

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 # \_\_\_\_\_

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

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 #: \_\_\_\_\_

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

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  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

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](mailto: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 Geologist Report / Mud Logs <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
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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				

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:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top _____ Bottom _____
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	OGLE 4
Doc ID	1471532

All Electric Logs Run

Dual Induction Log
Micro Log
Sonic Log
Compensated Density/Neutron Log
Cement Bond Log

Form	ACO1 - Well Completion
Operator	K & N Petroleum, Inc.
Well Name	OGLE 4
Doc ID	1471532

Tops

Name	Top	Datum
Anhydrite	810	+1116
B. Anhydrite	838	+1088
Heebner	3047	-1121
Toronto	3063	-1137
Douglas	3076	-1150
Brown Lime	3136	-1298
Lansing	3151	-1225
BKC	3388	-1290
Arbuckle	3396	-1470







**TREATMENT REPORT**

Acid Stage No. \_\_\_\_\_

Date 8/13/2019 District GB F.O. No. 47127

Company K&N Petroleum

Well Name & No. Ogle #4

Location \_\_\_\_\_ Field \_\_\_\_\_

County Barton State KS

Casing: Size 5.5" Type & Wt. New 14# Set at \_\_\_\_\_ ft.

Formation: \_\_\_\_\_ Perf. \_\_\_\_\_ to \_\_\_\_\_

Formation: \_\_\_\_\_ Perf. \_\_\_\_\_ to \_\_\_\_\_

Formation: \_\_\_\_\_ Perf. \_\_\_\_\_ to \_\_\_\_\_

Liner: Size \_\_\_\_\_ Type & Wt. \_\_\_\_\_ Top at \_\_\_\_\_ ft. Bottom at \_\_\_\_\_ ft.

Cemented:  Perforated from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Tubing: Size & Wt. \_\_\_\_\_ Swung at \_\_\_\_\_ ft.

Perforated from \_\_\_\_\_ ft. to \_\_\_\_\_ ft.

Open Hole Size \_\_\_\_\_ T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

Type Treatment: Amt. Type Fluid Sand Size Pounds of Sand

Bkdown \_\_\_\_\_ Bbl./Gal. \_\_\_\_\_

\_\_\_\_\_ Bbl./Gal. \_\_\_\_\_

\_\_\_\_\_ Bbl./Gal. \_\_\_\_\_

\_\_\_\_\_ Bbl./Gal. \_\_\_\_\_

Flush \_\_\_\_\_ Bbl./Gal. \_\_\_\_\_

Treated from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. No. ft. 0

from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. No. ft. 0

from \_\_\_\_\_ ft. to \_\_\_\_\_ ft. No. ft. 0

Actual Volume of Oil / Water to Load Hole: \_\_\_\_\_ Bbl./Gal.

Pump Trucks. No. Used: Std. 365 Sp. \_\_\_\_\_ Twin \_\_\_\_\_

Auxiliary Equipment 367/310

Personnel Nathan-Greg-Clarence

Auxiliary Tools \_\_\_\_\_

Plugging or Sealing Materials: Type \_\_\_\_\_

Company Representative ED Treater Nathan W.

TIME	PRESSURES		Total Fluid Pumped	REMARKS
	Tubing	Casing		
8:45		5.5"		On Location. Rig laying down pipe.
				TD-3455' Centralizers-1,3,5,7,9
				Pipe-3448' Baskets-2,6
				Baffle-3434'
11:30				Start pipe in hole.
				Tag bottom and set pipe at 3448'
1:30				Break circulation with mud pump. Circulate for 1 hour.
2:30				Pump 600gal of Mud Flush.
2:35				Plug Rat Hole with 30sks
2:40				Mix 200sks 60/40poz 2%gel .75%C-37 .75%C-12 .25%C-12 10% Salt 5#/sk Gilsonite.
				Wash out pump and lines.
				Displace with 83.8bbbls at 8bpm-900#
3:10				Plug landed at 1200# Pressured up to 1500# Released pressure. Float Held.
				Thank You!
				Nathan W.



# Musgrove

**PETROLEUM  
CORPORATION**  
Claflin, Kansas

## GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY K&N Petroleum, Inc  
 LEASE Ogle # 4  
 FIELD Finger  
 LOCATION SW-SE-NE-NE 1190'FNL  
& 430' FEL  
 SEC 12 TWSP 17S RGE 13W  
 COUNTY Barton STATE Kansas

#### ELEVATIONS

KB 1926'  
 DF \_\_\_\_\_  
 GL 1916'  
 Measurements Are All  
 From KB

CONTRACTOR Southwind Drilling co. (Rig #8)  
 SPUD 08/07/2019 COMP 08/13/2019  
 RTD 3455' LTD 3454'  
 MUD UP 2606' TYPE MUD Chemical

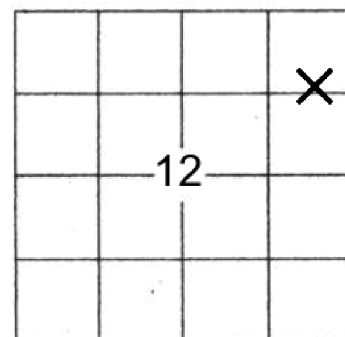
CASING  
 SURFACE 8 5/8"@385'  
 PRODUCTION 5 1/2"@3453'

