Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
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: Marc Downing
Purchaser: Coffeyville Resources

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ 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 EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

03/07/2019	03/13/2019	04/29/2019
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-195-23084-00-00
Spot Description:
W2 - NE - NW - NE Sec. 34 Twp. 13 S. R. 22 ☐ East ☑ West
330 Feet from ☑ North / ☐ South Line of Section
1800 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: ________ *(e.g. xx.xxxxx)*, Long: ________ *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Trego
Lease Name: STECKLINE Well #: 2-34
Field Name: Wildcat
Producing Formation: Cherokee
Elevation: Ground: 2350 Kelly Bushing: 2358
Total Vertical Depth: 4400 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 222 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1790 Feet
If Alternate II completion, cement circulated from: 1790
feet depth to: 0 w/ 155 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 38000 ppm Fluid volume: 160 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Downing Nelson Oil Co., Incl
Lease Name: Staab Ogallah Frank License #: 30717
Quarter NW Sec. 20 Twp. 12 S. R. 22 ☐ East ☑ West
County: Trego Permit #: D31526

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** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ **I** ☑ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 08/01/2019

Operator Name: Downing-Nelson Oil Co Inc Lease Name: STECKLINE Well #: 2-34

Sec. 34 Twp. 13 S. R. 22 ☐ East ☑ West County: Trego

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No
Electric Log Run ☑ Yes ☐ No
Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:

Micro
Dual Induction
Compensated Denisty Neutron

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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	12.25	8.625	23	222	Common	150	2% Gel & 3% CC
Production	7.875	5.5	14	4397	EA/2	150	-

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	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/ Injection: 06/07/2019

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	13		20		

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*

PRODUCTION INTERVAL:

Top	Bottom
4188	4191

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	4198	4202			
4	4188	4191			200 gallons 7.5% INS

TUBING RECORD:	Size:	Set At:	Packer At:
	2.375	4190	

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	STECKLINE 2-34
Doc ID	1454338

Tops

Name	Top	Datum
Top Anhydrite	1805'	+553
Base Anhydrite	1850'	+508
Topeka	3475'	-1117
Heebner	3710'	-1352
Toronto	3726'	-1368
LKC	3742'	-1384
BKC	3990'	-1632
Marmaton	4094'	-1736
Cherokee Shale	4143'	-1785
Cherokee Sand	4188'	-1830
Mississippi	4264'	-1906
Arbuckle	4308'	-1950

Form	ACO1 - Well Completion
Operator	Downing-Nelson Oil Co Inc
Well Name	STECKLINE 2-34
Doc ID	1454338

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	222	Common	150	2% Gel & 3% CC
Production	7.875	5.5	14	4397	EA/2	150	-

DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Steckline #2-34

34-13S-22W Trego,KS

Start Date: 2019.03.11 @ 19:40:30
End Date: 2019.03.12 @ 03:27:06
Job Ticket #: 65525 DST #: 1

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

Printed: 2019.03.14 @ 11:07:46

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Downing-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65525 **DST#: 1**

Test Start: 2019.03.11 @ 19:40:30

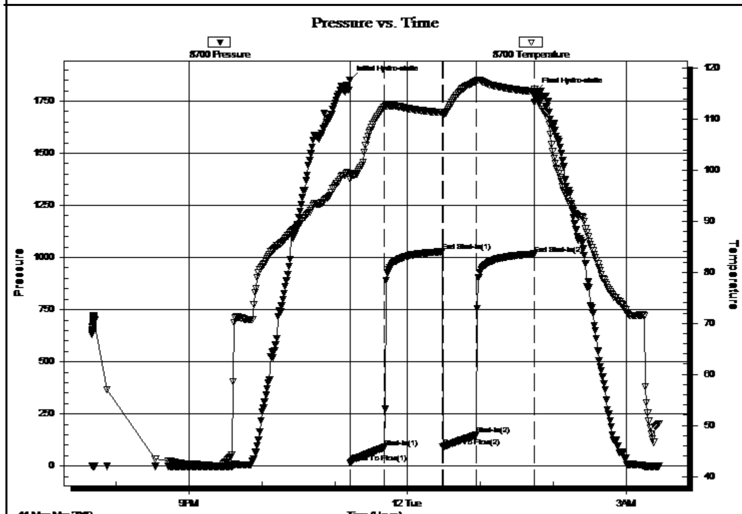
GENERAL INFORMATION:

Formation:	**LKC "E - F"**		
Deviated:	No Whipstock: ft (KB)	Test Type:	Conventional Bottom Hole (Initial)
Time Tool Opened:	23:12:36	Tester:	Brannan Lonsdale
Time Test Ended:	03:27:06	Unit No:	73
Interval:	**3809.00 ft (KB) To 3833.00 ft (KB) (TVD)**	Reference Elevations:	2358.00 ft (KB)
Total Depth:	3833.00 ft (KB) (TVD)		2350.00 ft (CF)
Hole Diameter:	7.88 inches Hole Condition: Fair	KB to GR/CF:	8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth:	148.43 psig @ 3810.00 ft (KB)			Capacity:	8000.00 psig
Start Date:	2019.03.11	End Date:	2019.03.12	Last Calib.:	2019.03.12
Start Time:	19:40:31	End Time:	03:27:06	Time On Btm:	2019.03.11 @ 23:12:21
				Time Off Btm:	2019.03.12 @ 01:45:06

