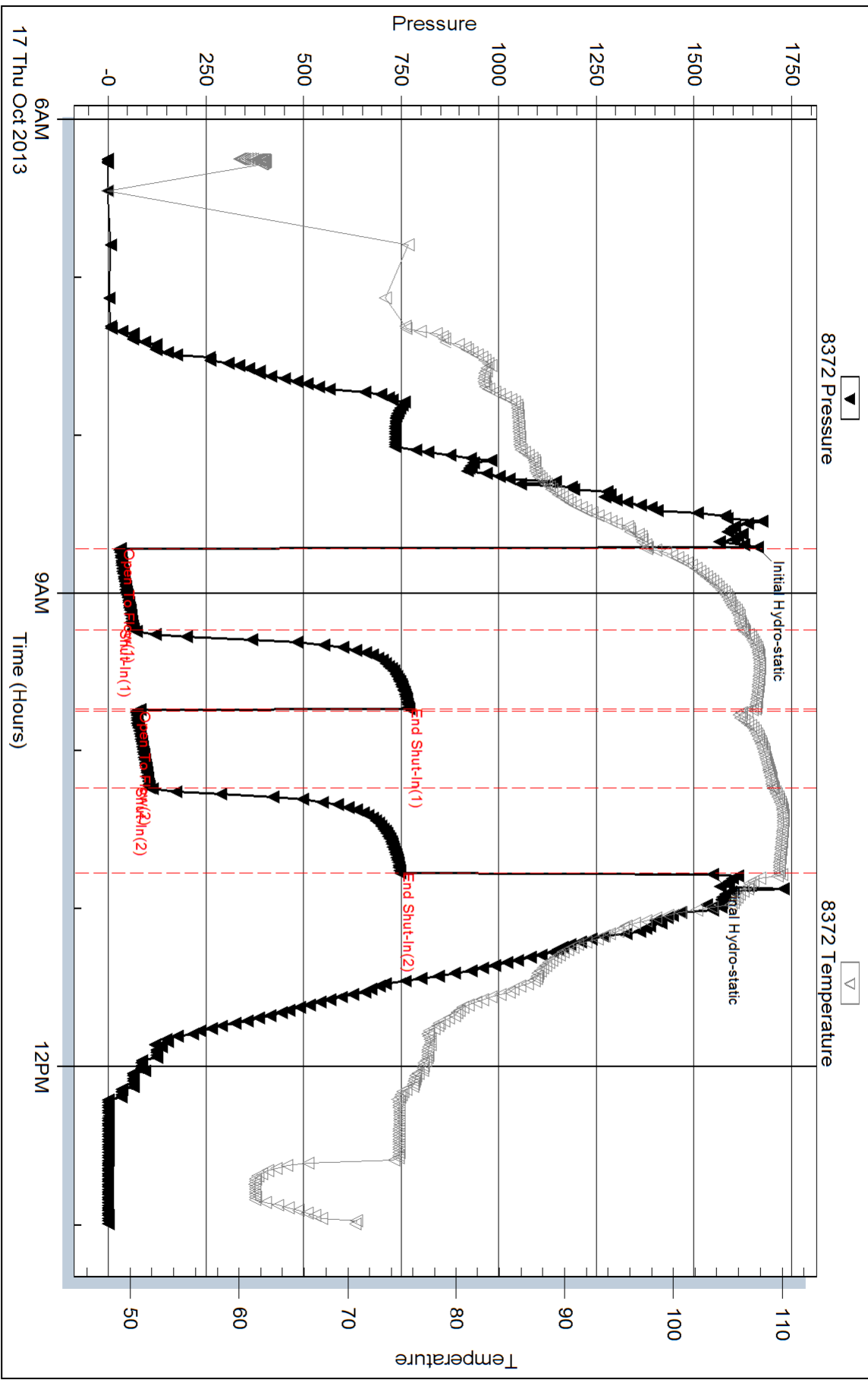
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Found loose hose connection. Explains Return blow .

