

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

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	Culbreath Oil & Gas Company, Inc.
Well Name	MINIUM R 1-32
Doc ID	1421933

All Electric Logs Run

Micro
Resistivity
Porosity
Survey
Sonic





# STEVEN P. MURPHY, P.G.

*Petroleum Geologist (KS #228)*

Cell 620.639.3030

Fax 785.387.2400

RR#1, Box 69

Otis, Kansas 67565

geomurphy@gbta.net

Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Minium R#1-32

API: 15-179-21449-00-00

Location: Sheridan County

License Number: 34344

Spud Date: 6/11/2018

Surface Coordinates: 840' FNL & 1260' FWL (Approx. NE SE NW NW)

Section 32-T9S-R26W

Region: Kansas

Drilling Completed: 6/19/2018

Bottom Hole Vertical Well w/ minimal deviation

Coordinates:

Ground Elevation (ft): 2651'

K.B. Elevation (ft): 2661'

Logged Interval (ft): 3600' To: TD Total Depth (ft): LTD - 4181'

Formation: Lower Topeka through Marmaton

Type of Drilling Fluid: Chemical - Andy's

Printed by WellSight LogViewer from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

Company: Culbreath Oil & Gas Co, Inc.

Address: 3501 S. Yale Ave

Tulsa, OK 75135

## GEOLOGIST

Name: Steven P. Murphy, PG (KS License #228)

Company: Consulting Petroleum Geologist

Address: 3365 CR 390

Otis, KS 67565

Cell: 620-639-3030

## REMARKS

8-5/8" Surface casing was set @ 268'

LOG TOPS (with associated datums):

Top Anhydrite - 2255 (+406)  
Base Anhydrite - 2299(+362)  
Topeka - 3602 (-941)  
Heebner - 3803 (-1142)  
Lansing - 3850 (-1189)  
Muncie Crk - 3972 (-1311)  
Stark - 4036 (-1375)  
Base KC - 4078 (-1417)

## DSTs

Drillstem testing performed by Diamond Testing.

DST #1 3870-3900

30:60:30:60

IF: BOB 11 min/ISI: No blow

FF: BOB 18 min/FSI: 1/4"

15' O, 53' SLOCW,

252' SLOCSLMCW

IHP: 1833 FHP: 1823

IFP: 24-115 ISIP: 977

FFP: 119-188 FSIP: 955

BHT - 126 F

DST #2 3968-4006

30:60:30:60

IF: Wk surf blow/ISI: No blow

FF:No blow/FSI: No blow

3' SLOCM

IHP: 1900 FHP: 1897

IFP: 11-11 ISIP: 709

FFP:11-11 FSIP: 599

BHT - 115 F

DST #3 4014-4034

30:60:30:60

IF: Wk blow to 1.5"/ISI: No blow

FF:Wk blow to 1.8"/FSI: No blow

20' HOCM (30%O, 70%M)

IHP: 1914 FHP: 1904

IFP: 9-13 ISIP: 1324

FFP:11-15 FSIP: 1305

BHT - 117 F

## COMMENTS

Based on the results of drillstem test results and log & sample analysis, it was determined that the well was not commercially viable, and was subsequently plugged.

Respectfully submitted,

Steven P. Murphy, PG  
Consulting Petroleum Geologist  
KS License #228

# ROCK TYPES

## LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Sltstn
- Shale
- Sandylms
- Lms
- Gry sh
- Dtd
- Dol
- Carb sh
- pipesymbol
- unknown lith
- Red shale

## FOSSIL

- Oomoldic
- Fuss
- Algae

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## MINERAL

- Silty
- Sand
- Dol
- Chlorite
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol

- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

## STRINGER

- Red shale
- Sh
- Sandylms
- Lms
- Gryslt
- Grysh
- Dol
- Clystn
- Carbsh
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst

- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

- Sltstng
- Ssstng

## TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackst

## OIL SHOW

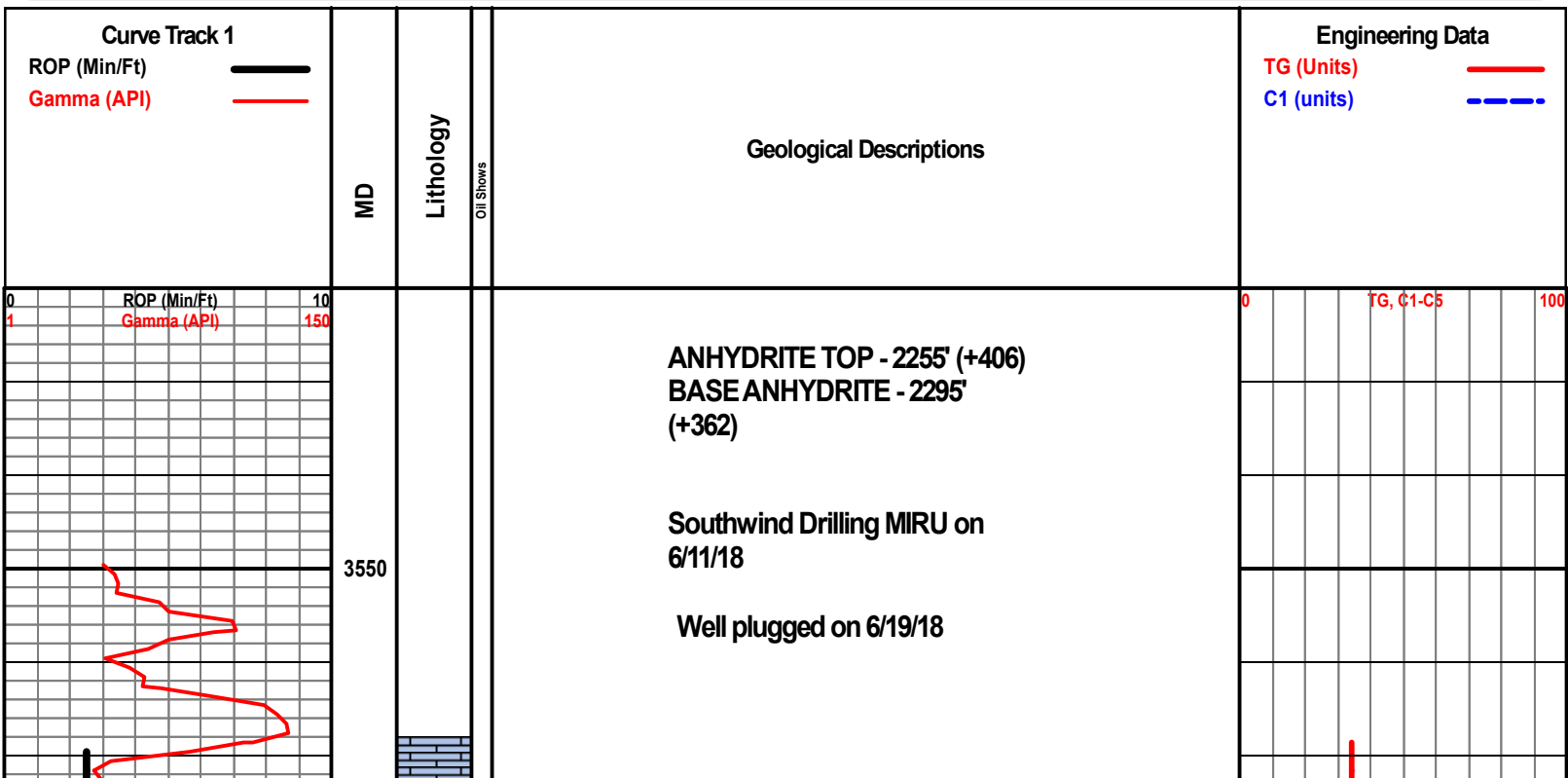
- Gas show
- Good
- Fair
- Poor
- Dead

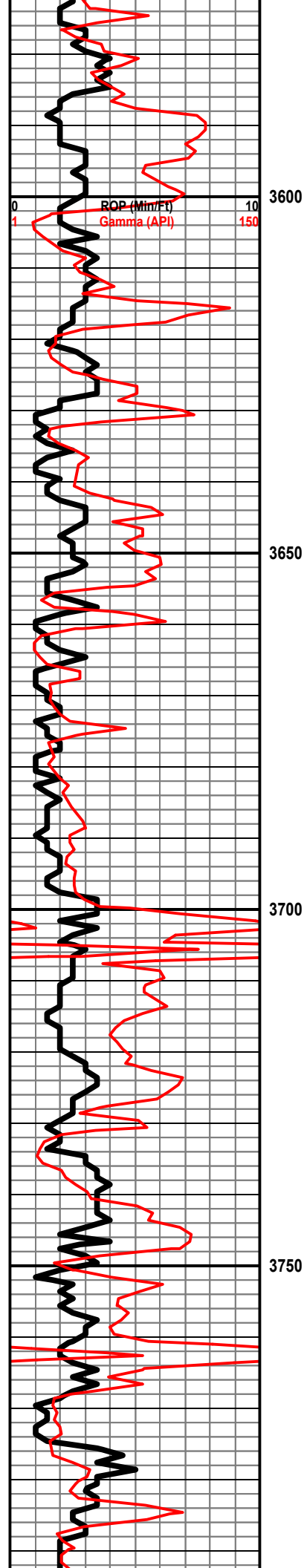
## INTERVAL

- Dst
- Core
- Dst
- Straddle test tail pipe

## EVENT

- Rft
- Sidewall
- Dst
- Open hole
- Perforations





**TOPEKA 3595 (-934)**

LS: crm-gry, vfxln, sl chalky, dense, NS

LS: as above

LS: wht-tan-gry, fxln, foss, chalky, dense, NS

LS: as above w/abund multi-col sh, NS

LS & SH: as above

LS: crm-tan, vfxln, chalky, sl cherty, NS

LS: as above

SH: blk-gry

LS: crm-gry, vfxln, chalky, sl cherty, dense, NS

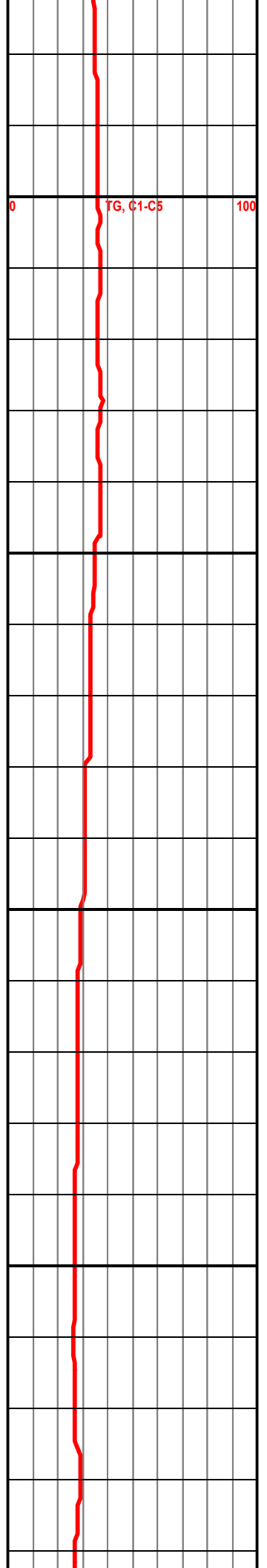
LS: crm-tan-gry, vfxln, chalky, dense, NS