TEST COMMENT: 30- IF- BOB 16 mins. Built to 16.32"
45- ISI- No blow
30- FF- BOB 22 mins. Built to 12.84"
45- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1851.74	99.37	Initial Hydro-static
1	14.21	98.28	Open To Flow (1)
29	89.14	112.39	Shut-In(1)
76	1027.93	111.33	End Shut-In(1)
77	92.05	110.99	Open To Flow (2)
104	148.43	117.49	Shut-In(2)
152	1016.93	115.40	End Shut-In(2)
153	1790.98	114.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
285.00	MW, 30%M 70%W	3.74

Gas Rates

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

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Dow ning-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Dow ning

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65525 **DST#: 1**

Test Start: 2019.03.11 @ 19:40:30

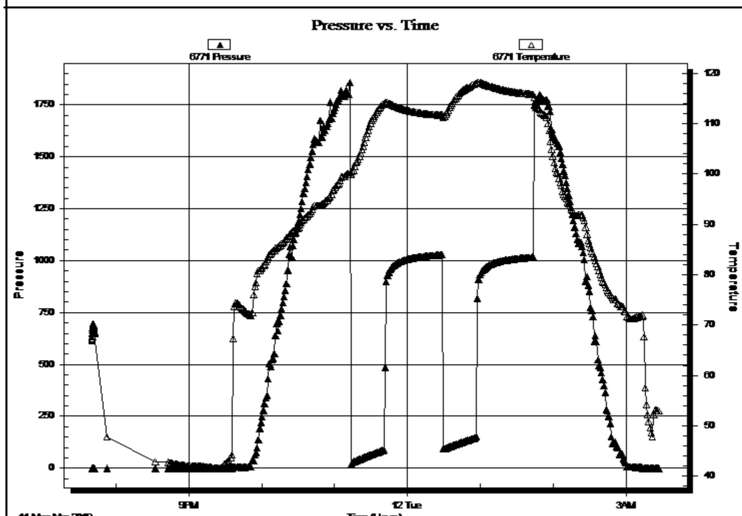
GENERAL INFORMATION:

Formation:	**LKC "E - F"**		
Deviated:	No Whipstock: ft (KB)	Test Type:	Conventional Bottom Hole (Initial)
Time Tool Opened:	23:12:36	Tester:	Brannan Lonsdale
Time Test Ended:	03:27:06	Unit No:	73
Interval:	**3809.00 ft (KB) To 3833.00 ft (KB) (TVD)**	Reference Elevations:	2358.00 ft (KB)
Total Depth:	3833.00 ft (KB) (TVD)		2350.00 ft (CF)
Hole Diameter:	7.88 inches Hole Condition: Fair	KB to GR/CF:	8.00 ft

Serial #: 6771 **Inside**

Press@RunDepth:	psig @ 3810.00 ft (KB)			Capacity:	8000.00 psig
Start Date:	2019.03.11	End Date:	2019.03.12	Last Calib.:	2019.03.12
Start Time:	19:40:41	End Time:	03:27:01	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: 30- IF- BOB 16 mins. Built to 16.32"
45- ISI- No blow
30- FF- BOB 22 mins. Built to 12.84"
45- FSI- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
285.00	MW, 30%M 70%W	3.74

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

TRILOBITE TESTING, INC.

Dow ning-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Dow ning

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65525 **DST#: 1**

Test Start: 2019.03.11 @ 19:40:30

Tool Information

Drill Pipe:	Length:	3772.00 ft	Diameter:	3.82 inches	Volume:	53.47 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length:	ft	Diameter:	inches	Volume:	- bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length:	32.00 ft	Diameter:	2.25 inches	Volume:	0.16 bbl	Weight to Pull Loose:	55000.00 lb
					Total Volume:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		15.00 ft					String Weight: Initial	47000.00 lb
Depth to Top Packer:		3809.00 ft					Final	49000.00 lb
Depth to Bottom Packer:		ft						
Interval betw een Packers:		24.00 ft						
Tool Length:		44.00 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			3790.00		
Shut In Tool	5.00			3795.00		
Hydraulic tool	5.00			3800.00		
Packer	5.00			3805.00	20.00	Bottom Of Top Packer
Packer	4.00			3809.00		
Stubb	1.00			3810.00		
Recorder	0.00	6771	Inside	3810.00		
Recorder	0.00	8700	Outside	3810.00		
Perforations	20.00			3830.00		
Bullnose	3.00			3833.00	24.00	Bottom Packers & Anchor
Total Tool Length:	**44.00**					

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Dow ning

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65525 **DST#: 1**

Test Start: 2019.03.11 @ 19:40:30

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:	83000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.59 in^3	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
285.00	MW, 30%M 70%W	3.744