Pressure vs. Time

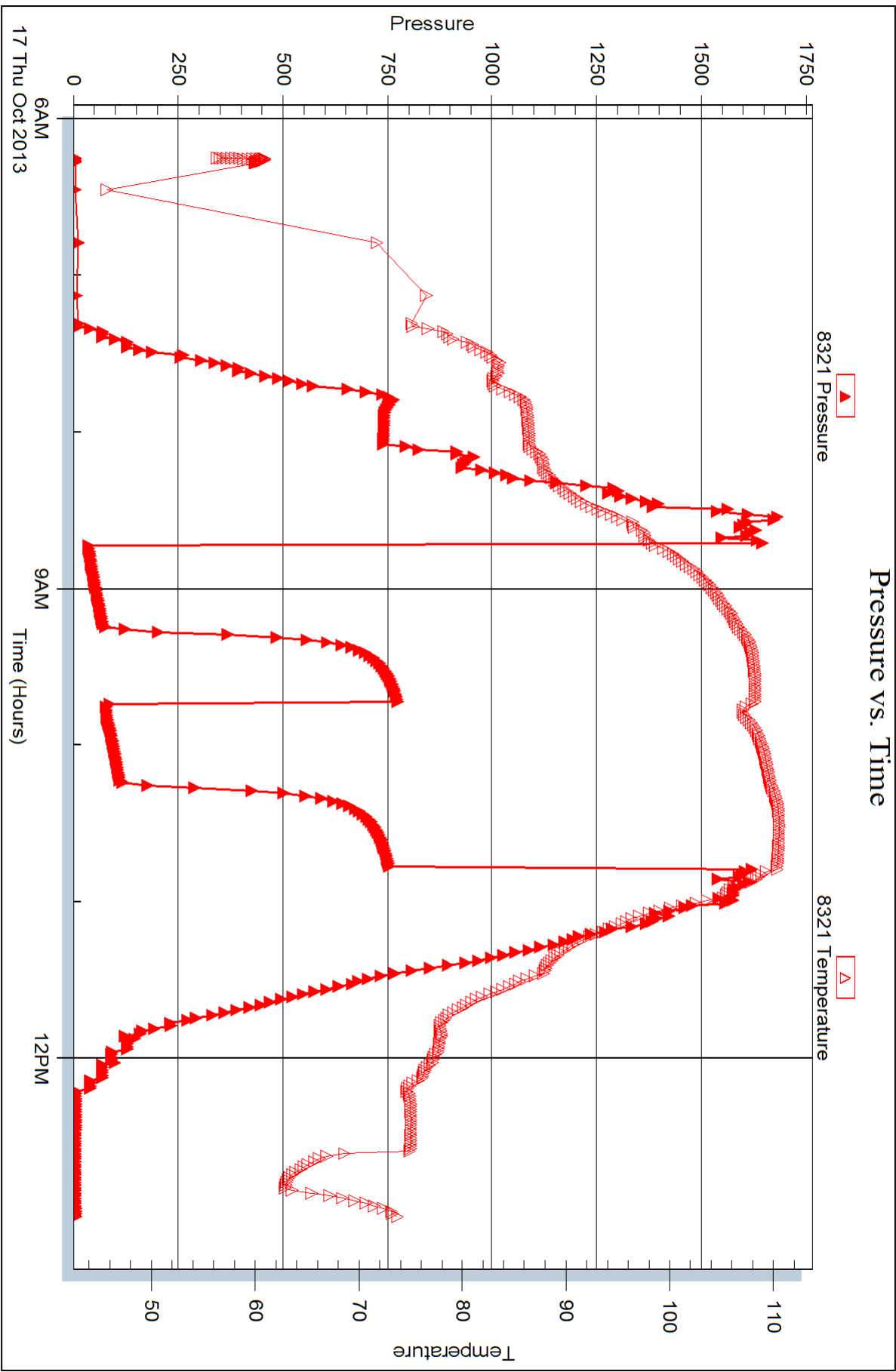


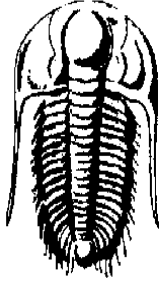
Serial #: 8321

Outside Dow n ing Nelson Oil Co

Rennigia Quint #1-20

DST Test Number: 2





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS. 67601

ATTN: Al Downing

Remigia Quint #1-20

20-14s-18w Ellis,KS

Start Date: 2013.10.17 @ 18:52:01

End Date: 2013.10.18 @ 01:21:00

Job Ticket #: 53643 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.21 @ 09:23:35



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53643

DST#: 3

ATTN: Al Dow ning

Test Start: 2013.10.17 @ 18:52:01

GENERAL INFORMATION:

Formation: **LKC"D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:50:30

Time Test Ended: 01:21:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Andy Carreira

Unit No: 68

Interval: 3439.00 ft (KB) To 3464.00 ft (KB) (TVD)

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3464.00 ft (KB) (TVD)

2094.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8372

Inside

Press @RunDepth: 254.18 psig @ 3440.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.17

End Date:

2013.10.18

Last Calib.: 2013.10.18

Start Time: 18:52:01

End Time:

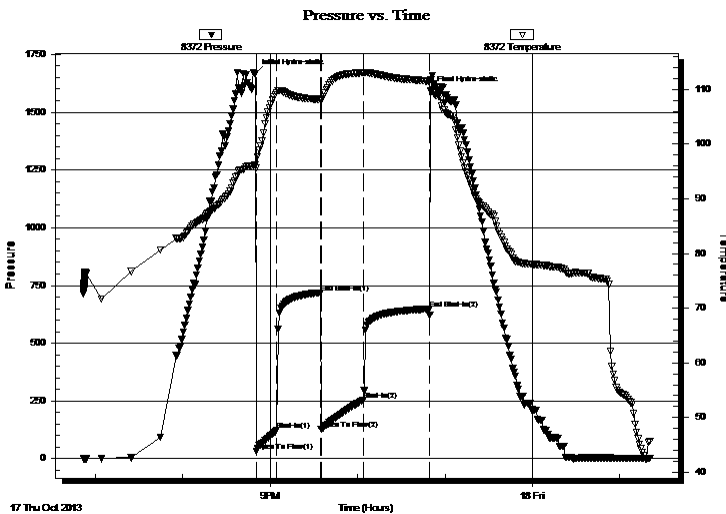
01:21:00

Time On Btm: 2013.10.17 @ 20:50:00

Time Off Btm: 2013.10.17 @ 22:50:00

TEST COMMENT: IF:(15min) BOB in 4 min.
IS:(30min) Return surface blow 12 min after bled off.
FF:(30min) BOB in 4 min.
FS:(45min) Return blow immediately after bled off. BOB in 10 min.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1665.85	96.19	Initial Hydro-static
1	31.50	95.64	Open To Flow (1)
15	122.32	109.41	Shut-In(1)
45	718.51	108.17	End Shut-In(1)
45	127.87	108.00	Open To Flow (2)
74	254.18	113.03	Shut-In(2)
119	648.64	111.51	End Shut-In(2)
120	1591.44	111.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
375.00	MW m=tr w=100%	4.99
60.00	GSOCMW g=5% o=5% m=25% w=65%	0.84
60.00	GHOCMW g=10% o=20% m=30% w=40%	0.84
15.00	GO g=10% o=90%	0.21
0.00	485' GIP	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53643

DST#: 3

ATTN: Al Dow ning

Test Start: 2013.10.17 @ 18:52:01

Tool Information

Drill Pipe:	Length: 3419.00 ft	Diameter: 3.80 inches	Volume: 47.96 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 48.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3439.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	25.00 ft			
Tool Length:	45.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			3420.00	
Shut In Tool	5.00			3425.00	
Hydraulic tool	5.00			3430.00	
Packer	5.00			3435.00	20.00 Bottom Of Top Packer
Packer	4.00			3439.00	
Stubb	1.00			3440.00	
Recorder	0.00	8372	Inside	3440.00	
Recorder	0.00	8321	Outside	3440.00	
Perforations	21.00			3461.00	
Bullnose	3.00			3464.00	25.00 Bottom Packers & Anchor
Total Tool Length:	45.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53643

DST#: 3

ATTN: Al Downing

Test Start: 2013.10.17 @ 18:52:01

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: 110000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
375.00	MW m=tr w=100%	4.987
60.00	GSOCMW g=5% o=5% m=25% w=65%	0.842
60.00	GHOCMW g=10% o=20% m=30% w=40%	0.842
15.00	GO g=10% o=90%	0.210
0.00	485' GIP	0.000

Total Length: 510.00 ft Total Volume: 6.881 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

