



KANSAS CORPORATION COMMISSION 1100028
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009

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

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30717
Name: Downing-Nelson Oil Co Inc
Address 1: PO BOX 1019
Address 2: _____
City: HAYS State: KS Zip: 67601 + _____
Contact Person: Ron Nelson
Phone: (785) 621-2610
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Alan Downing
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
 Conv. to GSW
 Plug Back: _____ Plug Back Total Depth _____
 Commingled Permit #: _____
 Dual Completion Permit #: _____
 SWD Permit #: _____
 ENHR Permit #: _____
 GSW Permit #: _____
10/22/2012 10/29/2012 10/30/2012
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 15-165-21993-00-00
Spot Description: _____
W2 NW NE SW Sec. 24 Twp. 16 S. R. 17 East West
2310 Feet from North / South Line of Section
1445 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Rush
Lease Name: Holland Well #: 1-24
Field Name: Wildcat
Producing Formation: None
Elevation: Ground: 2004 Kelly Bushing: 2012
Total Depth: 3660 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 1127 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: 23000 ppm Fluid volume: 400 bbls
Dewatering method used: Evaporated
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

- Letter of Confidentiality Received
Date: _____
 Confidential Release Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution
ALT I II III Approved by: Deanna Gantior Date: 12/04/2012



1100028

Operator Name: Downing-Nelson Oil Co Inc Lease Name: Holland Well #: 1-24
 Sec. 24 Twp. 16 S. R. 17 East West County: Rush

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Attached	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum Attached Attached Attached
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CASING RECORD <input checked="" 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
Surface Pipe	12.25	8.625	23	1127	Common	425	2% Gel & 3% CC

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate				
___ Protect Casing	-			
___ Plug Back TD				
___ Plug Off Zone	-			

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	
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 (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls. Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Holland 1-24
Doc ID	1100028

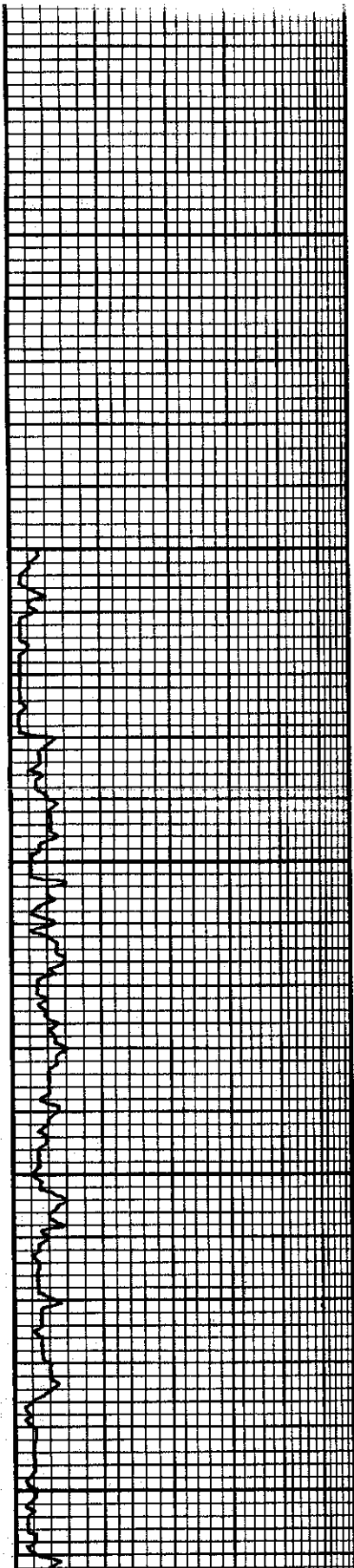
All Electric Logs Run

Micro
Sonic
Dual Induction
Compensated Density / Neutron

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	Holland 1-24
Doc ID	1100028

Tops

Top Anhydrite	1126'	+886
Base Anhydrite	1164'	+848
Topeka	3020'	-1008
Heebner	3246'	-1234
Toronto	3265'	-1253
LKC	3301'	-1289
BKC	3522'	-1510
Arbuckle	3548'	-1536

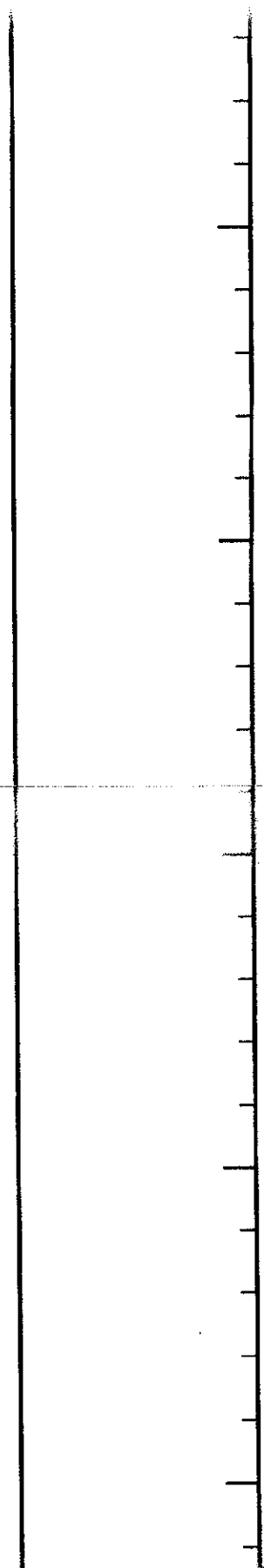
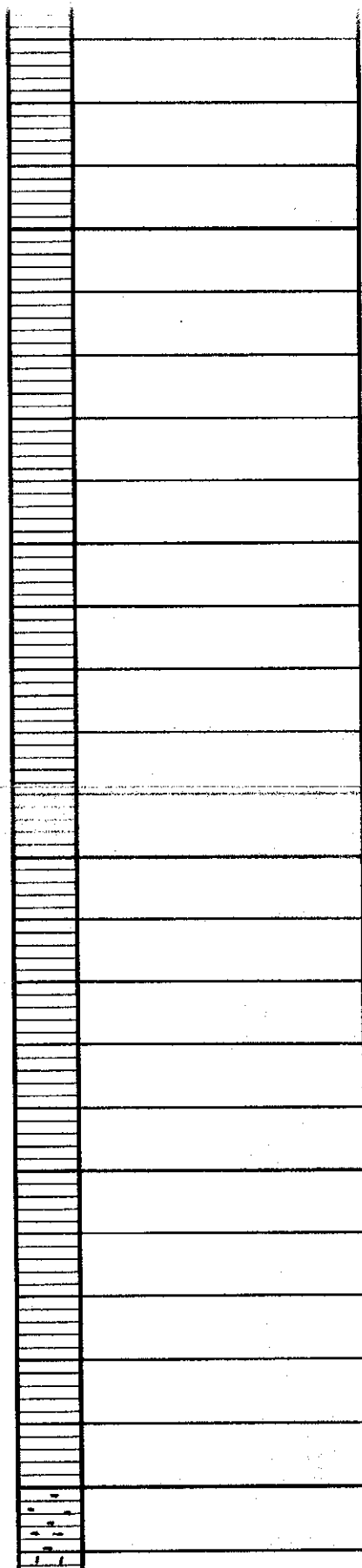


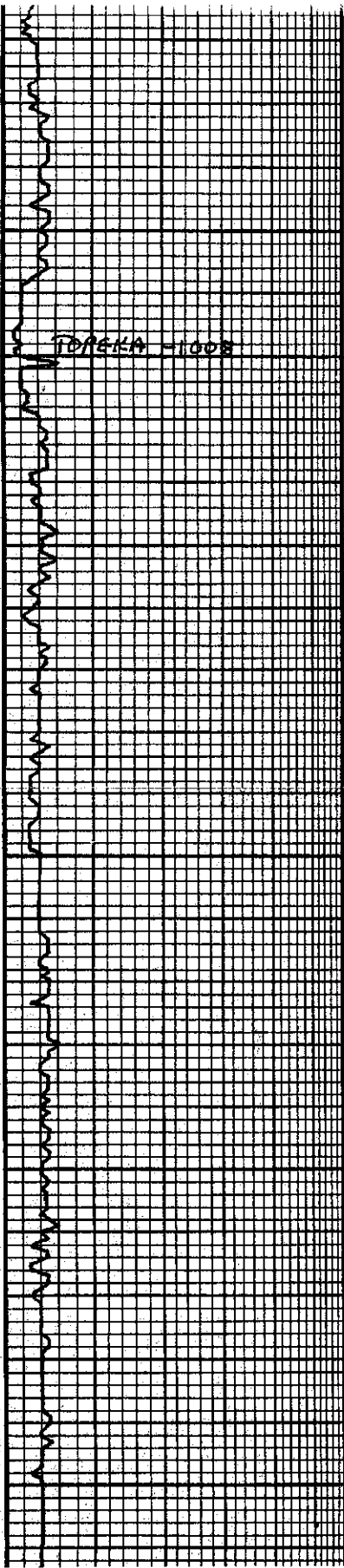
2800

50

2900

50





3000

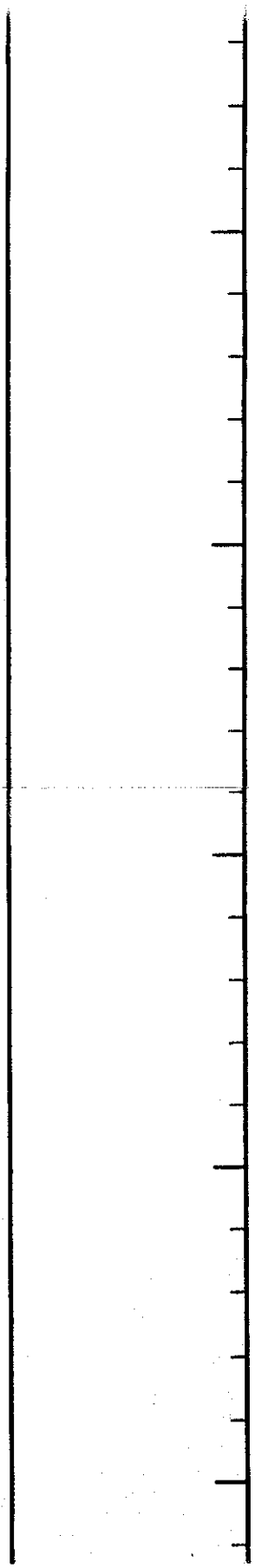
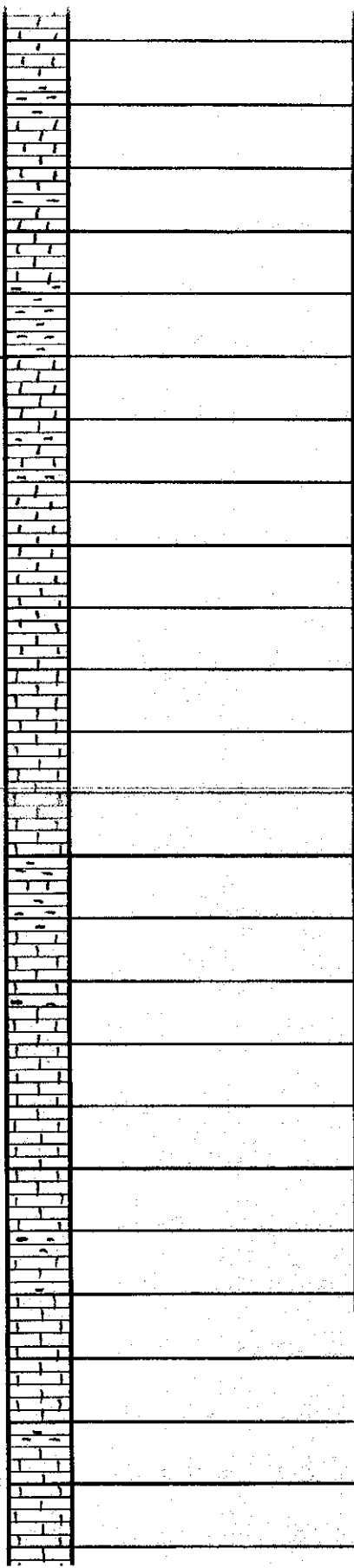
TOPGRA - 1000

