

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>

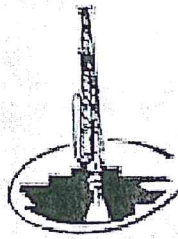
TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	C & K Operating LLC
Well Name	CYNTHIA REIMANN 5A
Doc ID	1457194

Tops

Name	Top	Datum
Heebner	2997	-1066
Toronto	3018	-1087
Douglas	3032	-1101
Brown Lime	3098	-1167
Lansing	3114	-1183
BKC	3360	-1423
Arbuckle	3385	-1454
Regan Sand	3469	-1538





# Musgrove

**PETROLEUM CORPORATION**  
Cliflin, Kansas

## GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY <u>C&amp;K Operating</u>	ELEVATIONS
LEASE <u>Cynthia Reimann # 5</u>	KB <u>1931'</u>
FIELD <u>Kraft Prusa</u>	DF _____
LOCATION <u>SW-NE-NE-SF</u>	GL <u>1926'</u>
SEC <u>33</u> TWSP <u>16S</u> RGE <u>11W</u>	Measurements Are All From <u>KB</u>
COUNTY <u>Barton</u> STATE <u>Kansas</u>	
CONTRACTOR <u>W.W Drilling (Rig #8)</u>	CASING SURFACE <u>8 5/8"@420'</u>
SPUD <u>12/03/2018</u> COMP <u>12/12/2018</u>	PRODUCTION <u>None</u>
RTD <u>3500'</u> LTD <u>3498'</u>	ELECTRICAL SURVEYS by ELI; DIL, CNL/CDL Micro, Sonic
MUD UP <u>2500' +</u> TYPE MUD <u>Chemical</u>	

SAMPLES SAVED FROM 2700' TO RTD

DRILLING TIME KEPT FROM 2700' TO RTD

SAMPLES EXAMINED FROM 2700' TO RTD

GEOLOGICAL SUPERVISION FROM 2800' TO RTD







GEOLOGIST ON WELL Jim Musgrove

FORMATION TOPS	LOG	<del>SAMPLES</del>
Anhydrite	744 (+1187)	Regan Sd. 3469 -1538
Base Anhydrite	773 (+1158)	RTD 3500 -1569
Heebner	2997 (-1066)	LTD 3498 -1567
Toronto	3013 (-1028)	
Douglas	3028 (-1097)	
Brown Lime	3095 (-1164)	
Lansing	3108 (-1177)	





	33		X

Base Kansas City	3358	(-1427)				
Arbuckle	3383	(-1452)				

