

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. 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
--	---

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) (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:	
----------------	-------	---------	------------	--

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1053

Date	Sec.	Twp.	Range	County	State	On Location	Finish
11-2-18	31	11	12	Russell	KS		2:15 AM
Lease <i>Ulich</i>				Location <i>Russell v Amber Rd E to Benkenhill Rd 1/4 E</i>		Well No. <i>1</i>	
Contractor <i>Royal</i>				Owner <i>Sinto</i>			
Type Job <i>Surface</i>				To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Hole Size <i>12 1/4</i>	T.D. <i>265</i>		Charge To <i>J.O. Farmer</i>				
Csg. <i>8 5/8</i>	Depth <i>263</i>		Street				
Tbg. Size	Depth		City		State		
Tool	Depth		The above was done to satisfaction and supervision of owner agent or contractor.				
Cement Left in Csg. <i>10'</i>	Shoe Joint		Cement Amount Ordered <i>160 8/20 3/11 2/10 2/10 2/10</i>				
Meas Line Displace <i>16BL</i>				EQUIPMENT			
Pumptrk <i>17</i>	No.	Cementor <i>raig</i>	Common <i>130</i>				
		Helper	Poz. Mix <i>30</i>				
Bulktrk	No.	Driver <i>David</i>	Gel. <i>3</i>				
Bulktrk <i>9</i>	No.	Driver <i>Tom</i>	Calcium <i>6</i>				
JOB SERVICES & REMARKS				Hulls			
Remarks:				Salt			
Rat Hole				Flowseal			
Mouse Hole				Kol-Seal			
Centralizers				Mud CLR 48			
Baskets				CFL-117 or CD110 CAF 38			
DNV or Port Collar				Sand			
<i>8 5/8 on bottom Est. Circulation</i>				Handling <i>169</i>			
<i>Mix 160SK9 Displace</i>				Mileage			
<i>Cement Circulated!</i>				FLOAT EQUIPMENT <i>8 5/8 Surge</i>			
<i>Thanks</i>				Guide Shoe			
				Centralizer			
				Baskets			
				AFU Inserts			
				Float Shoe			
				Latch Down			
				Pumptrk Charge <i>Surface</i>			
				Mileage <i>18</i>			
				Tax			
				Discount			
X Signature				Total Charge			



AUSTIN B. KLAUS



Cell 785.650.3629
Work 785.483.3145
Ext 225

PO BOX 352
Russell, KS 67665
austin.klaus@johnofarmer.com

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

Well Name: Ulrich A #1
Location: Russell County
License Number: API #15-167-24078-00-00
Spud Date: 11/1/2018
Surface Coordinates: Section 31, Township 11 South, Range 12 West
2,260' FNL & 2,310' FWL
Bottom Hole Coordinates: Vertical well w/ minimal deviation, same as above
Ground Elevation (ft): 1,714
Logged Interval (ft): 2,600
Formation: LKC
Type of Drilling Fluid: Chemical (Andy's Mud)

Region: Kansas
Drilling Completed: 11/8/2018
K.B. Elevation (ft): 1,721
Total Depth (ft): 3,300
To: RTD

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

OPERATOR

Company: John O. Farmer, Inc.
Address: 370 W. Wichita Ave.
Russell, KS 67665

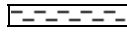



Comments





The Ulrich A #1 well was drilled by Royal Drilling Rig #2 (Tool Pusher: Doug Budig).

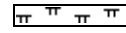
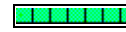
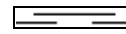
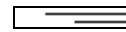
The location for the Ulrich A #1 was discovered via 3D seismic survey. Rock samples were gathered and evaluated from 2,600' - 3,330'. Oil shows were encountered in LKC B,C, & G. Structurally, the Lansing top was picked 3' low to the comparison well, Strecker #4. Slight structural thinning occurred through the LKC and the B/KC was picked 1' low to the comparison well. After evaluation of all oil shows, drill stem test results, & electric logs, the decision was made to plug and abandon the Ulrich A #1 on 11/8/2018.

