

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 Recompletion Date \_\_\_\_\_ 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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# Mudgrove

Petroleum Geology  
212 Main Street, Claflin KS

## GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY Fossil Energy, LLC.

LEASE Vanover #1

FIELD Jennings

LOCATION SE-NW-NE-NW (400' FNL & 1937' FWL)

SEC 23 TWSP 4S RGE 27W

COUNTY Decatur STATE Kansas

CONTRACTOR Southwind Drilling Co. (Rig #3)

SPUD 2-09-2019 COMP 2-17-2019

RTD 3680' LTD -none-

MUD UP 3000' TYPE MUD Chemical

#### ELEVATIONS

KB 2577'

DF \_\_\_\_\_

GL 2569'

Measurements Are All  
From KB

#### CASING

SURFACE 8 5/8" @ 288'

PRODUCTION None

#### ELECTRICAL SURVEYS

**None**

SAMPLES SAVED FROM 3100' TO RTD

DRILLING TIME KEPT FROM 3100' TO RTD

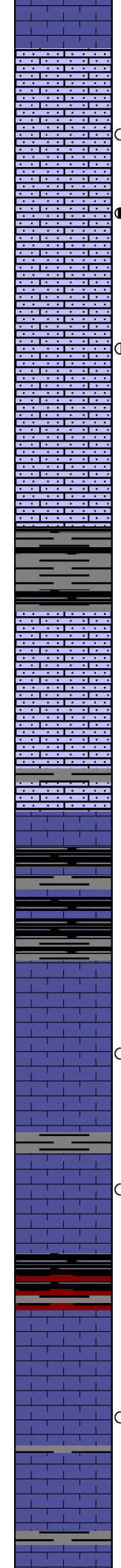
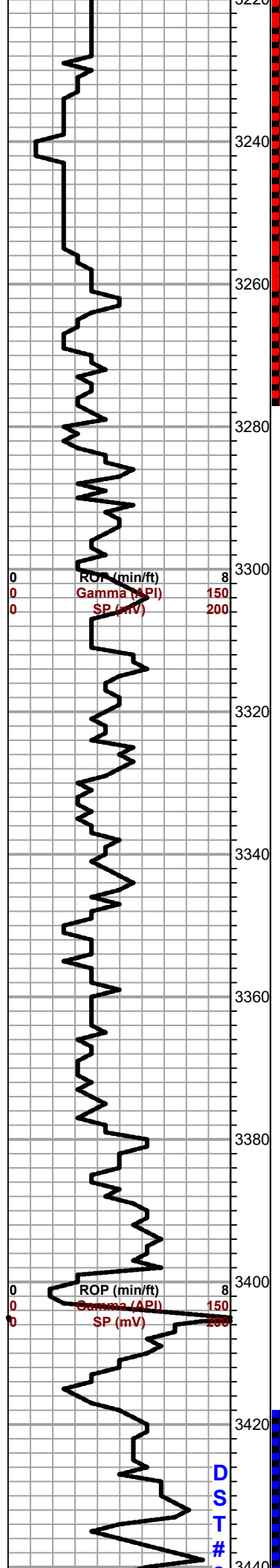
SAMPLES EXAMINED FROM 3100' TO RTD

GEOLOGICAL SUPERVISION FROM 3100' TO RTD

GEOLOGIST ON WELL Wyatt Urban

FORMATION TOPS	LOG	SAMPLES													
Anhydrite		2177 (460)	<table border="1"> <tr><td>X</td><td></td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td></td><td>23</td><td></td></tr> <tr><td></td><td></td><td></td></tr> </table>	X							23				
X															
	23														
B. Anhydrite		2136 (441)													
Topeka		3356 (-779)													
Heebner		3470 (-893)													
Toronto		3504 (-927)													
Lansing		3512 (-935)													





(dead) , nsfo, no odor

LS, tan, buff, suc./ dol. good p.p. porosity, dk brn stain, dk brown spty sfo, no odor

LS, tan, white, dol. fair-god scattered vuggy type porosity, dk brn stain, sfo, faint-fair odor

LS, white, cream, dol., in pts , few ool, fair vuggy p.p. type porosity, tr. spty sfo, tr. brn /golden brn stain on few, decrease show & loss of odor in 40 min cfs sample.