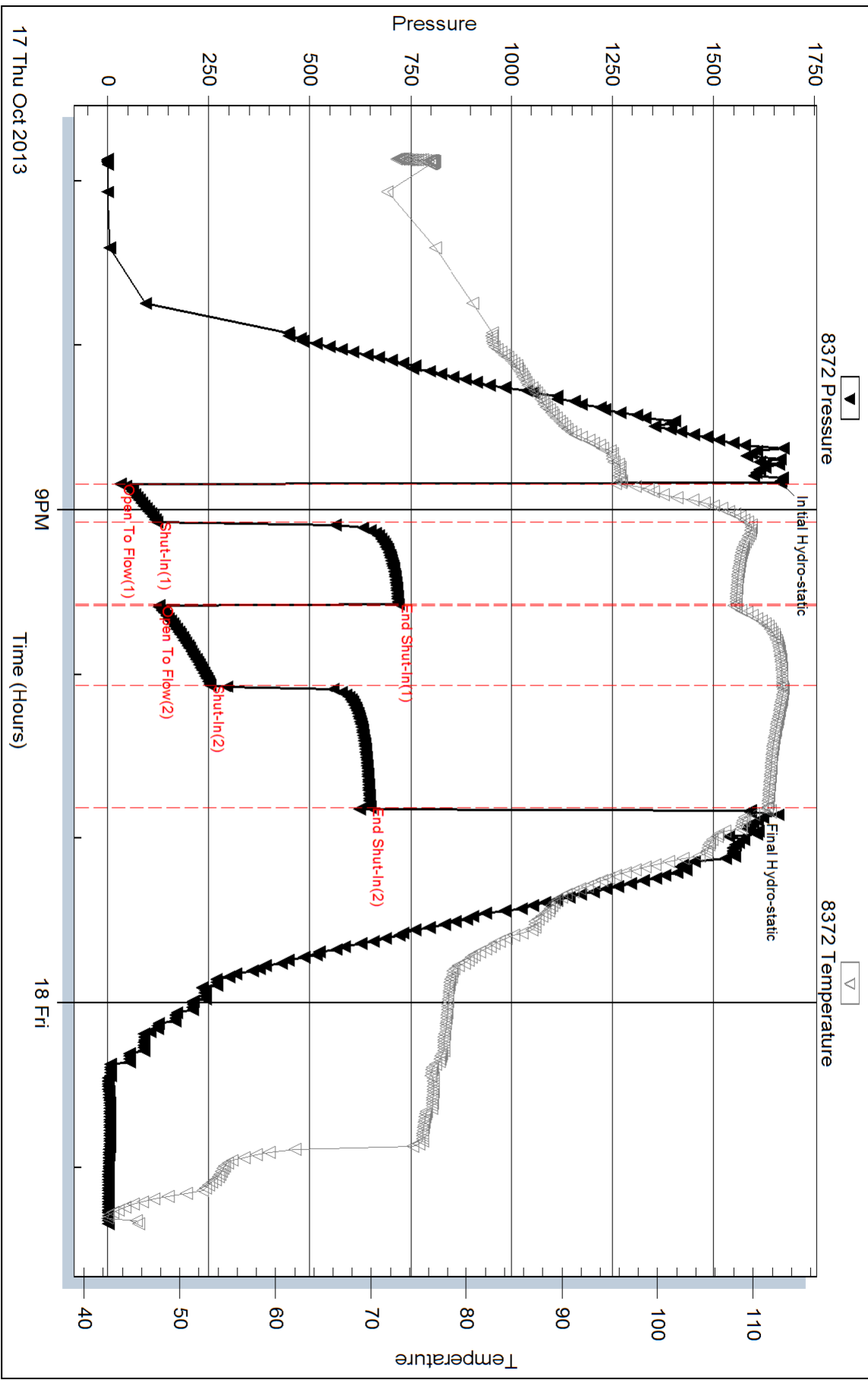
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Resistivity- .119 @ 44 deg = 110000

Pressure vs. Time

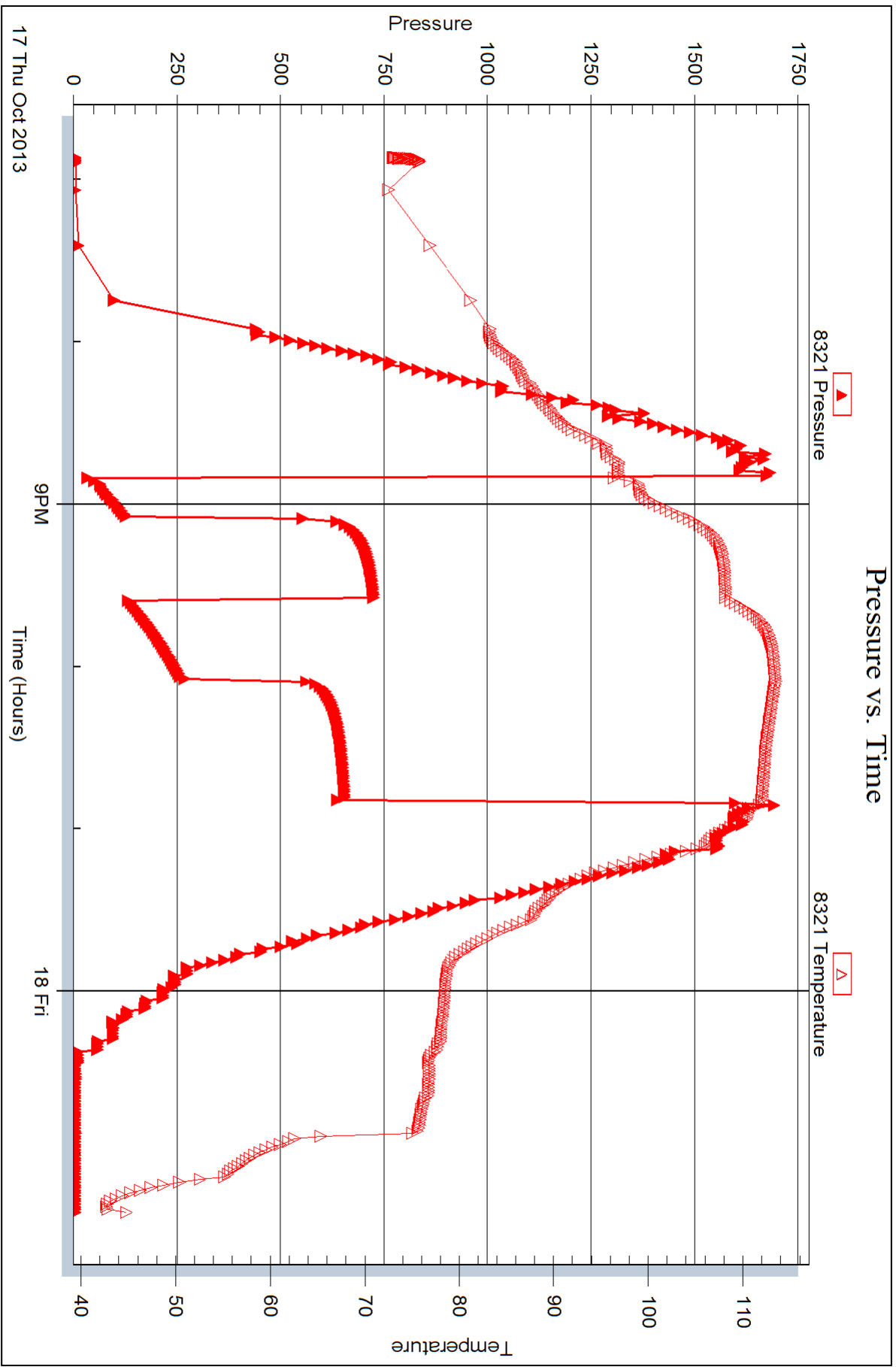


Serial #: 8321

Outside Dow nting Nelson Oil Co

Rennigia Quint #1-20

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS. 67601

ATTN: Al Downing

Remigia Quint #1-20

20-14s-18w Ellis,KS

Start Date: 2013.10.18 @ 07:45:01

End Date: 2013.10.18 @ 14:24:00

Job Ticket #: 53644 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.21 @ 09:23:10

Downing Nelson Oil Co
20-14s-18w Ellis,KS
Remigia Quint #1-20
DST # 4
LKC"E"
2013.10.18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53644

DST#: 4

ATTN: Al Dow ning

Test Start: 2013.10.18 @ 07:45:01

GENERAL INFORMATION:

Formation: **LKC"E"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:51:00

Time Test Ended: 14:24:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Andy Carreira

Unit No: 68

Interval: 3459.00 ft (KB) To 3482.00 ft (KB) (TVD)

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3482.00 ft (KB) (TVD)

2094.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8372

Inside

Press @RunDepth: 221.73 psig @ 3460.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.18

End Date:

2013.10.18

Last Calib.:

2013.10.18

Start Time:

07:45:01

End Time:

14:24:00

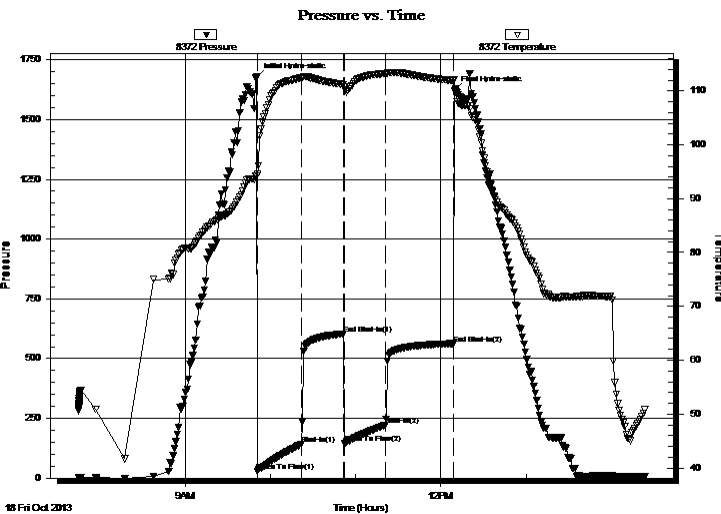
Time On Btm:

2013.10.18 @ 09:50:30

Time Off Btm:

2013.10.18 @ 12:09:30

TEST COMMENT: IF:(30min) BOB in 9 min.
IS:(30min) Return surface blow
FF:(30min) BOB in 13 min.
FS:(45min) Return blow built to 2.5"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1677.93	94.30	Initial Hydro-static
1	28.48	94.50	Open To Flow (1)
32	142.41	112.47	Shut-In(1)
61	603.44	111.20	End Shut-In(1)
62	145.22	110.77	Open To Flow (2)
91	221.73	113.20	Shut-In(2)
139	562.93	111.89	End Shut-In(2)
139	1620.13	112.04	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
430.00	MW	5.76
5.00	OIL	0.07
0.00	GIP= 65 ft	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co

20-14s-18w Ellis, KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53644

DST#: 4

ATTN: Al Downing

Test Start: 2013.10.18 @ 07:45:01

Tool Information

Drill Pipe:	Length: 3422.00 ft	Diameter: 3.80 inches	Volume: 48.00 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 48.15 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3459.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3440.00	
Shut In Tool	5.00			3445.00	
Hydraulic tool	5.00			3450.00	
Packer	5.00			3455.00	20.00 Bottom Of Top Packer
Packer	4.00			3459.00	
Stubb	1.00			3460.00	
Recorder	0.00	8372	Inside	3460.00	
Recorder	0.00	8321	Outside	3460.00	
Perforations	19.00			3479.00	
Bullnose	3.00			3482.00	23.00 Bottom Packers & Anchor
Total Tool Length:	43.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53644

DST#: 4

ATTN: Al Downing

Test Start: 2013.10.18 @ 07:45:01

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:

125000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
430.00	MW	5.758
5.00	OIL	0.070
0.00	GIP= 65 ft	0.000

Total Length: 435.00 ft Total Volume: 5.828 bbl

Num Fluid Samples: 0

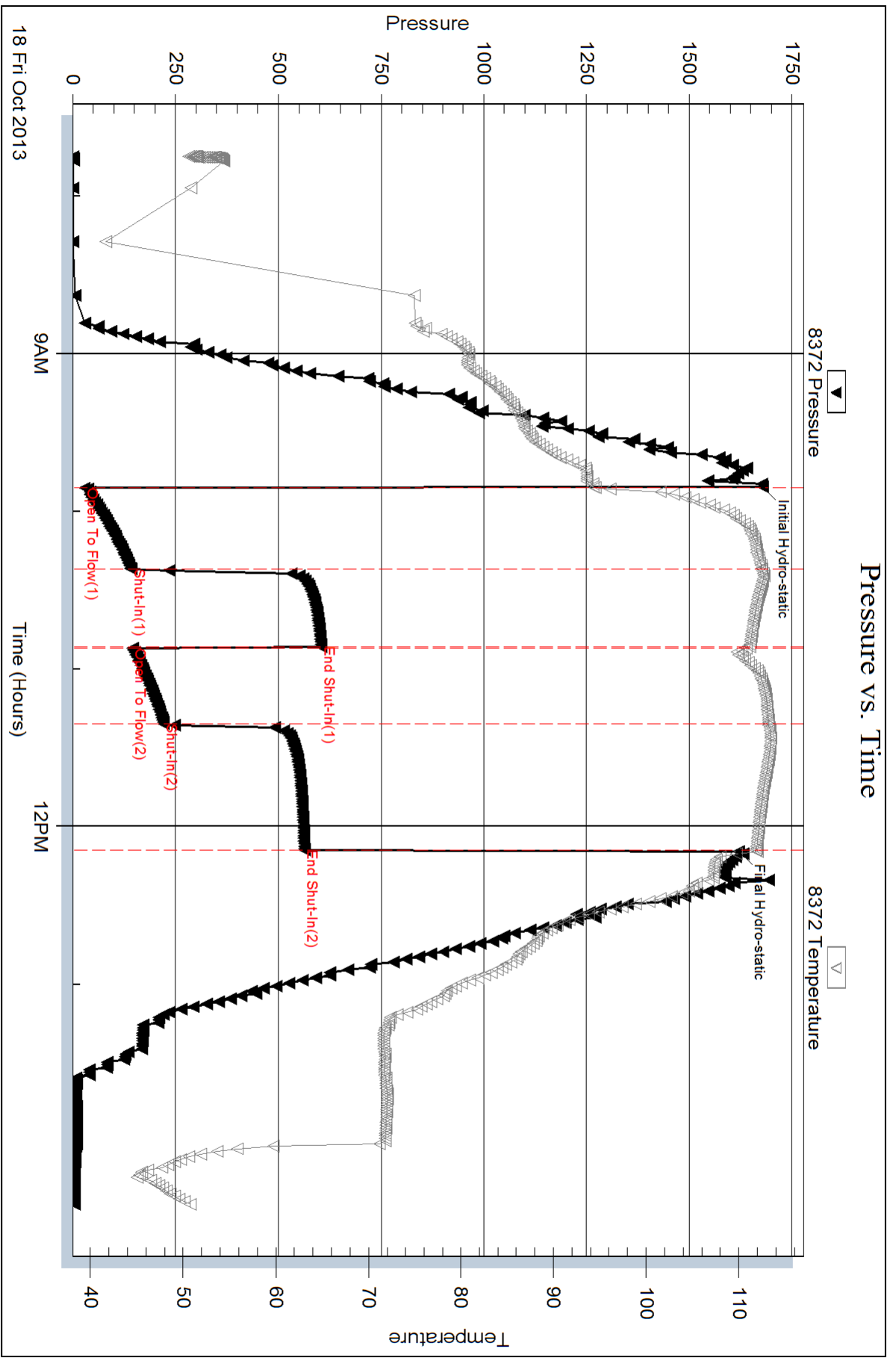
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Resistivity- .124 @ 40 deg = 125000