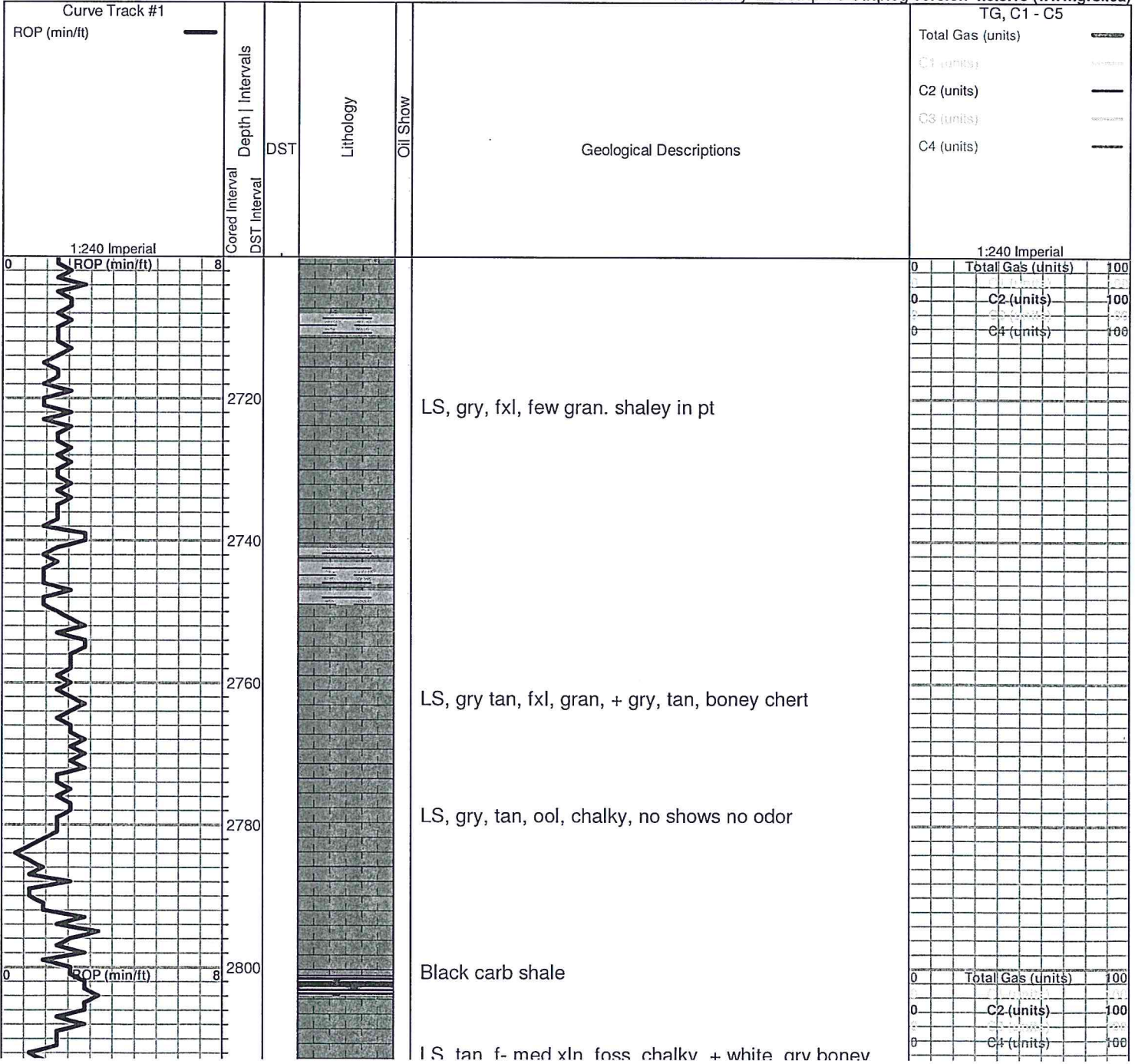
**ROCK TYPES**

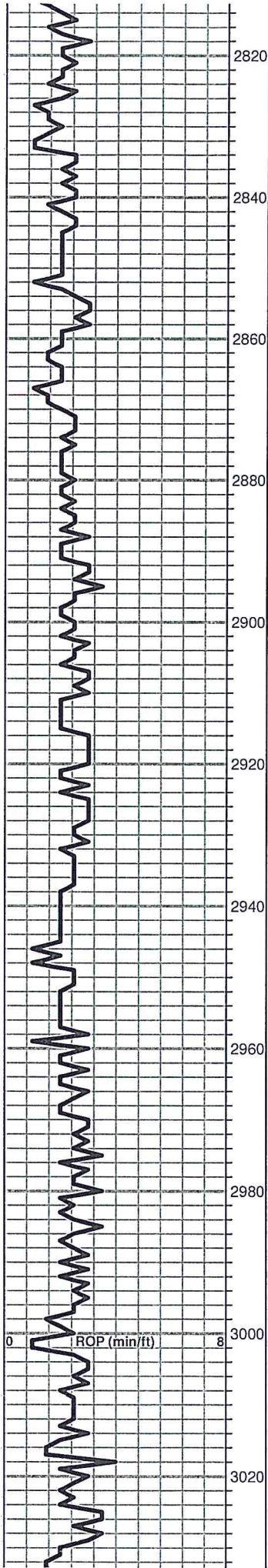
 Dolprim	 shale, grn	 Carbon Sh
 Lmst fw<7	 shale, gry	 Meta

**OTHER SYMBOLS**

<b>Oil Show</b>	<b>DST</b>
● Good Show	 DST Int
● Fair Show	 DST alt
○ Poor Show	 Core
○ Spotted or Trace	 tail pipe
○ Questionable Strn	
D Dead Oil Strn	
■ Fluorescence	
* Gas	

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





LS, tan, med xnl, foss, chalky, white, gry boney chert

Sh, gry, soft

LS, gry, fxl, few gran shaley in pt.