#### ELECTRICAL SURVEYS

ELI Wireline  
 DUCP, MEL, DIL, CDL/CNL

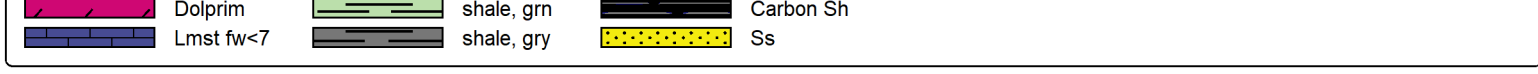
SAMPLES SAVED FROM 2700' TO RTD  
 DRILLING TIME KEPT FROM 2700' TO RTD  
 SAMPLES EXAMINED FROM 2900 TO RTD  
 GEOLOGICAL SUPERVISION FROM 2900' TO RTD  
 GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS	LOG	SAMPLES
Anhydrite	810 +1116	
B. Anhydrite	838 +1088	
Heebner	3047 -1121	
Toronto	3063 -1137	
Douglas	3076 -1150	
Brown Lime	3136 -1298	
Lansing	3151 -1225	
BKC	3388 -1290	
Arbuckle	3396 -1470	
RTD	3455 -1529	



#### ROCK TYPES

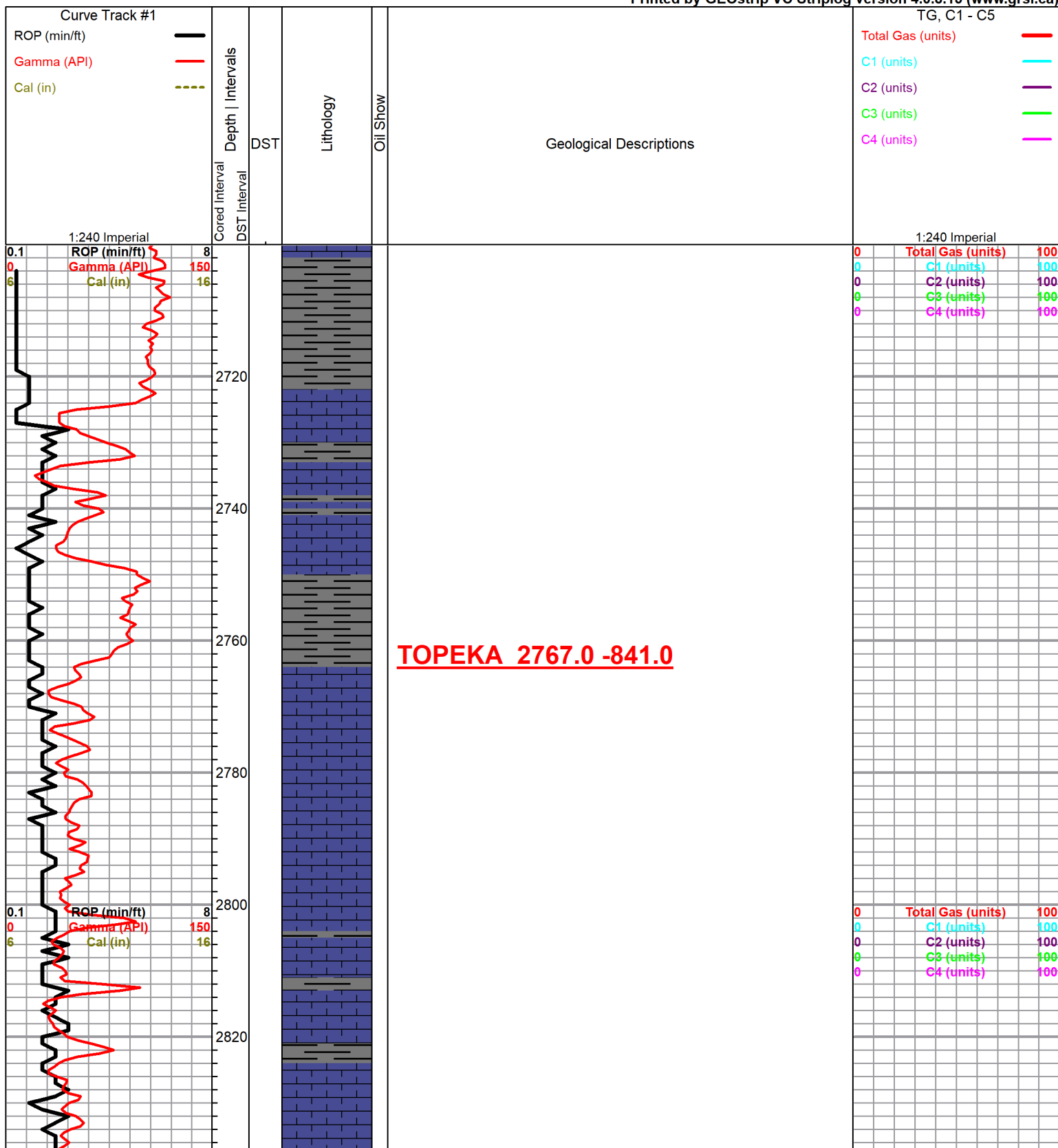


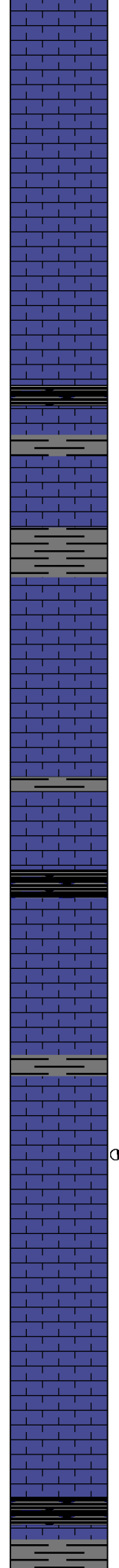
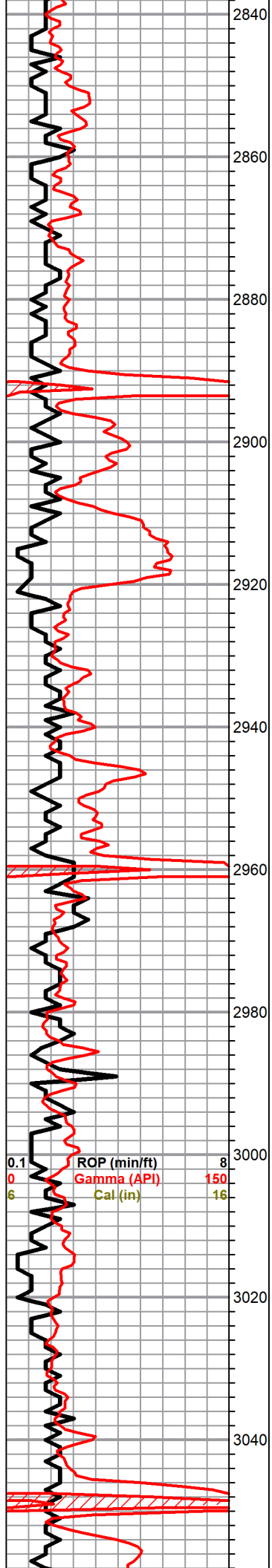


**OTHER SYMBOLS**

- Oil Show**
- Good Show
  - Fair Show
  - Poor Show
  - Spotted or Trace
  - Questionable Stn
  - D Dead Oil Stn
  - Fluorescence
  - \* Gas
- DST**
- DST Int
  - DST alt
  - Core
  - tail pipe

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)





Sh, black carb

LS, white/ gry, fxl, foss in pt, poor vis. poro.

① LS, tan, brn fxl, foss in pt, few sub oom, chalky, tr. brown stain, nsfo, no odor