LS: as above

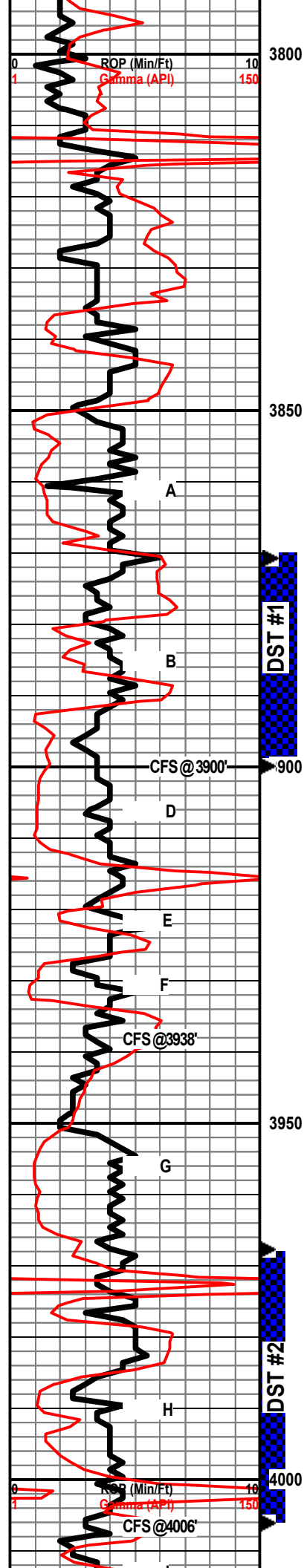
SH: blk, carb

LS: crm-brn-gry, vfxln, chalky, sl cherty, dense, NS

LS: as above







LS: crm-tan, fxln, foss, NS

SH: multi-colored

HEEBNER 3817 (-1156)

SH: blk, carb

Short trip @ 3900' (20 stands)

LS: whttan-brn, vfxln, minor cht, dense, NS

Strap @ 3900' - 1.59 short

LS: wht-tan, f-vfxln, oolitic, pr inter-ool por, vssfo on brk, lite brn stn, sl odor

SH: gry-grn-blk

LANSING 3855 (-1194)

DST #1 3870-3900

30:60:30:60

IF: BOB 11 min/ISI: No blow

FF: BOB 18 min/FSI: 1/4"

15' O, 53' SLOCW,

252' SLOCMLCW

IHP: 1833 FHP: 1823

IFP: 24-115 ISIP: 977

FFP: 119-188 FSIP: 955

BHT - 126 F

SH: grygrn-brn-red

LS: crm-tan, fxln, oolitic, fr inter-ool por, fsfo, dk brn stn, gr odor

Circ samples: crm-gry, fxln, gsfo, gsy, even lt stn, fr odor

LS: crm-tan, vfxln, dense, NS

SH: grygrn-brn-red

LS: wht-tan, fxln, ool in pt, fr-gd inxln por, ssfo, spotty stn, gd odor

DST #2 3968-4006

30:60:30:60

IF: Wk surf blow/ISI: No blow

FF: No blow/FSI: No blow

3' SLOCM

IHP: 1900 FHP: 1897

IFP: 11-11 ISIP: 709

FFP: 11-11 FSIP: 599

BHT - 115 F

LS: wht-tan, fxln, fr inxln por, NS

LS: tan-brn-gry, vfxln, dense, sl chalky, cherty, NS

LS: as above

MUNCIE CRK 3970 (-1309)

SH: blk-gry

LS: wht-gry, fxln, foss, rare tr FO w/gd vug por, mostly tite, cherty

LS: wht-gry, vfxln, dense, NS - SH: gry-brn

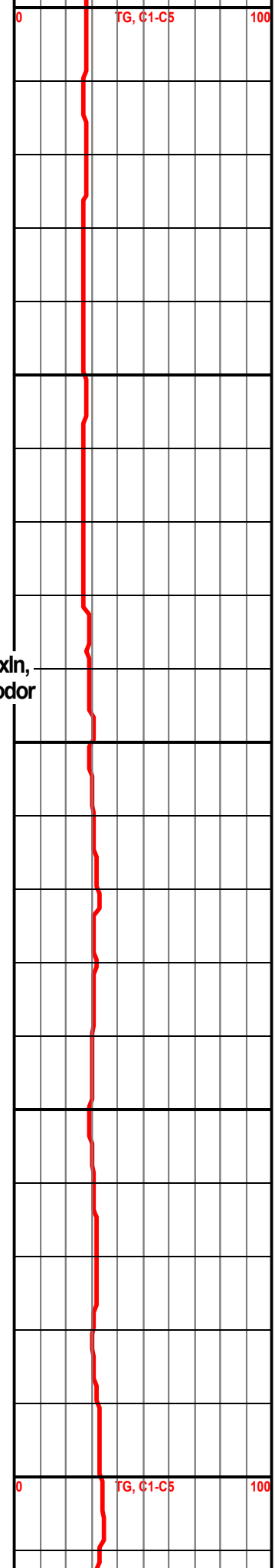
LS: crm-tan-gry, vfxln, dense, sl chalky, NS