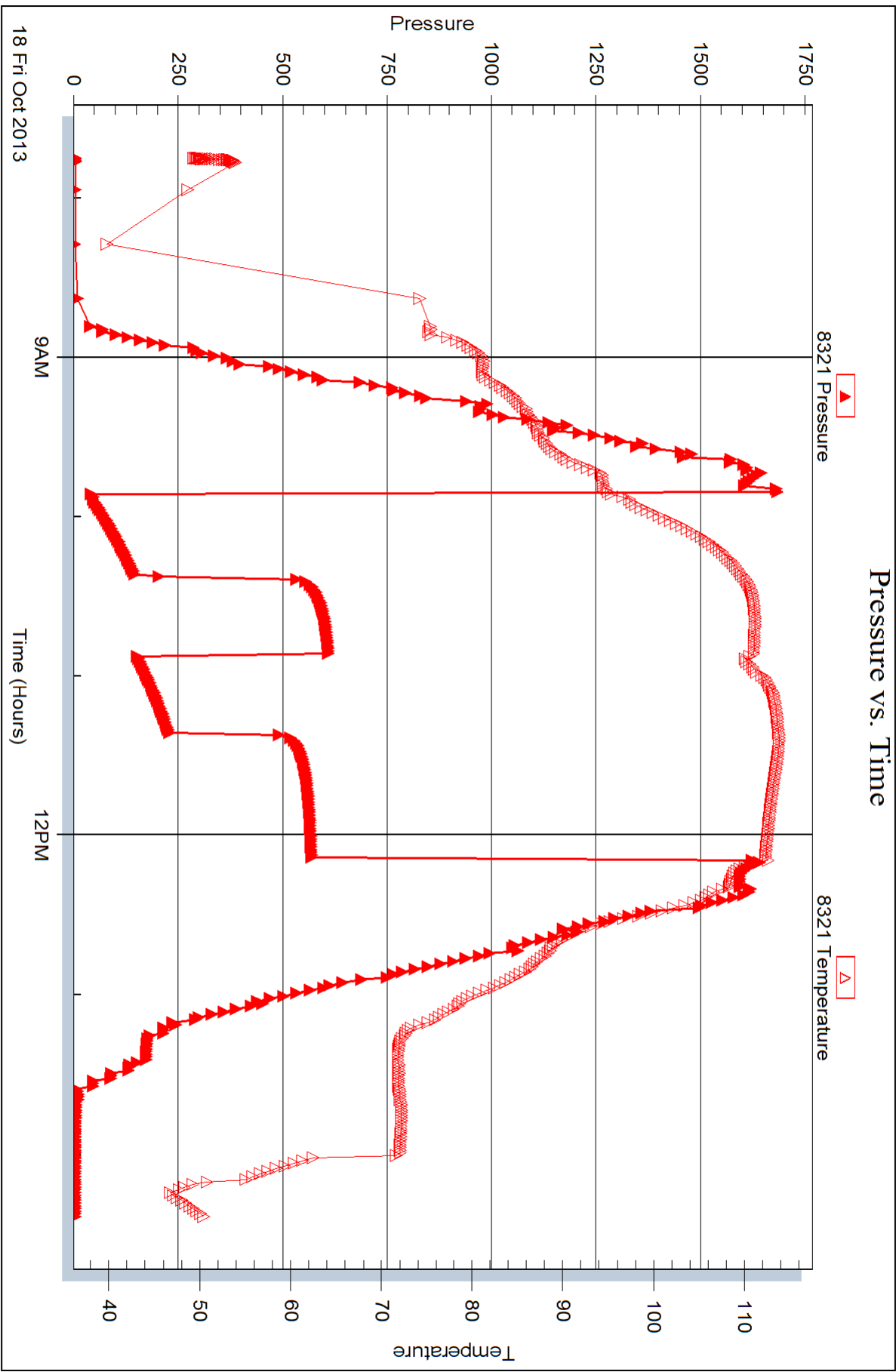
Serial #: 8321

Outside

Dow nung Nelson Oil Co

Rennigja Quint #1-20

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co**

PO Box 1019
Hays KS. 67601

ATTN: Al Downing

Remigia Quint #1-20

20-14s-18w Ellis,KS

Start Date: 2013.10.18 @ 23:10:01

End Date: 2013.10.19 @ 07:28:00

Job Ticket #: 53645 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2013.10.21 @ 09:21:19

Downing Nelson Oil Co

20-14s-18w Ellis,KS

Remigia Quint #1-20

DST # 5

LKC"H,I,J"

2013.10.18



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

ATTN: Al Dow ning

Job Ticket: 53645

DST#: 5

Test Start: 2013.10.18 @ 23:10:01

GENERAL INFORMATION:

Formation: **LKC"H,I,J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:58:30

Time Test Ended: 07:28:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Andy Carreira

Unit No: 68

Interval: 3515.00 ft (KB) To 3573.00 ft (KB) (TVD)

Reference Elevations: 2102.00 ft (KB)

Total Depth: 3573.00 ft (KB) (TVD)

2094.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 8372

Inside

Press @RunDepth: 545.57 psig @ 3518.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.10.18

End Date:

2013.10.19

Last Calib.:

2013.10.19

Start Time: 23:10:01

End Time:

07:28:00

Time On Btm:

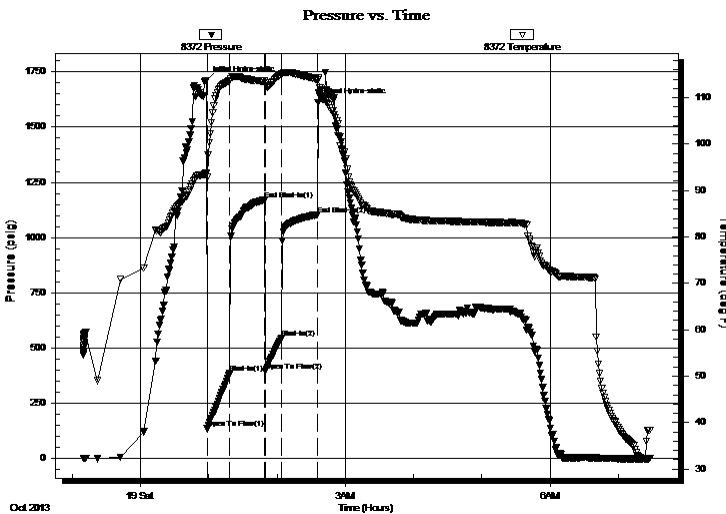
2013.10.19 @ 00:58:00

Time Off Btm:

2013.10.19 @ 02:36:00

TEST COMMENT: IF:(15min) BOB in 15 sec.
IS:(30min) Return Blow . BOB in 4 min after bled off.
FF:(15min) GTS 8 min into open.
FS:(30min) Return Blow , BOB 1 min after bled off.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1710.09	93.72	Initial Hydro-static
1	135.02	92.85	Open To Flow (1)
21	387.07	113.69	Shut-In(1)
51	1169.63	113.55	End Shut-In(1)
52	396.09	113.16	Open To Flow (2)
66	545.57	114.94	Shut-In(2)
98	1104.15	113.78	End Shut-In(2)
98	1609.65	113.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	HOCGM g=30% o=30% m=40%	1.41
1475.00	CGO g=15% o=85%	20.69

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53645

DST#: 5

ATTN: Al Dow ning

Test Start: 2013.10.18 @ 23:10:01

Tool Information

Drill Pipe:	Length: 3485.00 ft	Diameter: 3.80 inches	Volume: 48.89 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose:	64000.00 lb
			<u>Total Volume: 49.04 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	3515.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval betw een Packers:	58.00 ft				
Tool Length:	78.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: 19 min IF due to safety chain malfunction. Gas burned w / orange flame