LS, gry, cream, tan, fxl, dense, poor vis porosity, no shows.

Tr. dk gry/ blk carb sh., abd. pyrite.

LS, tan, sandy, gran. foss, good inner porosity, fair vuggy type porosity, no shows.

Sh, maroon, gry, dk gry sh. a/a, tr. sdy gry, f. grain, tr. blk carb. sh. pyrite. sd. gry . f. grain, well sorted, no show

**Topeka 3356.0 (779.0)**

LS, cream, poor vis.. porosity, p.p. dense chalky, dk blk stain, v. heavy blk flakey (viscous )SFO ( most dead in app). no odor

LS, cream, poor vis porosity, dense, chalky, dk blk stain, v. heavy , blk flakey sfo, no odor , abd. pyrite. LS, tan, cream, foss, dense, chalky, no shows.

Sh, black carb

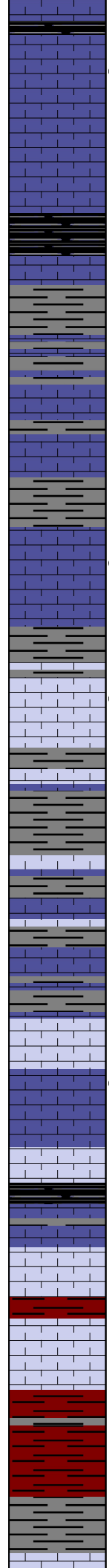
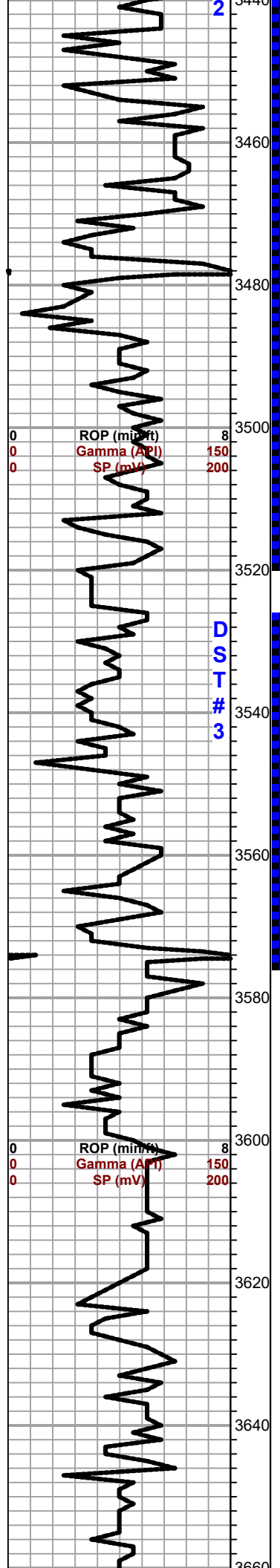
Slug maroon, soft sh. tr. sd. aa/ no shows

LS, tan, cream, scattered vuggy, type porosity, tr. blk spty, sfo, most dead in app. pyrite, slug blk sh.

**Recovery:**  
80' Oil Spotted Mud

**Pressures:**  
ISIP 942 psi  
FSIP 910 psi  
IFP 15-22 psi  
FFP 23-33 psi  
HSH 1515-1511 psi





Slug black carb

○ LS, cream, tan, foss, scattered vuggy porosity, dk blk blk stain, (tarry, viscous) sfo, wk sat./sfo

LS, tan, buff, fxl, dense, poor vis. porosity, cherty, no shows

**Heebner 3470.0 (-893.0)**

Slug black carb sh.