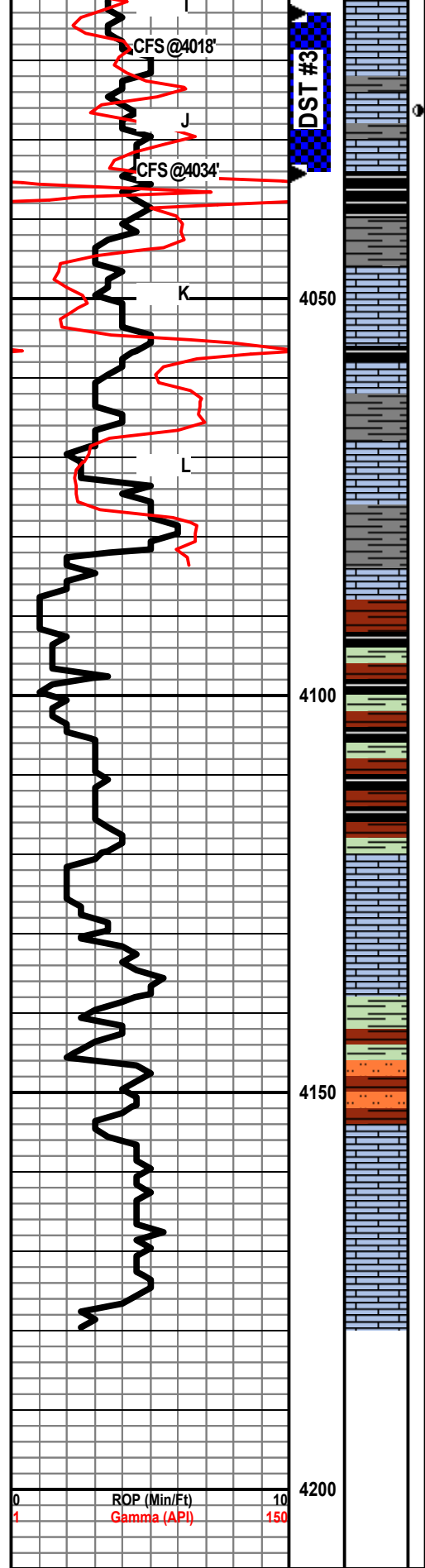
DST #3 4014-4034

30:60:30:60

IF: Wk blow to 1.5"/ISI: No blow

FF: Wk blow to 1.8"/FSI: No blow





SH: gry-blk-brn

FF: VFR blow to 1.8 / PSI. NO blow  
 20' HOCM (30%O, 70%M)  
 IHP: 1914 FHP: 1904  
 IFP: 9-13 ISIP: 1324

LS: wht-gry, fxl, ool, fr inter-ool  
 por & vug por, ssfo, fr odor

I-15 FSIP: 1305  
 BH1 - 117 F

LS: crm-tan, vfxln, dense, NS

STARK 4043 (-1382)

SH: blk-gry

LS: wht-tan-gry, vfxln, dense, NS

SH: gry-grn-brn

LS: wht-gry, vfxln, dense, NS

BKC 4081 (-1420)

SH: gry-blk-grn-dk red

SH: as above

SH: as above

MARMATON 4120 (-1459)

LS: crm-brn-gry, vfxln, dense, NS

SH: grn-brn-gry (also grn siltstone)

SH: red-brn-grygrn (silty)

LS: wht-brn-gry, vfxln, foss, dense, NS

LS & SH: as above

RTD 4180'  
 LTD 4181'

Hi gas reading from dumped oil from test

ROP (Min/Ft) 10  
 Gamma (API) 150

TG, C1-C5 100



**Company: Culbreath Oil & Gas Co Inc.**  
**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
 County: SHERIDAN  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 1  
 Elevation: 2650 EGL  
 Field Name: Sky  
 Pool: Infield  
 Job Number: 165

**DATE**  
 June  
**16**  
 2018

**DST #1**      **Formation: Lansing kc, B**      **Test Interval: 3870 - 3900'**      **Total Depth: 3900'**  
 Time On: 11:34 06/16      Time Off: 19:04 06/16  
 Time On Bottom: 13:55 06/16      Time Off Bottom: 16:55 06/16

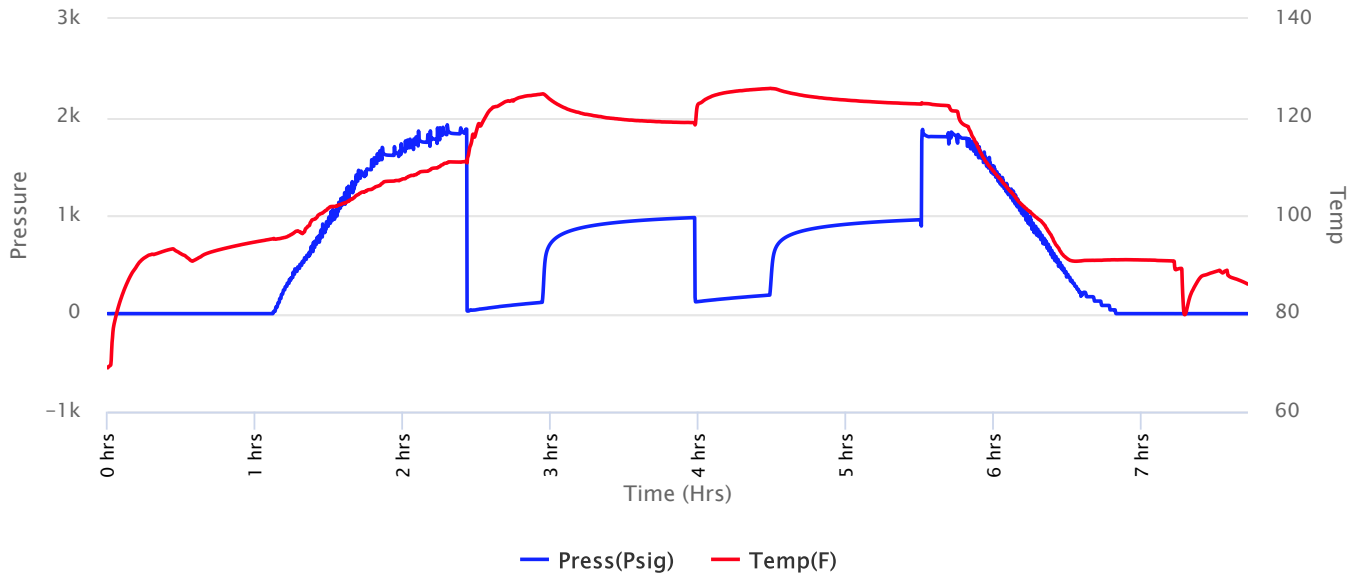
Electronic Volume Estimate:  
 423'