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

Change Over Sub	1.00			3496.00	
Shut In Tool	5.00			3501.00	
Hydraulic tool	5.00			3506.00	
Packer	5.00			3511.00	20.00 Bottom Of Top Packer
Packer	4.00			3515.00	
Stubb	1.00			3516.00	
Perforations	1.00			3517.00	
Change Over Sub	1.00			3518.00	
Recorder	0.00	8372	Inside	3518.00	
Recorder	0.00	8321	Outside	3518.00	
Drill Pipe	32.00			3550.00	
Change Over Sub	1.00			3551.00	
Perforations	19.00			3570.00	
Bullnose	3.00			3573.00	58.00 Bottom Packers & Anchor

Total Tool Length: 78.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co

20-14s-18w Ellis,KS

PO Box 1019
Hays KS. 67601

Remigia Quint #1-20

Job Ticket: 53645

DST#: 5

ATTN: Al Downing

Test Start: 2013.10.18 @ 23:10:01

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	HOCGM g=30% o=30% m=40%	1.410
1475.00	CGO g=15% o=85%	20.690

Total Length: 1595.00 ft Total Volume: 22.100 bbl

Num Fluid Samples: 0

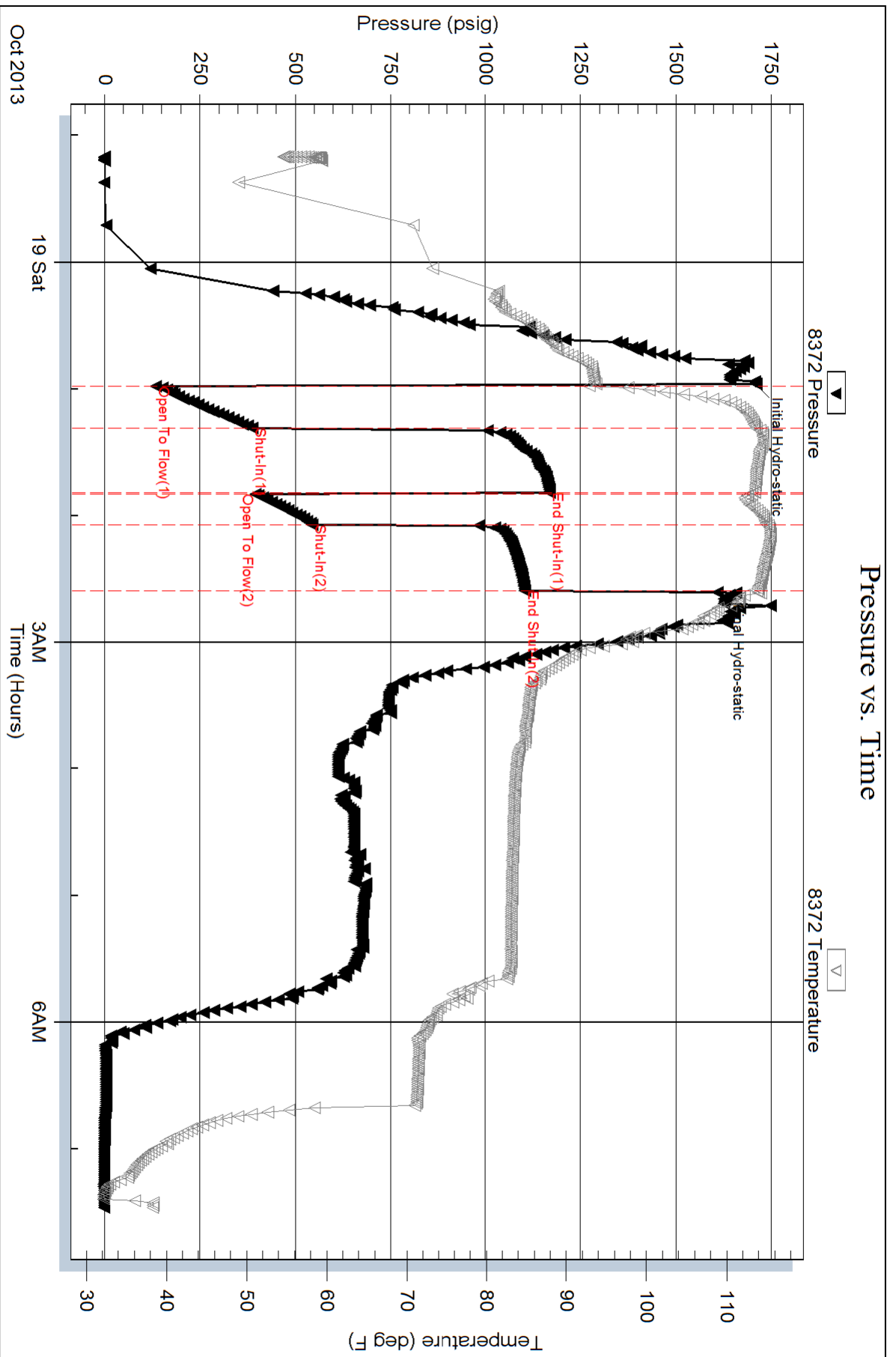
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



