



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1244129  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1244129

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

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

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

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

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

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

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

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

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

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	B & D Vap 1-10
Doc ID	1244129

All Electric Logs Run

Sonic
Micro
Dual Induction
Compensated Density Neutron



## DRILL STEM TEST REPORT

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

PO Box 1019  
Hays, KS 67601

ATTN: Marc Downing

### **B & D Vap #1-10**

#### **10-1s-33w Rawlins,KS**

Start Date: 2015.02.20 @ 06:21:00

End Date: 2015.02.20 @ 15:00:30

Job Ticket #: 61073                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.02.24 @ 09:29:31



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61073

**DST#: 1**

ATTN: Marc Dow ning

Test Start: 2015.02.20 @ 06:21:00

## GENERAL INFORMATION:

Formation: **LKC "B"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 09:54:30  
 Time Test Ended: 15:00:30  
 Interval: **3874.00 ft (KB) To 3930.00 ft (KB) (TVD)**  
 Total Depth: 3930.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Brandon Quintana  
 Unit No: 57  
 Reference Elevations: 2901.00 ft (KB)  
 2893.00 ft (CF)  
 KB to GR/CF: 8.00 ft

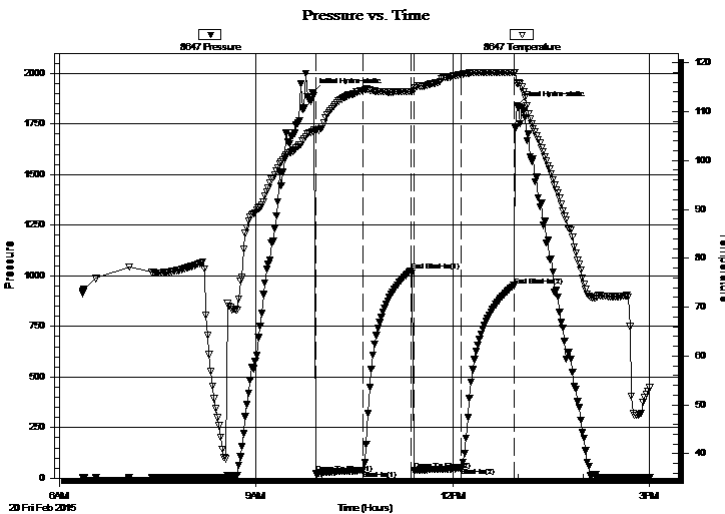
## Serial #: 8647

Inside

Press@RunDepth: 53.49 psig @ 3875.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.02.20 End Date: 2015.02.20 Last Calib.: 2015.02.20  
 Start Time: 06:21:01 End Time: 15:00:30 Time On Btm: 2015.02.20 @ 09:51:30  
 Time Off Btm: 2015.02.20 @ 12:59:00

TEST COMMENT: 45 - IF - Opened w/ surface blow , built to 3 1/2"  
 45 - ISI - No Return  
 45 - FF - Blow built to 2"  
 45 - FSI - No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1904.39	105.85	Initial Hydro-static
3	21.52	106.06	Open To Flow (1)
47	38.79	114.35	Shut-In(1)
90	1025.02	114.14	End Shut-In(1)
93	39.22	114.37	Open To Flow (2)
137	53.49	117.61	Shut-In(2)
185	951.87	118.02	End Shut-In(2)
188	1839.44	115.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
61.00	MW 60%w ,40%m	0.59
0.50	100%oil	0.01

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

Dow ning-Nelson Oil Co., Inc.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61073

**DST#: 1**

ATTN: Marc Dow ning

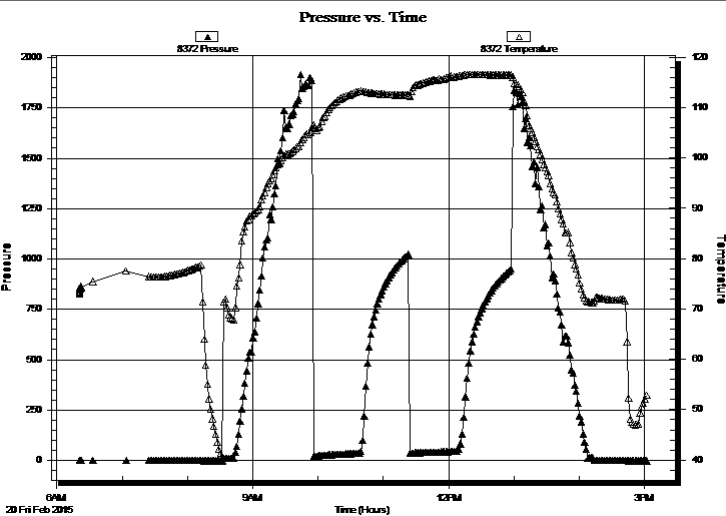
Test Start: 2015.02.20 @ 06:21:00

**GENERAL INFORMATION:**

Formation: <b>LKC "B"</b>		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)		Tester: Brandon Quintana
Time Tool Opened: 09:54:30		Unit No: 57
Time Test Ended: 15:00:30		
<b>Interval: 3874.00 ft (KB) To 3930.00 ft (KB) (TVD)</b>		Reference Elevations: 2901.00 ft (KB)
Total Depth: 3930.00 ft (KB) (TVD)		2893.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 8.00 ft