LS, white, cream, chalky, dense

LS, gry, tan, fxl, gran. + gry/ tan, boney chert

LS, gry, tan, ol, chalky, no shows

LS, white, cream, fxl, foss, in pt, poor vis. porosity, no shows

Sh. black carb

○ LS, white, chalky, poorly develeoped, tr. brown stain, nsfo

tr. gry/ blk chert

○ LS, white, cream, chalky, poorly developed, porosity, tr. brn stn nsfo

○ LS, tan, fxl, few foss, cherty in pts, tr. brn stain poss fractured cherty nsfo, no odor

tr. white chert

**Heebner 2997.0 (-1066.0)**

Sh, black carb a/a

Sh, gry, silty

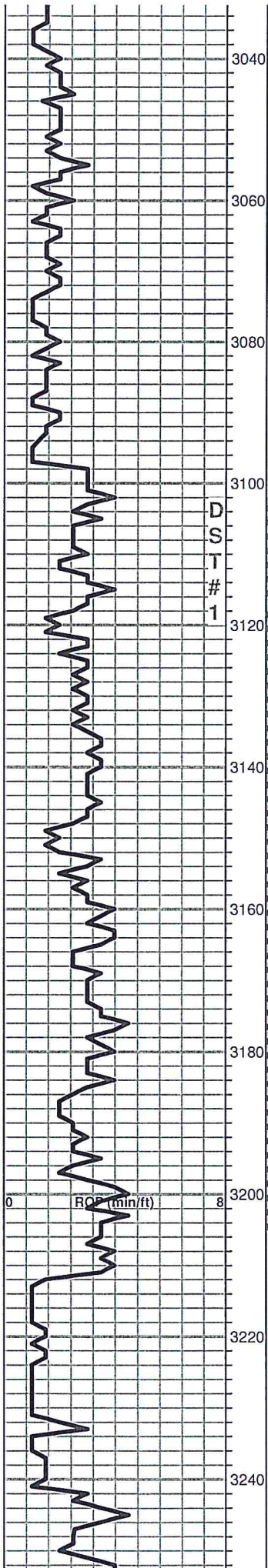
**Toronto 3018.0 (-1087.0)**

○ LS, white, cream, foss, chalky, scattered porosity, tr. brn stain/ sat., nsfo, ft. odor

Poor samples

Poor Samples

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



**Douglas 3032.0 (-1101.0)**

V.c. gry, gryish green silty shale,  
 Sh, gry, greenish, silty  
 Sh, gry, silty

**Brown Lime 3098.0 (-1167.0)**

LS, brown/ tan, fxl, slightly cherty (dense)

Sh, gry , gryish green

**Lansing 3114.0 (-1183.0)**

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

LS, gry, foss, slightly cherty, poor porosity, (dense)

○ LS, white, foss/ ool, chalky in pt, dk brown - blk stain, nsfo, no odor

LS, tan, cream, fxl, chalky, cherty, tr. tan opaque chert

LS, tan, ool, chlky in pt, (dense)

tr. gry chert

LS, tan, oom, good oom porosity, no shows, + white, chalk

a/a, + white chalk

LS, tan, gry, slightly cherty (dense)

Slug black carb sh.