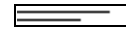



ROCK TYPES

 Anhy
 Bent
 Brec
 Cht

 Clyst
 Coal
 Congl
 Dol

 Gyp
 Igne
 Lmst
 Meta

 Mrlst
 Salt
 Shale
 Shcol

 Shgy
 Sltst
 Ss
 Till

OTHER SYMBOLS

POROSITY

Earthy
 Fenest
 Fracture
 Inter
 Moldic
 Organic
 Pinpoint

Vuggy

SORTING

Well
 Moderate
 Poor

ROUNDING

Rounded
 Subrnd
 Subang
 Angular

Spotted
 Ques
 Dead

EVENT

Rft
 Sidewall

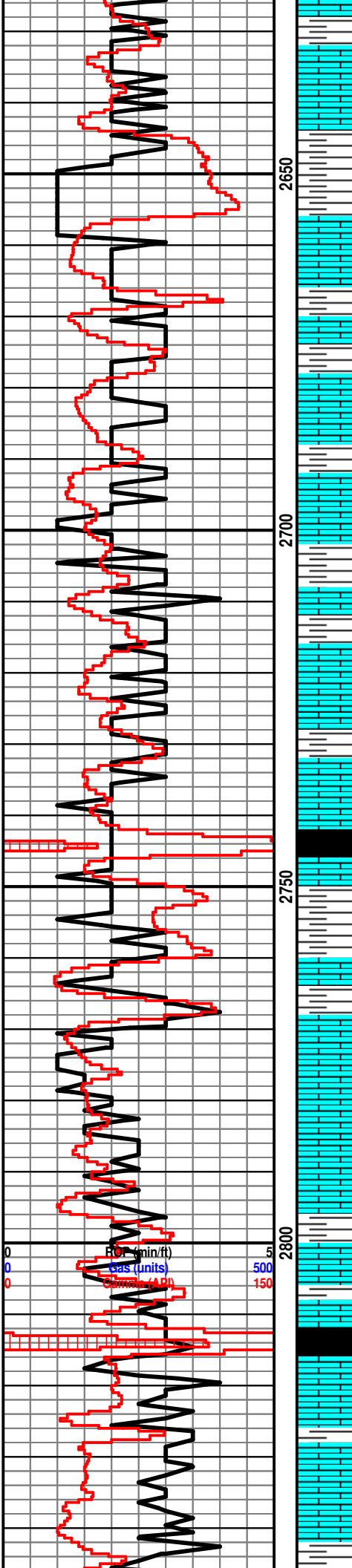
INTERVAL

Core
 Dst

OIL SHOW

Even

Curve Track 1		Depth	Lithology	Geological Descriptions	DST/Mud/Survey																					
ROP (min/ft)	Gas (units)					Gamma (API)																				
0	0	0	25	The open-hole logging was performed by Mr. Dan Schmidt with Pioneer Wireline, LLC (Hays, KS). Logs included: Dual Compensated Porosity, Dual Induction, and Microresistivity. Formation tops and datums from the open-hole logs include the following: <table border="1"> <tr><td>Anhydrite</td><td>710</td><td>1011</td></tr> <tr><td>Topeka</td><td>2656</td><td>-935</td></tr> <tr><td>Heebner</td><td>2894</td><td>-1173</td></tr> <tr><td>Lansing</td><td>2951</td><td>-1230</td></tr> <tr><td>B/KC</td><td>3241</td><td>-1520</td></tr> <tr><td>Arbuckle</td><td></td><td></td></tr> <tr><td>TD</td><td>3298</td><td>-1577</td></tr> </table>	Anhydrite	710	1011	Topeka	2656	-935	Heebner	2894	-1173	Lansing	2951	-1230	B/KC	3241	-1520	Arbuckle			TD	3298	-1577	Mud Engineer: Brandon Mendez
Anhydrite	710	1011																								
Topeka	2656	-935																								
Heebner	2894	-1173																								
Lansing	2951	-1230																								
B/KC	3241	-1520																								
Arbuckle																										
TD	3298	-1577																								
0	0	0	150																							
-11/1/2018 MIRU, Spud @ 2:30am																										
-11/2/2018 265', drilling																										
-11/3/2018 1,285', drilling																										
-11/4/2018 2,205', drilling																										
-11/5/2018 2,781', drilling																										
-11/6/2018 3,000', circulating																										
-11/7/2018 3,063', drilling																										
-11/8/2018 3,300', plugging																										
0	0	0	2550																							
0	0	0	2600	Sh: lt-drk gry, soft																						
0	0	0		Sh: ala																						



Ls: tan-gry, fn-sub xln, mostly DNS

Sh: lt gry, soft

Topeka 2658' (-938)

Ls: tan-gry, fn-sub xln, mostly DNS

Ls: lt gry, fn-sub xln, mostly DNS, scat pyrite

Ls: tan-lt gry, fn xln, foss, scat int xln & int foss porosity, barren, scat chert-off wh

Sh: lt-drk gry

Ls: tan-lt gry, fn xln, poor int xln & scat vuggy porosity, barren, scat sltst

Sh: lt-drk gry, soft

Ls: tan-lt gry, fn xln, mostly DNS, barren, scat chert-off wh-lt gry

Ls: ala, scat pyrite

Sh: drk gry-blk

Ls: tan-lt gry, fn-sub xln, mostly DNS, barren, scat sltst

Ls: off wh-tan, fn xln, scat int xln & vuggy porosity, mostly barren, scat chert-off wh

Ls: tan-lt gry, fn-sub xln, mostly DNS, barren

Sh: drk gry-blk

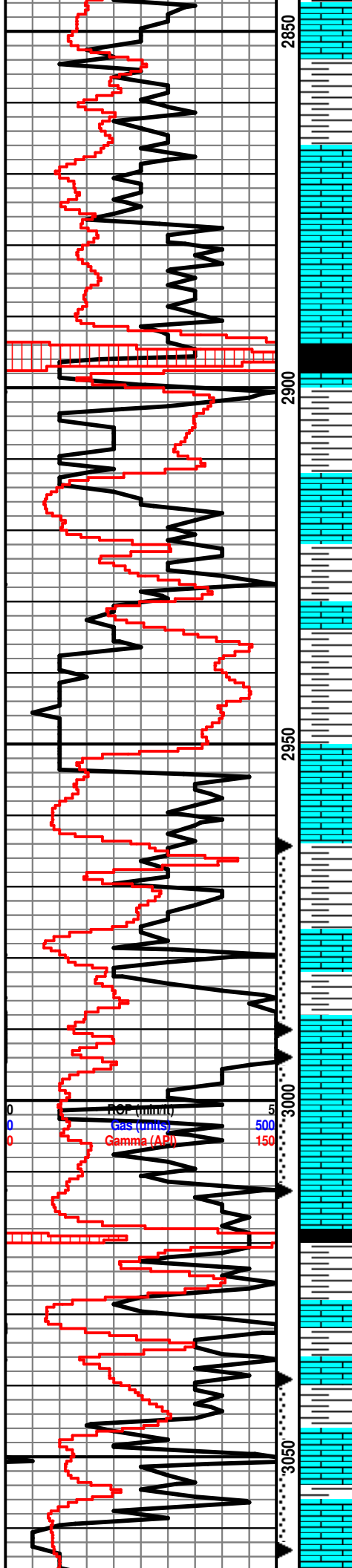
Ls: tan-lt gry, fn-sub xln, scat foss, mostly DNS, barren