<b>Serial #: 8372</b>	<b>Outside</b>			Capacity: 8000.00 psig
Press@RunDepth: psig @ 3875.00 ft (KB)				Last Calib.: 2015.02.20
Start Date: 2015.02.20	End Date: 2015.02.20			Time On Btm:
Start Time: 06:21:01	End Time: 15:02:00			Time Off Btm:

**TEST COMMENT:** 45 - IF - Opened w/ surface blow , built to 3 1/2"  
 45 - ISI - No Return  
 45 - FF - Blow built to 2"  
 45 - FSI - No Return



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
61.00	MW 60%w ,40%m	0.59
0.50	100%oil	0.01

**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.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61073

**DST#: 1**

ATTN: Marc Dow ning

Test Start: 2015.02.20 @ 06:21:00

## Tool Information

Drill Pipe:	Length: 3822.00 ft	Diameter: 3.80 inches	Volume: 53.61 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.22 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.22 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3874.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	56.00 ft			
Tool Length:	84.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3851.00	
Hydraulic tool	5.00			3856.00	
Jars	5.00			3861.00	
Safety Joint	3.00			3864.00	
Packer	5.00			3869.00	28.00 Bottom Of Top Packer
Packer	5.00			3874.00	
Stubb	1.00			3875.00	
Recorder	0.00	8647	Inside	3875.00	
Recorder	0.00	8372	Outside	3875.00	
Perforations	18.00			3893.00	
Change Over Sub	1.00			3894.00	
Drill Pipe	32.00			3926.00	
Change Over Sub	1.00			3927.00	
Bullnose	3.00			3930.00	56.00 Bottom Packers & Anchor

**Total Tool Length: 84.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dow ning-Nelson Oil Co., Inc.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61073

**DST#: 1**

ATTN: Marc Dow ning

Test Start: 2015.02.20 @ 06:21:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
61.00	MW 60%w ,40%m	0.589
0.50	100%oil	0.007

Total Length: 61.50 ft

Total Volume: 0.596 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

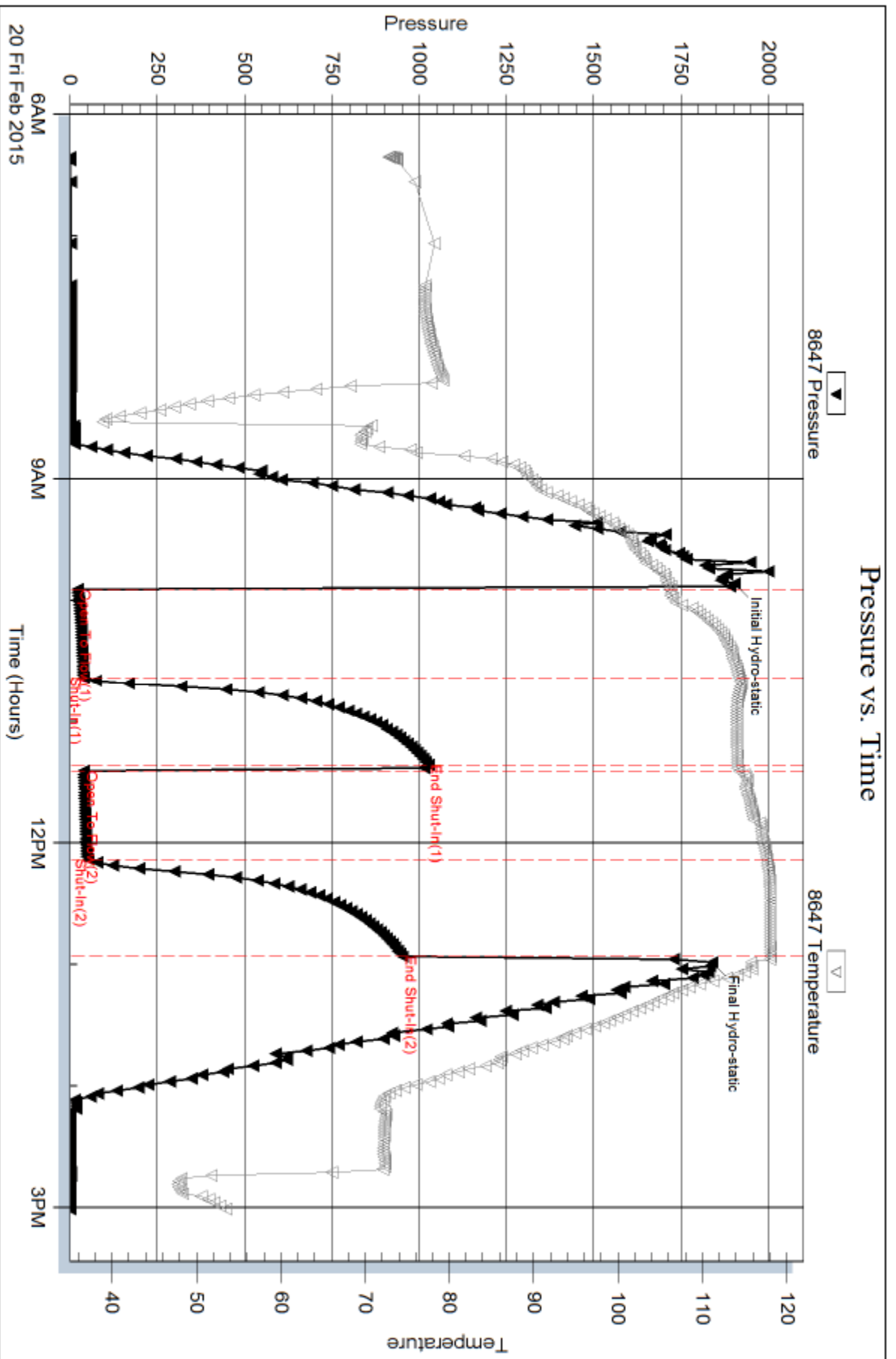
Serial #:

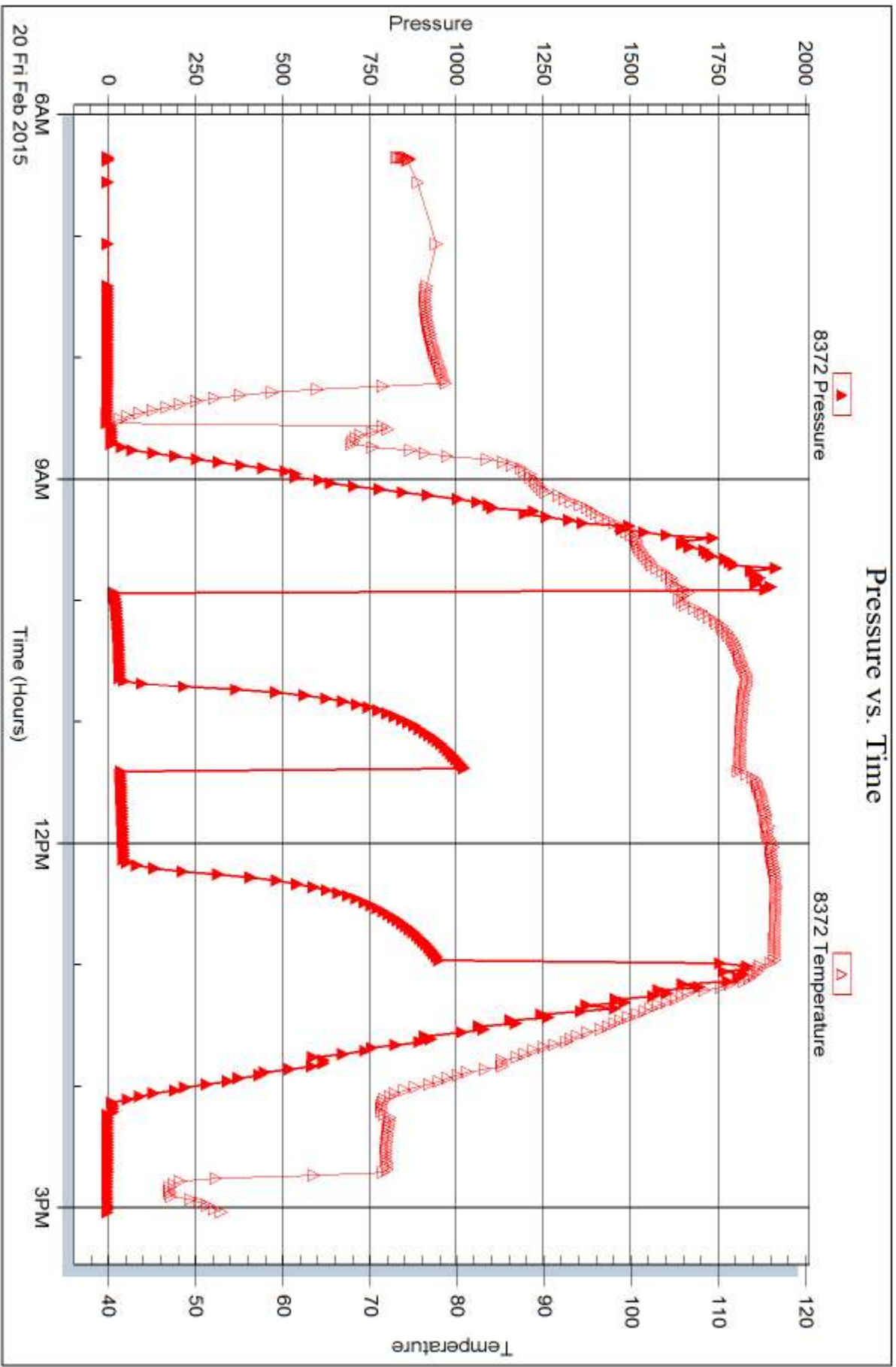
Laboratory Name:

Laboratory Location:

Recovery Comments:









## DRILL STEM TEST REPORT

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

PO Box 1019  
Hays, KS 67601

ATTN: Marc Downing

### **B & D Vap #1-10**

#### **10-1s-33w Rawlins,KS**

Start Date: 2015.02.21 @ 02:01:00

End Date: 2015.02.21 @ 07:50:30

Job Ticket #: 61074                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.02.24 @ 09:29:07