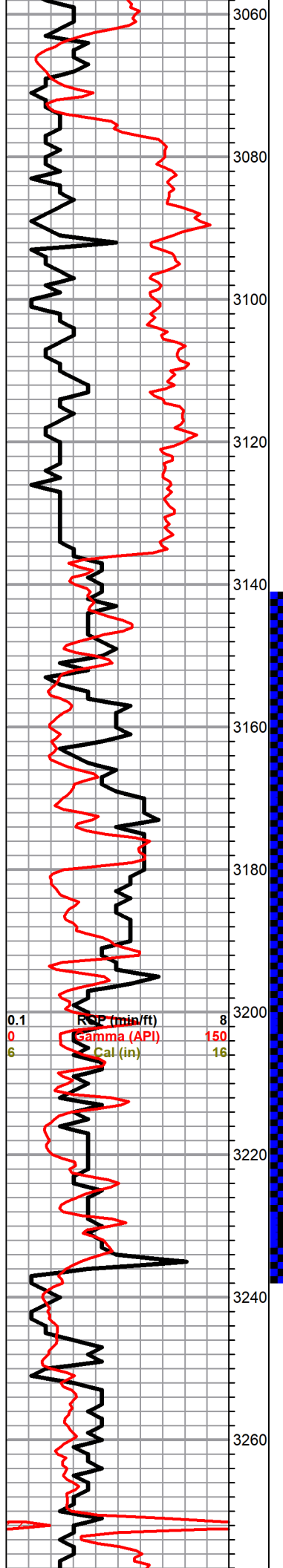
LS, gry, white, fxl, slightly chalky, few gran,

a/a,+ white/ gry chert

**HEEBNER 3049.0 -1123.0**

Sh, black carb

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100

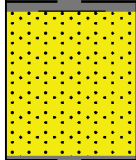


**TORONTO 3067.0 -1141.0**

LS, white, gry, fxl, chalky, tr. blk/ gry stain , nsfo, no odor

**DOUGLAS 3078.0 -1152.0**

Sh, gry, greenish



Sd, gry, gryish, green, vfg, mica, few friable, scatt IG (barren)

Sh, gry, griish green rusty brown silty sh

**BROWN LIME 3138.0 -1218.0**

LS, tan/ brn fxl, slightly cherty

**LANSING 3150.0 -1228.0**

● LS, tan,gry sub oom, chalky, fr. stain/sat, fr-sfo, good odor

○ LS, gry, white, chalky, poor vis porosity

LS, white, cream, fxl, chalky poorly developed vis porosity. no shows

○ LS, cream, tan, ool, slightly chalky, brn . stain, sfo, ft. odor

○ LS, white, gry, ool, chalky, poor vis. porosity, poor stain, wk sfo, no odor

Sh, gry, silty soft

LS, cream, tan, ool, oom, fair oom porosity (barren)

LS, tan, slightly cherty (dense)

Tr. gry/ blk sh.