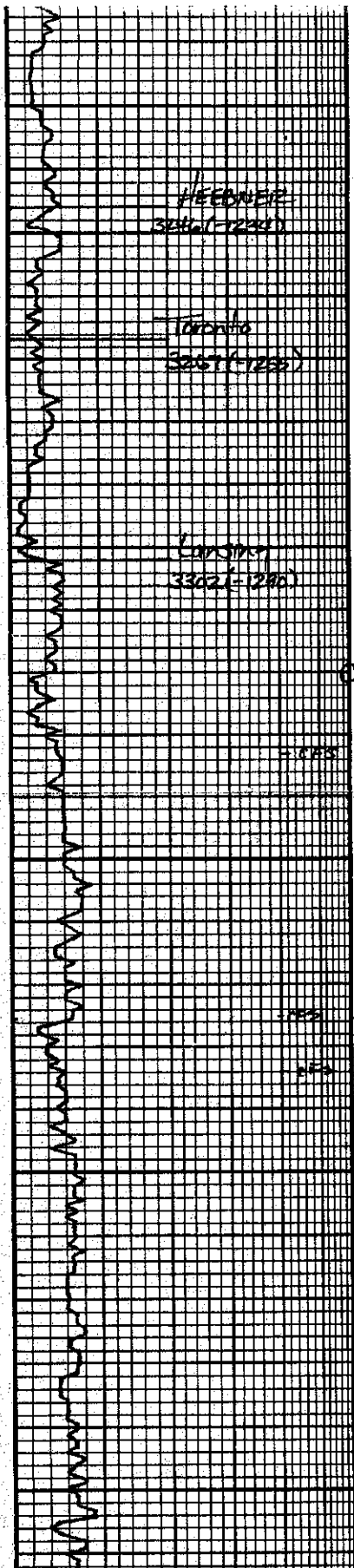
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3100

50

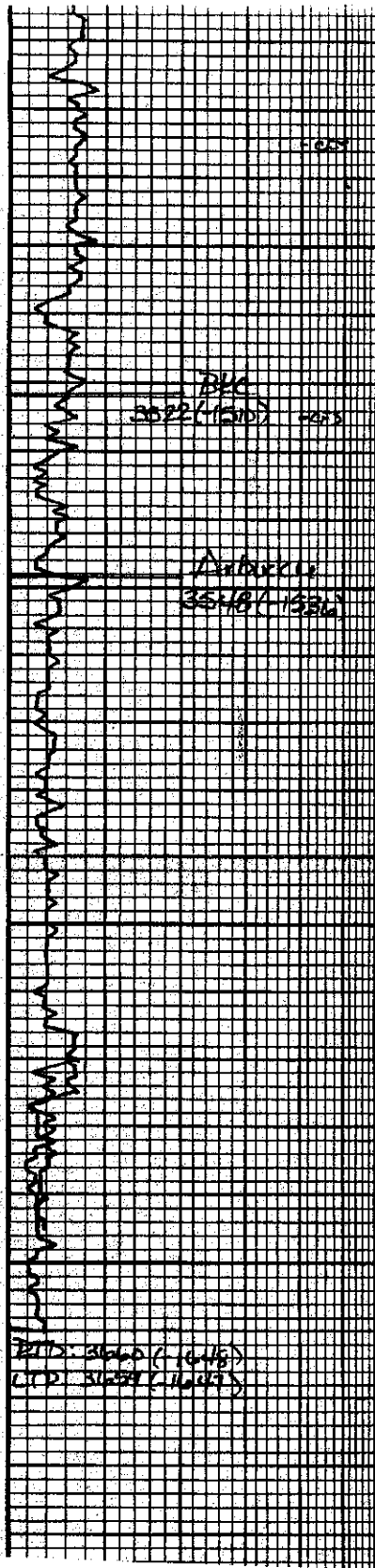
3200





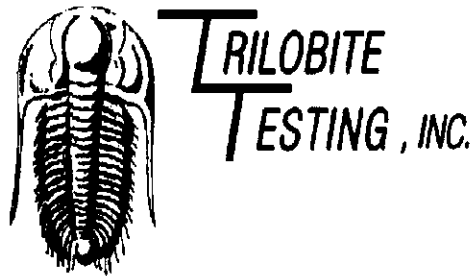
50	sh: Black - carb LS: wht - v. Am v. dse
	sh: gm
	LS: wht Am to subvm cm in pt in scatt intervals of Ns -
	sh: gm - Brown
3300	LS: wht Bone wht Am w/ scatt intervals of sh. chky Ns No od.
	sh: gm
	sh: wht Tan Am col wht ool - ool v. spl str 1-2 r's Rm sfo - No odor
	sh: gm
50	LS: wht v. Am v. dse No app. of Ns - few scatt oolitic r's au titr.
	sh: Black - carb
	LS: wht Am - col wht fine ool v. spl. str Ns sfo - No odor
	sh: gm
	LS: wht Tan Am v. ool w/ good ool of - Lt. sfo w/ faint odor
	sh: v. dark gm
3400	LS: wht Am, ool w/ scatt ool - Ns - sfo - No
	LS: wht - Bone wht v. Am w/ No vis of Ns sfo No odor - scatt wht Lt. Tan ackw -
	sh: gm - Brown, sfo pym tic
	LS: wht - v. Am w/ Am scatt intervals of Ns sfo - No odor au obs
50	sh: gm - Brown

vis 55 wt 8.8 wt 8.8 cm 2#
DST #1 3312 - 3335 30-30-30-30
Rec: 70' mud IHP: 1611# IFP: 54-51# FFP: 52-51# SIP: 864-854# FHP: 11000# Temp: 99.0F
DST #2 3354 - 3386 30-45-30-45
Rec: 270' mud IHP: 1653# IFP: 27-88# FFP: 98-140# SIP: 870-814# FHP: 11000# Temp: 108.0
vis 51 wt 8.8 wt 8.8 cm 2#



D S T # 3	U. sph. str. NSFO - No oil
	sol. gilsonite in v. lit. oil & sh. qm - Brown
	LS: unt. v. tan v. oil 1-2% poss. frac. w. lit. edge str. NSFO - No odor
D S T # 4	LS: Tan fin v. oil w. lit. oil - yellow w. g. sfo - g. odor 1-2% s. sh.
	sh. qm
D S T # 5	LS: Tan fin v. oil + good look w. sfo. Fr. g. odor some total bit sat.
	sh. Red qm -
	LS: Tan fin v. oil w. seafoam lit. sph. str. NSFO, some lit. tar - No od.
D S T # 6	Delo: unt. cr. str. w. good int. w. sfo. w. lit. sfo. some odor - No Delo v. lit. d. but mostly cr. str. good # - w. lit. - EUC str.
	Delo: unt. - Brown w. lit. cr. str. gel - v. g. int. # No od. w. gls. str. NSFO -
D S T # 7	Delo: unt. v. tan v. oil w. v. strong odor w. fr. g. sfo v. gassy when broken
	Delo: unt. Lt. Tan m. cr. str. w. v. strong odor g. show g. oil when broken - some oil on sand dip.
D S T # 8	Delo: Tan - unt. - cr. str. become increasing sandy - w. lit. bit lit. g. str. all in bed in deloite matrix. No show No odor.
	Delo: Tan - fin v. sdy No show -
No Down	

DST # 3	3185 - 3525 30-30-30-30 Rec: 1'00 3'50cm IHP: 1736# IFP: 20-32# FFP: 22-26# SIP: 32-26# FHP: 1700# Temp: 100°F
DST # 4	3520 - 3560 15-30-45-60 Rec: 2583' mw 20 KPPM IHP: 1767# IFP: 371-699# FFP: 769-1058# SIP: 1095-1104# FHP: 1682# Temp: 113°F
DST # 5	3586 - 3593 30-30-30-30 Rec: 760' mw IHP: 1816# IFP: 81-289# FFP: 311-475# SIP: 1143-1135# FHP: 1736# Temp: 114°F



DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Al Downing

Holland #1-24

24-16s-17w Rush,KS

Start Date: 2012.10.26 @ 22:03:30

End Date: 2012.10.27 @ 03:45:30

Job Ticket #: 48601 DST #: 1

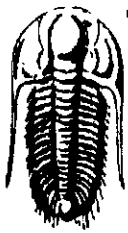
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.01 @ 14:25:09

Downing-Nelson Oil Co., Inc. 24-16s-17w Rush,KS Holland #1-24 DST # 1 LKC "C" 2012.10.26



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Downing-Nelson Oil Co., inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48601

DST#: 1

ATTN: Al Downing

Test Start: 2012.10.26 @ 22:03:30

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:06:30

Time Test Ended: 03:45:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3312.00 ft (KB) To 3335.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3335.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8354 Inside

Press@RunDepth: 51.47 psig @ 3315.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.26

End Date: 2012.10.27

Last Calib.: 2012.10.27

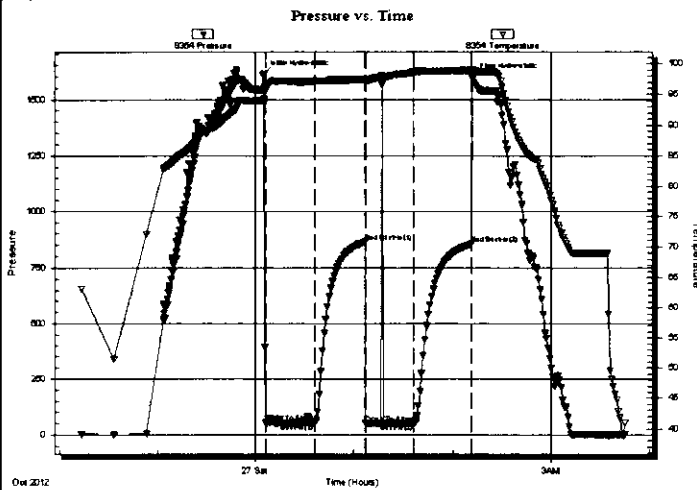
Start Time: 22:13:30

End Time: 03:45:30

Time On Btm: 2012.10.27 @ 00:05:30

Time Off Btm: 2012.10.27 @ 02:12:30

TEST COMMENT: IF-Weak blow . Built to 3 inches . Died off to surface . Slid 12'-15' after tool opening.
IS-No Return.
FF-No Blow . Flushed Tool . Weak surface blow . Died @ 12 minutes.
FS-No Return.



PRESSURE SUMMARY

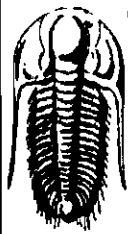
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1610.71	94.23	Initial Hydro-static
1	54.12	95.59	Open To Flow (1)
31	51.21	97.13	Shut-in(1)
61	863.95	97.40	End Shut-in(1)
62	51.68	97.04	Open To Flow (2)
91	51.47	98.65	Shut-in(2)
126	854.49	98.89	End Shut-in(2)
127	1600.48	98.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
70.00	100%Mud	0.71

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48601

DST#: 1

ATTN: Al Dow ning

Test Start: 2012.10.26 @ 22:03:30

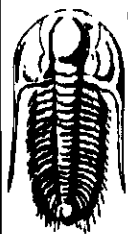
Tool Information

Drill Pipe:	Length: 3290.00 ft	Diameter: 3.80 inches	Volume: 46.15 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 15000.00 lb
			<u>Total Volume: 46.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3312.00 ft			Final 44000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3293.00	
Shut In Tool	5.00			3298.00	
Hydraulic tool	5.00			3303.00	
Packer	5.00			3308.00	20.00 Bottom Of Top Packer
Packer	4.00			3312.00	
Stubb	1.00			3313.00	
Perforations	2.00			3315.00	
Recorder	0.00	8354	Inside	3315.00	
Recorder	0.00	8520	Outside	3315.00	
Perforations	17.00			3332.00	
Bullnose	3.00			3335.00	23.00 Bottom Packers & Anchor