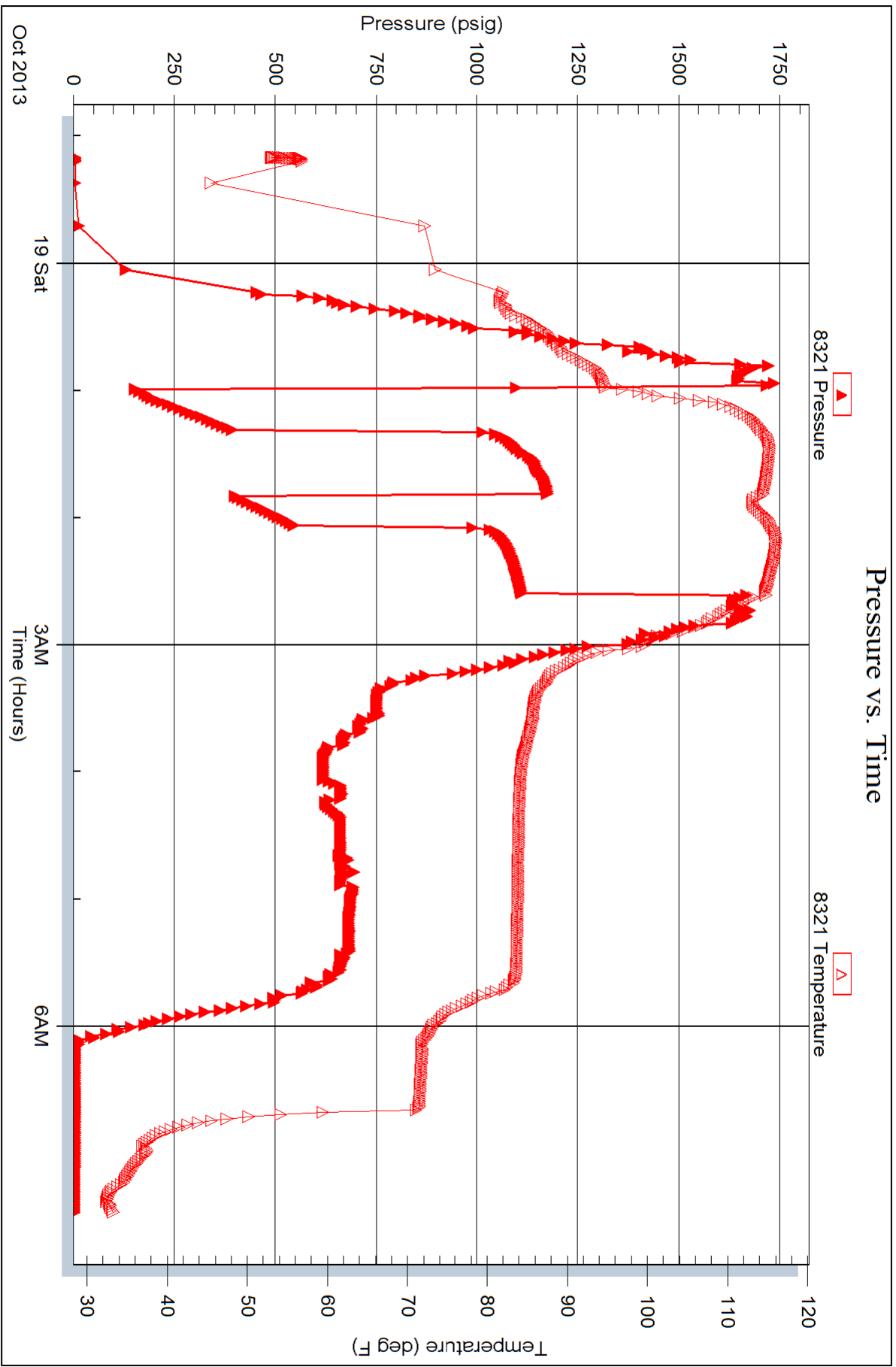
Serial #: 8321

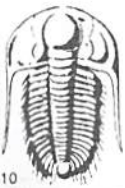
Outside

Dow n ing Nelson Oil Co

Rennigia Quint #1-20

DST Test Number: 5





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53641

Well Name & No. R. Quint #1-20 Test No. 1 Date 10-16-13
 Company DNOc Elevation 2102 KB 2094 GL
 Address PO Box 1019 Hays Ks. 67601
 Co. Rep / Geo. AL Downing Rig Discovery #3
 Location: Sec. 20 Twp. 14S Rge. 18W Co. Ellis State Ks

Interval Tested 3310-3340 Zone Tested Plattsmouth
 Anchor Length 30' Drill Pipe Run 3267 Mud Wt. 8.5
 Top Packer Depth 3305 Drill Collars Run 30' Vis 50
 Bottom Packer Depth ~~3340~~ 3310 Wt. Pipe Run 0 WL 8.0
 Total Depth 3340 Chlorides 1000 ppm System LCM 1 1/2#

Blow Description IF: 1" blow in 5 min. 2" in 20 min. Built to 3"
ISI: No Return
FF: 1" blow in ~~5~~ 1 min. 2" in 7 min. 3" in 16 min. 4" in 25 min. built to 5"
FST: No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>55</u>	Feet of <u>50 CBM</u>	<u>5</u>	<u>5</u>	<u>90</u>	
<u>5</u>	Feet of <u>GIP</u>				

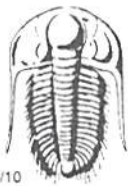
Rec Total 55 BHT 99° Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1574 Test 1150 T-On Location 12:50
 (B) First Initial Flow 15 Jars _____ T-Started 14:25
 (C) First Final Flow 28 Safety Joint _____ T-Open 16:14
 (D) Initial Shut-In 1049 Circ Sub _____ T-Pulled 19:14
 (E) Second Initial Flow 26 Hourly Standby _____ T-Out 21:02
 (F) Second Final Flow 36 Mileage 16RT 24.80 Comments _____
 (G) Final Shut-In 1001 Sampler _____
 (H) Final Hydrostatic 1517 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1174.80
 Accessibility _____ MP/DST Disc't _____

Sub Total 1174.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53642

Well Name & No. R. Quint #1-20 Test No. 2 Date 10-17-13
 Company DNOC Elevation 2102 KB 2094 GL
 Address PO Box 1019 Hays, Ks 67601
 Co. Rep / Geo. AL DOWNING Rig Discovery #3
 Location: Sec. 20 Twp. 14S Rge. 18W Co. Ellis State Ks

Interval Tested 3412-3441 Zone Tested LKC "C"
 Anchor Length 29 Drill Pipe Run 3390 Mud Wt. ~~8.5~~ 8.7
 Top Packer Depth 3407 Drill Collars Run 30 Vis ~~5.0~~ 5.2
 Bottom Packer Depth 3412 Wt. Pipe Run 0 WL ~~8.0~~ 8.8
 Total Depth 3441 Chlorides 4000 ppm System LCM 1 1/2 #5

Blow Description IF: 6" blow in 2min. BOB in 7min
ISI: NO RETURN
FF: 6" blow in 5min. BOB in 12min.
FSI: INTERMITTENT SURFACE RETURN BLOW

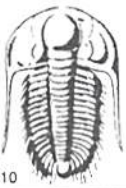
Rec	Feet of	%gas	%oil	%water	%mud
<u>140</u>	<u>60</u>	<u>10</u>	<u>90</u>		
<u>120</u>	<u>HOCBM</u>	<u>40</u>	<u>20</u>		<u>40</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 260 BHT 109° Gravity 38 API RW @ ° F Chlorides ppm

(A) Initial Hydrostatic 1683 Test 1150 T-On Location 05:45
 (B) First Initial Flow 31 Jars T-Started 06:15
 (C) First Final Flow 64 Safety Joint T-Open 08:45
 (D) Initial Shut-In 768 Circ Sub T-Pulled 10:45
 (E) Second Initial Flow 72 Hourly Standby T-Out 13:00
 (F) Second Final Flow 105 Mileage 16RT 24.80 Comments FOUND LOOSE HOSE CONNECTION. Explains Return blow.
 (G) Final Shut-In 747 Sampler Ruined Shale Packer
 (H) Final Hydrostatic 1548 Straddle Ruined Packer

Initial Open 30 Extra Packer Extra Copies
 Initial Shut-In 30 Extra Recorder Sub Total 0
 Final Flow 30 Day Standby Total 1174.80
 Final Shut-In 30 Accessibility MP/DST Disc't
 Sub Total 1174.80

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53643

4/10

Well Name & No. R. Quint #1-20 Test No. 3 Date 10-17-13
 Company DNOC Elevation 2102 KB 2094 GL
 Address PO BOX 1019 HAYS KS 67601
 Co. Rep / Geo. AI DOWNING Rig Discovery #3
 Location: Sec. 20 Twp. 14s Rge. 18W Co. Ellis State Ks

Interval Tested 3439-3464 Zone Tested LKC "D"
 Anchor Length 25' Drill Pipe Run 3419 Mud Wt. 8.7
 Top Packer Depth 3434 Drill Collars Run 30 Vis 5.2
 Bottom Packer Depth 3439 Wt. Pipe Run 0 WL 8.8
 Total Depth 3464 Chlorides 4000 ppm System LCM 1 1/2 #

Blow Description FF: BOB in 4min
FSD: Return surface blow 12min. after bleedoff
FF: BOB in 4min
FSD: Return blow immediately after bleedoff, BOB in 10min.