Sh: drk gry-blk

Ls: tan-lt gry, fn-sub xln, scat foss, mostly DNS, barren

Ls: ala, scat chert-off wh

Wt: 8.6
 Vis: 65



Ls: tan-lt gry, fn xln, scat int vuggy porosity, barren, chalky, scat chert-off wh

Sh: lt-drk gry

Ls: off wh-tan, fn xln, scat foss, poor-fair int xln porosity, scat dead oil stn, NSFO, scat chalk

Ls: off wh-tan, fn xln, mostly DNS, barren

Heebner 2895' (-1174)

Sh: blk, carb

Sh: lt-drk gry, soft

Toronto 2914' (-1193)

Ls: off wh-tan, fn xln, poor int xln porosity, barren, scat chalk

Sh: lt-drk gry, soft

Sh: ala

Lansing 2954' (-1233)

Ls: off wh-tan, fn-sub xln, mostly DNS, barren, scat sh: lt gry

Ls: ala

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor int xln porosity, few rxns w/ fair int xln porosity, fair oil stn, SSFO, sl odor

Sh: lt-drk gry

Ls: off wh-tan, fn xln, ool in part, poor-fair oom & scat int xln porosity, scat dead oil stn, VSSFO

Ls: off wh-tan, fn-sub xln, mostly DNS, barren, scat chalk

Sh: lt-drk gry

Ls: off wh-tan, fn xln, scat foss, mostly DNS, barren

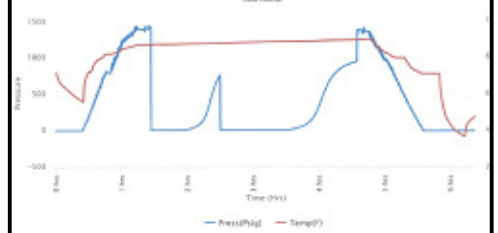
Sh: lt gry

Ls: off wh-tan, fn xln, foss, poor int xln porosity, barren, scat chert-off wh

Ls: off wh, fn xln, ool, fair oom porosity, scat dead oil stn on few rxns, mostly barren, scat pyrite

DST #1 2,964-2,990' Lansing B

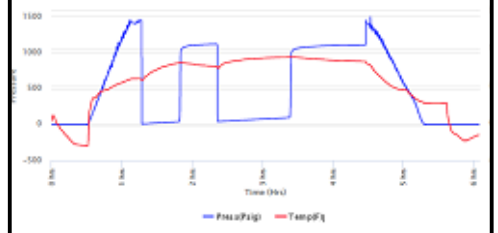
30"-30"-60"-60"
 IF: weak blow built to 1.25", no blow back on shut in
 FF: weak blow built to .75"
 Rec: 10' Oil & Gas Cut Mud (10% G, 10% O, 80% M)
 FP: 9-11, 11-14#
 SIP: 771-959#
 HP: 1,401-1,399
 **note: tool sample (2% G, 18% O, 80% M)



DST #2 2,994-3,012' Lansing C

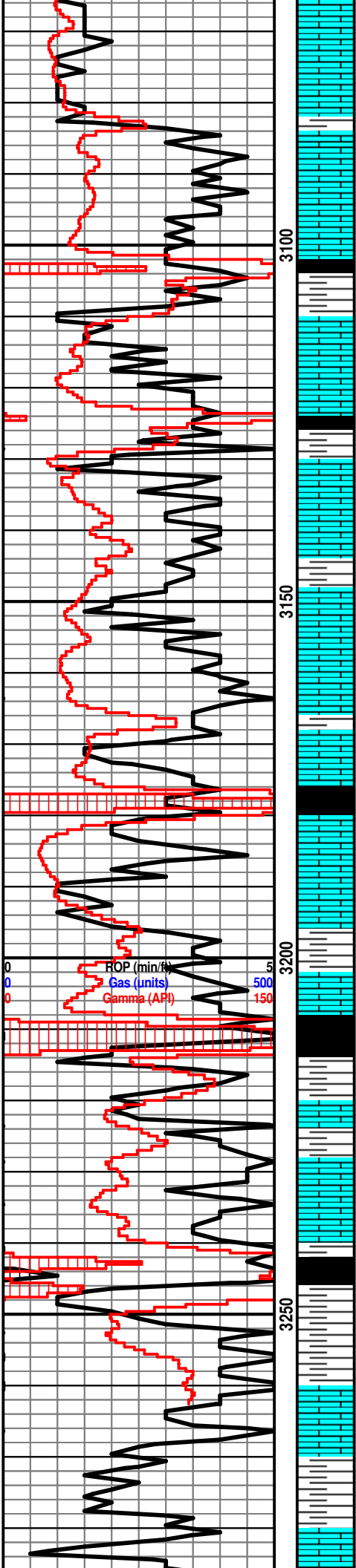
30"-30"-60"-60"
 IF: weak blow built to 9.6", surface blow back on shut in
 FF: weak blow built to 16.1", no blow back on shut in
 Rec: 3' Gas in Pipe
 1' Clean Oil
 185' Oil & Gas Cut Water (10% G, 10% O, 80% W)