Total Tool Length: 43.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48601

DST#: 1

ATTN: Al Dow ning

Test Start: 2012.10.26 @ 22:03:30

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:

bbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	100%Mud	0.709

Total Length: 70.00 ft

Total Volume: 0.709 bbl

Num Fluid Samples: 0

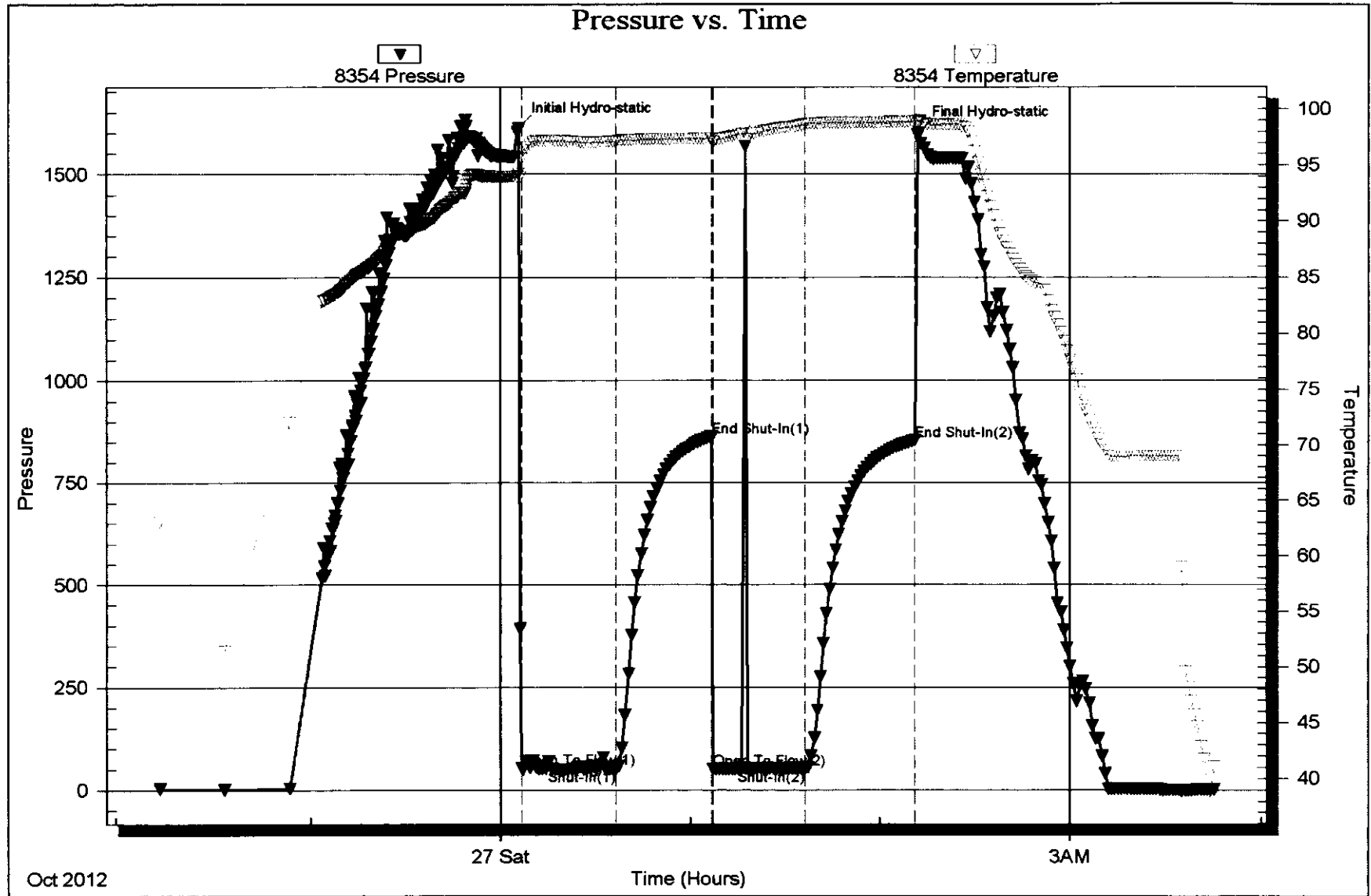
Num Gas Bombs: 0

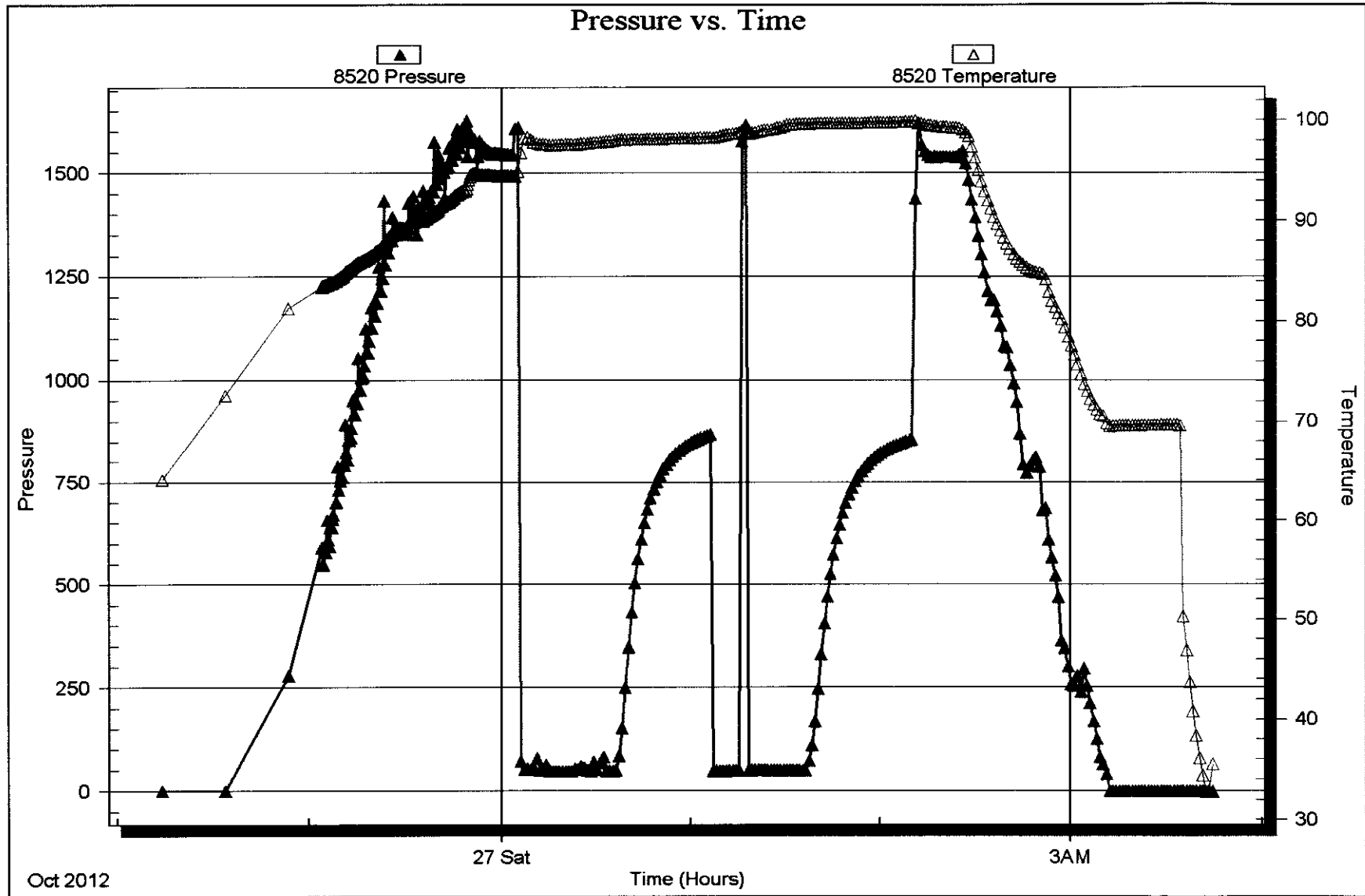
Serial #:

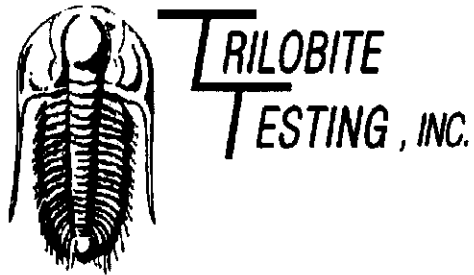
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Al Downing

Holland #1-24

24-16s-17w Rush,KS

Start Date: 2012.10.27 @ 13:18:30

End Date: 2012.10.27 @ 19:06:30

Job Ticket #: 48602 DST #: 2

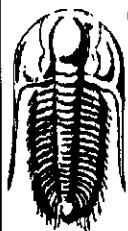
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.01 @ 14:24:23

Downing-Nelson Oil Co., Inc. 24-16s-17w Rush,KS Holland #1-24 DST # 2 LKC "E-F" 2012.10.27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48602

DST#: 2

ATTN: Al Dow ning

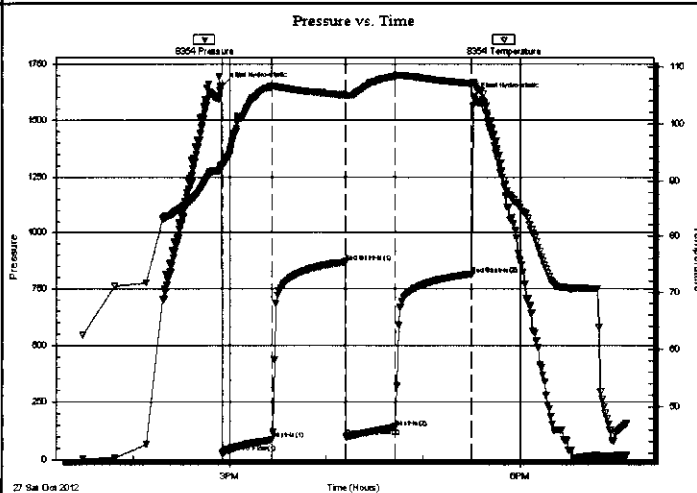
Test Start: 2012.10.27 @ 13:18:30

GENERAL INFORMATION:

Formation: **LKC "E-F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:55:30
 Time Test Ended: 19:06:30
 Interval: **3354.00 ft (KB) To 3386.00 ft (KB) (TVD)**
 Total Depth: 3386.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Rash
 Unit No: 38
 Reference Elevations: 2009.00 ft (KB)
 2004.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8354 Inside
 Press@RunDepth: 139.76 psig @ 3357.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.10.27 End Date: 2012.10.27 Last Calib.: 2012.10.27
 Start Time: 13:28:30 End Time: 19:06:30 Time On Btm: 2012.10.27 @ 14:55:20
 Time Off Btm: 2012.10.27 @ 17:31:30

TEST COMMENT: IF-Weak building blow . BOB in 19 minutes 45 seconds.
 IS-No Return.
 FF-Weak building blow . BOB in 30 minutes.
 FS-No Return.



PRESSURE SUMMARY

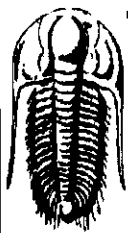
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1653.00	92.73	Initial Hydro-static
1	27.36	92.24	Open To Flow (1)
32	87.51	106.58	Shut-In(1)
77	869.54	104.95	End Shut-In(1)
78	98.31	104.90	Open To Flow (2)
108	139.76	108.31	Shut-In(2)
155	814.05	107.05	End Shut-In(2)
157	1606.34	107.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
270.00	80%Water/20%Mud	3.51

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48602

DST#: 2

ATTN: Al Downing

Test Start: 2012.10.27 @ 13:18:30

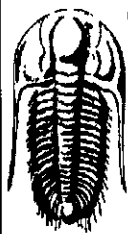
Tool Information

Drill Pipe:	Length: 3322.00 ft	Diameter: 3.80 inches	Volume: 46.60 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 10000.00 lb
			<u>Total Volume: 46.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3354.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	52.00 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			3335.00	
Shut In Tool	5.00			3340.00	
Hydraulic tool	5.00			3345.00	
Packer	5.00			3350.00	20.00 Bottom Of Top Packer
Packer	4.00			3354.00	
Stubb	1.00			3355.00	
Perforations	2.00			3357.00	
Recorder	0.00	8354	Inside	3357.00	
Recorder	0.00	8520	Outside	3357.00	
Perforations	26.00			3383.00	
Bullnose	3.00			3386.00	32.00 Bottom Packers & Anchor

Total Tool Length: 52.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48602

DST#: 2

ATTN: Al Dow ning

Test Start: 2012.10.27 @ 13:18:30

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:

13500 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: 0.81 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
270.00	80%Water/20%Mud	3.514