Sh,gry, soft gry mushy

**Toronto 3504.0 (-927.0)**

LS, white, fxl, dense poor vis porosity, cherty no shows,

**Lansing 3512.0 (-935.0)**

● LS, white, boney, cherty, scattered vuggy type porosity, tr. brn stain, spty blk sfo, ??? odor

D LS, tan, cream, fxl, v. chalky, poorly developed scattered vuggy/p.p. type porosity, Lt. golden brn stain,v. wk golden brn spty sfo, dead flakey sfo, ??? odor . (no sfo in CFS samples)

Sh, gry, silty

D LS, tan poorly developed vuggy type porosity, dk/ blk spty sfo, fair odor in broken sample. majority of dead sfo

Sh. gry, silty

○ D LS, tan, cream, oom poor developed porosity, chalky, tr. brn - blk stain??? nsfo no odor

Slug black carb

D LS, white, dol./ gran. suc. nsfo, dk, brn viscous - flakey spots dead oil, nsfo, no odor

Abd. slug soft maroon sh .

Abd. sh. gry, maroon, silty soft

Abd. soft gry & maroon shale. tr. LS. white. fxl. tr. blk

**DST # 2 3419-3520**

**1st Open:**  
**BOB 2 min 15 sec.**

**2nd Open:**  
**3 min. 20 sec. no return**

**Recovery :**  
**1000' HMCW**

**Pressures:**  
**ISIP 947 psi**  
**FSIP 883 psi**  
**IFP 42 -321 psi**  
**FFP 320-489 psi**  
**HSR 1662-1651 psi**

**DST#3 3525-3575**  
**30-45-45-60**

**1st Open:**  
Fair build 12.5"

**2nd Open:**  
Fair build 13.5"

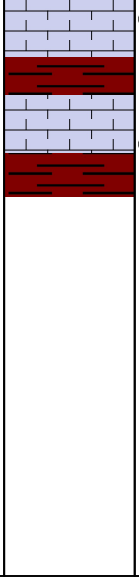
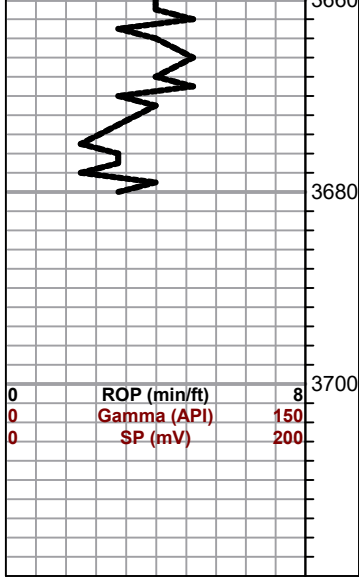
**Recovery:**  
55' SLOCHMCW

63' MCW tr. O

63' SLMCW tr. O

63' SLMCW tr. O

**Pressures:**  
**ISIP 775 psi**  
**FSIP 754 psi**  
**IFP 20 - 72 psi**  
**FFP 75-129 psi**  
**HSR 1681-1681 psi**



stain, tr. spty (visc./ tarry) sfo, odor ???

LS, white,fx, dol. poor - fair scattered porosity, chalky,  
 tr. gry stain, tr. sfo, v. wk odor, slug maroon sh.

**RTD 3680.0 (-1103.0)**





**Company: Fossil Energy, LLC**  
**Lease: Vanover #1**

SEC: 23 TWN: 4S RNG: 27W  
 County: DECATUR  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 3  
 Elevation: 2569 GL  
 Field Name: Jennings  
 Pool: Infield  
 Job Number: 302

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 February  
**14**  
 2019

**DST #1**      **Formation: Tarkio**      **Test Interval: 3207 - 3275'**      **Total Depth: 3275'**  
 Time On: 01:48 02/14      Time Off: 09:45 02/14  
 Time On Bottom: 04:52 02/14      Time Off Bottom: 07:22 02/14

Electronic Volume Estimate:  
 36'