DST #1 3143-3233

Misrun - hit bridge  
-30'

DST#2 3143-3233

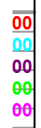
30-30-45-60

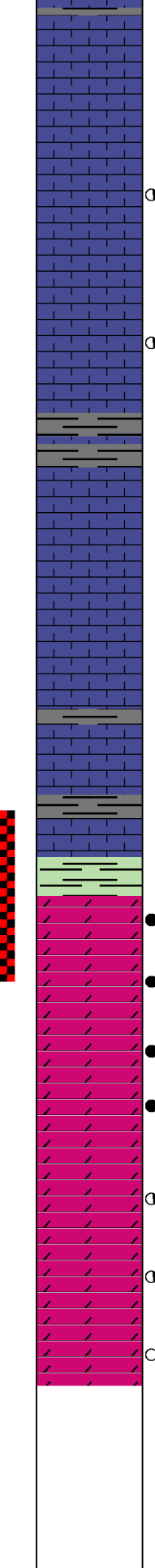
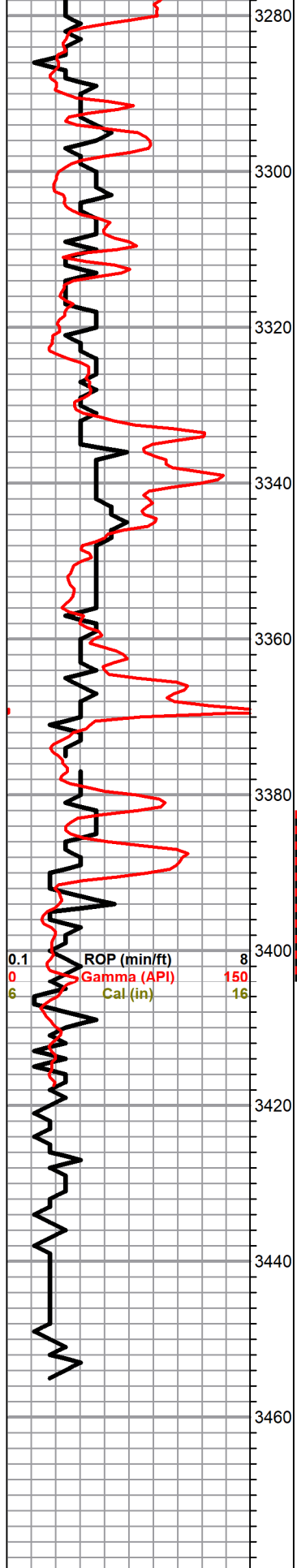
1st Open:  
weak

2nd Open:  
Weak .75"

Recovery:  
35' Mud

Pressures:  
ISIP 634 psi  
FSIP 29 psi  
IFP 14-21 psi  
FFP 22-24 psi  
HSH 1482-1468 psi





LS, white, sub oom, chalky poor vis. porosity, (barren)

LS, white ool, chalky, scattered porosity, tr. brn stain , tr. fo, no odor

LS, white, gry sub oom, chalky, tr. brn spty stain, nsfo, no odor

Sh, gry, silty, soft

LS, white, tan, gry fxl, slightly foss, chalky , no shows

Sh, gry gryish soft

LS, tan, highly ool, slightly cherty poor vis porosity, no shows

**BKC 3388.0 -1462.0**

**ARBUCKLE 3396.0 -1470.0**

Dol. white/ cream, fxl, suc. slightly cherty, tr. brn stain,

Dol. white, tan, suc. fair stain/sat., sfo, ft. odor

A/a+ white, cream, f-med xln, dol. fair inxln porosity, brn stain , sfo, ft. odor

Dol, white, cream, gry, f-med xln , fair inxln porosity, brn stain, sfo

Dol. a/a , tr. poor stain, tr. fo,

Dol white, cream, gry, fx-med xln, fr. inxln porosity, brn, blk stain , tr. fo, ??? odor

Dol, white, cream, med/ coarse xln, good inxln porosity, blk stain, nsfo ,

**RTD 3454.0 -1528.0**

**DST#3 3382-3404**  
 30-30-30-45

1st Open:  
 BOB 30sec.

2nd Open:  
 BOB 1.5 mins.

Recovery:  
 1338' Clean Oil

189' Muddy Gassy Oil

Pressures  
 ISIP 668 psi  
 FSIP 723 psi  
 IFP 344-542 psi  
 FFP 559-624 psi  
 HSH 1625-1610 psi

10  
 10  
 10  
 10  
 10







# Company: K & N Petroleum, Inc

## Lease: Ogle #4

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling, Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**  
Well Complete

**DATE**  
August  
**11**  
2019

**DST #1**      **Formation: L/KC "A-F"**      **Test Interval: 3142 - 3198'**      **Total Depth: 3198'**  
Time On: 11:23 08/11      Time Off: 15:05 08/11  
Time On Bottom: 00:00 01/01      Time Off Bottom: 00:00 01/01