1st Open  
 Minutes: 30  
 23.2" at 30 min

1st Close  
 Minutes: 60  
 .1" at 60 min

2nd Open  
 Minutes: 30  
 18" at 30 min

2nd Close  
 Minutes: 60  
 .25" at 60 min





**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

**DATE**  
June  
**16**  
2018

**DST #1**      **Formation: Lansing  
kc, B**      **Test Interval: 3870 -  
3900'**      **Total Depth: 3900'**  
  
Time On: 11:34 06/16      Time Off: 19:04 06/16  
Time On Bottom: 13:55 06/16      Time Off Bottom: 16:55 06/16

Recovered

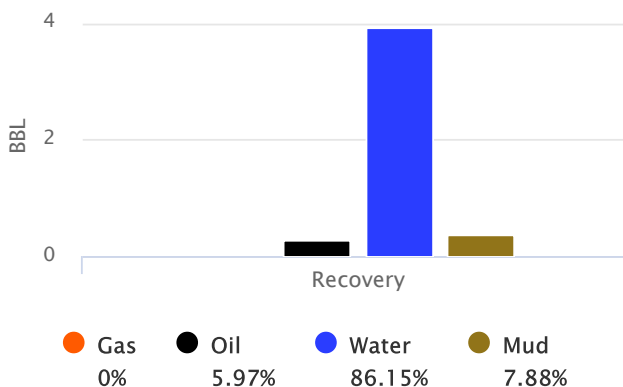
<u>Foot</u>	<u>BBLs</u>	<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
15	0.21345	O	0	100	0	0
53	0.75419	SLOCW	0	3	97	0
126	1.79298	SLOCMLCW	0	1	94	5
126	1.79298	SLOCMLCW	0	1	84	15

Total Recovered: 320 ft  
Total Barrels Recovered: 4.5536

Reversed Out  
NO

Initial Hydrostatic Pressure	1833	PSI
Initial Flow	24 to 115	PSI
<b>Initial Closed in Pressure</b>	<b>977</b>	<b>PSI</b>
Final Flow Pressure	119 to 188	PSI
<b>Final Closed in Pressure</b>	<b>955</b>	<b>PSI</b>
Final Hydrostatic Pressure	1823	PSI
Temperature	126	°F
Pressure Change Initial Close / Final Close	2.2	%

**Recovery at a glance**





**Company: Culbreath Oil & Gas  
Co Inc.**

**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>16</b> 2018
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<b>DST #1</b>	<b>Formation: Lansing kc, B</b>	<b>Test Interval: 3870 - 3900'</b>	<b>Total Depth: 3900'</b>
	Time On: 11:34 06/16	Time Off: 19:04 06/16	
	Time On Bottom: 13:55 06/16	Time Off Bottom: 16:55 06/16	

**REMARKS:**

5 ft slide to btm

If: 1 3/4" Bob in 11 1/2min

lc: wsb

Ff: 1/4 " Bob in 18min

Fc: 1/4"

Toolsample: 3o - 57w - 40m

Gravity: 32.9 @ 60 degrees F

Ph: 7

RW: .1 @ 89 degrees F

Chlorides: 60000 ppm



**Company: Culbreath Oil & Gas  
Co Inc.**

**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>16</b> 2018
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<b>DST #1</b>	<b>Formation: Lansing kc, B</b>	<b>Test Interval: 3870 - 3900'</b>	<b>Total Depth: 3900'</b>
	Time On: 11:34 06/16	Time Off: 19:04 06/16	
	Time On Bottom: 13:55 06/16	Time Off Bottom: 16:55 06/16	

**Down Hole Makeup**

<b>Heads Up:</b> 29.36 FT	<b>Packer 1:</b> 3865 FT
<b>Drill Pipe:</b> 3866.79 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3870 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3854.42 FT
<b>Collars:</b> FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3873 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH Jars Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 30	<b>Surface Choke:</b> 1"
<b>Anchor Makeup</b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> 1 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> FT	
<b>Drill Pipe: (in anchor):</b> FT <i>ID-3 1/2</i>	
<b>Change Over:</b> FT	
<b>Perforations: (below):</b> 28 FT <i>4 1/2-FH</i>	



**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
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Inc - Rig 1  
Elevation: 2650 EGL  
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<b>DATE</b> June <b>16</b> 2018
--

<b>DST #1</b>	<b>Formation: Lansing kc, B</b>	<b>Test Interval: 3870 - 3900'</b>	<b>Total Depth: 3900'</b>
	Time On: 11:34 06/16	Time Off: 19:04 06/16	
	Time On Bottom: 13:55 06/16	Time Off Bottom: 16:55 06/16	

**Mud Properties**

**Mud Type:** Chemical    **Weight:** 9.1    **Viscosity:** 47    **Filtrate:** 7.6    **Chlorides:** 1000 ppm



**Company: Culbreath Oil & Gas**

**Co Inc.**

**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling, Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

**DATE**  
June  
**17**  
2018

DST #2    Formation: Lansing - H    Test Interval: 3968 - 4006'    Total Depth: 4006'