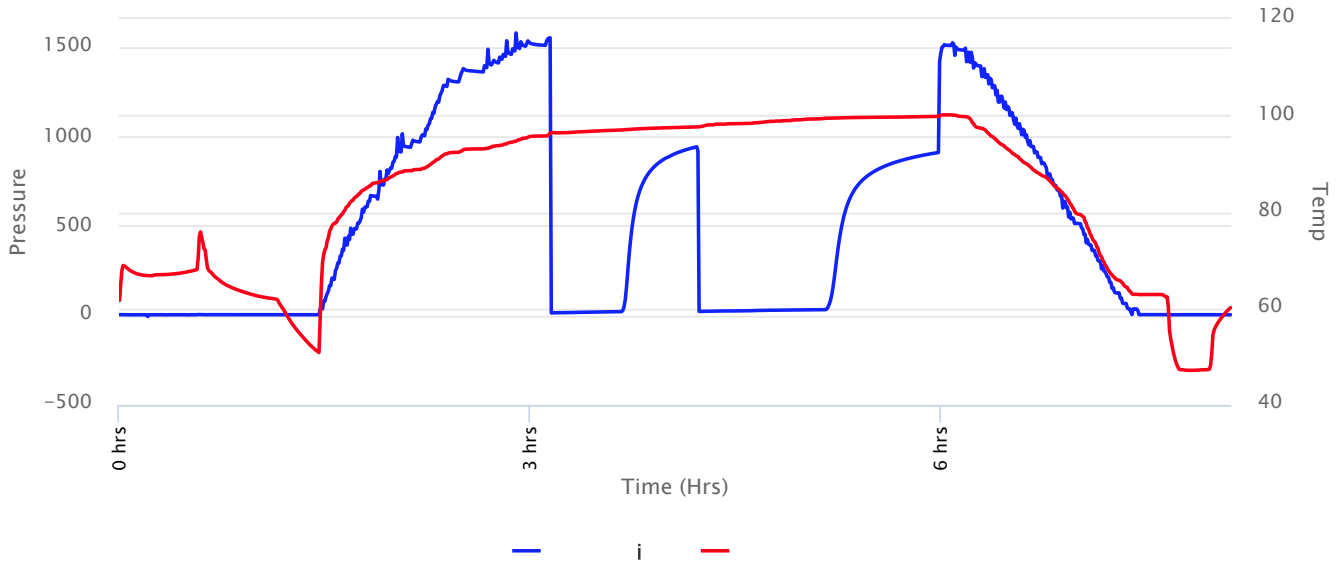
1st Open  
 Minutes: 30  
 Current Reading: 2.2" at 30 min  
 Max Reading: 2.2"

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

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

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

Inside Recorder





**Company: Fossil Energy, LLC**  
**Lease: Vanover #1**

SEC: 23 TWN: 4S RNG: 27W  
 County: DECATUR  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 3  
 Elevation: 2569 GL  
 Field Name: Jennings  
 Pool: Infield  
 Job Number: 302

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 Time On: 01:48 02/14      Time Off: 09:45 02/14  
 Time On Bottom: 04:52 02/14      Time Off Bottom: 07:22 02/14

Recovered

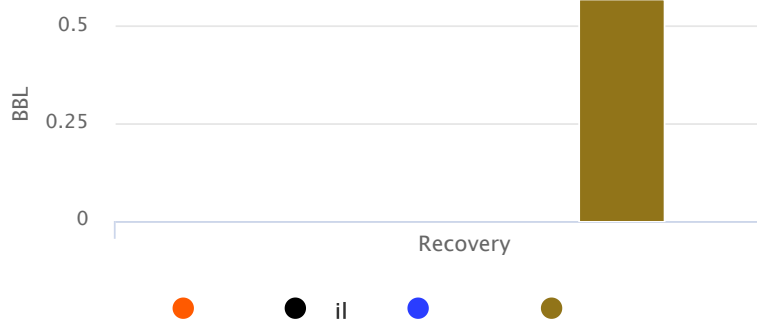
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
40	0.5692	M (trace O)	0	.1	0	99.9