Total Length: 270.00 ft

Total Volume: 3.514 bbl

Num Fluid Samples: 0

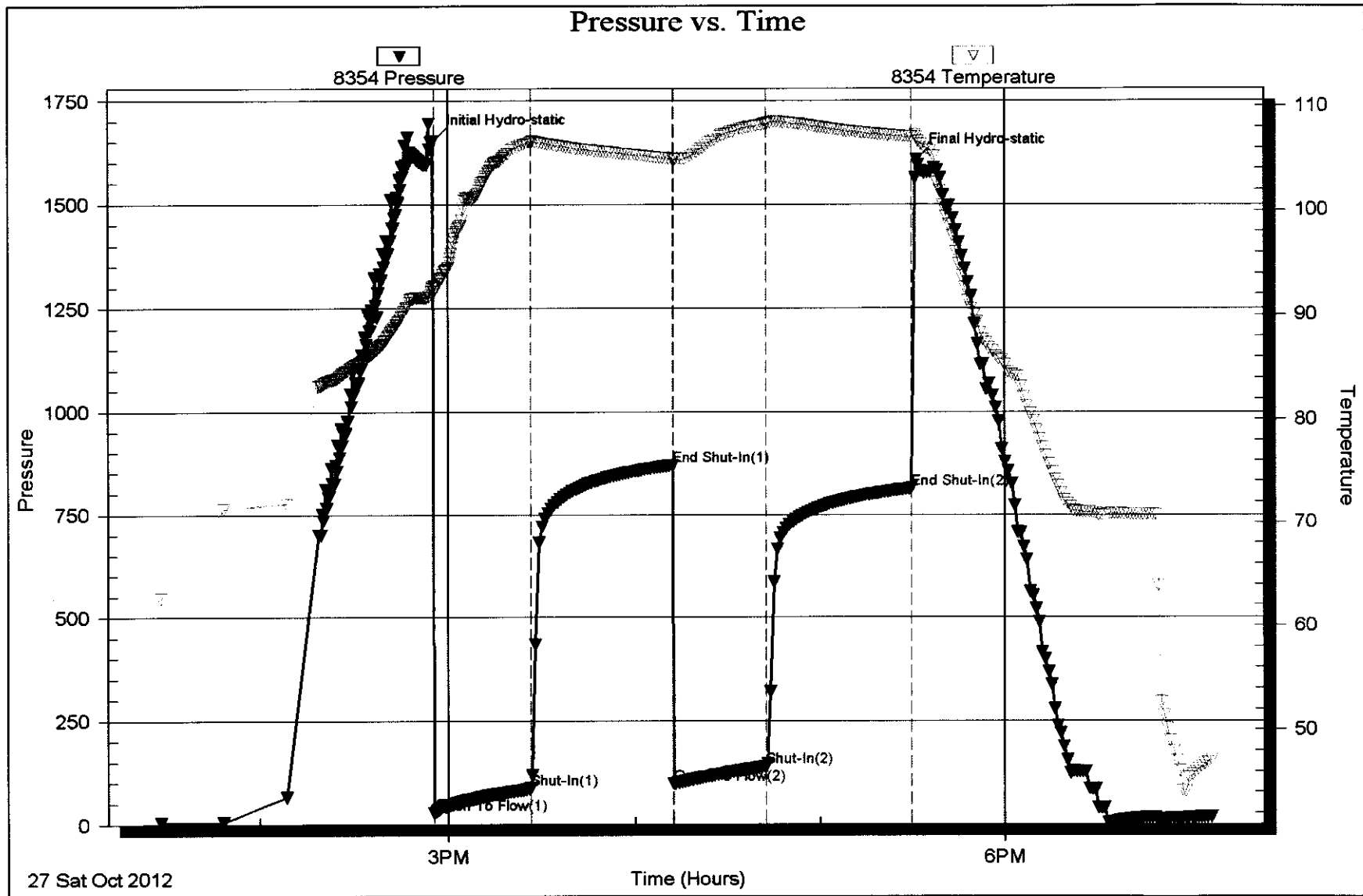
Num Gas Bombs: 0

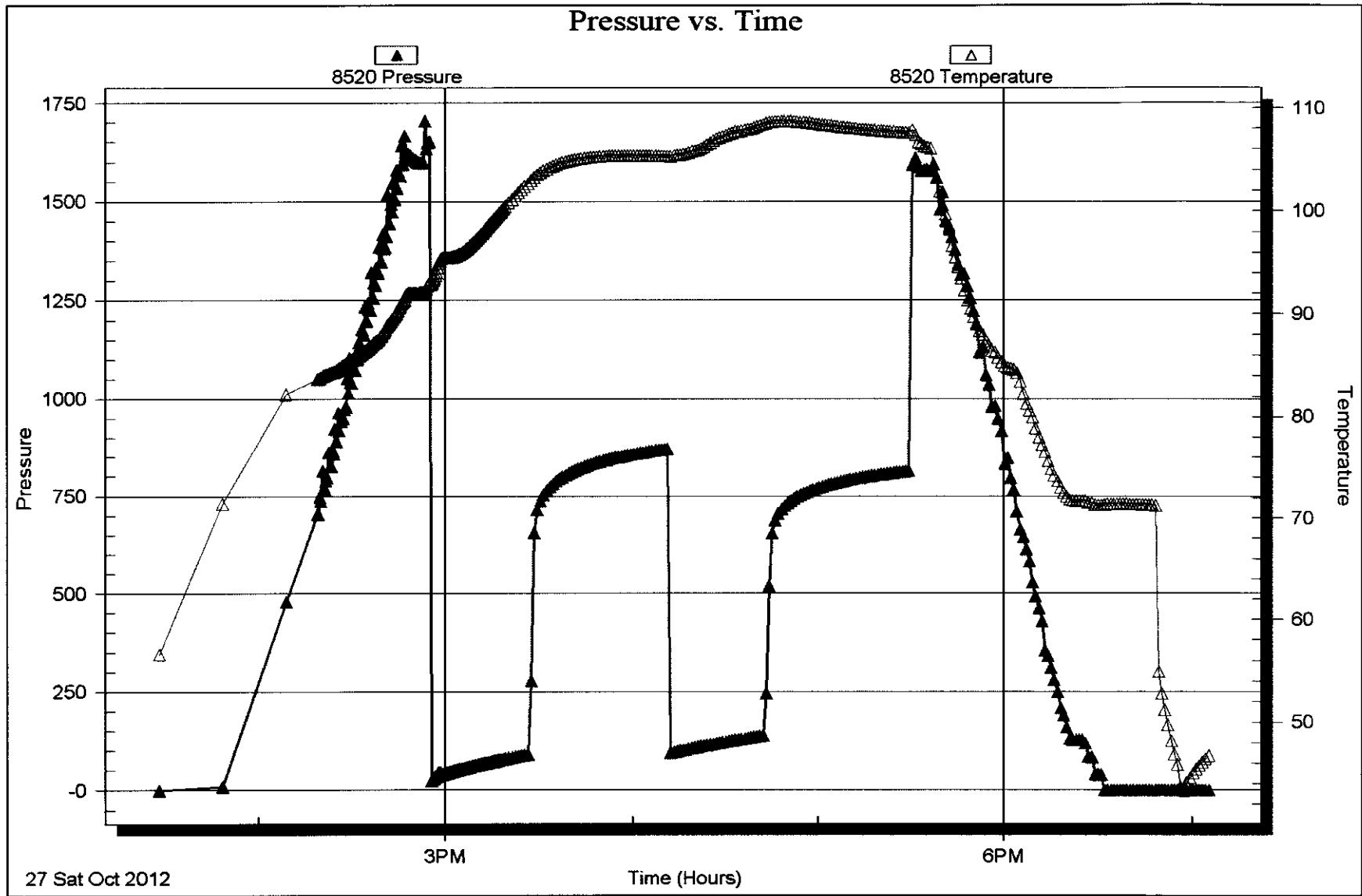
Serial #:

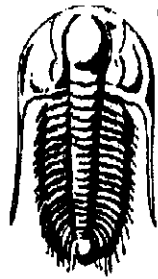
Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Al Downing

Holland #1-24

24-16s-17w Rush,KS

Start Date: 2012.10.28 @ 09:46:30

End Date: 2012.10.28 @ 15:16:30

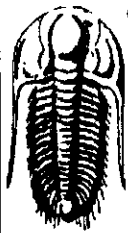
Job Ticket #: 48603 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.01 @ 14:23:35



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48603

DST#: 3

ATTN: Al Dow ning

Test Start: 2012.10.28 @ 09:46:30

GENERAL INFORMATION:

Formation: **LKC "K&L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:31:30

Time Test Ended: 15:16:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3485.00 ft (KB) To 3525.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3525.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8354 Inside

Press@RunDepth: 19.62 psig @ 3488.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.28

End Date: 2012.10.28

Last Calib.: 2012.10.28

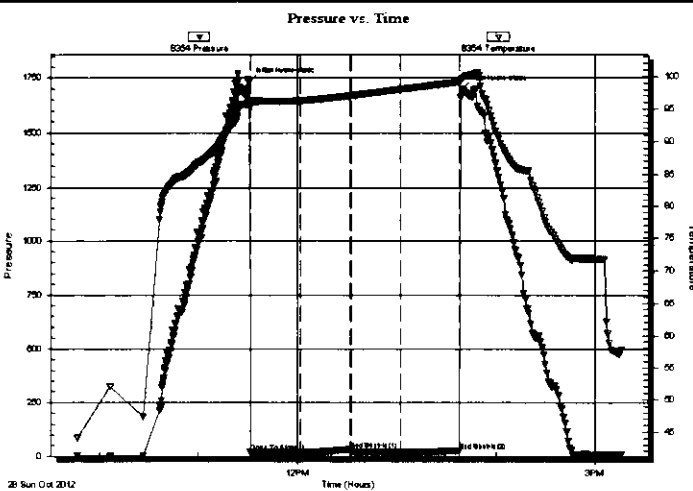
Start Time: 09:46:30

End Time: 15:16:30

Time On Btm: 2012.10.28 @ 11:31:20

Time Off Btm: 2012.10.28 @ 13:40:00

TEST COMMENT: IF-Weak surface blow . Surging @ 25 minutes.
ISI-No Return.
FF-Weak surface blow . Surging @ 21 minutes.
FSI-No Return.



PRESSURE SUMMARY

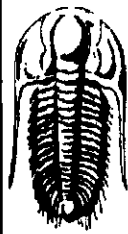
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1735.66	96.30	Initial Hydro-static
1	18.80	95.21	Open To Flow (1)
31	19.55	96.25	Shut-in(1)
62	32.07	97.02	End Shut-in(1)
62	21.55	97.03	Open To Flow (2)
92	19.62	97.98	Shut-in(2)
127	25.69	99.12	End Shut-in(2)
129	1699.93	99.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	10% Oil/90% Mud	0.01
1.00	100% Oil	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48603

DST#: 3

ATTN: Al Dow ning

Test Start: 2012.10.28 @ 09:46:30

GENERAL INFORMATION:

Formation: **LKC "K&L"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:31:30

Time Test Ended: 15:16:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3485.00 ft (KB) To 3525.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3525.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8520

Outside

Press@RunDepth: psig @ 3488.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.28

End Date:

2012.10.28

Last Calib.:

2012.10.28

Start Time: 09:46:45

End Time:

15:16:15

Time On Btm:

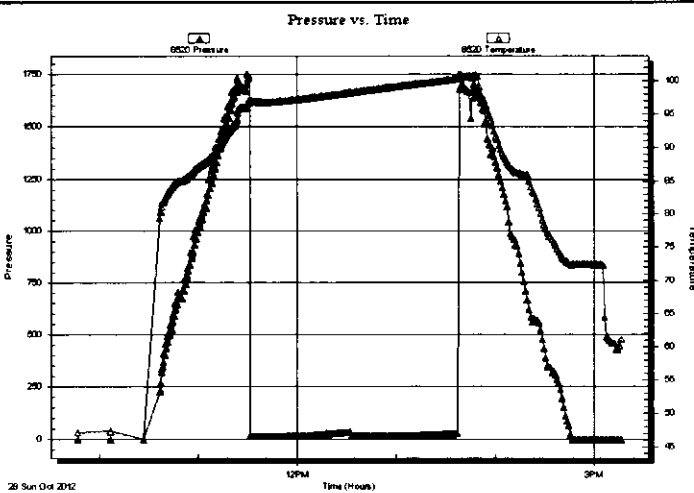
Time Off Btm:

TEST COMMENT: IF-Weak surface blow . Surging @ 25 minutes.

ISI-No Return.

FF-Weak surface blow . Surging @ 21 minutes.