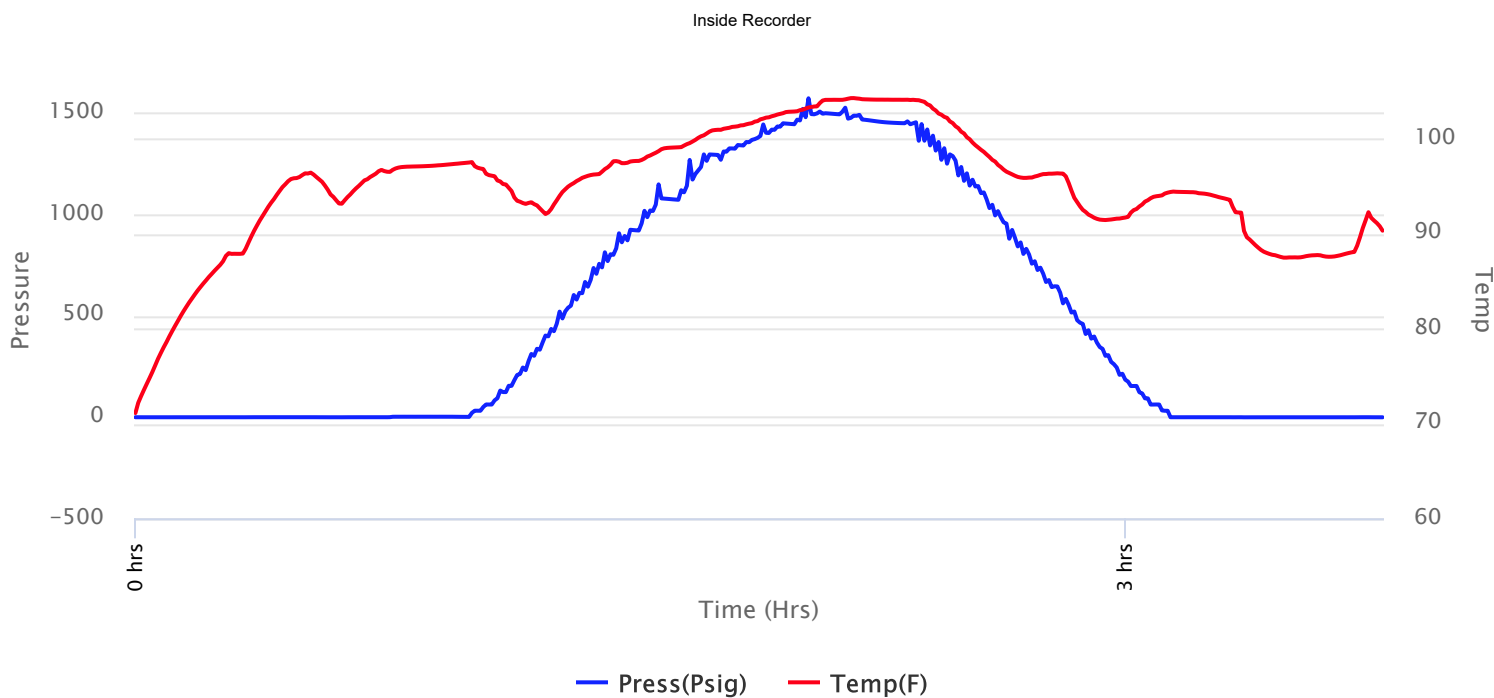
Electronic Volume Estimate:  
0'

1st Open  
N/A

1st Close  
N/A

2nd Open  
N/A

2nd Close  
N/A





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 8  
 Elevation: 1916 GL  
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 Time On: 11:23 08/11      Time Off: 15:05 08/11  
 Time On Bottom: 00:00 01/01      Time Off Bottom: 00:00 01/01

Recovered

Foot      BBS

Description of Fluid      Gas %      Oil %      Water %      Mud %

Total Recovered: 0 ft  
 Total Barrels Recovered: 0

Reversed Out  
 NO

Initial Hydrostatic Pressure	0	PSI
Initial Flow	0	PSI
<b>Initial Closed in Pressure</b>	<b>0</b>	<b>PSI</b>
Final Flow Pressure	0	PSI
<b>Final Closed in Pressure</b>	<b>0</b>	<b>PSI</b>
Final Hydrostatic Pressure	0	PSI
Temperature	0	°F
Pressure Change Initial Close / Final Close	0.0	%





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**

Well Complete

**DATE**

August

**11**

2019

**DST #1      Formation: L/KC "A-  
F"      Test Interval: 3142 -      Total Depth: 3198'**

Time On: 11:23 08/11

Time Off: 15:05 08/11

Time On Bottom: 00:00 01/01

Time Off Bottom: 00:00 01/01

**BUCKET MEASUREMENT:**

1st Open: MISRUN!

1st Close: N/A

2nd Open: N/A

2nd Close: N/A

**REMARKS:**

Hit bridge 30 ft. off bottom. No way to put head joint on.



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 Time On: 11:23 08/11      Time Off: 15:05 08/11  
 Time On Bottom: 00:00 01/01      Time Off Bottom: 00:00 01/01

**Down Hole Makeup**

<b>Heads Up:</b> 31.91 FT	<b>Packer 1:</b> 3137 FT
<b>Drill Pipe:</b> 3148.75 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3142 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3129 FT
<b>Collars:</b> FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3179 FT
<b>Test Tool:</b> 26.16 FT <i>ID-3 1/2-FH</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 56	<b>Surface Choke:</b> 1"
	<b>Bottom Choke:</b> 5/8"

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 2 FT  
*4 1/2-FH*





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API #: 15-009-26265-00-00

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Time On: 11:23 08/11      Time Off: 15:05 08/11  
Time On Bottom: 00:00 01/01      Time Off Bottom: 00:00 01/01

**Gas Volume Report**

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

Time	Orifice	PSI	MCF/D
------	---------	-----	-------





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**11**  
 2019

**DST #2 Formation: L/KC "A-F" Test Interval: 3143 - 3233' Total Depth: 3233'**

Time On: 22:16 08/11 Time Off: 04:53 08/12  
 Time On Bottom: 00:16 08/12 Time Off Bottom: 03:01 08/12

Electronic Volume Estimate:  
 25'