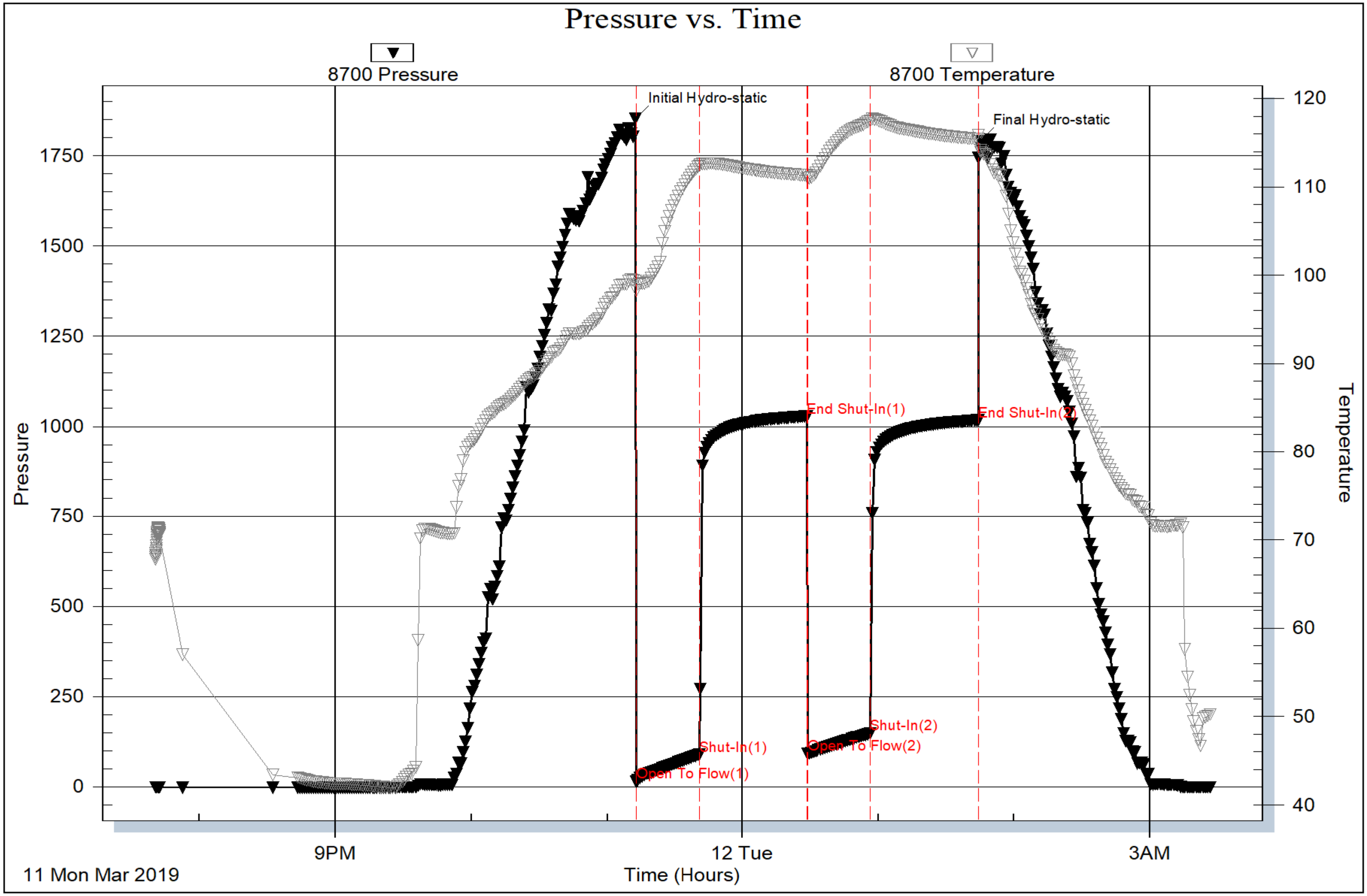
Total Length: 285.00 ft Total Volume: 3.744 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

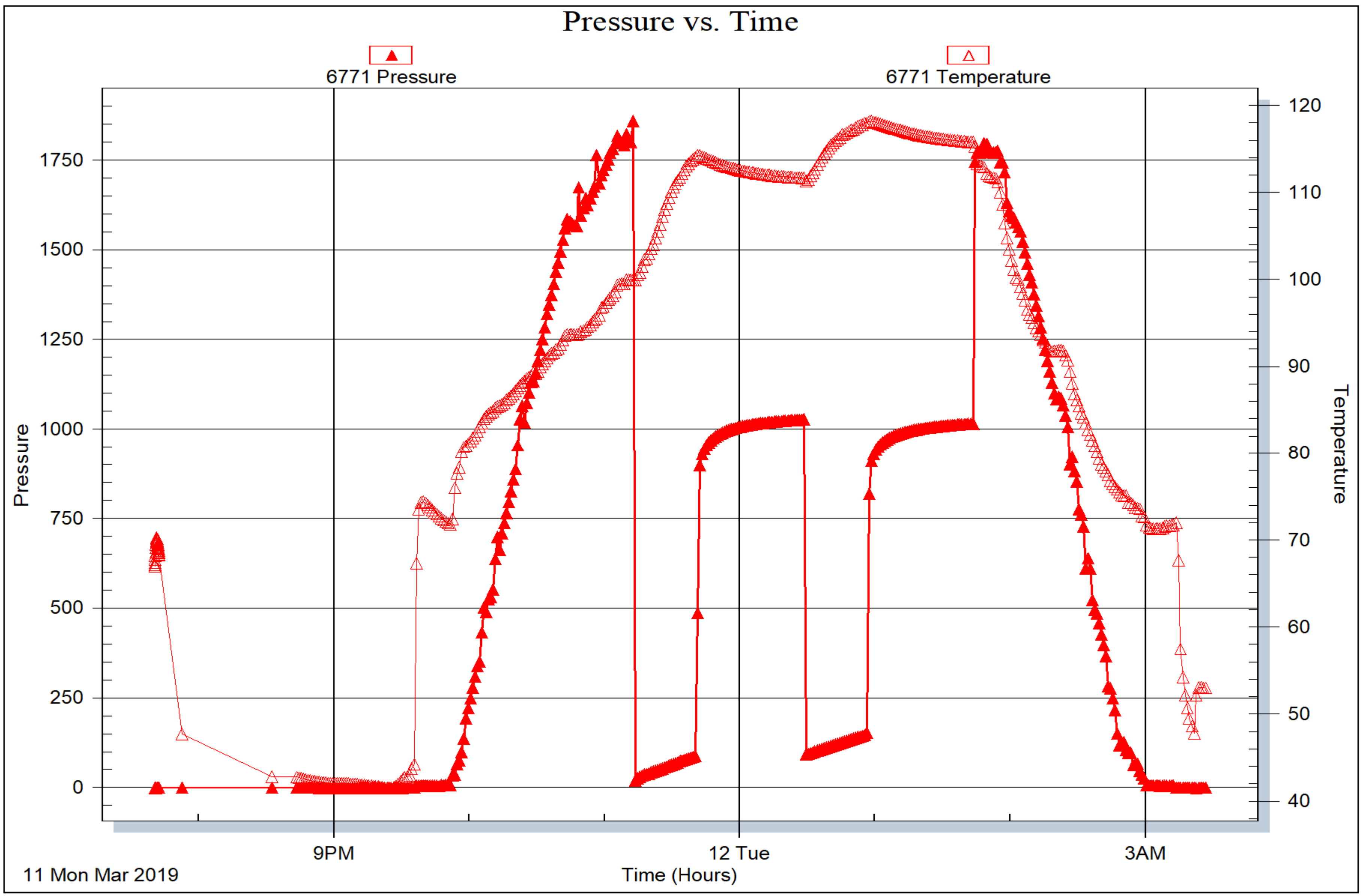
Laboratory Name: Laboratory Location:

Recovery Comments: RW: .10@56deg

Serial #: 8700 **Outside** Dow ning-Nelson Oil Co., Inc. Steckline #2-34 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 65525 Printed: 2019.03.14 @ 11:07:47


Pressure vs. Time
6771 Pressure
6771 Temperature
Pressure
0
250
500
750
1000
1250
1500
1750
Temperature
40
50
60
70
80
90
100
110
120
9PM
12 Tue
3AM
11 Mon Mar 2019
Time (Hours)

DRILL STEM TEST REPORT

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

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

Steckline #2-34

34-13S-22W Trego,KS

Start Date: 2019.03.13 @ 05:09:48

End Date: 2019.03.13 @ 12:21:24

Job Ticket #: 65676 DST #: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2019.03.14 @ 11:05:01

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Dow ning-Nelson Oil Co., Inc.	**34-13S-22W Trego,KS**
PO Box 1019 Hays, KS 67601	**Steckline #2-34**
	Job Ticket: 65676 **DST#: 2**
ATTN: Marc Dow ning	Test Start: 2019.03.13 @ 05:09:48

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:41:39
Time Test Ended: 12:21:24

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 4132.00 ft (KB) To 4190.00 ft (KB) (TVD)
Total Depth: 4190.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

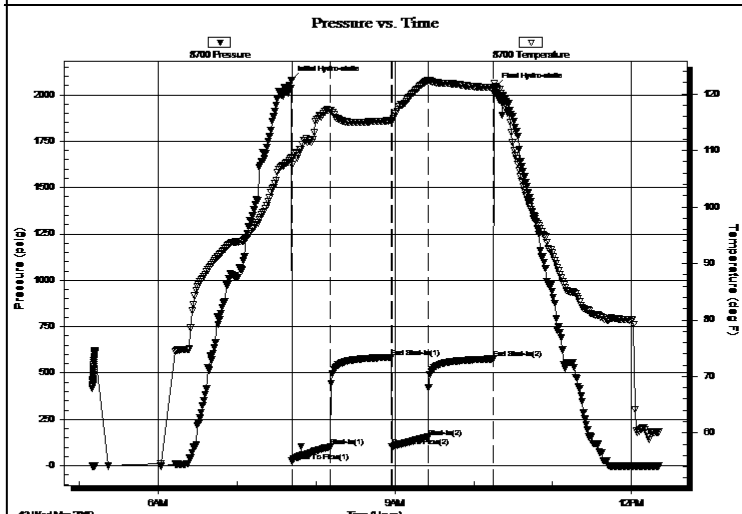
Reference Elevations: 2358.00 ft (KB)
2350.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: 154.02 psig @ 4133.00 ft (KB)
Start Date: 2019.03.13 End Date: 2019.03.13
Start Time: 05:09:49 End Time: 12:21:24

Capacity: 8000.00 psig
Last Calib.: 2019.03.13
Time On Btm: 2019.03.13 @ 07:41:24
Time Off Btm: 2019.03.13 @ 10:16:24

TEST COMMENT: 30- IF- BOB 15 mins. Built to 16.46"
45- ISI- No blow
30- FF- BOB 22 mins. Built to 12.60"
45- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2079.70	108.70	Initial Hydro-static
1	24.48	107.43	Open To Flow (1)
30	100.98	117.07	Shut-In(1)
76	584.90	115.33	End Shut-In(1)
77	102.83	115.36	Open To Flow (2)
104	154.02	122.39	Shut-In(2)
154	576.00	121.14	End Shut-In(2)
155	2042.29	121.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	OCMW, 10%O 25%M 65%W	1.48
160.00	OCM, 10%O 90%M	2.27
15.00	CO	0.21

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Dow ning-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Dow ning

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65676 **DST#: 2**

Test Start: 2019.03.13 @ 05:09:48

GENERAL INFORMATION:

Formation: **Cherokee Sand**
Deviated: No Whipstock: ft (KB)
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Total Depth: 4190.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