FSI-No Return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
3.00	10% Oil/90% Mud	0.01
1.00	100% Oil	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., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48603

DST#: 3

ATTN: Al Downing

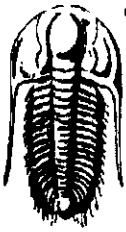
Test Start: 2012.10.28 @ 09:46:30

Tool Information

Drill Pipe:	Length: 3446.00 ft	Diameter: 3.80 inches	Volume: 48.34 bbl	Tool Weight:	2000.00 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:	5000.00 lb
		Total Volume: 48.49 bbl		Tool Chased	0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3485.00 ft			Final	48000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	60.00 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			3466.00	
Shut In Tool	5.00			3471.00	
Hydraulic tool	5.00			3476.00	
Packer	5.00			3481.00	20.00 Bottom Of Top Packer
Packer	4.00			3485.00	
Stubb	1.00			3486.00	
Perforations	2.00			3488.00	
Recorder	0.00	8354	Inside	3488.00	
Recorder	0.00	8520	Outside	3488.00	
Perforations	34.00			3522.00	
Bullnose	3.00			3525.00	40.00 Bottom Packers & Anchor

Total Tool Length: 60.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48603

DST#: 3

ATTN: Al Dow ning

Test Start: 2012.10.28 @ 09:46:30

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 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
3.00	10%Oil/90%Mud	0.015
1.00	100%Oil	0.005

Total Length: 4.00 ft Total Volume: 0.020 bbl

Num Fluid Samples: 0

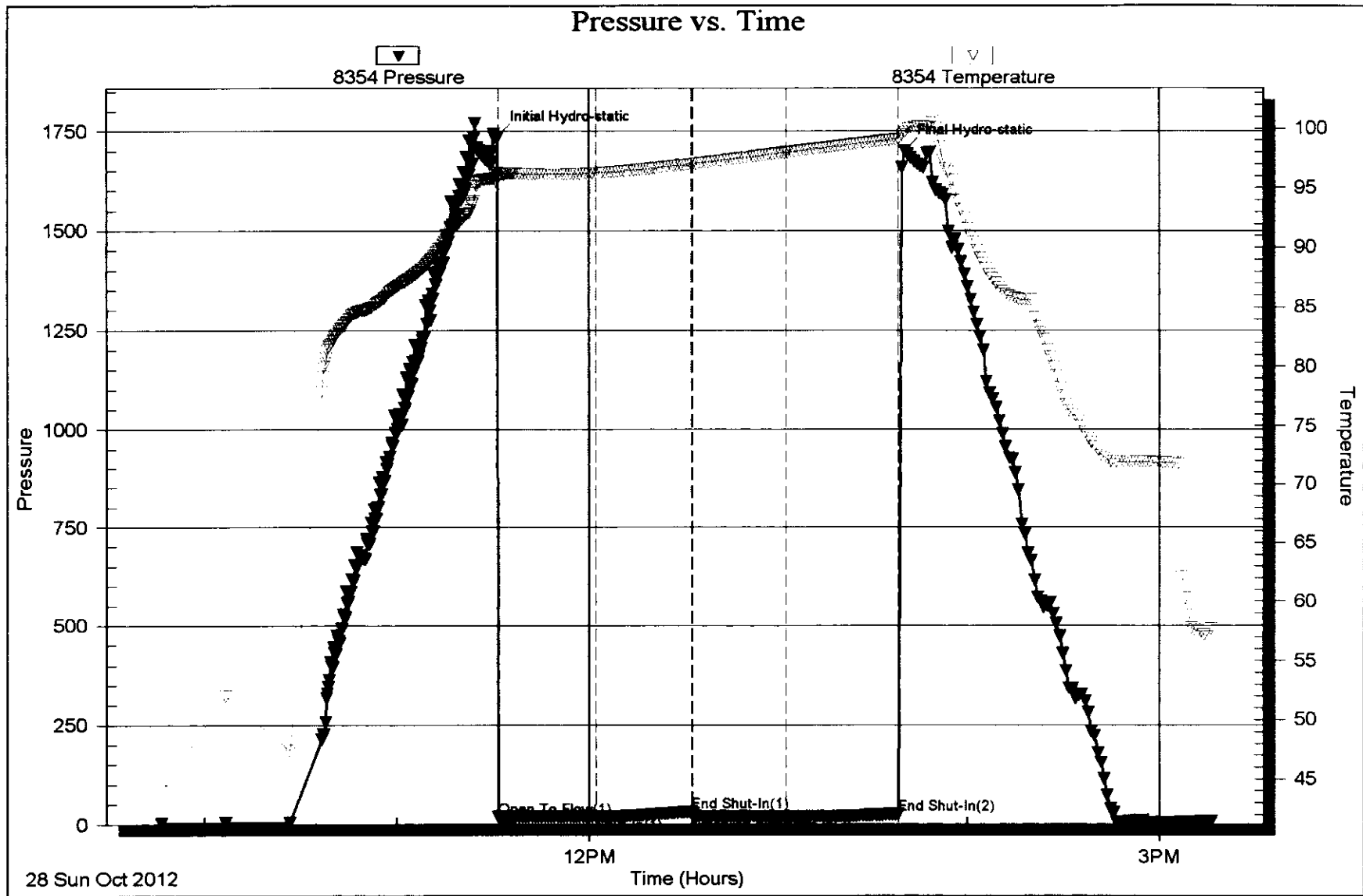
Num Gas Bombs: 0

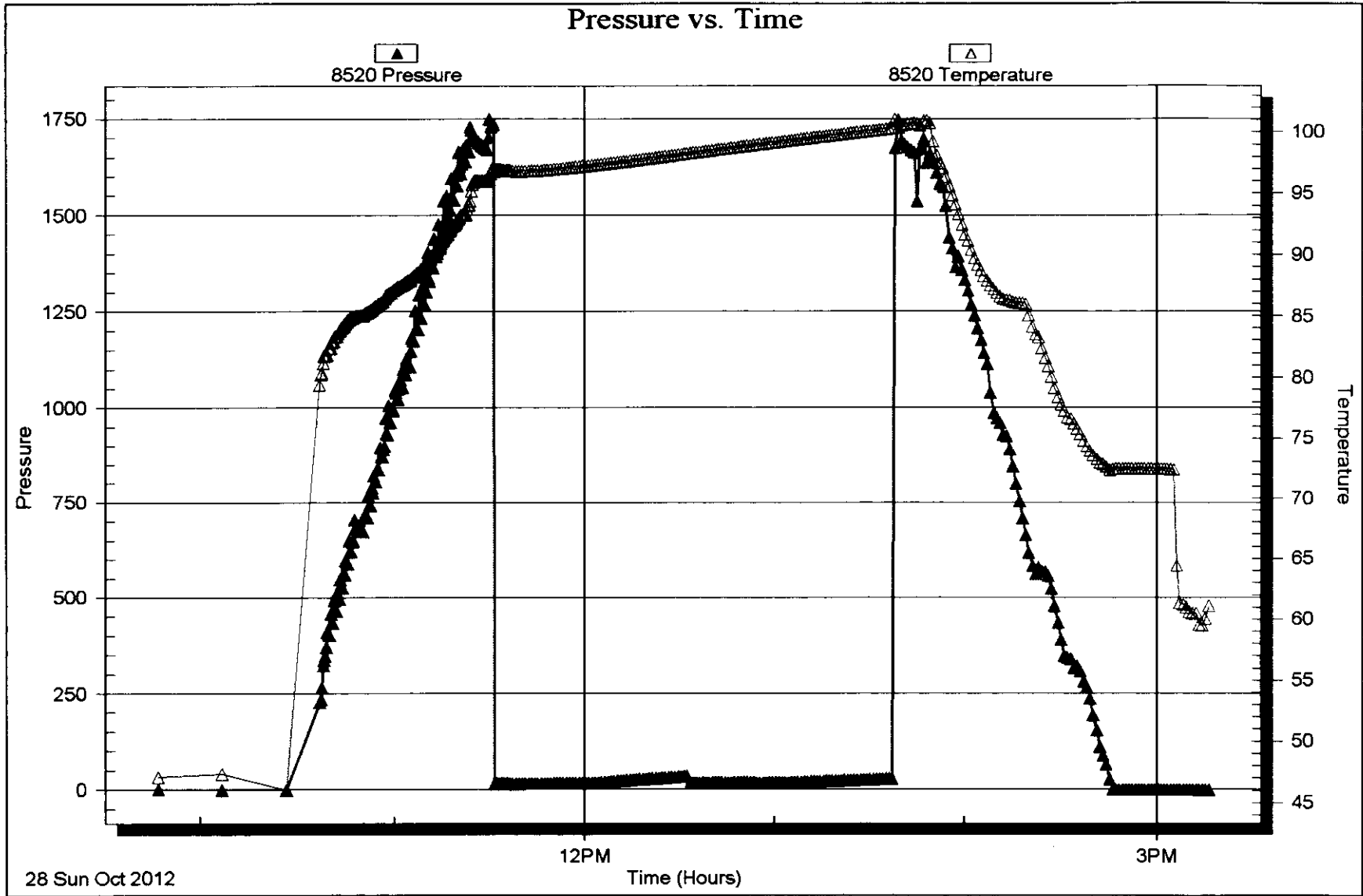
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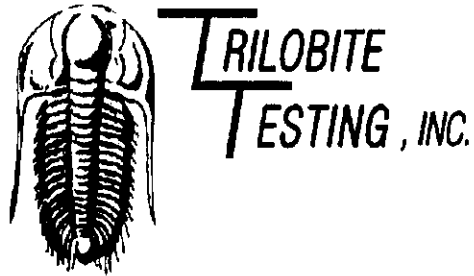
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Al Downing

Holland #1-24

24-16s-17w Rush,KS

Start Date: 2012.10.28 @ 21:53:30

End Date: 2012.10.29 @ 04:27:00

Job Ticket #: 48604 DST #: 4

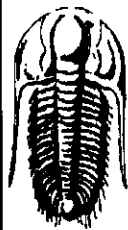
Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.11.01 @ 14:22:42

Downing-Nelson Oil Co., Inc. 24-16s-17w Rush,KS Holland #1-24 DST # 4 Arbuckle 2012.10.28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48604

DST#: 4

ATTN: Al Dow ning

Test Start: 2012.10.28 @ 21:53:30

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:30:40

Time Test Ended: 04:27:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3520.00 ft (KB) To 3560.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3560.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8354

Inside

Press@RunDepth: 1057.84 psig @ 3523.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.28

End Date: 2012.10.29

Last Calib.: 2012.10.29

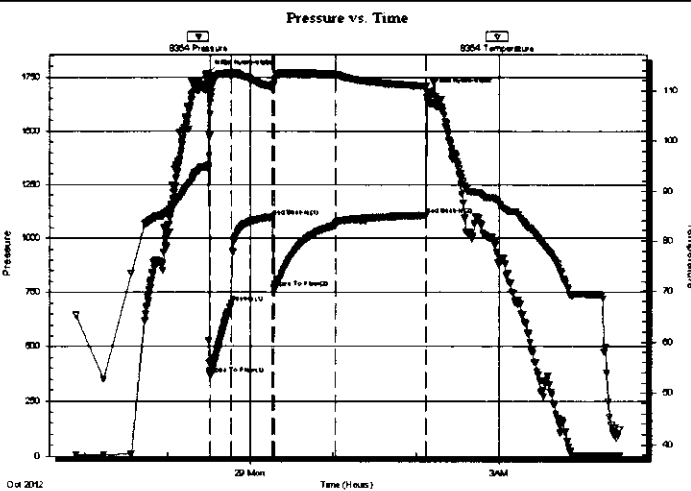
Start Time: 21:53:30

End Time: 04:27:00

Time On Btm: 2012.10.28 @ 23:29:30

Time Off Btm: 2012.10.29 @ 02:08:30

TEST COMMENT: IF-Strong building blow . BOB in 30 seconds.
IS-Return @ 1 minute. Built to 1 & 1/2 inches.
FF-Strong building blow . BOB in 30 seconds.
FSI-No Return.



PRESSURE SUMMARY

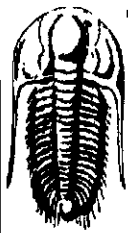
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1766.75	95.11	Initial Hydro-static
2	370.61	105.28	Open To Flow (1)
17	698.71	113.43	Shut-In(1)
47	1095.36	110.55	End Shut-In(1)
48	768.66	111.30	Open To Flow (2)
92	1057.84	113.19	Shut-In(2)
158	1104.49	110.82	End Shut-In(2)
159	1682.10	107.92	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2079.00	95% Water/5% Mud	28.89
504.00	90% Water/10% Mud	7.07

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48604

DST#: 4

ATTN: Al Dow ning

Test Start: 2012.10.28 @ 21:53:30

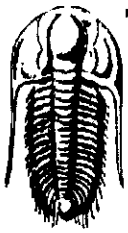
Tool Information

Drill Pipe:	Length: 3477.00 ft	Diameter: 3.80 inches	Volume: 48.77 bbl	Tool Weight: 2000.00 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: 5000.00 lb
			<u>Total Volume: 48.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3520.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	40.00 ft			
Tool Length:	60.00 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			3501.00	
Shut In Tool	5.00			3506.00	
Hydraulic tool	5.00			3511.00	
Packer	5.00			3516.00	20.00 Bottom Of Top Packer
Packer	4.00			3520.00	
Stubb	1.00			3521.00	
Perforations	2.00			3523.00	
Recorder	0.00	8354	Inside	3523.00	
Recorder	0.00	8520	Outside	3523.00	
Perforations	34.00			3557.00	
Bullnose	3.00			3560.00	40.00 Bottom Packers & Anchor

Total Tool Length: 60.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48604

DST#: 4

ATTN: Al Downing

Test Start: 2012.10.28 @ 21:53:30

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:

20000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.17 in³

Gas Cushion Type:

Resistivity: 0.56 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2079.00	95%Water/5%Mud	28.890
504.00	90%Water/10%Mud	7.070