**DST#1 3103-3209**  
**30-30-45-45**

**1st Open:**  
**Blow; Strong**  
**BOB 1.5 mins**

**2nd Open:**  
**BOB 5 mins.**

**Recovery:**  
**199' GIP**

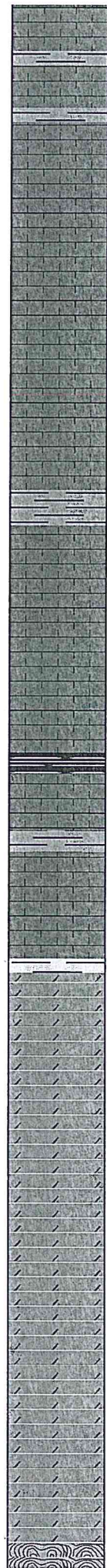
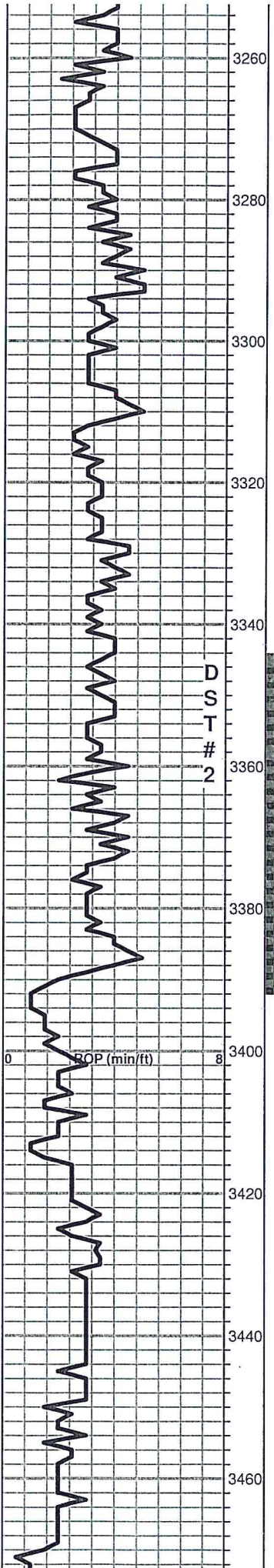
**242' SL OCMW**  
**(5%G, 1%O, 10%W, 84%M)**

**650' VSOCMW**  
**(1%O, 87%W, 12% M)**

**Pressures:**  
**ISIP 593psi**  
**FSIP 53-255 psi**  
**FFP 259-415 psi**  
**HSH 1483-1484 psi**

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





LS, white, gry, few foss, chalky, poo vis. porosity

LS, gry, white, ool, chalky, tr. brown stain, nsfo, no odor

LS, tan, ool, foss, dense poorly developed porosity

LS, white, cream, sub oom, chalky, poor vis. porosity, tr. gry-blk (dead) stain, nsfo, no odor

LS, white, gry, chalky (dense)

LS, tan, gry, fxl, few gran. chalky

LS, tan, fxl, slightly cherty poor porosity, no shows

**BKC 3360.0 (-1423.0)**

Sh, black carb

LS, gry/ tan, cherty, + gry opaque chert

LS, a/a

**Arbuckle 3385.0 (-1454.0)**

Dol. white/ cream, med coarse xl, fair - good inxln porosity, tr. brn stain, SFO, faint -fair odor

Dol, a/a , fair- good inxln porosity, tr. brown stain, sfo, odor

Dol, white, cream, fxl, sandy in pt, tr. brn stain, nsfo, faint odor

Dol, white, tan, fxl, few sandy, slightly cherty, poor vis. porosity, nsfo, faint odor

Dol, white, tan, fxl, increase in sand fair porosity, no shows

Dol a/a highly sandy, fair porosity, no shows

**Regan Sd. 3469.0 (-1538.0)**

Sd, clear white etc, sub rounded, friable, fair inner

**DST#2 3344-3390**

30-30-30-30

1st Open:  
BOB 6.5 mins

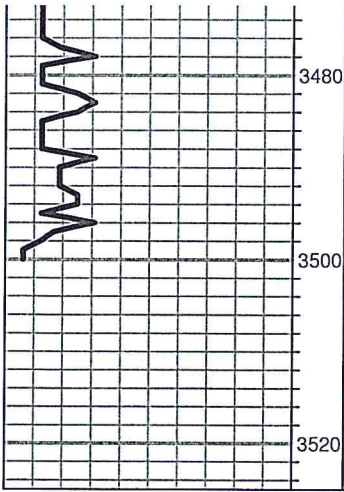
2nd Open:  
BOB 9.5 mins.

Recovery  
1' clean oil  
253' SI. OCMW  
(2%O, 65%W, 33%  
M)

252' VSOCMW  
1%O, 49%W, 50%M)

189' Muddy Water

Pressures:  
ISIP 1074 psi  
FSIP 1073 psi  
IFP 16-219 psi



Sd, clear white qtz, sub rounded, friable, fair in gran. porosity, tr. brn stain, nsfo, faint odor

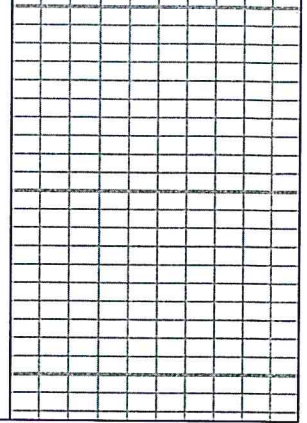
a/a, dolomitic no shows

Dol, tan, pk, fxl, sandy in pt, no shows

Sd. white, clear, qtz, sub rounded friable, fair in gran. porosity, tr. pyrite inclusions.