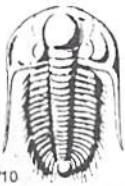
Rec	Feet of	%gas	%oil	%water	%mud
15	60	10	90		
60	GHOCMW	10	20	40	30
60	GSOCMW	5	5	65	25
375	MW			100	TR
	BIP=485				

Rec Total 510 BHT _____ Gravity 39 API RW .119 @ 44 °F Chlorides 110000 ppm

(A) Initial Hydrostatic 1665 Test 1150 T-On Location 18:30
 (B) First Initial Flow 31 Jars _____ T-Started 18:52
 (C) First Final Flow 122 Safety Joint _____ T-Open 20:50
 (D) Initial Shut-In 718 Circ Sub _____ T-Pulled 22:50
 (E) Second Initial Flow 127 Hourly Standby _____ T-Out 01:22
 (F) Second Final Flow 254 Mileage 16RT 24.80 Comments _____
 (G) Final Shut-In 648 Sampler _____
 (H) Final Hydrostatic 1591 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 15 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1174.80
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 45 Sub Total 1174.80

Approved By _____ Our Representative [Signature]

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



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 53644

Well Name & No. R. Quint #1-20 Test No. 4 Date 10-18-13
 Company DNOC Elevation 2102 KB 2094 GL
 Address PO Box 1019 Hays, Ks 67601
 Co. Rep / Geo. Al Downing Rig DISCOVERY #3
 Location: Sec. 20 Twp. 14S Rge. 18W Co. Ellis State Ks

Interval Tested 3459-3482 Zone Tested LKC "E"
 Anchor Length 23 Drill Pipe Run 3422 Mud Wt. 8.6
 Top Packer Depth 3454 Drill Collars Run 30 Vis 48
 Bottom Packer Depth 3459 Wt. Pipe Run 0 WL 8.8
 Total Depth 3482 Chlorides 5000 ppm System LCM 1 1/2"

Blow Description IF: BOB in 9min.
ISI: Return surface blow
FF: BOB in 13min.
FST: Return Blow built to 2 1/2"

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Oil</u>				
<u>430</u>	<u>MW</u>				

Rec Total 435 BHT 111° Gravity 38 API RW .124 @ 40 ° F Chlorides 125,000 ppm

(A) Initial Hydrostatic 1677 Test 1150 T-On Location 07:08
 (B) First Initial Flow 28 Jars 07:45
 (C) First Final Flow 142 Safety Joint 09:37
 (D) Initial Shut-In 603 Circ Sub 11:52
 (E) Second Initial Flow 145 Hourly Standby 14:10
 (F) Second Final Flow 221 Mileage 16RT 24.80
 (G) Final Shut-In 562 Sampler
 (H) Final Hydrostatic 1620 Straddle
 Shale Packer
 Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Initial Open 30
 Initial Shut-In 30
 Final Flow 30
 Final Shut-In 45

Sub Total 0
 Total 1174.80
 MP/DST Disc't

Approved By _____ Our Representative Andy Cox

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. 53645

Well Name & No. R. Quint #1-20 Test No. 5 Date 10-18-13
 Company DNOC Elevation 2102 KB 2094 GL
 Address PO Box 1019 Hays, Ks. 67601
 Co. Rep / Geo. Al Downing Rig DISCOVERY #3
 Location: Sec. 20 Twp. 14s Rge. 18w Co. Ellis State Ks

Interval Tested 3515-3573 Zone Tested LKC "H, I, J"
 Anchor Length 58' Drill Pipe Run 3485' Mud Wt. ~~8.4~~ 9.4
 Top Packer Depth 3510 Drill Collars Run 30 Vis ~~48~~ 52
 Bottom Packer Depth 3515 Wt. Pipe Run 0 WL 8.8
 Total Depth 3573 Chlorides 5000 ppm System LCM 1 1/2 #

Blow Description IF: BOB in 15 sec.
ISI: Return Blow. BOB 4 min after bleed off
FF: BTS 8 min into open
FSL: Return Blow, BOB 4 min after bleed off

Rec	Feet of	%gas	%oil	%water	%mud
<u>1475</u>	<u>CGO</u>	<u>15%</u>	<u>85%</u>		
<u>120</u>	<u>HOCGM</u>	<u>30%</u>	<u>30%</u>		<u>40%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1595 BHT 113° Gravity 40 API RW @ ° F Chlorides ppm
 Test 1150 T-On Location 22:35
 Jars T-Started 23:10
 Safety Joint T-Open 01:00
 Circ Sub T-Pulled 02:34
 Hourly Standby T-Out 07:28
 Mileage 16RT 49.60 Comments 19 min IF due to safety chain malfunction
 Sampler loaded tools 10/20 4:45 GAS BURNES w/ORANGE FLAME
 Straddle
 Shale Packer
 Ruined Shale Packer
 Extra Packer
 Ruined Packer
 Extra Recorder
 Extra Copies
 Day Standby
 Accessibility
 Sub Total 1199.60 Sub Total 0 Total 1199.60 MP/DST Disc't

Initial Open 19
 Initial Shut-In 30
 Final Flow 15'
 Final Shut-In 30

Approved By _____ Our Representative [Signature]

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

Marc Downing

Consulting Petroleum Geologist
1411 Washington Circle
Hays, KS 67601
Phone: (316) 428-1356 (cell) 785-621-2286

Geologic Report Log

Company: Downing-Nelson Oil Co., Inc.
Well: Permian Bunt # 1-20
Field: Wildcat

Location: 1440' ECL - 750' FUL
Sec. 20 Twp. 14S Rge. 18W
County: Ellis
State: Kansas

Production Use

Elevation: 2103'
KB: 2095'
GI: 2103' RB

Drilling Measured From:
3050 To: TD
3050 To: TD
3050 To: TD

Operation: Driskom Drig. Zieg H 3
Contractor: Driskom Drig.
Comm: 10-12-13
Casing Record: Alton Downing
Revised: Alton Downing
Geological Supervision: Alton Downing
Wellhead Geologist: Alton Downing
Production: 5 1/2 @ 3711'

SURF: 8 3/4 @ 684'
PROD: 5 1/2 @ 3711'
TOTAL DEPTH DILLERS: 3800'
TOTAL DEPTH LOG: 3801'

FORMATION	START TOP	ELECTRIC LOG TOP	SUBSEA DEPTH	STRUCTURAL POSITION
Anhydrite Base	1528	1330	+173	
Topoka	3102	3102	-994	+3
Hedrick	3354	3355	-1252	+5
Toronto	3376	3377	-1274	+4
CAC	3404	3404	-1301	+6
ARC	3634	3634	-1531	+7
ABUCKLE	3716	3716	-1613	NA

REFERENCE WELL FOR STRUCTURE: W14500 EUTERNALES Zone #1 @ SW-CW 20-14-68

DRILL STEM TESTS

No.	Interval	IFP/Time	ISIP/Time	FFP/Time	IRP/PP	RECOVERY

LEGEND