Time On: 10:55 06/17    Time Off: 17:24 06/17

Time On Bottom: 12:50 06/17    Time Off Bottom: 15:50 06/17

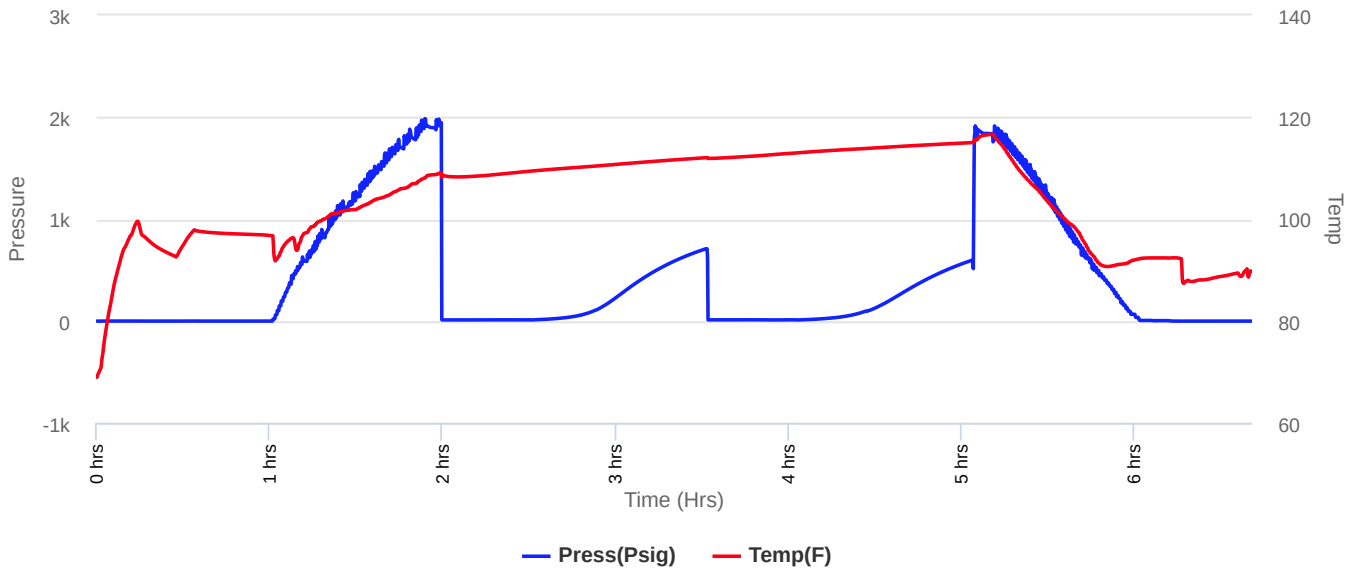
Electronic Volume Estimate:  
1'

1st Open  
Minutes: 30  
.1" at 30 min

1st Close  
Minutes: 60  
0" at 60 min

2nd Open  
Minutes: 30  
0" at 30 min

2nd Close  
Minutes: 60  
0" at 60 min







**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

**DATE**  
June  
**17**  
2018

**DST #2**      **Formation: Lansing - H**      **Test Interval: 3968 - 4006'**      **Total Depth: 4006'**  
Time On: 10:55 06/17      Time Off: 17:24 06/17  
Time On Bottom: 12:50 06/17      Time Off Bottom: 15:50 06/17

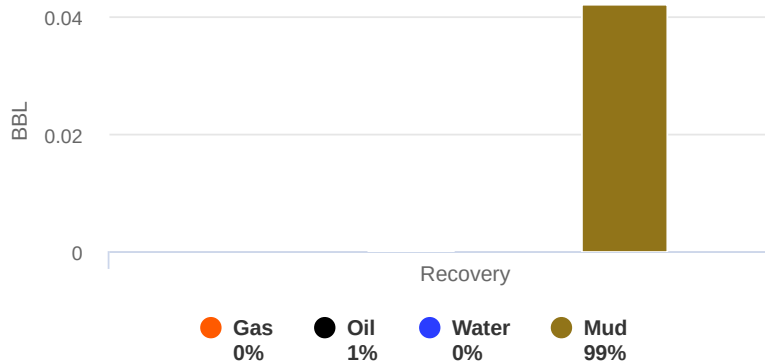
Recovered

Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
3	0.04269	SLOCM	0	1	0	99

Total Recovered: 3 ft  
Total Barrels Recovered: 0.04269

Reversed Out  
NO

**Recovery at a glance**



Initial Hydrostatic Pressure	1900	PSI
Initial Flow	11 to 11	PSI
<b>Initial Closed in Pressure</b>	<b>709</b>	<b>PSI</b>
Final Flow Pressure	11 to 11	PSI
<b>Final Closed in Pressure</b>	<b>599</b>	<b>PSI</b>
Final Hydrostatic Pressure	1897	PSI
Temperature	115	°F
Pressure Change Initial Close / Final Close	15.5	%



**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>17</b> 2018
--

<b>DST #2</b>	<b>Formation: Lansing - H</b>	<b>Test Interval: 3968 - 4006'</b>	<b>Total Depth: 4006'</b>
	Time On: 10:55 06/17	Time Off: 17:24 06/17	
	Time On Bottom: 12:50 06/17	Time Off Bottom: 15:50 06/17	

**REMARKS:**

If:wsb no build

Ic:nobb

Ff:no blow no build

Fc:nobb

Toolsample: 1o - 99m



**Company: Culbreath Oil & Gas  
 Co Inc.  
 Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
 County: SHERIDAN  
 State: Kansas  
 Drilling Contractor: Southwind Drilling,  
 Inc - Rig 1  
 Elevation: 2650 EGL  
 Field Name: Sky  
 Pool: Infield  
 Job Number: 165

<b>DATE</b> June <b>17</b> 2018
--

<b>DST #2</b>	<b>Formation: Lansing - H</b>	<b>Test Interval: 3968 - 4006'</b>	<b>Total Depth: 4006'</b>
	Time On: 10:55 06/17	Time Off: 17:24 06/17	
	Time On Bottom: 12:50 06/17	Time Off Bottom: 15:50 06/17	

**Down Hole Makeup**

<b>Heads Up:</b> 26.47 FT	<b>Packer 1:</b> 3963 FT
<b>Drill Pipe:</b> 3961.9 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3968 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3952.42 FT
<b>Collars:</b> FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3971 FT
<b>Test Tool:</b> 33.57 FT <i>ID-3 1/2-FH Jars Safety Joint</i>	<b>Well Bore Size:</b> 7 7/8
<b>Total Anchor:</b> 38	<b>Surface Choke:</b> 1"
<u><b>Anchor Makeup</b></u>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> 1 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> FT	
<b>Drill Pipe: (in anchor):</b> FT <i>ID-3 1/2</i>	
<b>Change Over:</b> FT	
<b>Perforations: (below):</b> 36 FT <i>4 1/2-FH</i>	