Total Length: 2583.00 ft

Total Volume: 35.960 bbl

Num Fluid Samples: 0

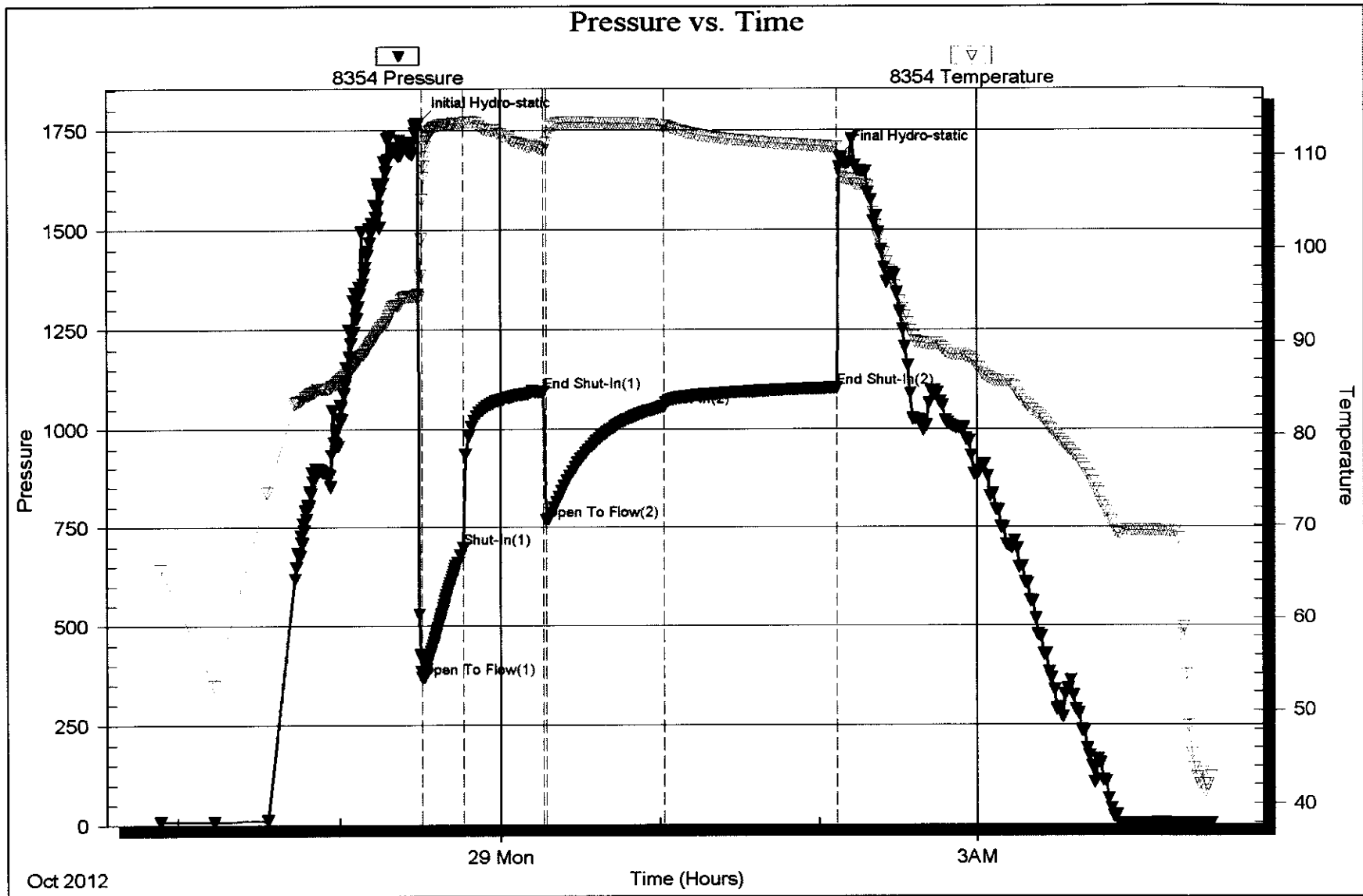
Num Gas Bombs: 0

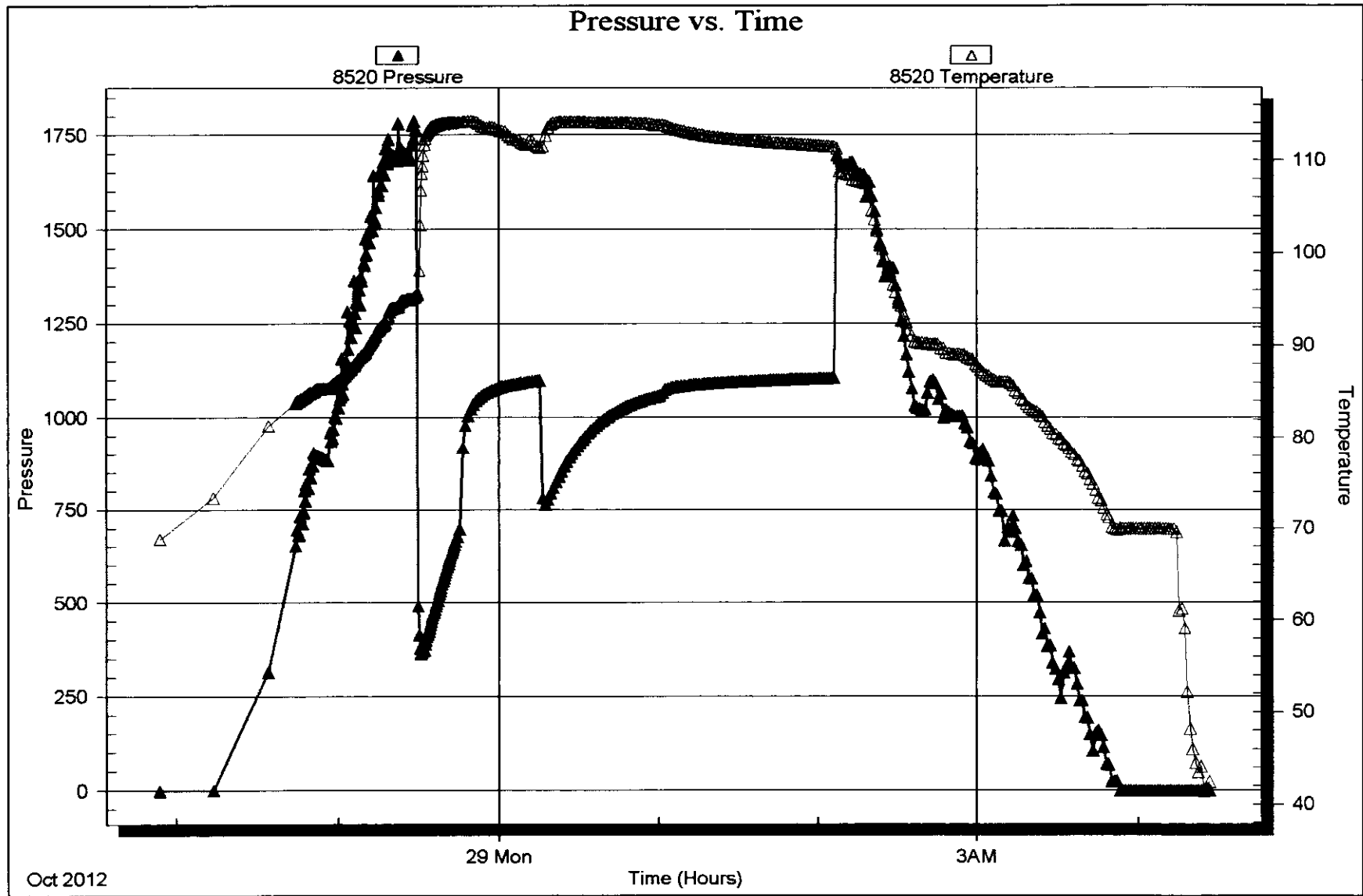
Serial #:

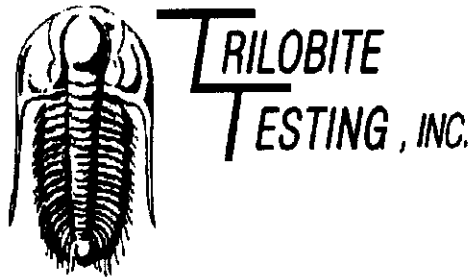
Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Al Downing

Holland #1-24

24-16s-17w Rush,KS

Start Date: 2012.10.29 @ 18:12:15

End Date: 2012.10.29 @ 23:54:45

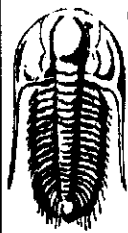
Job Ticket #: 48605 DST #: 5

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PO Box 362 Hays, KS 67601

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

Printed: 2012.11.01 @ 14:21:07



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48605

DST#: 5

ATTN: Al Dow ning

Test Start: 2012.10.29 @ 18:12:15

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:58:35

Time Test Ended: 23:54:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Dustin Rash

Unit No: 38

Interval: **3586.00 ft (KB) To 3593.00 ft (KB) (TVD)**

Reference Elevations: 2009.00 ft (KB)

Total Depth: 3660.00 ft (KB) (TVD)

2004.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8354

Inside

Press@RunDepth: 475.29 psig @ 3587.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.29

End Date: 2012.10.29

Last Calib.: 2012.10.29

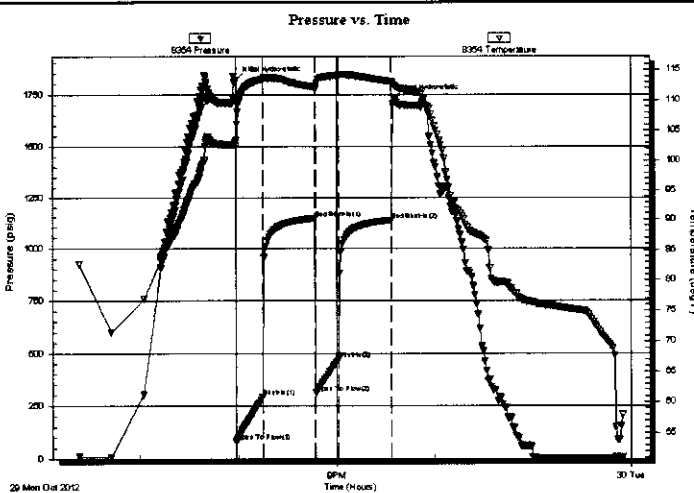
Start Time: 18:22:15

End Time: 23:54:45

Time On Btm: 2012.10.29 @ 19:58:25

Time Off Btm: 2012.10.29 @ 21:35:15

TEST COMMENT: IF-Strong building blow . BOB in 1 minute 45 seconds.
IS-Return @ 1 minute. Built to 1&1/2 inches.
FF-Strong building blow . BOB in 1 minute 45 seconds.
FSI-No Return.



PRESSURE SUMMARY

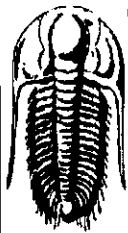
Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1816.82	103.19	Initial Hydro-static
1	81.87	102.39	Open To Flow (1)
17	289.47	113.46	Shut-In(1)
49	1143.48	112.19	End Shut-In(1)
49	311.13	111.99	Open To Flow (2)
63	475.29	114.10	Shut-In(2)
96	1135.02	113.06	End Shut-In(2)
97	1730.03	112.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
960.00	95%Water/5%Mud	13.19

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48605

DST#: 5

ATTN: Al Dow ning

Test Start: 2012.10.29 @ 18:12:15

Tool Information

Drill Pipe:	Length: 3543.00 ft	Diameter: 3.80 inches	Volume: 49.70 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 5000.00 lb
			<u>Total Volume: 49.85 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3586.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	75.00 ft			
Tool Length:	95.00 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			3567.00	
Shut In Tool	5.00			3572.00	
Hydraulic tool	5.00			3577.00	
Packer	5.00			3582.00	20.00 Bottom Of Top Packer
Packer	4.00			3586.00	
Stubb	1.00			3587.00	
Recorder	0.00	8354	Inside	3587.00	
Recorder	0.00	8520	Outside	3587.00	
Perforations	3.00			3590.00	
Blank Off Sub	1.00			3591.00	75.00 Tool Interval
Packer	4.00			3595.00	
Stubb	1.00			3596.00	
Change Over Sub	1.00			3597.00	
Recorder	0.00	8653	Below	3597.00	
Drill Pipe	31.00			3628.00	
Change Over Sub	1.00			3629.00	
Perforations	29.00			3658.00	
Bullnose	3.00			3661.00	1000094.00 Bottom Packers & Anchor

Total Tool Length: 95.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

24-16s-17w Rush,KS

PO Box 1019
Hays, KS 67601

Holland #1-24

Job Ticket: 48605

DST#: 5

ATTN: Al Dow ning

Test Start: 2012.10.29 @ 18:12:15

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:

22000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.18 in³

Gas Cushion Type:

Resistivity: 0.45 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
960.00	95%Water/5%Mud	13.193