186' Total Fluid Recovery
 FP: 9-41, 42-90#
 SIP: 1,121-1,109#
 HP: 1,405-1,405
 BHT: 96° F



DST #3 3,039-3,063' Lansing G

30"-30"-60"-60"
 IF: weak blow built to 3", no blow back on shut in
 FF: weak blow built to 3.9", no blow back on shut in
 Rec: 56' Mud Cut Water (25% M, 75% W)
 FP: 10-21, 20-34#



Ls: ala

Sh: drk gry-blk

Ls: off wh-tan, fn xln, ool, fair-good oom porosity, fair oil stn in porosity, SSFO when broken, sl odor

Sh: drk gry-blk

Ls: off wh-tan-lt gry, fn-sub xln, mostly DNS, scat chert-off wh, NSFO

Sh: lt-drk gry

Ls: off wh-tan, fn xln, few rxs ool, fair oom porosity, barren, scat chert-off wh-drk gry, scat chalk

Sh: drk gry

Ls: off wh-tan, fn xln, foss, scat int foss & int xln porosity, barren, scat chert-off wh, scat chalk

Sh: lt-drk gry

Sh: drk gry-blk

Ls: off wh-tan, fn xln, ool, scat oom porosity, barren, scat chert-off wh, chalky

Ls: off wh-tan, fn xln, ool, poor-fair oom porosity, scat dead oil stn, most rxs barren, scat chalk

Sh: drk gry-blk

Sh: lt gry

Ls: tan-lt gry, fn-sub xln, mostly DNS, barren, chalky

Ls: ala

B/KC 3245' (-1524)

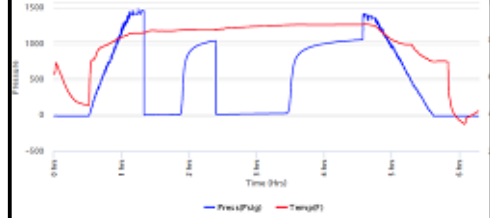
Sh: lt-drk gry, soft

Ls: tan-gry, fn-sub xln, DNS, scat chert-off wh

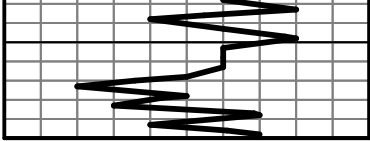
Sh: lt-drk gry, soft

Ls: tan-gry, sub xln, DNS

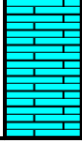
SIP: 1,054-1,067#
 HP: 1,418-1,419
 BHT: 89° F



Wt: 8.6
 Vis: 60



00



Ls: ala





Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 Est
 Field Name: Hegarty
 Pool: Wildcat
 Job Number: 266

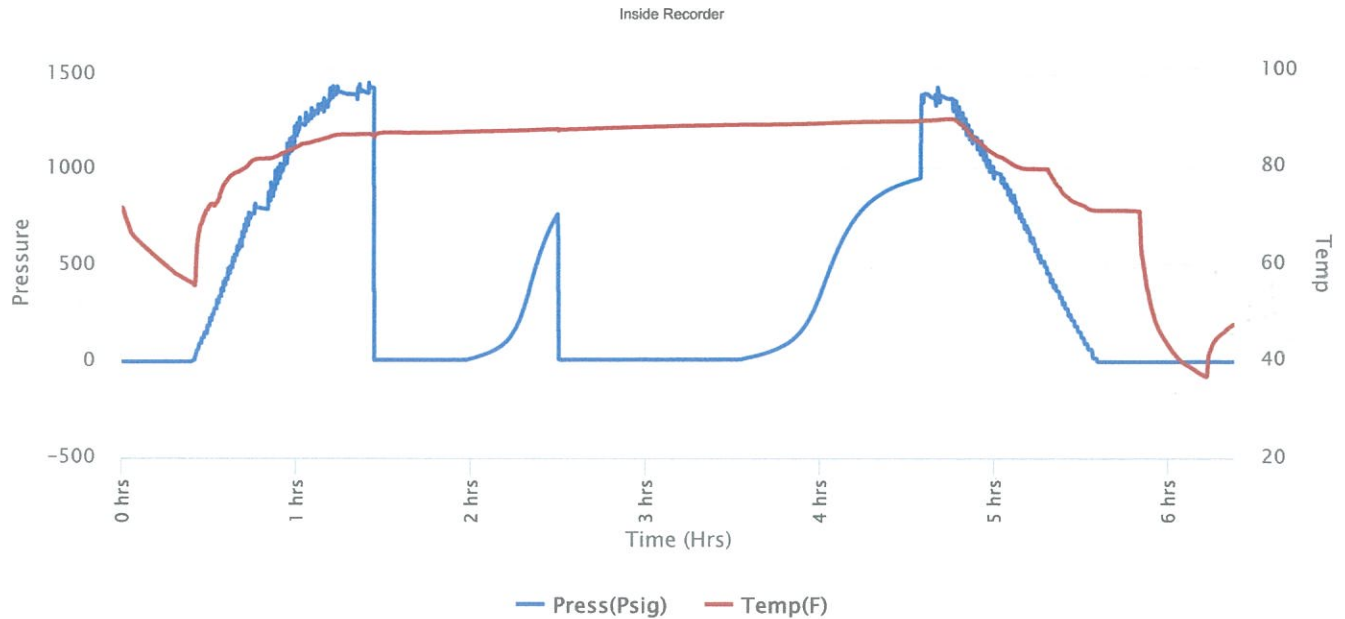
Operation:
 Uploading recovery & pressures