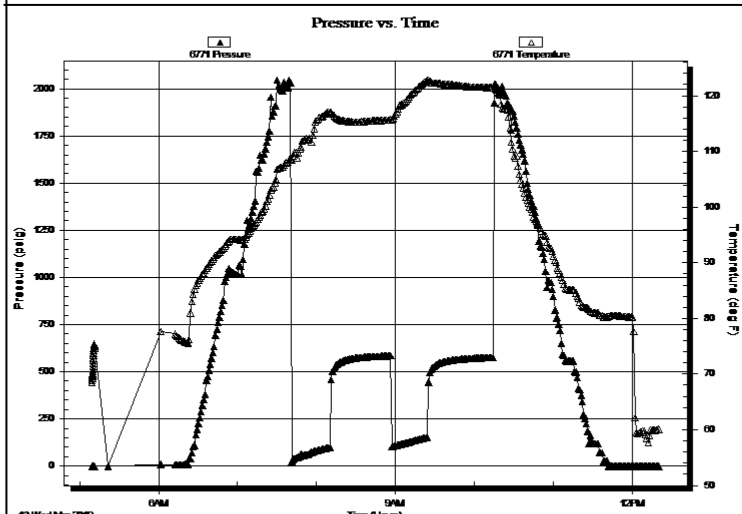
Reference Elevations: 2358.00 ft (KB)
2350.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: psig @ 4133.00 ft (KB)
Start Date: 2019.03.13 End Date: 2019.03.13
Start Time: 05:09:26 End Time: 12:21:01

Capacity: 8000.00 psig
Last Calib.: 2019.03.13
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- BOB 15 mins. Built to 16.46"
45- ISI- No blow
30- FF- BOB 22 mins. Built to 12.60"
45- FSI- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
125.00	OCMW, 10%O 25%M 65%W	1.48
160.00	OCM, 10%O 90%M	2.27
15.00	CO	0.21

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

TRILOBITE TESTING, INC.

Downing-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Downing

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65676 **DST#: 2**

Test Start: 2019.03.13 @ 05:09:48

Tool Information

Drill Pipe:	Length:	4090.00 ft	Diameter:	3.82 inches	Volume:	57.98 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:	32.00 ft	Diameter:	2.25 inches	Volume:	0.16 bbl	Weight to Pull Loose:	63000.00 lb
					Total Volume:	- bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:		18.00 ft					String Weight: Initial	51000.00 lb
Depth to Top Packer:		4132.00 ft					Final	53000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		58.00 ft						
Tool Length:		86.00 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			4105.00		
Shut In Tool	5.00			4110.00		
Hydraulic tool	5.00			4115.00		
Jars	5.00			4120.00		
Safety Joint	3.00			4123.00		
Packer	5.00			4128.00	28.00	Bottom Of Top Packer
Packer	4.00			4132.00		
Stubb	1.00			4133.00		
Recorder	0.00	6771	Inside	4133.00		
Recorder	0.00	8700	Outside	4133.00		
Perforations	20.00			4153.00		
Change Over Sub	1.00			4154.00		
Drill Pipe	32.00			4186.00		
Change Over Sub	1.00			4187.00		
Bullnose	3.00			4190.00	58.00	Bottom Packers & Anchor

Total Tool Length: 86.00

DRILL STEM TEST REPORT

FLUID SUMMARY

Trilobite Testing, Inc

Dow ning-Nelson Oil Co., Inc.

PO Box 1019
Hays, KS 67601

ATTN: Marc Dow ning

34-13S-22W Trego,KS

Steckline #2-34

Job Ticket: 65676 **DST#: 2**

Test Start: 2019.03.13 @ 05:09:48

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	36 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	29000 ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.58 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
125.00	OCMW, 10%O 25%M 65%W	1.476
160.00	OCM, 10%O 90%M	2.268
15.00	CO	0.213