**RTD 3500.0 (-1569.0)**

FFP 221-347 psi  
HSH 1627-1623 psi



# QUALITY WELL SERVICE, INC.

*Inv C-1923*

6135

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410  
Fax 620-672-3663

Rich's Cell 620-727-3409  
Brady's Cell 620-727-6964

Date	DEC 7, 18	Sec.	33	Twp.	16S	Range	11W	County	Barton	State	K.S.	On Location	6:44 10:30 pm	Finish	
Lease	REIMANN	Well No.	#5	Location		Chaplin R 7N West Intd									
Contractor	CYNTHIA C & K OPERATING				Owner										
Type Job	8 3/8	To Quality Well Service, 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	12 1/4	T.D.	1528'												
Csg.		Depth	Charge To C & K												
Tbg. Size		Depth	Street												
Tool		Depth	City State												
Cement Left in Csg.		Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.												
Meas Line		Displace	Cement Amount Ordered 250 sk Common												
<b>EQUIPMENT</b>													27.6L 31.0L 1/4 CF		
Pumptrk	6	No.	Rich	Common 250 sk											
Bulktrk		No.	TU	Poz. Mix											
Bulktrk		No.		Gel. 5 sk											
Pickup		No.	BKENT	Calcium 9 sk											
<b>JOB SERVICES &amp; REMARKS</b>													Hulls		
Rat Hole												Salt			
Mouse Hole												Flowseal 625			
Centralizers												Kol-Seal			
Baskets												Mud CLR 48			
D/V or Port Collar												CFL-117 or CD110 CAF 38			
pumped 94 BBL mud													Sand		
5 BBL water 250 SKS													Handling 264		
COM - DISPLACED 98.5 BBL													Mileage 40		
													77% <b>FLOAT EQUIPMENT</b>		
Pipe Plug up													Guide Shoe		
Packed 1481'													Centralizer		
Then pumped													Baskets 1 EA TOP Rubber Plug		
													AFU Inserts 1 EA		
													Float Shoe		
													Latch Down		
													SERVICE SUPERVISOR		
													IMV 40		
													Pumptrk Charge 5FL 3		
													Mileage 00		
													Tax		
													Discount		
													Total Charge		
X Signature	<i>Jim Knapp</i>														

# QUALITY WELL SERVICE, INC.

Federal Tax I.D. # 481187368

*W.W.*  
*C-1930* 6136

Home Office 324 Simpson St., Pratt, KS 67124

Office 620-727-3410  
Fax 620-672-3663

Rich's Cell 620-727-3409  
Brady's Cell 620-727-6964

Date	Dec 12, 2018	Sec.	33	Twp.	16	Range	11 W	County	BARTON	State	K.S.	On Location	9:30 AM	Finish	12:30	
Lease	CYNTHIA RAIMANN			Well No.	# 5		Location 6' N of claffer									
Contractor	W W				Owner C+K											
Type Job	plug job				To Quality Well Service, 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					T.D.											
Csg.	8 5/8				Depth				Charge To				C+K			
Tbg. Size					Depth				Street							
Tool					Depth				City				Pratt State K.S.			
Cement Left in Csg.					Shoe Joint				The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line					Displace.				Cement Amount Ordered <del>520</del> 1505x 60/4048							
<b>EQUIPMENT</b>								Gel / 4305x Com.								
Pumptrk #6	No. Rich								Common				520			
Bulktrk #4	No. Rich								Poz. Mix				60			
Bulktrk #7	No. VAKKE								Gel.				5			
Pickup	No. Present								Calcium				15			
<b>JOB SERVICES &amp; REMARKS</b>								Hulls								
Rat Hole 305x								Salt								
Mouse Hole								Flowseal								
Centralizers								Kol-Seal								
Baskets								Mud CLR 48								
DV or Port Collar								CFL-117 or CD110 CAF 38								
(a) 3863 pumped 15 water								Sand								
75 SKS 5 water, 5 min on mud pump								Handling 600								
1648' 15' water, 75 SKS 5 bbls water, 2 min on mud pump								Mileage 40								
pumped 750 ran to 1770'								<b>FLOAT EQUIPMENT</b>								
pumped 75 SKS 4 water 50 seconds on mud pump								Guide Shoe								
pumped, 450' pipe at 459' pumped 125 SKS								Centralizer								
down drill pipe pulled out								Baskets								
pumped 30 SKS in rat hole								AFU Inserts								
swedged in 8 5/8 pumped 200 SKS cement circulated to surface								Float Shoe								
								Latch Down								
								L.M.V 40								
								Service supervisor								
								Pumptrk Charge Rotary Plug								
								Mileage 80.								
								Tax								
								Discount								
								Total Charge								
Signature <i>W.W. Pratt</i>																