DATE
 November
05
 2018

DST #1 Formation: Lans B Test Interval: 2964 - 2990' Total Depth: 2990'
 Time On: 22:07 11/05 Time Off: 04:19 11/06
 Time On Bottom: 23:34 11/05 Time Off Bottom: 02:34 11/06

Electronic Volume Estimate:
 17'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 30	Minutes: 60	Minutes: 60
Current Reading: 1.3" at 30 min	Current Reading: 0" at 30 min	Current Reading: .8" at 60 min	Current Reading: 0" at 60 min
Max Reading: 1.3"	Max Reading: 0"	Max Reading: .9"	Max Reading: 0"





Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 Est
 Field Name: Hegarty
 Pool: Wildcat
 Job Number: 266

Operation:
 Uploading recovery & pressures

DATE
 November
05
 2018

DST #1 **Formation: Lans B** **Test Interval: 2964 - 2990'** **Total Depth: 2990'**
 Time On: 22:07 11/05 Time Off: 04:19 11/06
 Time On Bottom: 23:34 11/05 Time Off Bottom: 02:34 11/06

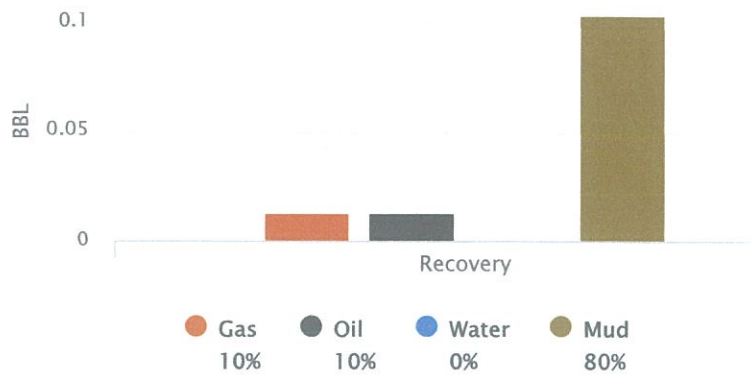
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
10	0.129	SLOCSLGCM	10	10	0	80

Total Recovered: 10 ft
 Total Barrels Recovered: 0.129

Reversed Out
 NO

Initial Hydrostatic Pressure	1401	PSI
Initial Flow	9 to 11	PSI
Initial Closed in Pressure	771	PSI
Final Flow Pressure	11 to 14	PSI
Final Closed in Pressure	959	PSI
Final Hydrostatic Pressure	1399	PSI
Temperature	90	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance





Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 Est
Field Name: Hegarty
Pool: Wildcat
Job Number: 266

Operation:
Uploading recovery &
pressures

DATE
November
05
2018

DST #1	Formation: Lans B	Test Interval: 2964 - 2990'	Total Depth: 2990'
	Time On: 22:07 11/05	Time Off: 04:19 11/06	
	Time On Bottom: 23:34 11/05	Time Off Bottom: 02:34 11/06	

BUCKET MEASUREMENT:

1st Open: 1/4 Blow. Built to 1 1/4 inches in 30 mins
1st Close: NOBB
2nd Open: 1/4 Blow. Built to 3/4 inch in 60 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 2% Gas 18% Oil 0% Water 80% Mud



Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 Est
 Field Name: Hegarty
 Pool: Wildcat
 Job Number: 266

Operation:
 Uploading recovery & pressures

DATE
 November
05
 2018

DST #1 **Formation: Lans B** **Test Interval: 2964 - 2990'** **Total Depth: 2990'**
 Time On: 22:07 11/05 Time Off: 04:19 11/06
 Time On Bottom: 23:34 11/05 Time Off Bottom: 02:34 11/06

Down Hole Makeup

Heads Up: 22.28 FT	Packer 1: 2959 FT
Drill Pipe: 2953.71 FT <i>ID-3 1/2</i>	Packer 2: 2964 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 2948.42 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 2966 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 26	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 25 FT <i>4 1/2-FH</i>	



Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 Est
Field Name: Hegarty
Pool: Wildcat
Job Number: 266

Operation:

Uploading recovery &
pressures

DATE

November

05

2018

DST #1 Formation: Lans B Test Interval: 2964 - 2990' Total Depth: 2990'