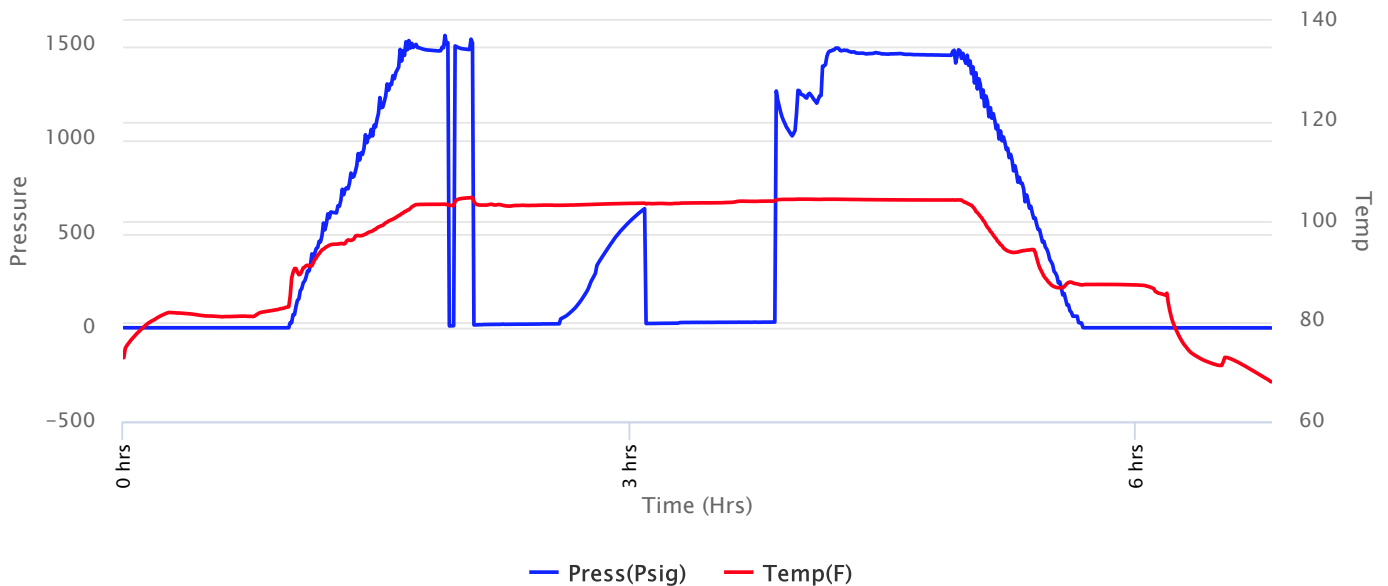
1st Open  
 Minutes: 30  
 Current Reading:  
 2.3" at 30 min  
 Max Reading: 2.3"

1st Close  
 Minutes: 30  
 Current Reading:  
 0" at 30 min  
 Max Reading: 0"

2nd Open  
 Minutes: 45  
 Current Reading:  
 .1" at 45 min  
 Max Reading: .7"

2nd Close  
 Minutes: 60  
 Current Reading:  
 0" at 60 min  
 Max Reading: 0"

Inside Recorder





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 8  
 Elevation: 1916 GL  
 Field Name: Finger  
 Pool: Infield  
 Job Number: 377  
 API #: 15-009-26265-00-00

**Operation:**  
 Well Complete

**DATE**  
 August  
**11**  
 2019

**DST #2**    **Formation: L/KC "A-F"**    **Test Interval: 3143 - 3233'**    **Total Depth: 3233'**  
 Time On: 22:16 08/11    Time Off: 04:53 08/12  
 Time On Bottom: 00:16 08/12    Time Off Bottom: 03:01 08/12

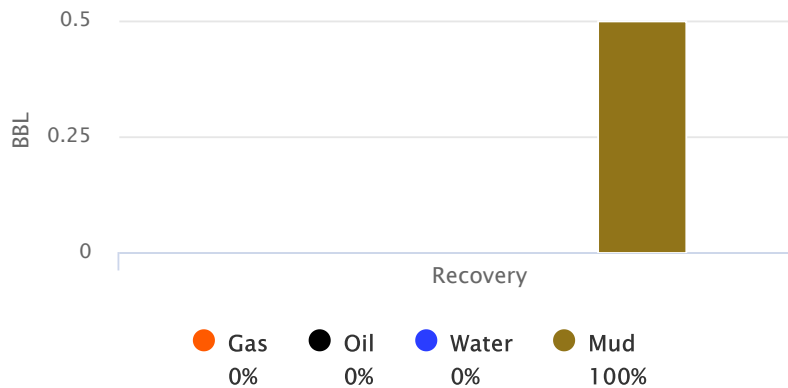
Recovered

<u>Foot</u>	<u>BBLS</u>	<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
35	0.49805	M	0	0	0	100

Total Recovered: 35 ft  
 Total Barrels Recovered: 0.49805

**Reversed Out**  
 NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1482	PSI
Initial Flow	14 to 21	PSI
<b>Initial Closed in Pressure</b>	<b>634</b>	<b>PSI</b>
Final Flow Pressure	22 to 24	PSI
<b>Final Closed in Pressure</b>	<b>29</b>	<b>PSI</b>
Final Hydrostatic Pressure	1468	PSI
Temperature	104	°F
Pressure Change Initial Close / Final Close	95.4	%

GIP cubic foot volume: 0



**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**

Well Complete

**DATE**

August

**11**

2019

<b>DST #2</b>	<b>Formation: L/KC "A- F"</b>	<b>Test Interval: 3143 - 3233'</b>	<b>Total Depth: 3233'</b>
	Time On: 22:16 08/11	Time Off: 04:53 08/12	
	Time On Bottom: 00:16 08/12	Time Off Bottom: 03:01 08/12	

**BUCKET MEASUREMENT:**

1st Open: 1 in. blow building to 2 1/4 ins.

1st Close: No blow back.

2nd Open: Blow building to 3/4 in.

2nd Close: No blow back.

**REMARKS:**

Tool slid 10 ft. to bottom. Flushed tool 10 mins. into 2nd open.

Had 35 ft. of recovery but the driller popped off the pipe before anyone was ready so was unable to get a sample.