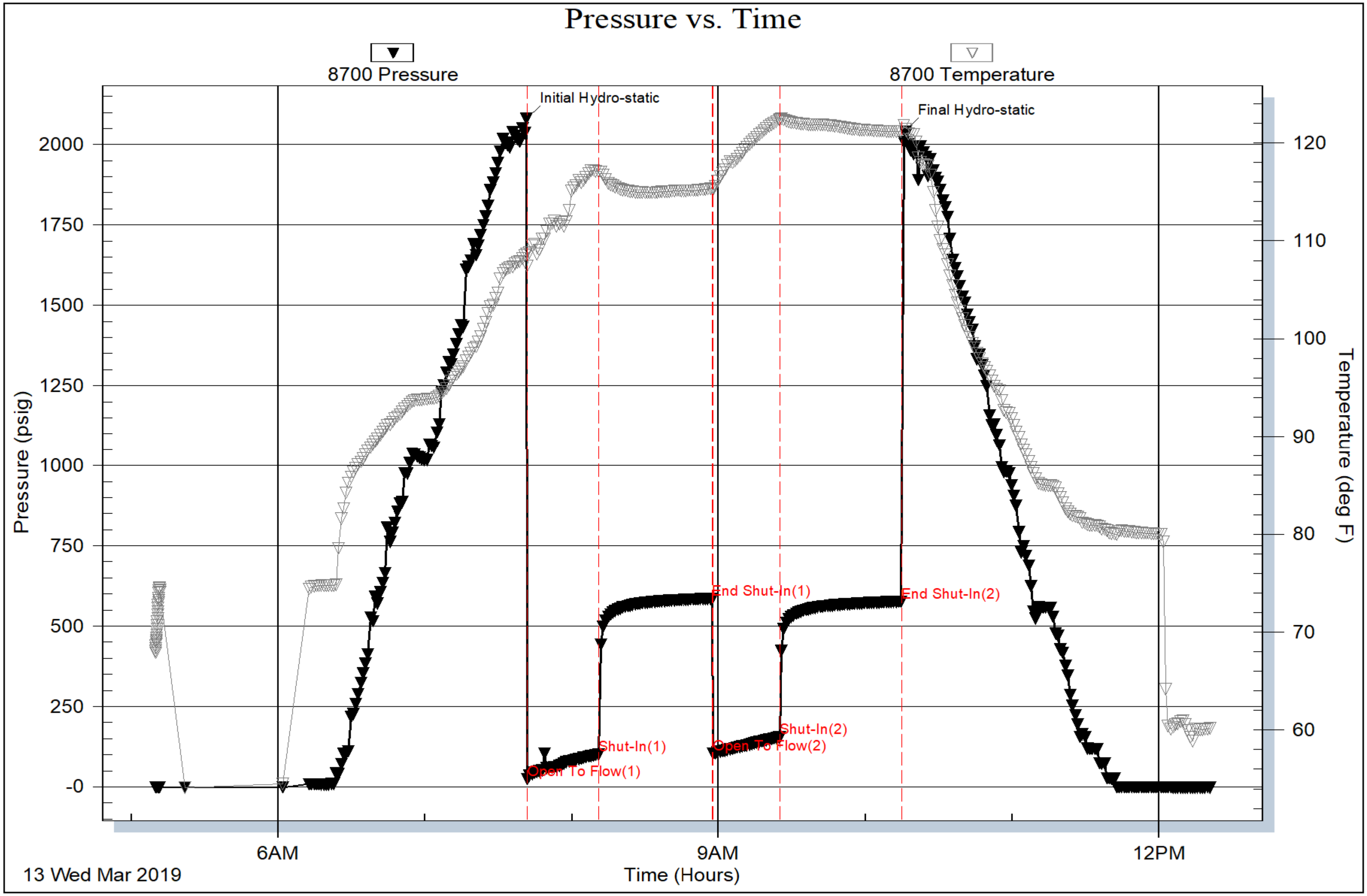
Total Length: 300.00 ft Total Volume: 3.957 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