Time On: 22:07 11/05

Time Off: 04:19 11/06

Time On Bottom: 23:34 11/05

Time Off Bottom: 02:34 11/06

Mud Properties

Mud Type: Chem

Weight: 8.6

Viscosity: 65

Filtrate: 8

Chlorides: 3000 ppm



Company: John O. Farmer, Inc
Lease: Ulrich A-1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 Est
 Field Name: Hegarty
 Pool: Wildcat
 Job Number: 266

Operation:
 Uploading recovery & pressures

DATE
 November
05
 2018

DST #1 Formation: Lans B Test Interval: 2964 - 2990' Total Depth: 2990'
 Time On: 22:07 11/05 Time Off: 04:19 11/06
 Time On Bottom: 23:34 11/05 Time Off Bottom: 02:34 11/06

Gas Volume Report

1st Open

2nd Open

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

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



Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 EGL
 Field Name: Hegarty
 Pool: WILDCAT
 Job Number: 266

Operation:
 Uploading recovery & pressures

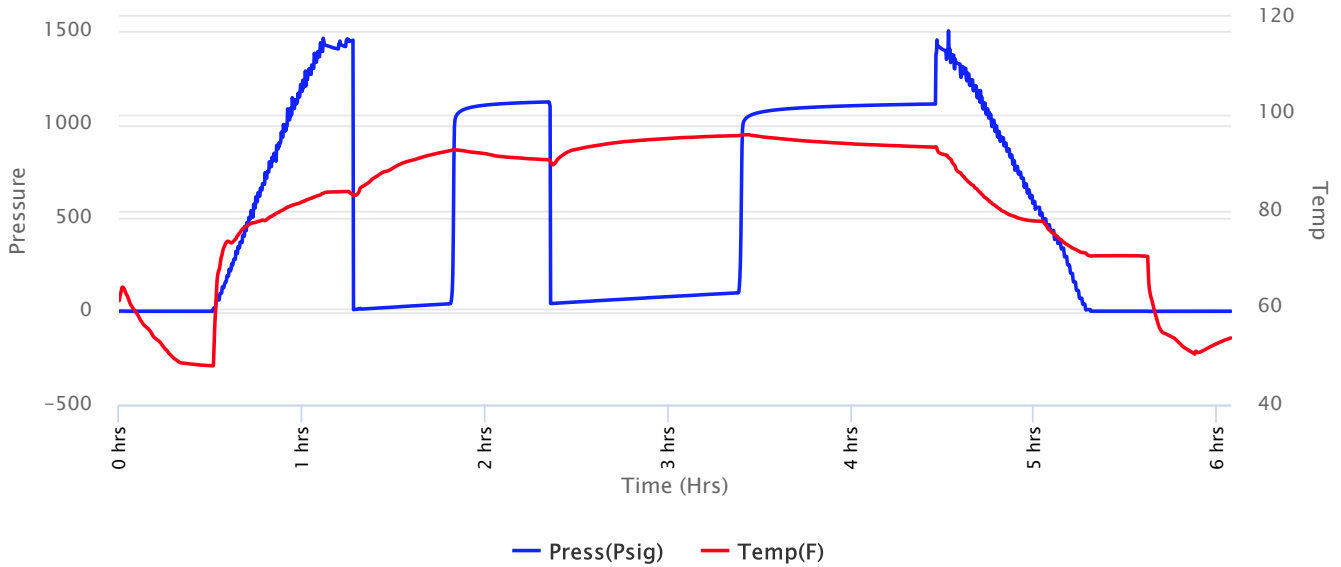
DATE
 November
06
 2018

DST #2 Formation: Lans C Test Interval: 2994 - 3012' Total Depth: 3012'
 Time On: 11:00 11/06 Time Off: 16:54 11/06
 Time On Bottom: 12:14 11/06 Time Off Bottom: 15:14 11/06

Electronic Volume Estimate:
 198'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 30	Minutes: 60	Minutes: 60
Current Reading: 9.6" at 30 min	Current Reading: .1" at 30 min	Current Reading: 16.1" at 60 min	Current Reading: 0" at 60 min
Max Reading: 9.6"	Max Reading: .1"	Max Reading: 16.1"	Max Reading: 0"

Inside Recorder





Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 EGL
 Field Name: Hegarty
 Pool: WILDCAT
 Job Number: 266

Operation:
 Uploading recovery & pressures

DATE
 November
06
 2018

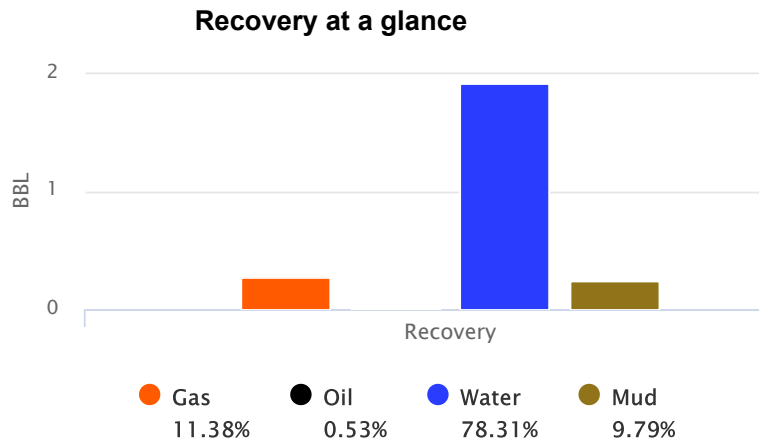
DST #2 **Formation: Lans C** **Test Interval: 2994 - 3012'** **Total Depth: 3012'**
 Time On: 11:00 11/06 Time Off: 16:54 11/06
 Time On Bottom: 12:14 11/06 Time Off Bottom: 15:14 11/06