Tool Sample: 0% Gas 0% Oil 0% Water 100% Mud





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 8  
 Elevation: 1916 GL  
 Field Name: Finger  
 Pool: Infield  
 Job Number: 377  
 API #: 15-009-26265-00-00

**Operation:**  
 Well Complete

**DATE**  
 August  
**11**  
 2019

**DST #2      Formation: L/KC "A-F"      Test Interval: 3143 - 3233'      Total Depth: 3233'**  
 Time On: 22:16 08/11      Time Off: 04:53 08/12  
 Time On Bottom: 00:16 08/12      Time Off Bottom: 03:01 08/12

**Down Hole Makeup**

<b>Heads Up:</b> 30.7 FT	<b>Packer 1:</b> 3138 FT
<b>Drill Pipe:</b> 3148.54 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3143 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3130 FT
<b>Collars:</b> FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3212 FT
<b>Test Tool:</b> 26.16 FT <i>ID-3 1/2-FH</i>	<b>Well Bore Size:</b> 7 7/8
	<b>Surface Choke:</b> 1"
	<b>Bottom Choke:</b> 5/8"

**Total Anchor:** 90

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 2 FT  
*4 1/2-FH*

**Change Over:** .5 FT

**Drill Pipe: (in anchor):** 64 FT  
*ID-3 1/2*

**Change Over:** .5 FT

**Perforations: (below):** 22 FT  
*4 1/2-FH*





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**  
Well Complete

**DATE**  
August  
**11**  
2019

**DST #2**      **Formation: L/KC "A-  
F"**      **Test Interval: 3143 -  
3233'**      **Total Depth: 3233'**  
Time On: 22:16 08/11      Time Off: 04:53 08/12  
Time On Bottom: 00:16 08/12      Time Off Bottom: 03:01 08/12

**Gas Volume Report**

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
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Time	Orifice	PSI	MCF/D
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# Company: K & N Petroleum, Inc Lease: Ogle #4

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling, Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**  
Well Complete

**DATE**  
August  
**12**  
2019

**DST #3    Formation: Arbuckle    Test Interval: 3382 - 3404'    Total Depth: 3404'**

Time On: 21:10 08/12    Time Off: 04:05 08/13  
Time On Bottom: 23:09 08/12    Time Off Bottom: 01:24 08/13

Electronic Volume Estimate:  
2118'

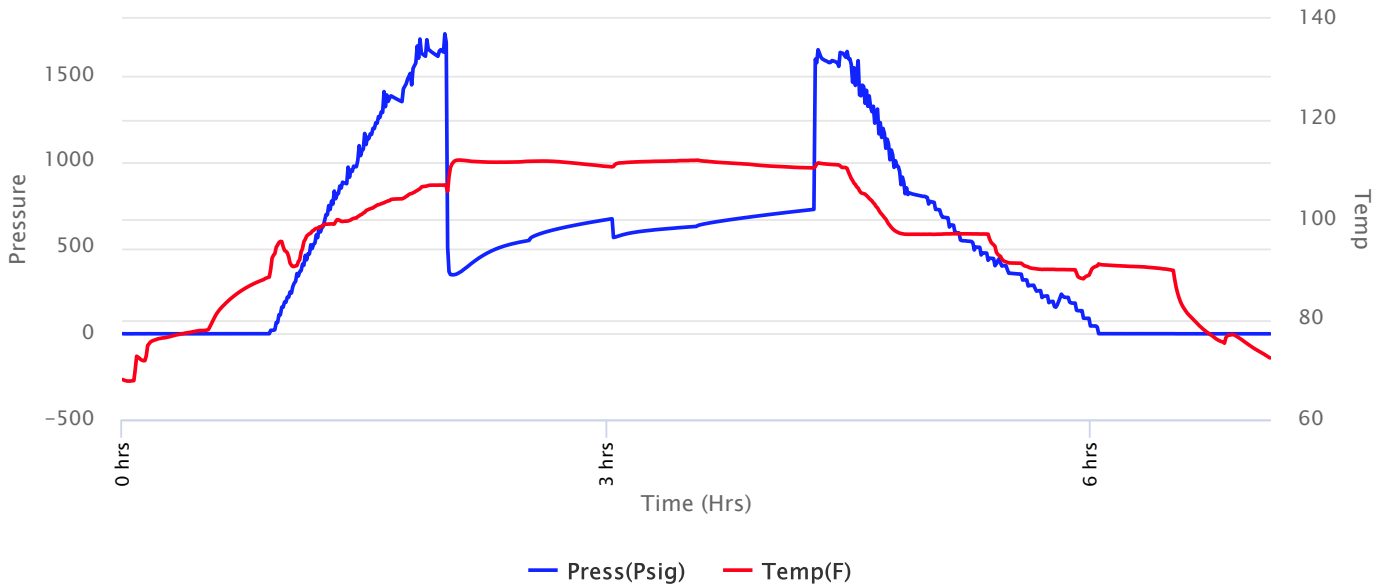
1st Open  
Minutes: 30  
Current Reading:  
218.7" at 30 min  
Max Reading: 220"

1st Close  
Minutes: 30  
Current Reading:  
0" at 30 min  
Max Reading: 0"

2nd Open  
Minutes: 30  
Current Reading:  
43.5" at 30 min  
Max Reading: 43.5"

2nd Close  
Minutes: 45  
Current Reading:  
0" at 45 min  
Max Reading: 0"

Inside Recorder





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 8  
 Elevation: 1916 GL  
 Field Name: Finger  
 Pool: Infield  
 Job Number: 377  
 API #: 15-009-26265-00-00