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61074

**DST#: 2**

ATTN: Marc Dow ning

Test Start: 2015.02.21 @ 02:01:00

## GENERAL INFORMATION:

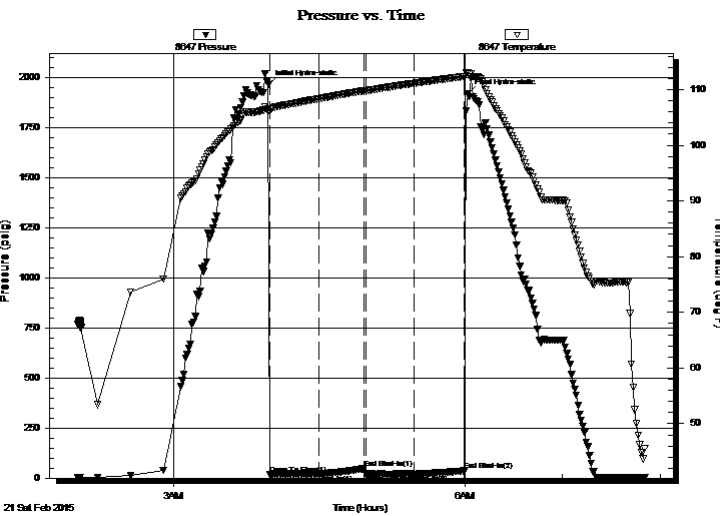
Formation: **LKC "D"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 03:59:30  
 Time Test Ended: 07:50:30  
 Interval: **3969.00 ft (KB) To 4022.00 ft (KB) (TVD)**  
 Total Depth: 4022.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Brandon Quintana  
 Unit No: 57  
 Reference Elevations: 2901.00 ft (KB)  
 2893.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8647

Inside

Press@RunDepth: 19.16 psig @ 3970.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.02.21 End Date: 2015.02.21 Last Calib.: 2015.02.21  
 Start Time: 02:01:01 End Time: 07:50:30 Time On Btm: 2015.02.21 @ 03:58:30  
 Time Off Btm: 2015.02.21 @ 06:01:30

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to 1/4"  
 30 - ISI - No Return  
 30 - FF - No Blow  
 30 - FSI - No Return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1967.23	106.53	Initial Hydro-static
1	19.94	106.06	Open To Flow (1)
31	20.39	108.35	Shut-In(1)
59	48.61	109.78	End Shut-In(1)
60	20.45	109.80	Open To Flow (2)
90	19.16	111.13	Shut-In(2)
121	36.88	112.36	End Shut-In(2)
123	1921.72	113.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	100% mud w / layer of oil in tool	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.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61074

**DST#: 2**

ATTN: Marc Dow ning

Test Start: 2015.02.21 @ 02:01:00

## GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:59:30

Time Test Ended: 07:50:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

**Interval: 3969.00 ft (KB) To 4022.00 ft (KB) (TVD)**

Reference Elevations: 2901.00 ft (KB)

Total Depth: 4022.00 ft (KB) (TVD)

2893.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

**Serial #: 8372**

**Outside**

Press@RunDepth: psig @ 3970.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.02.21

End Date:

2015.02.21

Last Calib.:

2015.02.21

Start Time: 02:01:01

End Time:

07:51:30

Time On Btm:

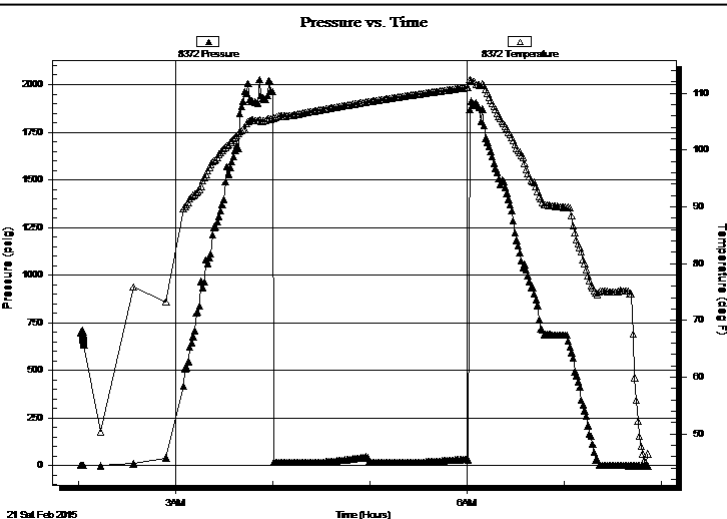
Time Off Btm:

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to 1/4"

30 - ISI - No Return

30 - FF - No Blow

30 - FSI - No Return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
1.00	100% mud w / layer of oil in tool	0.00

## 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.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61074

**DST#: 2**

ATTN: Marc Dow ning

Test Start: 2015.02.21 @ 02:01:00

## Tool Information

Drill Pipe:	Length: 3917.00 ft	Diameter: 3.80 inches	Volume: 54.95 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 29.22 ft	Diameter: 2.25 inches	Volume: 0.14 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.22 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	3969.00 ft			Final 40000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een Packers:	53.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3946.00	
Hydraulic tool	5.00			3951.00	
Jars	5.00			3956.00	
Safety Joint	3.00			3959.00	
Packer	5.00			3964.00	28.00 Bottom Of Top Packer
Packer	5.00			3969.00	
Stubb	1.00			3970.00	
Recorder	0.00	8647	Inside	3970.00	
Recorder	0.00	8372	Outside	3970.00	
Perforations	15.00			3985.00	
Change Over Sub	1.00			3986.00	
Drill Pipe	32.00			4018.00	
Change Over Sub	1.00			4019.00	
Bullnose	3.00			4022.00	53.00 Bottom Packers & Anchor