Total Recovered: 40 ft  
 Total Barrels Recovered: 0.5692

Reversed Out  
 NO

Initial Hydrostatic Pressure	1515	PSI
Initial Flow	15 to 22	PSI
<b>Initial Closed in Pressure</b>	<b>942</b>	<b>PSI</b>
Final Flow Pressure	23 to 33	PSI
<b>Final Closed in Pressure</b>	<b>910</b>	<b>PSI</b>
Final Hydrostatic Pressure	1511	PSI
Temperature	100	°F
Pressure Change Initial Close / Final Close	3.5	%

**Recovery at a glance**



GIP cubic foot volume: 0



**Company: Fossil Energy, LLC**  
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County: DECATUR  
State: Kansas  
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Inc - Rig 3  
Elevation: 2569 GL  
Field Name: Jennings  
Pool: Infield  
Job Number: 302

**Operation:**  
Uploading recovery &  
pressures

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Time On Bottom: 04:52 02/14      Time Off Bottom: 07:22 02/14

**BUCKET MEASUREMENT:**

*Diesel in Bucket*

1st Open: Surface blow built to 3 1/8" over 30 min.

1st Close: No Return

2nd Open: Surface blow started at 3 min. Built to 2 1/2"

2nd Close: No Return

**REMARKS:**

Tool Sample: 0% Gas .1% Oil 0% Water 99.9% Mud



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**DST #1**      **Formation: Tarkio**      **Test Interval: 3207 - 3275'**      **Total Depth: 3275'**  
 Time On: 01:48 02/14      Time Off: 09:45 02/14  
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**Down Hole Makeup**

<b>Heads Up:</b> 12.23 FT	<b>Packer 1:</b> 3202 FT
<b>Drill Pipe:</b> 3194.07 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3207 FT
<b>Weight Pipe:</b> 0 FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3194 FT
<b>Collars:</b> 0 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3273 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> 68	<b>Surface Choke:</b> 1"
<b><u>Anchor Makeup</u></b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> 31 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> .5 FT	
<b>Drill Pipe: (in anchor):</b> 32 FT <i>ID-3 1/2</i>	
<b>Change Over:</b> .5 FT	
<b>Perforations: (below):</b> 3 FT <i>4 1/2-FH</i>	



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Inc - Rig 3  
Elevation: 2569 GL  
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Pool: Infield  
Job Number: 302

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pressures

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Time On: 01:48 02/14      Time Off: 09:45 02/14  
Time On Bottom: 04:52 02/14      Time Off Bottom: 07:22 02/14

**Mud Properties**

**Mud Type:** Chem      **Weight:** 8.6      **Viscosity:** 56      **Filtrate:** 7.6      **Chlorides:** 750 ppm







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 Elevation: 2569 GL  
 Field Name: Jennings  
 Pool: Infield  
 Job Number: 302

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 February  
**15**  
 2019

**DST #2**    **Formation: Topeka - LKC "A"**    **Test Interval: 3419 - 3520'**    **Total Depth: 3520'**  
 Time On: 13:01 02/15    Time Off: 20:21 02/15  
 Time On Bottom: 15:18 02/15    Time Off Bottom: 17:18 02/15

Electronic Volume Estimate:  
 1151'