# Company: C & K Operating, LLC

## Lease: Cynthia Reimann #5

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**10**  
2018

**DST #1**    **Formation: Lans "A-F"**    **Test Interval: 3103 - 3209'**    **Total Depth: 3209'**

Time On: 10:08 12/10    Time Off: 17:12 12/10  
Time On Bottom: 12:02 12/10    Time Off Bottom: 14:47 12/10

Electronic Volume Estimate:  
1219'

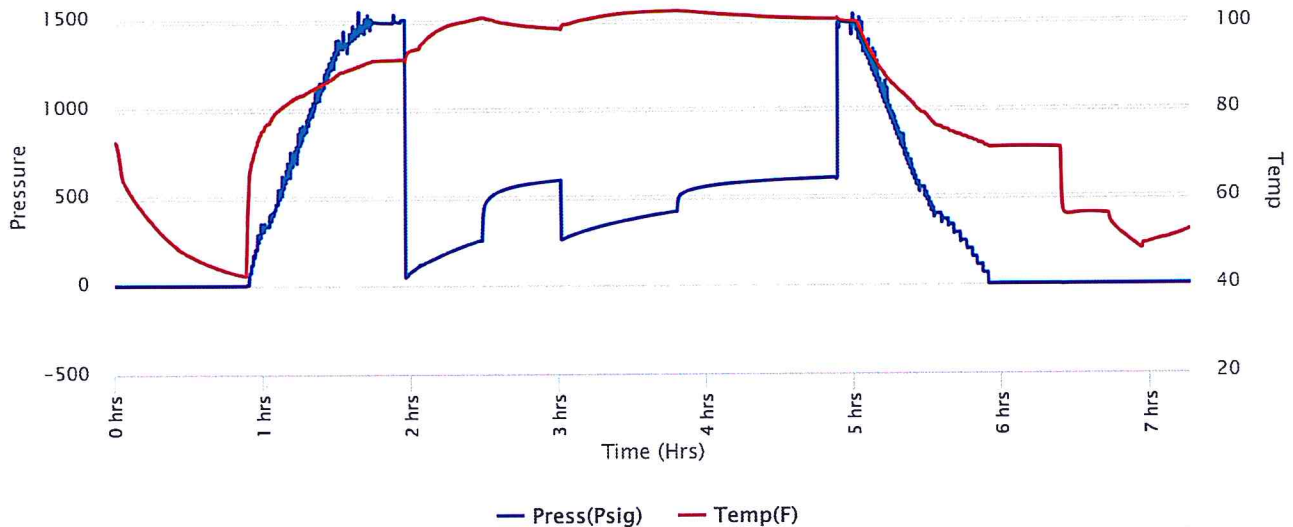
1st Open  
Minutes: 30  
Current Reading:  
88.4" at 30 min  
Max Reading: 88.4"

1st Close  
Minutes: 30  
Current Reading:  
1.6" at 30 min  
Max Reading: 2"

2nd Open  
Minutes: 45  
Current Reading:  
66" at 45 min  
Max Reading: 66"

2nd Close  
Minutes: 60  
Current Reading:  
3.8" at 60 min  
Max Reading: 4.2"

Inside Recorder





**Company: C & K Operating, LLC**  
**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: WW Drilling, LLC - Rig 8  
 Elevation: 1926 EGL  
 Field Name: Kraft-Prusa  
 Pool: Pool Ext  
 Job Number: 295