**Total Tool Length: 81.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dow ning-Nelson Oil Co., Inc.

**10-1s-33w Rawlins,KS**

PO Box 1019  
Hays, KS 67601

**B & D Vap #1-10**

Job Ticket: 61074

**DST#: 2**

ATTN: Marc Dow ning

Test Start: 2015.02.21 @ 02:01:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbf

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 750.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
1.00	100% mud w / layer of oil in tool	0.005

Total Length: 1.00 ft      Total Volume: 0.005 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

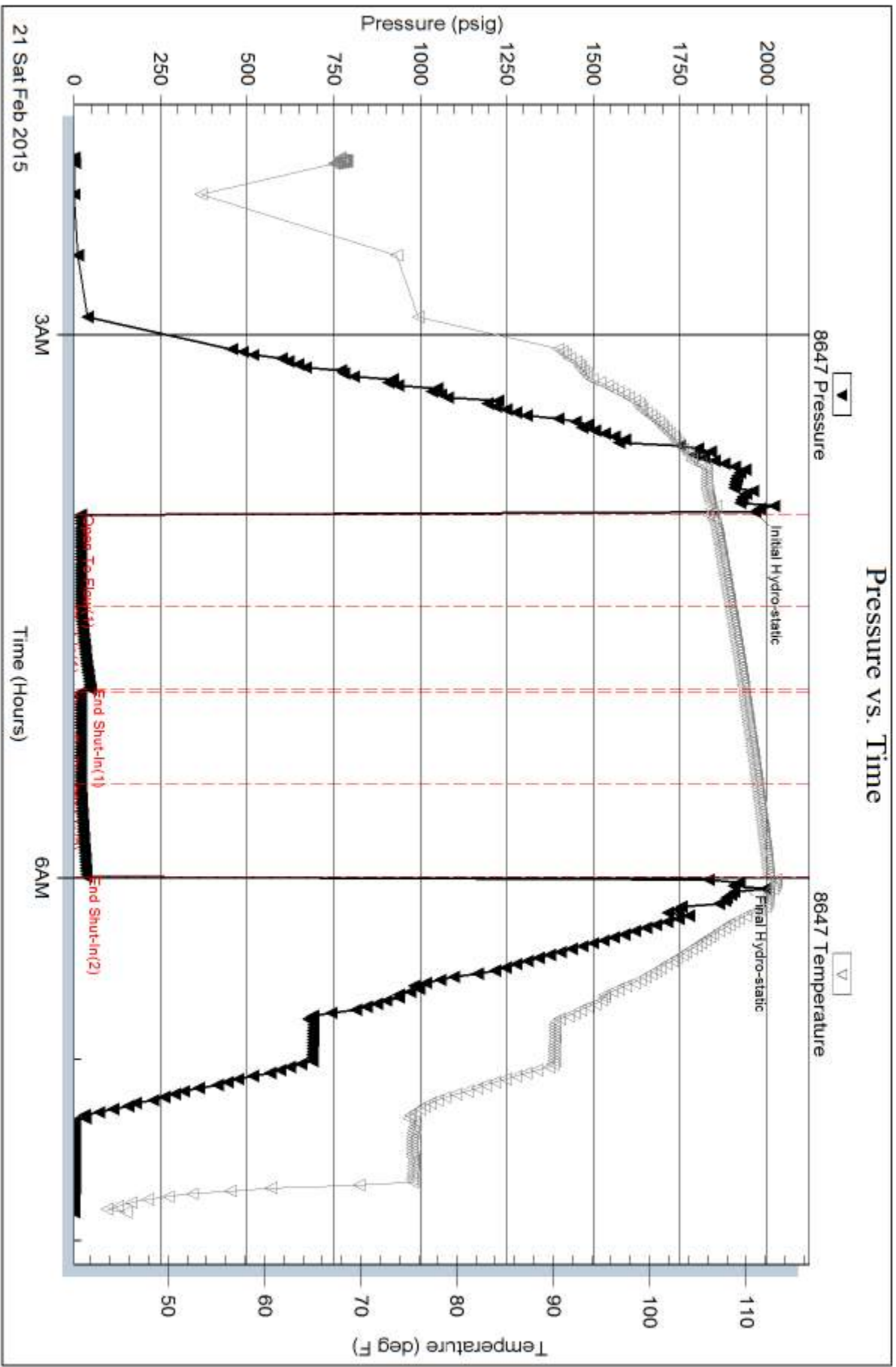
Serial #: 8647

Inside

Downing-Nelson Oil Co., Inc.