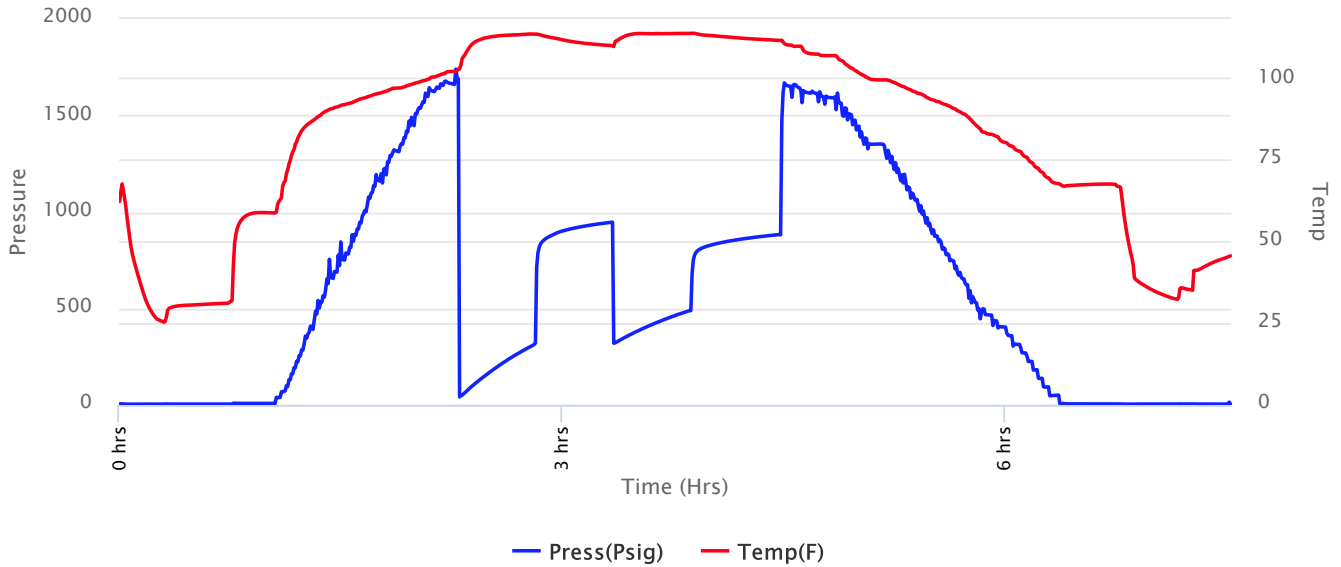
1st Open  
 Minutes: 30  
 Current Reading: 82.9" at 30 min  
 Max Reading: 82.9"

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

2nd Open  
 Minutes: 30  
 Current Reading: 54" at 30 min  
 Max Reading: 54"

2nd Close  
 Minutes: 30  
 Current Reading: 0" at 30 min  
 Max Reading: 0"

Inside Recorder





**Company: Fossil Energy, LLC**  
**Lease: Vanover #1**

SEC: 23 TWN: 4S RNG: 27W  
 County: DECATUR  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 3  
 Elevation: 2569 GL  
 Field Name: Jennings  
 Pool: Infield  
 Job Number: 302

**Operation:**  
 Uploading recovery & pressures

**DATE**  
 February  
**15**  
 2019

**DST #2**      **Formation: Topeka - LKC "A"**      **Test Interval: 3419 - 3520'**      **Total Depth: 3520'**  
 Time On: 13:01 02/15      Time Off: 20:21 02/15  
 Time On Bottom: 15:18 02/15      Time Off Bottom: 17:18 02/15

Recovered

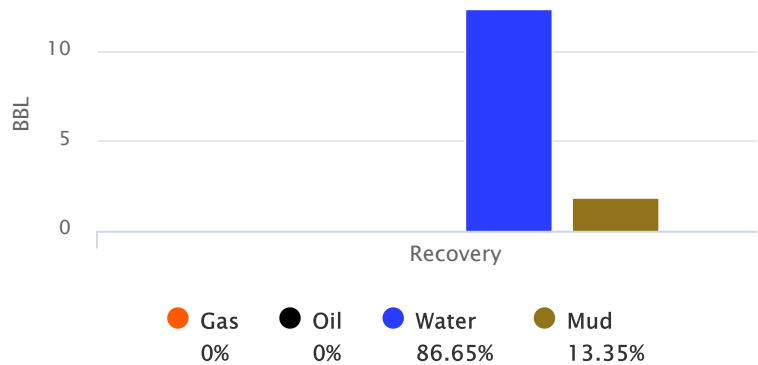
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
118	1.67914	HMCW	0	0	52	48
126	1.79298	MCW	0	0	78	22
189	2.68947	SLMCW	0	0	85	15
126	1.79298	SLMCW	0	0	90	10
189	2.68947	SLMCW	0	0	97	3
252	3.58596	SLMCW	0	0	99	1