**Operation:**  
 Test Complete

**DATE**  
 December  
**10**  
 2018

**DST #1**    **Formation: Lans "A-F"**    **Test Interval: 3103 - 3209'**    **Total Depth: 3209'**  
 Time On: 10:08 12/10    Time Off: 17:12 12/10  
 Time On Bottom: 12:02 12/10    Time Off Bottom: 14:47 12/10

Recovered

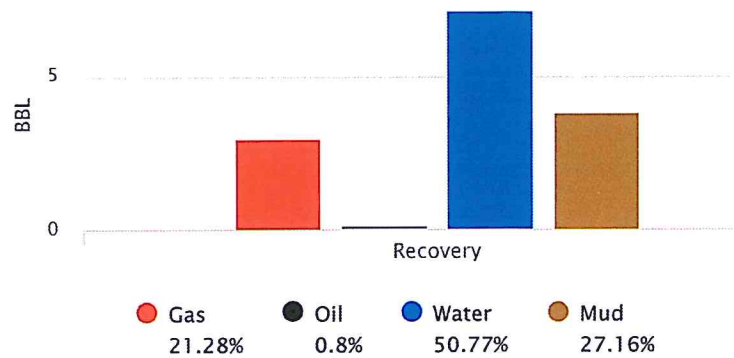
Foot	BBLs	Description of Fluid	Gas %	Oil %	Water %	Mud %
199	2.83177	G	100	0	0	0
242	3.44366	SLOCSLGCSLWCM	5	1	10	84
630	7.8423933	SLOCSLMCW	0	1	87	12

Total Recovered: 1071 ft  
 Total Barrels Recovered: 14.1178233

Reversed Out  
 NO

Initial Hydrostatic Pressure	1483	PSI
Initial Flow	53 to 255	PSI
<b>Initial Closed in Pressure</b>	<b>593</b>	<b>PSI</b>
Final Flow Pressure	259 to 415	PSI
<b>Final Closed in Pressure</b>	<b>605</b>	<b>PSI</b>
Final Hydrostatic Pressure	1484	PSI
Temperature	103	°F
Pressure Change Initial Close / Final Close	0.0	%

**Recovery at a glance**





**Company: C & K Operating,  
LLC  
Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC -  
Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**

Test Complete

**DATE**

December

**10**

2018

**DST #1      Formation: Lans "A-  
F"      Test Interval: 3103 -  
3209'      Total Depth: 3209'**

Time On: 10:08 12/10

Time Off: 17:12 12/10

Time On Bottom: 12:02 12/10      Time Off Bottom: 14:47 12/10

**BUCKET MEASUREMENT:**

*Diesel in Bucket*

1st Open: 1 in. blow building. BOB in 1 1/2 mins.

1st Close: 2 in. blow back.

2nd Open: 1 3/4 in. blow building. BOB in 5 mins.

2nd Close: 4 1/4 in. blow back.

**REMARKS:**

Tool Sample: 5% Gas 15% Oil 15% Water 65% Mud

Ph: 7

Measured RW: .15 @ 40 degrees °F

RW at Formation Temp: 0.064 @ 103 °F

Chlorides: 88,000 ppm



**Company: C & K Operating, LLC**

**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**10**  
2018

**DST #1**      **Formation: Lans "A-F"**      **Test Interval: 3103 - 3209'**      **Total Depth: 3209'**  
Time On: 10:08 12/10      Time Off: 17:12 12/10  
Time On Bottom: 12:02 12/10      Time Off Bottom: 14:47 12/10

**Down Hole Makeup**

<b>Heads Up:</b> 25.31 FT	<b>Packer 1:</b> 3097.88 FT
<b>Drill Pipe:</b> 2982.46 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3102.88 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3089.88 FT
<b>Collars:</b> 120.57 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3172 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> 106.12	<b>Surface Choke:</b> 1"
	<b>Bottom Choke:</b> 5/8"