**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>17</b> 2018
--

<b>DST #2</b>	<b>Formation: Lansing - H</b>	<b>Test Interval: 3968 - 4006'</b>	<b>Total Depth: 4006'</b>
	Time On: 10:55 06/17	Time Off: 17:24 06/17	
	Time On Bottom: 12:50 06/17	Time Off Bottom: 15:50 06/17	

**Mud Properties**

**Mud Type:** Chemical    **Weight:** 9.1    **Viscosity:** 51    **Filtrate:** 8    **Chlorides:** 2500 ppm



**Company: Culbreath Oil & Gas Co Inc.**  
**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling, Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>18</b> 2018
--

DST #3      Formation: **Lansing J**      Test Interval: **4014 - 4034'**      Total Depth: **4034'**  
Time On: 00:54 06/18      Time Off: 07:25 06/18  
Time On Bottom: 02:50 06/18      Time Off Bottom: 05:50 06/18

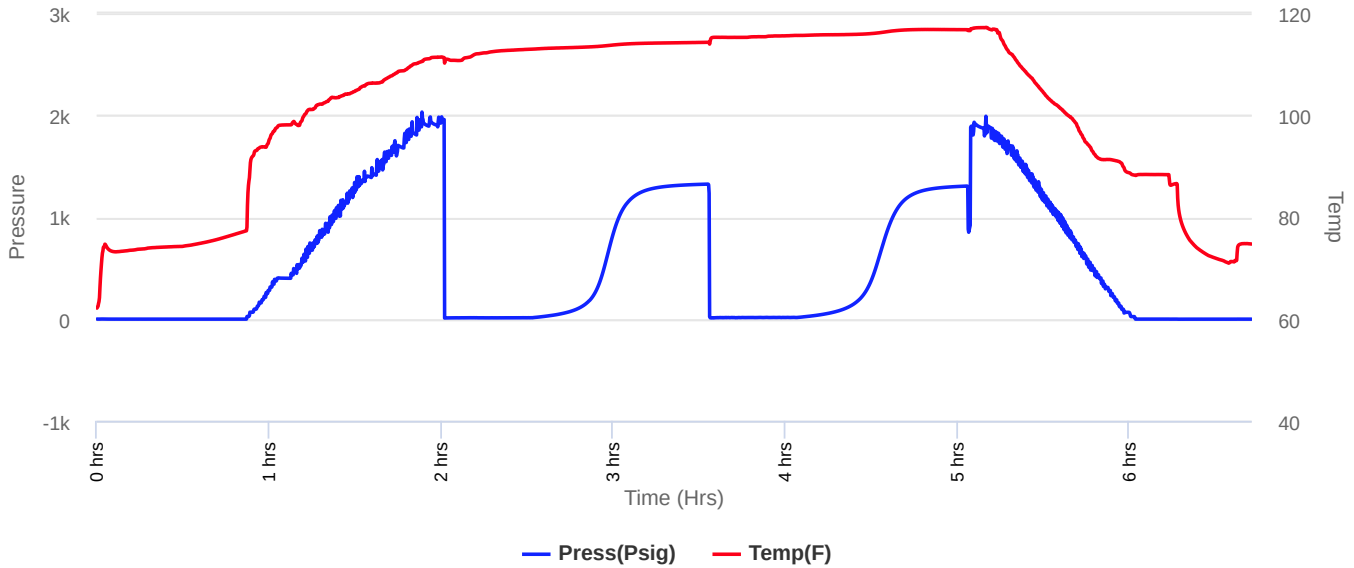
Electronic Volume Estimate:  
36'

1st Open  
Minutes: 30  
1.5" at 30 min

1st Close  
Minutes: 60  
0" at 60 min

2nd Open  
Minutes: 30  
1.8" at 30 min

2nd Close  
Minutes: 60  
0" at 60 min





**Company: Culbreath Oil & Gas**  
**Co Inc.**  
**Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling, Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

**DATE**  
June  
**18**  
2018

DST #3      Formation: **Lansing J**      Test Interval: **4014 - 4034'**      Total Depth: **4034'**  
Time On: 00:54 06/18      Time Off: 07:25 06/18  
Time On Bottom: 02:50 06/18      Time Off Bottom: 05:50 06/18

Recovered

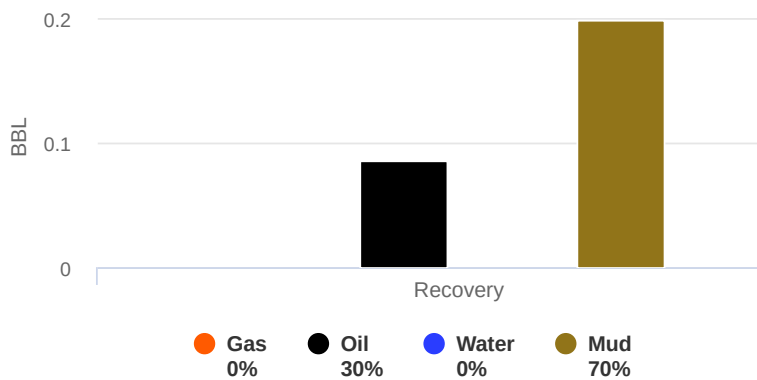
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
20	0.2846	HOCM	0	30	0	70

Total Recovered: 20 ft  
Total Barrels Recovered: 0.2846

Reversed Out  
**NO**

Initial Hydrostatic Pressure	1914	PSI
Initial Flow	9 to 13	PSI
<b>Initial Closed in Pressure</b>	<b>1324</b>	<b>PSI</b>
Final Flow Pressure	11 to 15	PSI
<b>Final Closed in Pressure</b>	<b>1305</b>	<b>PSI</b>
Final Hydrostatic Pressure	1904	PSI
Temperature	117	°F
Pressure Change Initial Close / Final Close	1.5	%

**Recovery at a glance**





**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<b>DATE</b> June <b>18</b> 2018
--

<b>DST #3</b>	<b>Formation: Lansing J</b>	<b>Test Interval: 4014 - 4034'</b>	<b>Total Depth: 4034'</b>
	Time On: 00:54 06/18	Time Off: 07:25 06/18	
	Time On Bottom: 02:50 06/18	Time Off Bottom: 05:50 06/18	