**Operation:**  
 Well Complete

**DATE**  
 August  
**12**  
 2019

**DST #3 Formation: Arbuckle Test Interval: 3382 - 3404' Total Depth: 3404'**  
 Time On: 21:10 08/12 Time Off: 04:05 08/13  
 Time On Bottom: 23:09 08/12 Time Off Bottom: 01:24 08/13

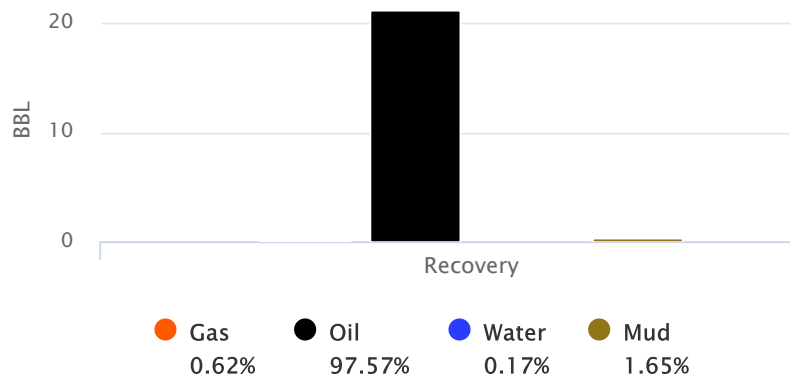
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
1338	19.03974	O	0	100	0	0
126	1.79298	SLWCSLGCSLMCO	5	84	1	10
63	0.89649	SLWCSLGC MCO	5	73	2	20

Total Recovered: 1527 ft  
 Total Barrels Recovered: 21.72921

Reversed Out  
 NO

**Recovery at a glance**



GIP cubic foot volume: 0.755

Initial Hydrostatic Pressure	1625	PSI
Initial Flow	344 to 542	PSI
<b>Initial Closed in Pressure</b>	<b>668</b>	<b>PSI</b>
Final Flow Pressure	559 to 624	PSI
<b>Final Closed in Pressure</b>	<b>723</b>	<b>PSI</b>
Final Hydrostatic Pressure	1610	PSI
Temperature	112	°F
Pressure Change Initial Close / Final Close	0.0	%



**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**

Well Complete

**DATE**

August

**12**

2019

**DST #3      Formation: Arbuckle      Test Interval: 3382 -      Total Depth: 3404'**  
**3404'**

Time On: 21:10 08/12      Time Off: 04:05 08/13

Time On Bottom: 23:09 08/12      Time Off Bottom: 01:24 08/13

**BUCKET MEASUREMENT:**

1st Open: Blow building. BOB in 30 secs.

1st Close: No blow back.

2nd Open: 1 in. blow building. BOB in 1 min. 30 secs.

2nd Close: No blow back.

**REMARKS:**

Tool Sample: 0% Gas 100% Oil 0% Water 0% Mud

Gravity: 29.2 @ 60 °F



**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 8  
 Elevation: 1916 GL  
 Field Name: Finger  
 Pool: Infield  
 Job Number: 377  
 API #: 15-009-26265-00-00

**Operation:**  
 Well Complete

**DATE**  
 August  
**12**  
 2019

**DST #3      Formation: Arbuckle      Test Interval: 3382 - 3404'      Total Depth: 3404'**  
 Time On: 21:10 08/12      Time Off: 04:05 08/13  
 Time On Bottom: 23:09 08/12      Time Off Bottom: 01:24 08/13

**Down Hole Makeup**

<b>Heads Up:</b> 14.26 FT	<b>Packer 1:</b> 3377 FT
<b>Drill Pipe:</b> 3371.1 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3382 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3369 FT
<b>Collars:</b> FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3384 FT
<b>Test Tool:</b> 26.16 FT <i>ID-3 1/2-FH</i>	<b>Well Bore Size:</b> 7 7/8
	<b>Surface Choke:</b> 1"
	<b>Bottom Choke:</b> 5/8"

**Total Anchor:** 22

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** FT  
*4 1/2-FH*

**Change Over:** FT

**Drill Pipe: (in anchor):** FT  
*ID-3 1/2*

**Change Over:** FT

**Perforations: (below):** 21 FT  
*4 1/2-FH*





**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
County: BARTON  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 8  
Elevation: 1916 GL  
Field Name: Finger  
Pool: Infield  
Job Number: 377  
API #: 15-009-26265-00-00

**Operation:**

Well Complete

**DATE**

August

**12**

2019

**DST #3      Formation: Arbuckle      Test Interval: 3382 -      Total Depth: 3404'**  
**3404'**

Time On: 21:10 08/12      Time Off: 04:05 08/13

Time On Bottom: 23:09 08/12      Time Off Bottom: 01:24 08/13

**Mud Properties**

**Mud Type:** Chemical

**Weight:** 9.1

**Viscosity:** 43

**Filtrate:** 10.8

**Chlorides:** 5,000 ppm



**Company: K & N Petroleum, Inc**  
**Lease: Ogle #4**

SEC: 12 TWN: 17S RNG: 13W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: Southwind Drilling,  
 Inc - Rig 8  
 Elevation: 1916 GL  
 Field Name: Finger  
 Pool: Infield  
 Job Number: 377  
 API #: 15-009-26265-00-00

**Operation:**  
 Well Complete

**DATE**  
 August  
**12**  
 2019

**DST #3      Formation: Arbuckle      Test Interval: 3382 -      Total Depth: 3404'**  
**3404'**  
 Time On: 21:10 08/12      Time Off: 04:05 08/13  
 Time On Bottom: 23:09 08/12      Time Off Bottom: 01:24 08/13

**Gas Volume Report**

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
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Time	Orifice	PSI	MCF/D
------	---------	-----	-------