B & D Vap #1-10

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 61074

Printed: 2015.02.24 @ 09:29:08

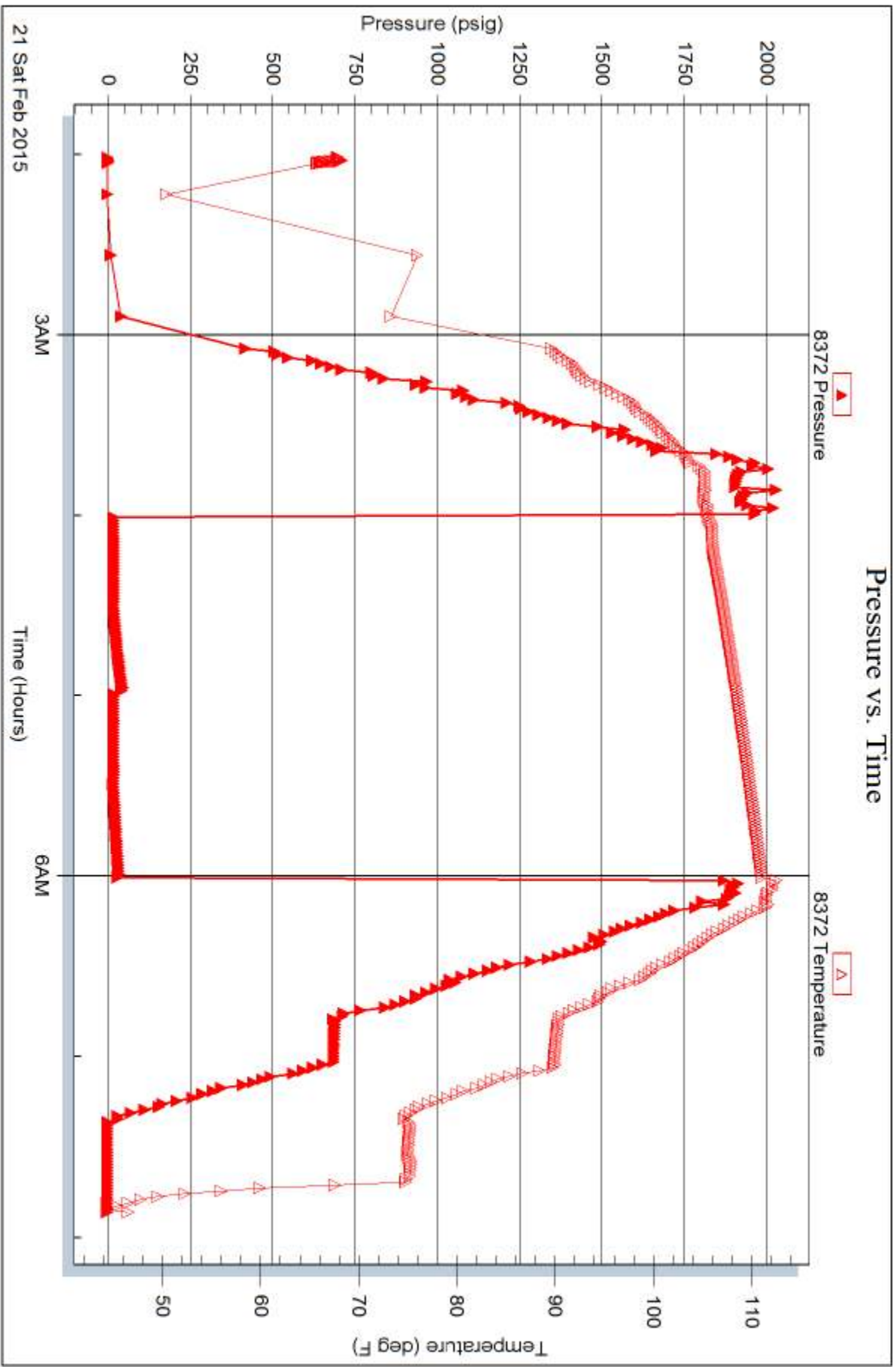


Serial #: 8372

Outside Dow nting-Nelson Oil Co., Inc.

B & D Vap #1-10

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 61074

Printed: 2015.02.24 @ 09:29:09



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

61073

NO.

4/10

Well Name & No. B+D Vap #1-10 Test No. 1 Date 2-20-15  
 Company Downing-Nelson Oil Co., Inc. Elevation 2901 KB 2893 GL  
 Address P.O. Box 1019 Hays, KS 67601  
 Co. Rep / Geo. Marc Downing Rig Discovery #1  
 Location: Sec. 10 Twp. 15 Rge. 33W Co. Rawlins State KS

Interval Tested 3874-3930 Zone Tested UKB"  
 Anchor Length 56' Drill Pipe Run 3822 Mud Wt. 8.8  
 Top Packer Depth 3869 Drill Collars Run 29.22 Vis 67  
 Bottom Packer Depth 3874 Wt. Pipe Run — WL 8  
 Total Depth 3930 Chlorides 750 ppm System LCM 7 1/2

Blow Description IF- Opened w/ surface blow, built to 3 1/2"  
ISI- No Return  
FF- Blow built to 2"  
FSI- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>.5</u>	<u>Oil</u>		<u>100</u>		
<u>61</u>	<u>MW</u>			<u>60</u>	<u>40</u>

Rec Total 61.5 BHT 118 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1904  Test 1050 T-On Location 5:51 AM  
 (B) First Initial Flow 21  Jars 250 T-Started 6:21 AM  
 (C) First Final Flow 38  Safety Joint 75 T-Open 9:54 AM  
 (D) Initial Shut-In 1025  Circ Sub \_\_\_\_\_ T-Pulled 12:54 PM  
 (E) Second Initial Flow 39  Hourly Standby \_\_\_\_\_ T-Out 3:02 PM  
 (F) Second Final Flow 53  Mileage 81 R.T. 81 Comments \_\_\_\_\_  
 (G) Final Shut-In 951  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1839  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_

Initial Open 45  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Flow 45  Day Standby \_\_\_\_\_ Total 1456  
 Final Shut-In 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1456

Approved By \_\_\_\_\_ Our Representative Burd Q. T.