Total Recovered: 1000 ft  
 Total Barrels Recovered: 14.23

Reversed Out  
 NO

Initial Hydrostatic Pressure	1662	PSI
Initial Flow	42 to 321	PSI
<b>Initial Closed in Pressure</b>	<b>947</b>	<b>PSI</b>
Final Flow Pressure	320 to 489	PSI
<b>Final Closed in Pressure</b>	<b>883</b>	<b>PSI</b>
Final Hydrostatic Pressure	1651	PSI
Temperature	114	°F
Pressure Change Initial Close / Final Close	6.8	%

**Recovery at a glance**



GIP cubic foot volume: 0









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 Job Number: 302

**Operation:**  
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**DATE**  
 February  
**16**  
 2019

**DST #3**      **Formation: LKC "B-E"**      **Test Interval: 3525 - 3575'**      **Total Depth: 3575'**  
 Time On: 06:33 02/16      Time Off: 14:39 02/16  
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Electronic Volume Estimate:  
 240'

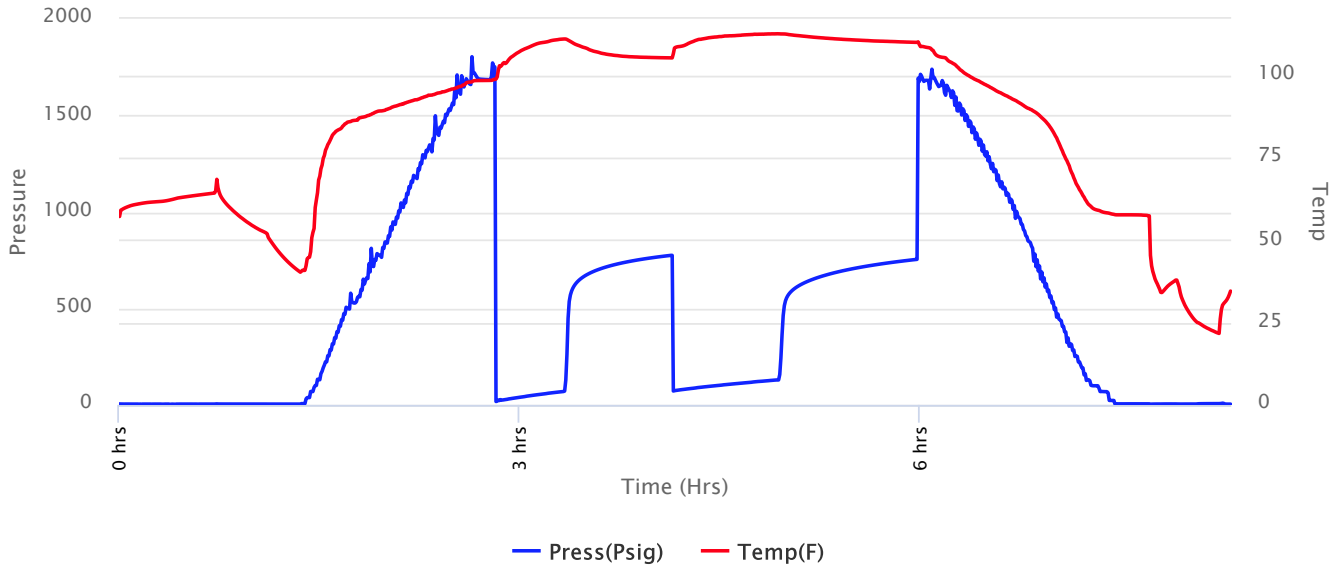
1st Open  
 Minutes: 30  
 Current Reading: 12.5" at 30 min  
 Max Reading: 12.5"

1st Close  
 Minutes: 45  
 Current Reading: .1" at 45 min  
 Max Reading: .1"

2nd Open  
 Minutes: 45  
 Current Reading: 13.1" at 45 min  
 Max Reading: 13.1"

2nd Close  
 Minutes: 60  
 Current Reading: .1" at 60 min  
 Max Reading: .1"