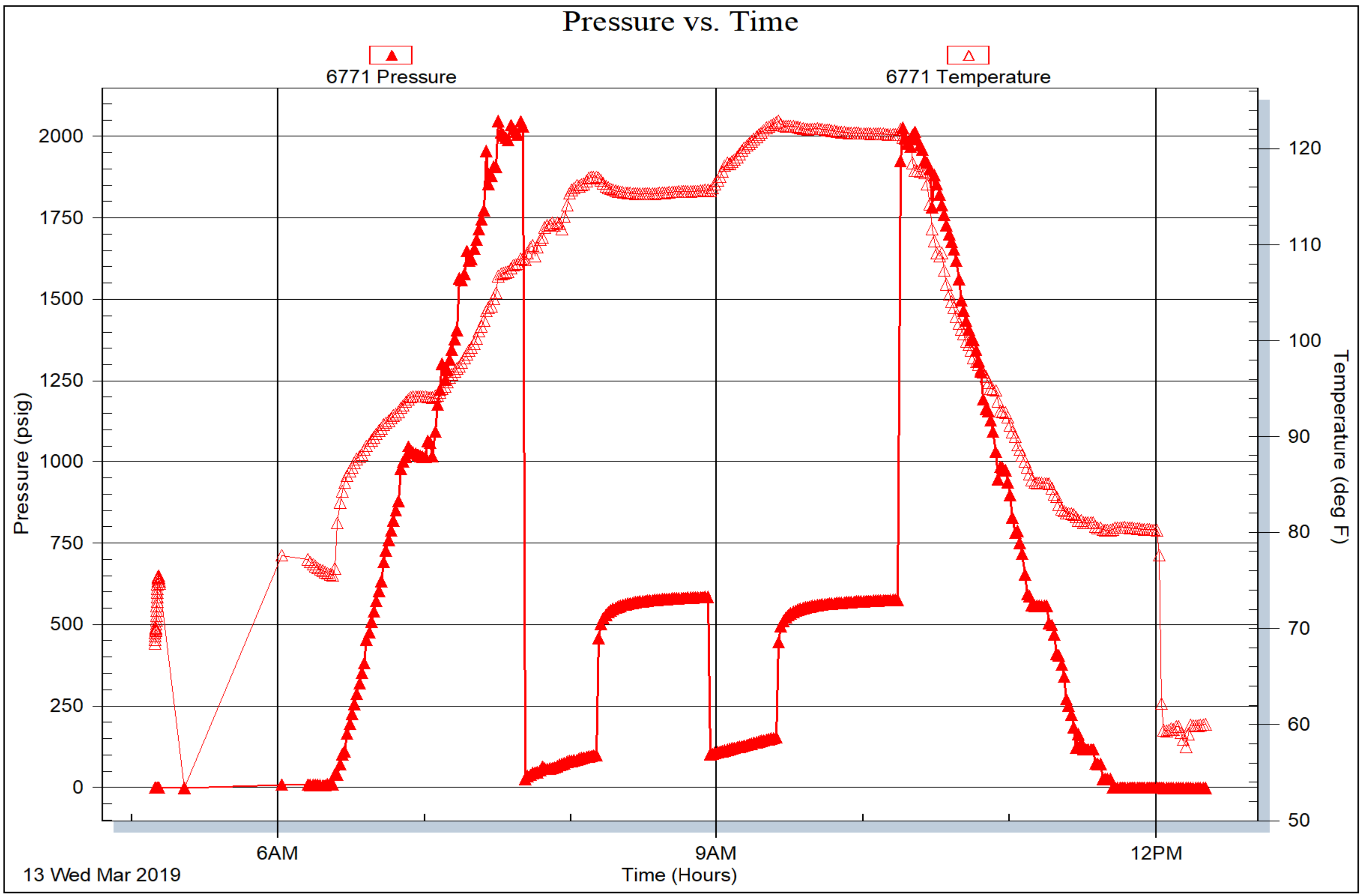
Recovery Comments: RW: .28@55deg

Serial #: 8700 **Outside** Downing-Nelson Oil Co., Inc. Steckline #2-34 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65676 Printed: 2019.03.14 @ 11:05:02

Serial #: 6771 **Inside** Dow ning-Nelson Oil Co., Inc. Steckline #2-34 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65676 Printed: 2019.03.14 @ 11:05:02

4/10

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65525

Well Name & No. Steckline #2-34 Test No. 1 Date 3/11/19

Company Downing-Nelson Oil Co., Inc. Elevation 2358 KB 2350 GL

Address PO Box 1019 Hays, KS 67601

Co. Rep / Geo. Marc Downing Rig Discovery 4

Location: Sec. 34 Twp 13 S Rge. 22 W Co. Trego State KS

Interval Tested 3809-3833 Zone Tested LKC "E+F"

Anchor Length 24' Drill Pipe Run 3772 Mud Wt. 8.9

Top Packer Depth 3804 Drill Collars Run 32 Vis 48

Bottom Packer Depth 3809 Wt. Pipe Run — WL 7.6

Total Depth 3833 Chlorides 5,000 ppm System LCM 2#

Blow Description IF - BOB 16 mins. Built to 16.32"

ISI - No blow

FF - BOB 22 mins. Built to 12.84"

FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
285'	MW			70	30

Rec Total 285' BHT 115° Gravity ____ API RW .10 @ 56 °F Chlorides 83,000 ppm

(A) Initial Hydrostatic	1852	☒ Test	1200	T-On Location	1911
(B) First Initial Flow	14	☐ Jars		T-Started	1940
(C) First Final Flow	89	☐ Safety Joint		T-Open	2312
(D) Initial Shut-In	1028	☐ Circ Sub		T-Pulled 3/12	0142
(E) Second Initial Flow	92	☐ Hourly Standby		T-Out	0327
(F) Second Final Flow	148	☒ Mileage	72 RT 72	Comments	
(G) Final Shut-In	1017	☐ Sampler			
(H) Final Hydrostatic	1791	☐ Straddle		☐ EM Tool	
		☐ Shale Packer		☐ Ruined Shale Packer	
Initial Open	30	☐ Extra Packer		☐ Ruined Packer	
Initial Shut-In	45	☐ Extra Recorder		☐ Extra Copies	
Final Flow	30	☐ Day Standby		Sub Total	0
Final Shut-In	45	☐ Accessibility		Total	1272
		Sub Total	1272	MP/DST Disc't	

Approved By ____________ Our Representative Brannan Lonsdale

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

4/10

Test Ticket

NO. 65676

Well Name & No. Stockline #2-34 Test No. 2 Date 3/13/19

Company Downing-Nelson Oil Co., Inc. Elevation 2358 KB 2350 GL

Address PO Box 1019 Hays, KS 67601

Co. Rep / Geo. Marc Downing Rig Discovery 4

Location: Sec. 34 Twp 13 S Rge. 22 W Co. Trego State KS

Interval Tested 4132-4190 Zone Tested Cherokee Sand

Anchor Length 58' Drill Pipe Run 4090 Mud Wt. 8.9

Top Packer Depth 4127 Drill Collars Run 32 Vis 52

Bottom Packer Depth 4132 Wt. Pipe Run —— WL 7.6

Total Depth 4190 Chlorides 5,000 ppm System LCM 2#

Blow Description IF-BOB 15 mins; Built to 16.46"

ISI-No blow

FF-BOB 22 mins; Built to 12.60"

FSI-No blow

Rec	Feet of	%gas	%oil	%water	%mud
125	OCMW		10	65	25
160	OCM		10		90
15	CO				

Rec Total 300' BHT 121° Gravity 36 API RW .28 @ 55 °F Chlorides 29,000 ppm

(A) Initial Hydrostatic	2080	☒ Test	1300	T-On Location	0329
(B) First Initial Flow	24	☒ Jars	250	T-Started	0510
(C) First Final Flow	101	☒ Safety Joint	75	T-Open	0741
(D) Initial Shut-In	585	☐ Circ Sub		T-Pulled	1011
(E) Second Initial Flow	103	☐ Hourly Standby		T-Out	1221
(F) Second Final Flow	154	☒ Mileage	22 RT 72	Comments	
(G) Final Shut-In	576	☐ Sampler			
(H) Final Hydrostatic	2042	☐ Straddle		☐ EM Tool	
		☐ Shale Packer		☐ Ruined Shale Packer	
Initial Open	30	☐ Extra Packer		☐ Ruined Packer	
Initial Shut-In	45	☐ Extra Recorder		☐ Extra Copies	
Final Flow	30	☐ Day Standby		Sub Total	0
Final Shut-In	45	☐ Accessibility		Total	1697
		Sub Total	1697	MP/DST Disc't	