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. **61074**

4/10

Well Name & No. <u>B+D Vap #1-10</u>	Test No. <u>2</u>	Date <u>2-21-15</u>
Company <u>Downing-Nelson Oil Co., Inc.</u>	Elevation <u>2901</u>	KB <u>2893</u> GL
Address <u>P.O. Box 1019 Hays, KS 67601</u>		
Co. Rep / Geo. <u>Marc Downing</u>	Rig <u>Discovery #1</u>	
Location: Sec. <u>10</u> Twp. <u>15</u> Rge. <u>33W</u> Co. <u>Rawlins</u> State <u>KS</u>		

Interval Tested <u>3969 - 4022</u>	Zone Tested <u>LKC "D"</u>
Anchor Length <u>53'</u>	Drill Pipe Run <u>3917</u> Mud Wt. <u>9.3</u>
Top Packer Depth <u>3964</u>	Drill Collars Run <u>29.22</u> Vis <u>52</u>
Bottom Packer Depth <u>3969</u>	Wt. Pipe Run <u>—</u> WL <u>7.2</u>
Total Depth <u>4022</u>	Chlorides <u>750</u> ppm System LCM <u>6</u>

Blow Description IF - Opened w/ surface blow, built to 1/4"  
ISI - No Return  
FF - No Blow  
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>Mud w/ layer of oil in tool</u>				<u>100</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total <u>1</u>	BHT <u>112</u>	Gravity <u>1150</u>	API RW <u>@</u>	F Chlorides <u>ppm</u>
(A) Initial Hydrostatic <u>1967</u>	<input checked="" type="checkbox"/> Test	<u>250</u>	T-On Location <u>1:27 AM</u>	
(B) First Initial Flow <u>19</u>	<input checked="" type="checkbox"/> Jars	<u>75</u>	T-Started <u>2:01 AM</u>	
(C) First Final Flow <u>20</u>	<input checked="" type="checkbox"/> Safety Joint		T-Open <u>4:00 AM</u>	
(D) Initial Shut-In <u>48</u>	<input type="checkbox"/> Circ Sub		T-Pulled <u>6:00 AM</u>	
(E) Second Initial Flow <u>20</u>	<input type="checkbox"/> Hourly Standby		T-Out <u>7:52 AM</u>	
(F) Second Final Flow <u>19</u>	<input checked="" type="checkbox"/> Mileage <u>81 R.T.</u>	<u>162</u>	Comments <u>loaded tools 2/22 3:00</u>	
(G) Final Shut-In <u>36</u>	<input type="checkbox"/> Sampler			
(H) Final Hydrostatic <u>1921</u>	<input type="checkbox"/> Straddle		<input type="checkbox"/> Ruined Shale Packer	
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer		<input type="checkbox"/> Ruined Packer	
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer		<input type="checkbox"/> Extra Copies	
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder		Sub Total <u>0</u>	
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby		Total <u>1637</u>	
	<input type="checkbox"/> Accessibility		MP/DST Disc't	
	Sub Total <u>1637</u>			

Approved By \_\_\_\_\_

Our Representative Bud Oltz

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.



3+D VAP

# ALLIED OIL & GAS SERVICES, LLC 063836

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Orkney

DATE <u>7/16/15</u>	SEC. <u>10</u>	TWP. <u>1</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START <u>12:00</u>	JOB FINISH <u>12:30</u>
LEASE <u>Pop Up</u>	WELL# <u>1-10</u>	LOCATION <u>ATwood N 70 CC 2 E</u>		COUNTY <u>Ward</u>	STATE <u>Ky</u>		
OLD OR NEW (Circle one) <u>NEW</u>				<u>into last use</u>			

CONTRACTOR Discovery  
 TYPE OF JOB Surf  
 HOLE SIZE 12 1/4 T.D.  
 CASING SIZE 8 5/8 DEPTH  
 TUBING SIZE DEPTH  
 DRILL PIPE 4 1/2 DEPTH  
 TOOL DEPTH  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15'  
 PERFS.  
 DISPLACEMENT

OWNER Same

CEMENT AMOUNT ORDERED 190 can 3/4 size

COMMON 190 @ 0.122 262  
 POZMIX @  
 GEL @ 190 190  
 CHLORIDE 483.6 @ 1.2 465.20  
 ASC @

**EQUIPMENT**

PUMP TRUCK CEMENTER Alan Ryan  
 # 195-281 HELPER Kevin Ryan  
 BULK TRUCK  
 # 370 DRIVER Brandon Wilkinson  
 BULK TRUCK  
 # DRIVER

Material total @ 3292.30  
 (1481.53/45%)  
 HANDLING 100CT @ 3.78  
 MILEAGE 27/mile @ 3.78  
 TOTAL

**REMARKS:**

Analysis, Circulate, Mix Cement, Displace Cement  
9 hours  
Cement did circulate  
1 inch  
Stemmed in Brandon

**SERVICE**

DEPTH OF JOB  
 PUMP TRUCK CHARGE 150.25  
 EXTRA FOOTAGE @  
 MILEAGE 100 @ 2.20  
 MANIFOLD @ 4.80 20.00  
 TOTAL 3,843.63  
 (1729.63/45%)

CHARGE TO: Downing Nelson  
 STREET  
 CITY STATE ZIP

**PLUG & FLOAT EQUIPMENT**

@  
 @  
 @  
 @  
 @

TOTAL

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.