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Foot	BBLs					
3	0.0387	G	100	0	0	0
1	0.0129	O	0	100	0	0
185	2.3865	SLGCSLMCW	10	0	80	10

Total Recovered: 189 ft
 Total Barrels Recovered: 2.4381

Reversed Out
 NO

Initial Hydrostatic Pressure	1405	PSI
Initial Flow	9 to 41	PSI
Initial Closed in Pressure	1121	PSI
Final Flow Pressure	42 to 99	PSI
Final Closed in Pressure	1109	PSI
Final Hydrostatic Pressure	1405	PSI
Temperature	96	°F
Pressure Change Initial Close / Final Close	1.1	%





Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 EGL
Field Name: Hegarty
Pool: WILDCAT
Job Number: 266

Operation:
Uploading recovery &
pressures

DATE
November
06
2018

DST #2	Formation: Lans C	Test Interval: 2994 - 3012'	Total Depth: 3012'
	Time On: 11:00 11/06	Time Off: 16:54 11/06	
	Time On Bottom: 12:14 11/06	Time Off Bottom: 15:14 11/06	

BUCKET MEASUREMENT:

1st Open: 1/4 " Blow Blow. Built to 9 3/4 inch in 30 min
1st Close: Weak Blow Back
2nd Open: 1/4" Blow. BOB in 14 1/4 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 10% Gas 5% Oil 75% Water 10% Mud

Ph: 7

Measured RW: .24 @ 48 degrees °F

RW at Formation Temp: 0.128 @ 96 °F

Chlorides: 90,000 ppm



Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc -
 Rig 2
 Elevation: 1706 EGL
 Field Name: Hegarty
 Pool: WILDCAT
 Job Number: 266

Operation:
 Uploading recovery &
 pressures

DATE
 November
06
 2018

DST #2 **Formation: Lans C** **Test Interval: 2994 - 3012'** **Total Depth: 3012'**
 Time On: 11:00 11/06 Time Off: 16:54 11/06
 Time On Bottom: 12:14 11/06 Time Off Bottom: 15:14 11/06

Down Hole Makeup

Heads Up: 16.09 FT	Packer 1: 2989 FT
Drill Pipe: 2984.93 FT <i>ID-3 1/2</i>	Packer 2: 2994 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 2981 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 2996 FT
Test Tool: 26.16 FT <i>ID-3 1/2-FH</i>	Well Bore Size: 7 7/8
Total Anchor: 18	Surface Choke: 1"
<u>Anchor Makeup</u>	
Packer Sub: 1 FT	Bottom Choke: 5/8"
Perforations: (top): 0 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 17 FT <i>4 1/2-FH</i>	



Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 EGL
Field Name: Hegarty
Pool: WILDCAT
Job Number: 266

Operation:
Uploading recovery &
pressures

DATE
November
06
2018

DST #2 **Formation: Lans C** **Test Interval: 2994 - 3012'** **Total Depth: 3012'**
Time On: 11:00 11/06 Time Off: 16:54 11/06
Time On Bottom: 12:14 11/06 Time Off Bottom: 15:14 11/06

Mud Properties

Mud Type: Chem **Weight:** 8.6 **Viscosity:** 58 **Filtrate:** 8.8 **Chlorides:** 4000 ppm



Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 EGL
 Field Name: Hegarty
 Pool: WILDCAT
 Job Number: 266