**REMARKS:**

If:wsb built to 1 1/2"

Ic:nobb

Ff:wsb built to 1.8"

Fc:nobb

Toolsample: 40o - 60m







**Company: Culbreath Oil & Gas  
Co Inc.  
Lease: Minium R #1-32**

SEC: 32 TWN: 9S RNG: 26W  
County: SHERIDAN  
State: Kansas  
Drilling Contractor: Southwind Drilling,  
Inc - Rig 1  
Elevation: 2650 EGL  
Field Name: Sky  
Pool: Infield  
Job Number: 165

<p><u>DATE</u> June <b>18</b> 2018</p>
--

<b>DST #3</b>	<b>Formation: Lansing J</b>	<b>Test Interval: 4014 - 4034'</b>	<b>Total Depth: 4034'</b>
	Time On: 00:54 06/18	Time Off: 07:25 06/18	
	Time On Bottom: 02:50 06/18	Time Off Bottom: 05:50 06/18	

### Mud Properties

**Mud Type:** Chemical     **Weight:** 9.1     **Viscosity:** 51     **Filtrate:** 8     **Chlorides:** 2500 ppm



PRESSURE PUMPING LLC  
 PO Box 884, Chanute, KS 66720  
 620-431-9210 or 800-467-8676

10889

10781

TICKET NUMBER 55177

LOCATION Oakley KS

FOREMAN Travis Williams

FIELD TICKET & TREATMENT REPORT  
 CEMENT

Walt Dinkel  
 INVOICE # 813408 KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6/11/15	2777	Miner R F32	32	9 S	26 W	Sheridan
CUSTOMER Culbreath Oil + Gas			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 3501 South Yale Avenue			772-1118	Paul W		
CITY Tulsa			70	Eric W		
STATE OK			17	Travis W		
ZIP CODE 74135			697	Walt D		

Grainfield  
 N to Rd  
 400 E to  
 100 S to  
 1/2 E line

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 268 CASING SIZE & WEIGHT 8 5/8 - 23 lb.  
 CASING DEPTH 270 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 14.8 SLURRY VOL 1.36 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT 15 3/4 bbls. DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting, rig up on Southwind Drilling Rig #1, Circulate casing and mix 250 Sx of Surface Blend II, Class A, 30% Calcium, 2% Ggd, displace with 15 3/4 bbls of water, shut in, cement did circulate, 4 bbls to pit

Thanks  
 Travis + Crew

6/9/15

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE 0471	1	PUMP CHARGE	1150.00	1150.00
CE 0002	40	MILEAGE	7.15	286.00
CE 0710	12.38 Tons	Ton Mileage	1.75	866.60
CC 5871	250 Sx	Surface Blend II	24.00	6000.00
			Sub Total	8302.60
			30% Dis.	2490.78
			New Total	5811.82
			SALES TAX	357.00
			ESTIMATED TOTAL	6168.82

Ravin 3737

AUTHORIZATION [Signature] TITLE \_\_\_\_\_ DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



10943  
10834

TICKET NUMBER 55172  
LOCATION Oakley KS  
FOREMAN Miles Shaw

RE PUMPING LLC  
PO Box 100, Chanute, KS 66720  
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT  
CEMENT

Invoice # 813462

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
6-19-18	2777	Minium R 1-32	32	9 S	26 W	Sheridan
CUSTOMER <u>Culbreath</u>			TRUCK #			
MAILING ADDRESS <u>3501 South Yale Avenue</u>			DRIVER			
CITY <u>Tulsa</u>			TRUCK #			
STATE <u>OK</u>			DRIVER			
ZIP CODE <u>74135</u>			TRUCK #			
			DRIVER			

JOB TYPE PTA HOLE SIZE 7 7/8" HOLE DEPTH 4180' CASING SIZE & WEIGHT \_\_\_\_\_  
 CASING DEPTH \_\_\_\_\_ DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 138 SLURRY VOL 1.4 WATER gal/sk \_\_\_\_\_ CEMENT LEFT in CASING \_\_\_\_\_  
 DISPLACEMENT \_\_\_\_\_ DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_

REMARKS: Safety meeting and R.S. upon Southwind drilling R.S. #1 Plus as ordered  
2 Plus 50 x 2 @ 2294'  
2 Plus 100 x 2 @ 1395'  
3 Plus 50 x 2 @ 310'  
4 Plus 100 x 2 @ 40' w/plus  
30 x RH 285 5x 60 x 40 40 1/2 1/2  
1552 MH

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
<u>CE0450</u>	<u>1</u>	<u>PUMP CHARGE</u>	<u>1500.<sup>00</sup></u>	<u>1500.<sup>00</sup></u>
<u>CE0002</u>	<u>35</u>	<u>MILEAGE</u>	<u>7.15</u>	<u>250.25</u>
<u>CE0710</u>	<u>11.09 TONS</u>	<u>Ton mileage delivery</u>	<u>67.926</u>	<u>679.26</u>
<u>CE5829</u>	<u>(17078 Pcs) 255 SX</u>	<u>Lite Ur. sh hand II</u>	<u>11.<sup>00</sup></u>	<u>4080.<sup>00</sup></u>
<u>CE8228</u>	<u>1</u>	<u>8 7/8" Occident Plus</u>	<u>165.<sup>00</sup></u>	<u>165.<sup>00</sup></u>
			<u>Subtotal</u>	<u>6674.51</u>
			<u>Loss 30 Ed. service</u>	<u>2002.35</u>
			<u>Subtotal</u>	<u>4672.16</u>
			SALES TAX	<u>252.58</u>
			ESTIMATED TOTAL	<u>4924.74</u>

Ravin 3737

AUTHORIZATION [Signature] TITLE Tool Pusher DATE 6-19-18

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.