Total Length: 960.00 ft

Total Volume: 13.193 bbl

Num Fluid Samples: 0

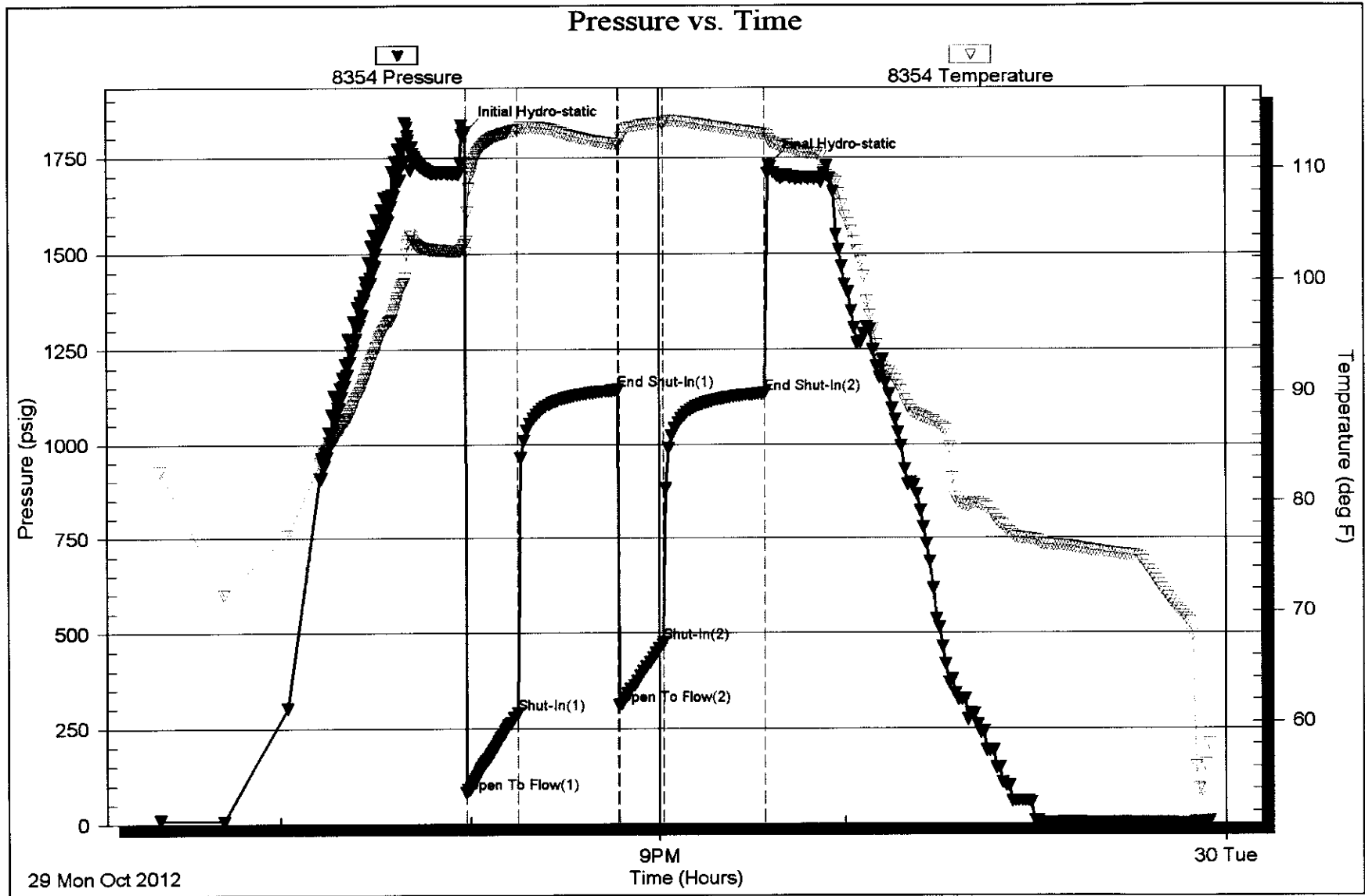
Num Gas Bombs: 0

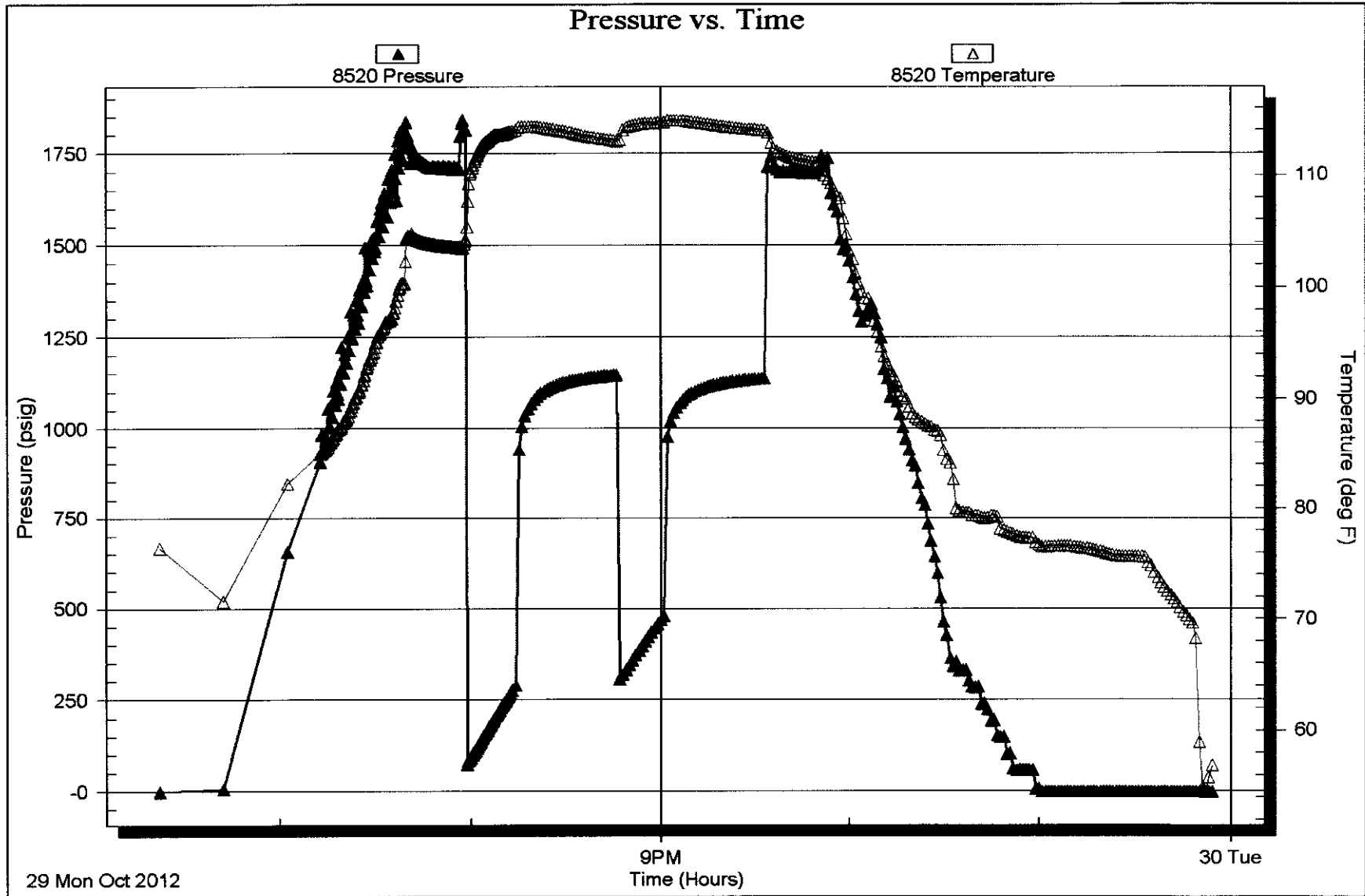
Serial #:

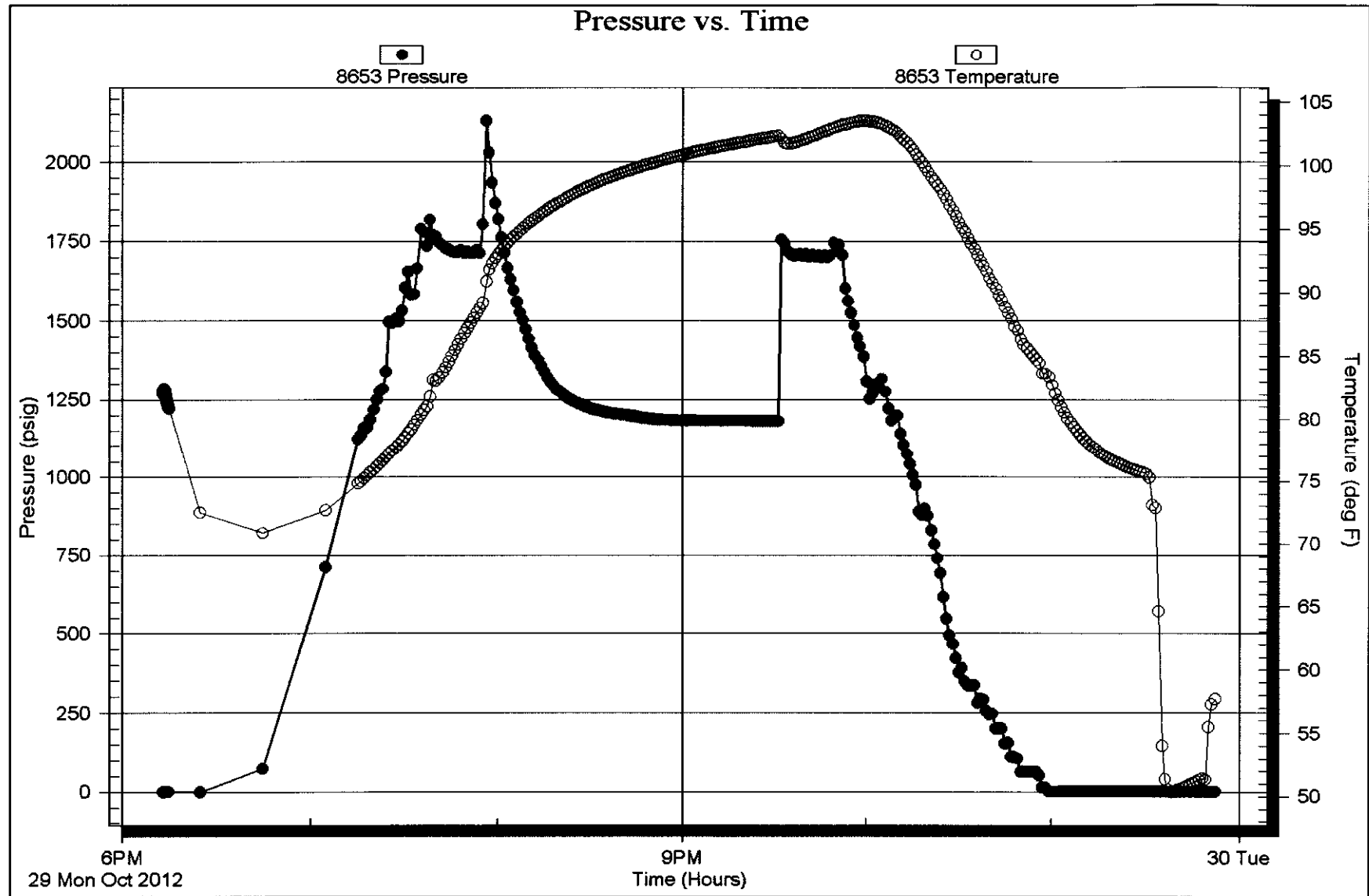
Laboratory Name:

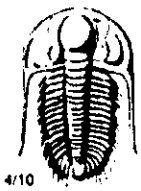
Laboratory Location:

Recovery Comments:









TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 4860

Well Name & No. Holland #1-24 Test No. 1 Date 10-26-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2009 KB 2004 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery 4
 Location: Sec. 24 Twp. 16S Rge. 17W Co. Rush State KS

Interval Tested 3312-3335 Zone Tested LKC "C"
 Anchor Length 23' Drill Pipe Run 3290 Mud Wt. 8.8
 Top Packer Depth 3307 Drill Collars Run 30.47 Vis 5.5
 Bottom Packer Depth 3312 Wt. Pipe Run 0 WL 8.8
 Total Depth 3335 Chlorides 3000 ppm System LCM 2#

Blow Description IF - Weak blow, Built to 3 inches & died to surface, Slid 12'-15'
ISF - No Return,
FF - No Blow, Flushed tool. Weak surface blow, Died @ 12 minutes,
FBI - No Return,

Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>Mud</u>			<u>100</u>	

Rec Total 70 BHT 99 Gravity ✓ API RW @ °F Chlorides ppm

(A) Initial Hydrostatic <u>1611</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>2100</u>
(B) First Initial Flow <u>54</u>	<input type="checkbox"/> Jars	T-Started <u>2230</u>
(C) First Final Flow <u>51</u>	<input type="checkbox"/> Safety Joint	T-Open <u>0006</u>
(D) Initial Shut-In <u>864</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>0210</u>
(E) Second Initial Flow <u>52</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0345</u>
(F) Second Final Flow <u>51</u>	<input checked="" type="checkbox"/> Mileage <u>25X2</u> 77.50	Comments <u>Batt-2203</u>
(G) Final Shut-In <u>854</u>	<input type="checkbox"/> Sampler	<u>Slid 12'-15'</u>
(H) Final Hydrostatic <u>1600</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1227.50</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1227.50</u>	<u>D. Rash</u>

Approved By _____ Our Representative D. Rash
 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.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48602

Well Name & No. Holland #1-24 Test No. 2 Date 10-27-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2009 KB 2004 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery 4
 Location: Sec. 24 Twp. 16S Rge. 17W Co. Rush State KS

Interval Tested 3354-3386 Zone Tested LKC "E-F"
 Anchor Length 32' Drill Pipe Run 3322 Mud Wt. 8.8
 Top Packer Depth 3349 Drill Collars Run 30.47 Vis 51
 Bottom Packer Depth 3354 Wt. Pipe Run 0 WL 8.8
 Total Depth 3386 Chlorides 4000 ppm System LCM 2#

Blow Description IF - Weak building blow, BOB in 19 minutes 45 seconds.
IST - No Return.
FF - Weak building blow, BOB in 30 minutes.
FSE - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>270</u>	<u>Muddy water</u>		<u>80</u>	<u>20</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

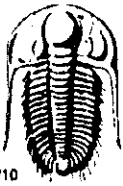
Rec Total 270 BHT 108 Gravity API RW .814 @ 42 °F Chlorides 13500 ppm

(A) Initial Hydrostatic 1653 Test T-On Location 1245
 (B) First Initial Flow 27 Jars T-Started 1330
 (C) First Final Flow 88 Safety Joint T-Open 1455
 (D) Initial Shut-In 870 Circ Sub T-Pulled 1730
 (E) Second Initial Flow 98 Hourly Standby T-Out 1900
 (F) Second Final Flow 140 Mileage 25X2 77.50 Comments BATT-1318
 (G) Final Shut-In 814 Sampler
 (H) Final Hydrostatic 1606 Straddle Ruined Shale Packer

Initial Open 30 Shale Packer Ruined Packer
 Initial Shut-In 45 Extra Packer Extra Copies
 Final Flow 30 Extra Recorder Sub Total 0
 Final Shut-In 45 Day Standby Total 1227.50
 Accessibility MP/DST Disc't
 Sub Total 1227.50

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48603

Well Name & No. Holland #1-24 Test No. 3 Date 10-28-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2009 KB 2009 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery 4
 Location: Sec. 24 Twp. 16S Rge. 17W Co. Rush State KS

Interval Tested 3485-3525 Zone Tested LKC "K-L"
 Anchor Length 40' Drill Pipe Run 3446 Mud Wt. 8.8
 Top Packer Depth 3480 Drill Collars Run 30.47 Vis 51
 Bottom Packer Depth ~~3485~~ 3485 Wt. Pipe Run -0 WL 8.8
 Total Depth 3525 Chlorides 4000 ppm System LCM 2#

Blow Description IF-Weak surface blow, Surging @ 25 minutes,
ISI- No Return.
FF- Weak surface blow, Surging @ 21 minutes.
FBI- No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>Oil</u>	<u>100</u>			
<u>3</u>	<u>SOCM</u>	<u>10</u>		<u>90</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

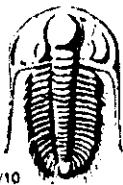
Rec Total 4 BHT 100 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1736 Test T-On Location 0845
 (B) First Initial Flow 19 Jars T-Started 0945
 (C) First Final Flow 20 Safety Joint T-Open 1132
 (D) Initial Shut-In 32 Circ Sub T-Pulled 1335
 (E) Second Initial Flow 22 Hourly Standby T-Out 1515
 (F) Second Final Flow 20 Mileage 25X2 77.50 Comments BHT-0936
 (G) Final Shut-In 26 Sampler _____
 (H) Final Hydrostatic 1700 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 30 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1227.50
 Final Shut-In 30 Accessibility _____ MP/DST Disc't _____

Sub Total 1227.50
 Approved By _____ Our Representative D. Rush

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



TRIOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 4860.

Well Name & No. Holland #1-24 Test No. 4 Date 10-28-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2009 KB 2004 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. Al Downing Rig Discovery 4
 Location: Sec. 24 Twp. 18S Rge. 17W Co. Rush State KS

Interval Tested 3520-3560 Zone Tested Arbuckle
 Anchor Length 40' Drill Pipe Run 3477 Mud Wt. 9.3
 Top Packer Depth 3515 Drill Collars Run 30,47 Vis 44
 Bottom Packer Depth 3520 Wt. Pipe Run 0 WL 10.2
 Total Depth 3560 Chlorides 4000 ppm System LCM 2#

Blow Description FF- Strong building blow, BOB in 30 seconds.
F&I- Return @ 1 minute. Built to 1 1/2 inches.
FF- Strong building blow, BOB in 30 seconds.
F&I- No Return.

Rec	Feet of	%gas	%oil	%water	%mud
504	Muddy water			90%	10%
2079	Muddy water			95%	5%

Rec Total 2583 BHT 113 Gravity ✓ API RW 562 @ 41 °F Chlorides 20,000 ppm
 (A) Initial Hydrostatic 1767 Test T-On Location 2130
 (B) First Initial Flow 371 Jars T-Started 2200
 (C) First Final Flow 699 Safety Joint T-Open 2330
 (D) Initial Shut-In 1095 Circ Sub T-Pulled 0205
 (E) Second Initial Flow 769 Hourly Standby T-Out 0430
 (F) Second Final Flow 1058 Mileage 25X2 77.50 Comments: BET-2143
 (G) Final Shut-In 1104 Sampler
 (H) Final Hydrostatic 1682 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies

Initial Open 15
 Initial Shut-In 30
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 1227.50
 MP/DST Disc't _____
 Sub Total 1227.50

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48601

Well Name & No. Holland #1-24 Test No. 5 Date 10-29-12
 Company Downing-Nelson Oil Co., Inc. Elevation 2009 KB 2004 GL
 Address P.O. Box 1019 Hays, KS 67601
 Co. Rep / Geo. AI Downing Rig Discovery 4
 Location: Sec. 24 Twp. 16S Rge. 17W Co. Rush State KS

Interval Tested 3586-3593 Zone Tested Arbuckle
 Anchor Length 7' 66' TP Drill Pipe Run 3543 Mud Wt. 9.3
 Top Packer Depth 3581 Drill Collars Run 30.47 Vis 44
 Bottom Packer Depth 3586 Wt. Pipe Run 0 WL 10.2
 Total Depth 3659 Chlorides 4000 ppm System LCM 2#

Blow Description IF - Spring building blow. BOB in 1 minute 45 seconds.
ISI - Return @ 1 minute. Built to 1 1/2 inches.
FF - Spring building blow. BOB in 1 minute 45 seconds.
FBI - No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>960</u>	<u>Muddy water</u>			<u>95</u>	<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 960 BHT 114 Gravity API RW 454 @ 48 °F Chlorides 22000 ppm
 (A) Initial Hydrostatic 1817 Test T-On Location 1715
 (B) First Initial Flow 82 Jars T-Started 1815
 (C) First Final Flow 289 Safety Joint T-Open 1959
 (D) Initial Shut-In 1143 Circ Sub T-Pulled 2130
 (E) Second Initial Flow 311 Hourly Standby T-Out 2400
 (F) Second Final Flow 475 Mileage 25X2 77.50 Comments BHT-1812
 (G) Final Shut-In 1135 Sampler
 (H) Final Hydrostatic 1730 Straddle 600
 Ruined Shale Packer
 Ruined Packer
 Extra Copies

Initial Open 15
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 30
 Sub Total 1827.50
 Total 1827.50
 MP/DST Disc't D. Rush

Approved By _____ Our Representative _____
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QUALITY OILWELL CEMENTING, INC.

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

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

No. 6131

Date	10-23-12	Sec.	24	Twp.	16	Range	17	County	Rush	State	KS	On Location	Finish	7:30 p.m.	
Location								Corbett 1E 1/2 S E into							

Lease	Holland	Well No.	24	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor	D. Spawey #4				
Type Job	Surface				
Hole Size	12 1/4	T.D.	1132	Charge To	Downing/Wilson
Csg.	8 5/8	Depth	1127	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.	37	Shoe Joint	37	Cement Amount Ordered	425 cum 30/100 20/100
Meas Line		Displace	70 BBL		

EQUIPMENT

Pumptrk	9	No.	Cement Helper	Cody	Common	425
Bulktrk		No.	Driver	Cody	Poz. Mix	
Bulktrk	4	No.	Driver	Louise	Gel.	8
			Driver		Calcium	15

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

8 5/8 on bottom Best Circulation
Mix 425 SKV Displace Plug
Plug landed 800ft Cement
Circulated!

FLOAT EQUIPMENT

Guide Shoe	Sand
Centralizer	Handling 448
Baskets	Mileage
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	Long Surface	Tax		
Mileage	26	Discount		
Signature Mike Swallen		Total Charge		

ALLIED OIL & GAS SERVICES, LLC 059071

REMIT TO P.O. BOX 93999
SOUTH LAKE, TEXAS 76092

SERVICE POINT: Heartland Pk

DATE <u>10-30-12</u>	SEC <u>24</u>	TWP <u>16</u>	RANGE <u>17</u>	10-29-12 CALLED OUT <u>11:30 PM</u>	10-30-12 ON LOCATION <u>1:30 AM</u>	JOB START <u>2:14 AM</u>	JOB FINISH <u>6:30 AM</u>
LEASE <u>Holland</u>	WELL # <u>1-24</u>	LOCATION <u>bonetta East 1/2 South</u>			COUNTY <u>Hugh</u>	STATE <u>TX</u>	
OLD OR NEW (Circle one) <u>NEW</u>				EOR/water		1.03	

CONTRACTOR Quincy #4

TYPE OF JOB potting plug

HOLE SIZE 7 7/8" T.D. 3160'

CASING SIZE _____ DEPTH _____

TUBING SIZE _____ DEPTH _____

DRILL PIPE 4 1/2" DEPTH 3530'

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____

MEAS. LINE _____ SHOE JOINT _____

CEMENT LEFT IN CSG. _____

PERFS. _____

DISPLACEMENT _____

OWNER Some

CEMENT AMOUNT ORDERED 210 lbs 60/40 470/AD

1/4" floored / oh

COMMON	<u>136</u>	@ <u>17.90</u>	<u>2,255.40</u>
POZMIX	<u>84</u>	@ <u>9.35</u>	<u>785.40</u>
GEL	<u>7</u>	@ <u>23.40</u>	<u>163.80</u>
CHLORIDE		@	
ASC		@	
<u>flashed</u>	<u>53</u>	@ <u>2.97</u>	<u>157.41</u>
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>325.19</u>	@ <u>2.48</u>	<u>805.47</u>
MILEAGE	<u>9.44 35x</u>	@ <u>2.60</u>	<u>245.44</u>
TOTAL			<u>4,775.44</u>

EQUIPMENT

PUMP TRUCK CEMENTER Tom O'Kean #1

398 HELPER Jack I. Saxe #2

BULK TRUCK DRIVER Jack M. Saxe #2

341

BULK TRUCK DRIVER _____

REMARKS:

1st plug - 50 lbs at 3530'

2nd plug - 50 lbs at 1160'

3rd plug - 40 lbs at 490'

4th plug - 20 lbs at 60'

30 lbs in Benthole

20 lbs in Mounthole

T. Saxe

CHARGE TO: Dawning - Nelson Oil Co.

STREET _____

CITY _____ STATE _____ ZIP _____

329

SERVICE

DEPTH OF JOB	<u>3530'</u>		
PUMP TRUCK CHARGE		<u>2600.47</u>	
EXTRA FOOTAGE		@	
MILEAGE	<u>Hum 35</u>	@ <u>7.70</u>	<u>269.50</u>
MANIFOLD	<u>Hum 35</u>	@ <u>4.40</u>	<u>154.00</u>
		@	
TOTAL			<u>3,023.97</u>

PLUG & FLOAT EQUIPMENT

	@		
	@		
	@		
	@		
	@		
TOTAL			
SALES TAX (If Any)		<u>491.39</u>	
TOTAL CHARGES		<u>7,799.85</u>	
DISCOUNT	<u>25%</u>	<u>1,949.96</u>	
IF PAID IN 30 DAYS			
TOTAL			<u>5,849.89</u>

To: Allied Oil & Gas Services, LLC.

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

PRINTED NAME _____

SIGNATURE X. M. Saxe