Approved By ______________________ Our Representative Brannan Lonsdale

Marc A. Downing

Consulting Petroleum Geologist

Geologic Report

Drilling Time and Sample Log

Operator **Downing-Nelson Oil Co., Inc.**			**Elevation** KB **2358** DF **2356** GL **2350**
Lease **Stecklein**		No. **2-34**	
API # **15-195-23084-0000**			**Casing Record** Surface **8 5/8" @ 222'** Production **5 1/2" @ 4397'**
Field **Wildcat**			
Location **335' FNL & 1800' FEL**			
Sec. **34**	Twp. **13s**	Rge. **22w**	**Electrical Surveys** **CNDL, DIL MEL**
County **Trego**	State **Kansas**		

Formation	Sample tops	Log Tops	Datum	Struct Comp
Top Anhydrite	1807	1805	+553	-1
Base Anhydrite	1852	1850	+508	FL
Topeka	3477	3475	-1117	+4
Heebner	3713	3710	-1352	+4
Toronto	3727	3726	-1368	+4
LKC	3743	3742	-1384	+4
BKC	3992	3990	-1632	-1
Marmaton	4096	4094	-1736	+1
Cherokee Sh	4143	4143	-1785	+1
Cherokee Sand	4187	4188	-1830	-3
Miss	4266	4264	-1906	-3
Arbuckle	4308	4308	-1950	Not Reached
Total Depth	4400	4400	-2042	

Reference Well For Structural Comparison **DNOCI - Stecklein Brothers #1-34**
748' FNL & 1057' FEL - Sec. 34-13s-22w

Drilling Contractor		**Discovery Drilling, Rig #4**		
Commenced	**3-7-19**	Completed		**3-14-19**
Samples Saved From		**3450'**	To	**RTD**
Drilling Time Kept From		**3350'**	To	**RTD**
Samples Examined From		**3450'**	To	**RTD**
Geological Supervision From		**3450'**	To	**RTD**

Summary and Recommendations

Due to structural position, DST recovery, and log evaluation, it was decided to set 5 1/2" production casing for completion.

Respectfully Submitted,

Marc A. Downing

...G			SWIFT Services, Inc.		DATE 3-7-19	PAGE NO.
...TOMER Downing-Nelson	WELL NO. # 2-29	LEASE Steckline		JOB TYPE Shallow Surf.	TICKET NO. 27503	

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	2300							On location
								8 5/8
								RTD - 222
								Circ on Bottom
	0015	3	5			200		pump wtr spacer
		3	34			300		pump cmt - 150 sks @ 14.7 PPG
		3	13			450		Disp
								Jet cellar to see cmt
								Circ 5 sks cmt
	0045							Job Complete
								Thanks
								David & Zach & Kirby

SWIFT Services, Inc.

PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 27490

CUSTOMER: Downing & Nelson | WELL: Steckline 2-34 | DATE: 03/14/19 | PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	LOC	ACCT	DF	TIME	DESCRIPTION	QTY	U/M	QTY	U/M	UNIT PRICE	AMOUNT
330		2				Swift Multi-Density Standard	200	sks			16.25	3250.00
325		2				Standard Cement	150	sks			13.00	1950.00
284		2				Calseal	7	sks			35.00	245.00
283		2				Salt	800	lbs			0.20	160.00
292		2				Halad 322	70	lbs			8.00	560.00
276		2				Flocele	75	lbs			2.50	187.50
581		2				SERVICE CHARGE Cement	~~CUBIC FEET~~ 350 sks				1.75	612.50
583		2				MILEAGE CHARGE TOTAL WEIGHT 35627 LOADED MILES 30	TON MILES 534.41				0.85	454.25

CONTINUATION TOTAL 7419.25

JOB LOG

SWIFT Services, Inc.

DATE	PAGE NO.
03/14/19	1

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Downing & Nelson	2-34	Steckline	2 Stage	27490

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1445							On location w/ Float Equipment
								RTD - 4400'
								LTD - 4400'
								5½" x 14# 105 Jts ran
								Total Pipe - 4388.99' set @ 4396.99'
								Shoe Jt - 42.45'; Baffle Plate - 4354.54'
								Centralizers - 1, 3, 5, 7, 9, 11, 62
								Basket - 63
								D.V. Tool - 63 @ 1790'
	1800							Start Pipe w/ Float Equipment
	2000							Break Circulation on Bottom
	2100							Hook up to Swift
		5	12				350	Pump Mudflush
		5	20				350	Pump KCL Spacer
	2110	4					350	Start EA-2 Cement @ 15.5 ppg
		4	36				Vac	Fin EA-2 Cmt
	2120		3					Drop Plug, wash out Pump & Lines
	2125	8½					Vac	Start Displacement
		7½	80				400	Catch Pressure, KCL in last tank
	2145	6	107				900/1500	Land Plug Lift PSI 900
								Land PSI 1500
	2150							Release Truck, Drop D.V. Bomb
	2155	2	8					Plug Rathole w/ 30 SKS SMD
	2200	2	5					Plug Mousehole w/ 15 SKS SMD
	2205						400	Open D.V. Tool
	2210	2						Start SMD Cement
	2240	2	55					Fin SMD Cement
	2245						Vac	Drop Plug
	2250	6					Vac	Start Displacement
		6	30				350	Catch Pressure
	2300	6	44				500/1300	Land Plug Lift PSI 500
								Land PSI 1300
								Circulated Cmt, 20 SKS to pit
	2305							Release, Dry
								Washup
								Rackup
	2330							Job Complete Thanks

Jon, Austin, Isaac