Operation:
 Uploading recovery & pressures

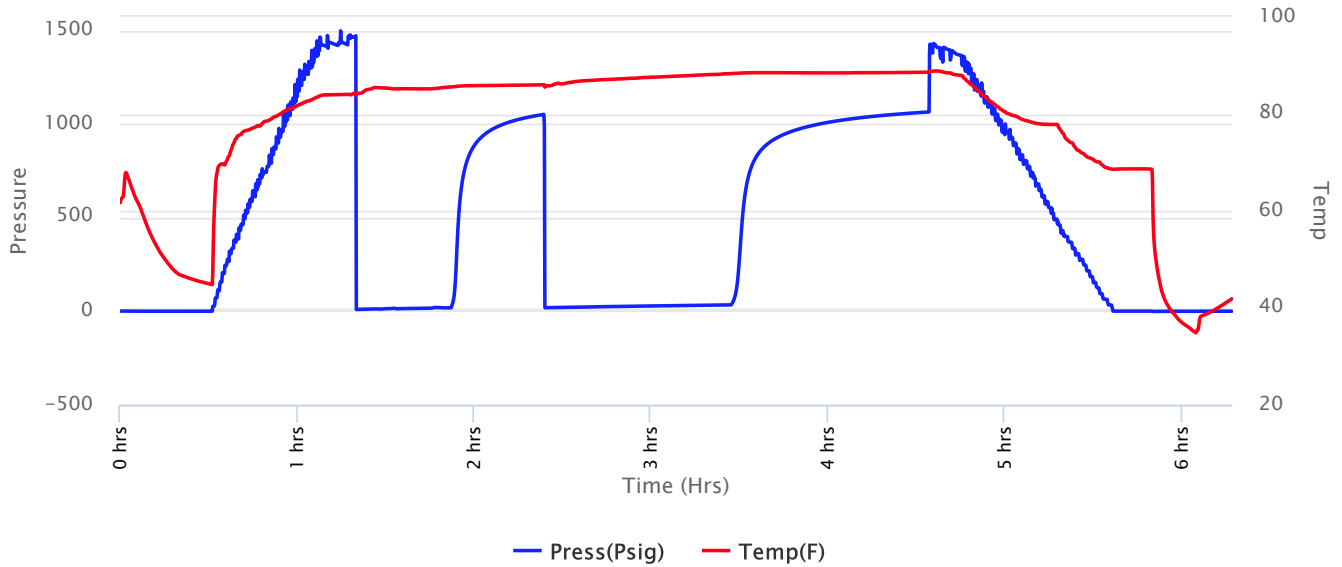
DATE
 November
07
 2018

DST #3 Formation: Lans G Test Interval: 3039 - 3063' Total Depth: 3063'
 Time On: 00:47 11/07 Time Off: 06:54 11/07
 Time On Bottom: 02:05 11/07 Time Off Bottom: 05:05 11/07

Electronic Volume Estimate:
 54'

<u>1st Open</u>	1st Close	<u>2nd Open</u>	2nd Close
Minutes: 30	Minutes: 30	Minutes: 60	Minutes: 60
Current Reading: 3" at 30 min	Current Reading: 0" at 30 min	Current Reading: 3.9" at 60 min	Current Reading: 0" at 60 min
Max Reading: 3"	Max Reading: 0"	Max Reading: 3.9"	Max Reading: 0"

Inside Recorder





Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
 County: RUSSELL
 State: Kansas
 Drilling Contractor: Royal Drilling, Inc - Rig 2
 Elevation: 1706 EGL
 Field Name: Hegarty
 Pool: WILDCAT
 Job Number: 266

Operation:
 Uploading recovery & pressures

DATE
 November
07
 2018

DST #3 Formation: Lans G Test Interval: 3039 - 3063' Total Depth: 3063'
 Time On: 00:47 11/07 Time Off: 06:54 11/07
 Time On Bottom: 02:05 11/07 Time Off Bottom: 05:05 11/07

Recovered

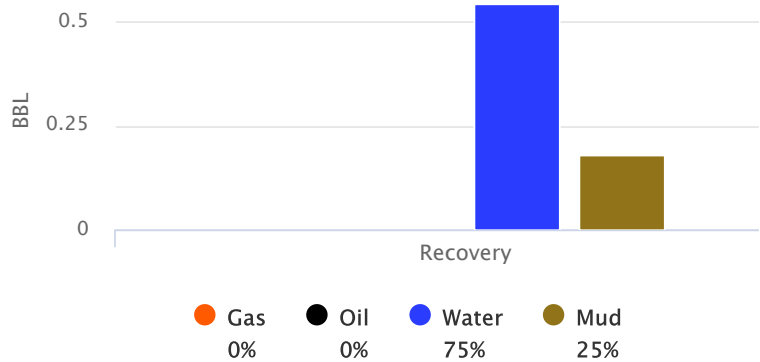
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
56	0.7224	MCW	0	0	75	25

Total Recovered: 56 ft
 Total Barrels Recovered: 0.7224

Reversed Out
 NO

Initial Hydrostatic Pressure	1418	PSI
Initial Flow	10 to 21	PSI
Initial Closed in Pressure	1054	PSI
Final Flow Pressure	20 to 34	PSI
Final Closed in Pressure	1067	PSI
Final Hydrostatic Pressure	1419	PSI
Temperature	89	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance





Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 EGL
Field Name: Hegarty
Pool: WILDCAT
Job Number: 266

Operation:
Uploading recovery &
pressures

DATE
November
07
2018

DST #3 Formation: Lans G Test Interval: 3039 - Total Depth: 3063'
3063'
Time On: 00:47 11/07 Time Off: 06:54 11/07
Time On Bottom: 02:05 11/07 Time Off Bottom: 05:05 11/07

BUCKET MEASUREMENT:

1st Open: 1/4" Blow. Built to 3 inches in 30 mins
1st Close: NOBB
2nd Open: WSB. Built to 3 3/4 inches in 60 mins
2nd Close: NOBB

REMARKS:

Tool Sample: 0% Gas 0% Oil 90% Water 10% Mud

Ph: 7

Measured RW: .26 @ 40 degrees °F

RW at Formation Temp: 0.127 @ 89 °F

Chlorides: 65000 ppm



Company: John O. Farmer, Inc
Lease: Ulrich "A" #1

SEC: 31 TWN: 11S RNG: 12W
County: RUSSELL
State: Kansas
Drilling Contractor: Royal Drilling, Inc -
Rig 2
Elevation: 1706 EGL
Field Name: Hegarty
Pool: WILDCAT
Job Number: 266

Operation:
Uploading recovery &
pressures

DATE
November
07
2018

DST #3 Formation: Lans G Test Interval: 3039 - Total Depth: 3063'
3063'
Time On: 00:47 11/07 Time Off: 06:54 11/07
Time On Bottom: 02:05 11/07 Time Off Bottom: 05:05 11/07

Mud Properties

Mud Type: Chem **Weight:** 8.6 **Viscosity:** 58 **Filtrate:** 8.8 **Chlorides:** 4000 ppm