Inside Recorder







**Company: Fossil Energy, LLC**  
**Lease: Vanover #1**

SEC: 23 TWN: 4S RNG: 27W  
 County: DECATUR  
 State: Kansas  
 Drilling Contractor: Southwind Drilling, Inc - Rig 3  
 Elevation: 2569 GL  
 Field Name: Jennings  
 Pool: Infield  
 Job Number: 302

**Operation:**  
 Uploading recovery & pressures

**DATE**  
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Recovered

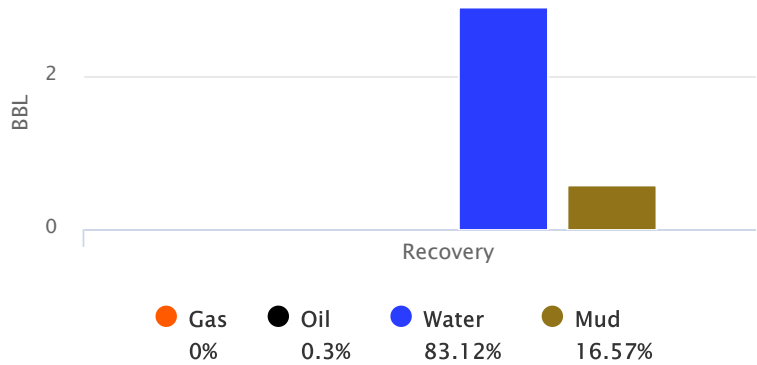
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
55	0.78265	SLOCHMCW	0	1	69	30
63	0.89649	MCW (trace O)	0	.1	79.9	20
63	0.89649	SLMCW (trace O)	0	.1	96.9	3
63	0.89649	SLMCW (trace O)	0	.1	84.9	15

Total Recovered: 244 ft  
 Total Barrels Recovered: 3.47212

**Reversed Out**  
**NO**

Initial Hydrostatic Pressure	1686	PSI
Initial Flow	20 to 72	PSI
<b>Initial Closed in Pressure</b>	<b>775</b>	<b>PSI</b>
Final Flow Pressure	75 to 129	PSI
<b>Final Closed in Pressure</b>	<b>754</b>	<b>PSI</b>
Final Hydrostatic Pressure	1681	PSI
Temperature	113	°F
Pressure Change Initial Close / Final Close	2.8	%

**Recovery at a glance**



GIP cubic foot volume: 0



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**BUCKET MEASUREMENT:**

*Diesel in Bucket*

1st Open: BoB in 17 min. 45 sec.

1st Close: Weak surface blow started at 6 min. Built to 1/8" over 45 min.

2nd Open: BoB in 20 min. 15 sec.

2nd Close: Weak surface return started at 5 min. Built to 1/8" over 60 min.

**REMARKS:**

Tool Sample: 0% Gas .1% Oil 98.9% Water 1% Mud

Ph: 6

Measured RW: .21 @ 22 degrees °F

RW at Formation Temp: 0.05 @ 113 °F

Chlorides: 63000 ppm



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**Down Hole Makeup**

<b>Heads Up:</b> 7.18999999999999 FT	<b>Packer 1:</b> 3520.48 FT
<b>Drill Pipe:</b> 3507.51 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3525.48 FT
<b>Weight Pipe:</b> 0 FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3512.48 FT
<b>Collars:</b> 0 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3529 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> 49.52	<b>Surface Choke:</b> 1"
<b><u>Anchor Makeup</u></b>	<b>Bottom Choke:</b> 5/8"
<b>Packer Sub:</b> 1 FT	
<b>Perforations: (top):</b> 13 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> .5 FT	
<b>Drill Pipe: (in anchor):</b> 31.52 FT <i>ID-3 1/2</i>	
<b>Change Over:</b> .5 FT	
<b>Perforations: (below):</b> 3 FT <i>4 1/2-FH</i>	



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**Mud Properties**

**Mud Type:** Chem      **Weight:** 9.3      **Viscosity:** 53      **Filtrate:** 7.2      **Chlorides:** 2500 ppm