SALES TAX (if Any)  
 TOTAL CHARGES 7,135.93  
 DISCOUNT 3,211.16 (45%) IF PAID IN 30 DAYS  
3,924.76 Net

PRINTED NAME

SIGNATURE [Signature]

# ALLIED OIL & GAS SERVICES, LLC 063840

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Dallas, TX

DATE <u>2/20/15</u>	SEC. <u>10</u>	TWP. <u>1</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION	JOB START <u>10:30</u>	JOB FINISH <u>11:30</u>
LEASE # <u>100</u>	WELL # <u>1-10</u>	LOCATION <u>HT wood W TO CC 2E</u>			COUNTY <u>Harrison</u>	STATE <u>TX</u>	
OLD OR NEW (Circle one)				<u>NEW</u>			

CONTRACTOR Discovery OWNER 1

TYPE OF JOB HT

HOLE SIZE 7 7/8 T.D. \_\_\_\_\_

CASING SIZE 8 1/2 DEPTH 220

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_

DRILL PIPE 4 1/2 DEPTH \_\_\_\_\_

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOE JOINT \_\_\_\_\_

CEMENT LEFT IN CSG. \_\_\_\_\_

PERFS. \_\_\_\_\_

DISPLACEMENT \_\_\_\_\_

CEMENT AMOUNT ORDERED 295 60/100 4 1/2

COMMON 255 @ 18.92 4824.60

POZMIX @ \_\_\_\_\_

GEL @ \_\_\_\_\_

CHLORIDE @ \_\_\_\_\_

ASC @ \_\_\_\_\_

Fiscal 64 @ 2.92 190.22

Material total @ \_\_\_\_\_ 5,614.82

(2236.69/45%)

HANDLING 273.02 @ 2.18 629.20

MILEAGE 25 @ 7.11/1.48 201.15

TOTAL \_\_\_\_\_

**EQUIPMENT**

PUMP TRUCK CEMENTER Alan Ryan

# 405-281 HELPER Ryan Ryan

BULK TRUCK \_\_\_\_\_

# 818 DRIVER James Racette

BULK TRUCK \_\_\_\_\_

# \_\_\_\_\_ DRIVER \_\_\_\_\_

REMARKS:

50 @ 21.00

100 @ 20.00

50 @ 2.70

10 @ 4.0

20 Rat Holes

15 Moves

Thank You  
Alan Ryan

CHARGE TO: Discovery & Nelson

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**SERVICE**

DEPTH OF JOB \_\_\_\_\_

PUMP TRUCK CHARGE 2483.22

EXTRA FOOTAGE @ \_\_\_\_\_

MILEAGE 00 @ 7.10 385.00

MANIFOLD @ \_\_\_\_\_

LP Valve 50 @ 4.44 222.00

(2403.35/45%) TOTAL 5,340.79

**PLUG & FLOAT EQUIPMENT**

8 1/2 Wood Plug @ \_\_\_\_\_ 110.00

TOTAL 110.00

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 Clyff Mayfield

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 10,465.66

DISCOUNT 4,660.04 (45%) IF PAID IN 30 DAYS

5,805.61 Net



<b>Marc A. Downing</b>		<b>Geologic Report</b>	
Consulting Petroleum Geologist		Drilling Time and Sample Log	
Operator <b>Downing-Nelson Oil Co., Inc.</b>		Elevation KB 2906 DF 2904 GL 2998	
Lease <b>B&amp;D Vap</b> No. 1-10		Casing Record Surface 8 5/8" @ 220' Production None	
API # 15-153-21105-0000		Electrical Surveys None	
Field <b>Wildcat</b>		CNDL, DIL, MEL, Sonic	
Location <b>350' FSL &amp; 739' FWL</b>			
Sec. 10	Twp. 1s	Rge. 33w	
County <b>Rawlins</b> State <b>Kansas</b>			
Formation	Sample tops	Log Tops	Datum
Top Anhydrite	2755	2755	+151
Base Anhydrite	2793	2792	+114
Topeka	3665	3665	-759
Oread	3785	3786	-880
Heebner	3814	3814	-908
Lansing	3860	3861	-955
BKC	4120	4121	-1215
Total Depth	4170	4172	-1266
Reference Well For Structural Comparison	Galloway Drilling		
Vap #1	SW NW NW		Sec. 15-1s-33w

Drilling Contractor	Discovery Drilling, Rig #1	
Commenced	2-16-15	Completed 2-22-15
Samples Saved From	3700	To RTD
Drilling Time Kept From	3350	To RTD
Samples Examined From	3700	To RTD
Geological Supervision From	3350	To RTD

**Summary and Recommendations**

Due to structural position, DST recovery, and log evaluation, it was decided to plug and abandon the well.

Respectfully Submitted,

Marc A. Downing