**Anchor Makeup**

**Packer Sub:** 1 FT

**Perforations: (top):** 3 FT  
*4 1/2-FH*

**Change Over:** .5 FT

**Drill Pipe: (in anchor):** 62.62 FT  
*ID-3 1/2*

**Change Over:** 1 FT

**Perforations: (below):** 38 FT  
*4 1/2-FH*





**Company: C & K Operating,  
LLC**

**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC -  
Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**

Test Complete

**DATE**

December

**10**

2018

**DST #1      Formation: Lans "A-  
F"      Test Interval: 3103 -      Total Depth: 3209'  
3209'**

Time On: 10:08 12/10

Time Off: 17:12 12/10

Time On Bottom: 12:02 12/10      Time Off Bottom: 14:47 12/10

### **Mud Properties**

**Mud Type:** Chemical

**Weight:** 9.2

**Viscosity:** 50

**Filtrate:** 8.8

**Chlorides:** 2,400 ppm



# Company: C & K Operating, LLC

## Lease: Cynthia Reimann #5

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**11**  
2018

**DST #2**    **Formation: Arbuckle**    **Test Interval: 3344 - 3390'**    **Total Depth: 3390'**

Time On: 09:51 12/11    Time Off: 16:14 12/11  
Time On Bottom: 11:48 12/11    Time Off Bottom: 13:48 12/11

**DANGER**  
H2S Present  
**2 PPM**

Electronic Volume Estimate:  
722'

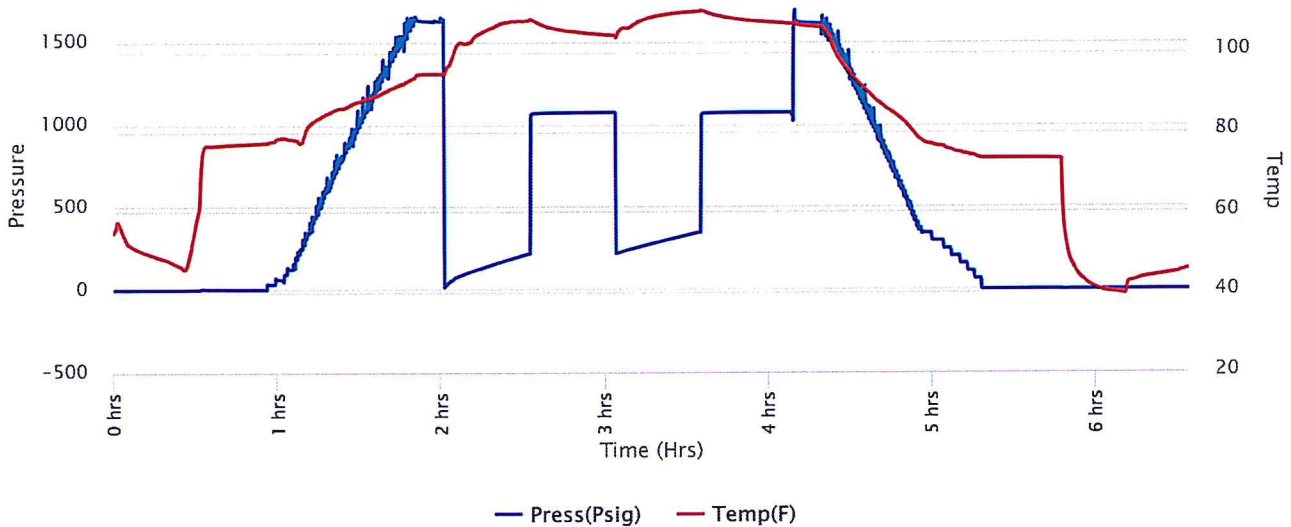
1st Open  
Minutes: 30  
Current Reading:  
43.8" at 30 min  
Max Reading: 43.8"

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

2nd Open  
Minutes: 30  
Current Reading:  
34.6" at 30 min  
Max Reading: 34.6"

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

Inside Recorder





**Company: C & K Operating, LLC**

**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
 County: BARTON  
 State: Kansas  
 Drilling Contractor: WW Drilling, LLC - Rig 8  
 Elevation: 1926 EGL  
 Field Name: Kraft-Prusa  
 Pool: Pool Ext  
 Job Number: 295

**Operation:**  
 Test Complete

**DATE**  
 December  
**11**  
 2018

**DST #2 Formation: Arbuckle Test Interval: 3344 - 3390' Total Depth: 3390'**

Time On: 09:51 12/11 Time Off: 16:14 12/11  
 Time On Bottom: 11:48 12/11 Time Off Bottom: 13:48 12/11

**DANGER**  
 H2S Present  
 2 PPM

Recovered

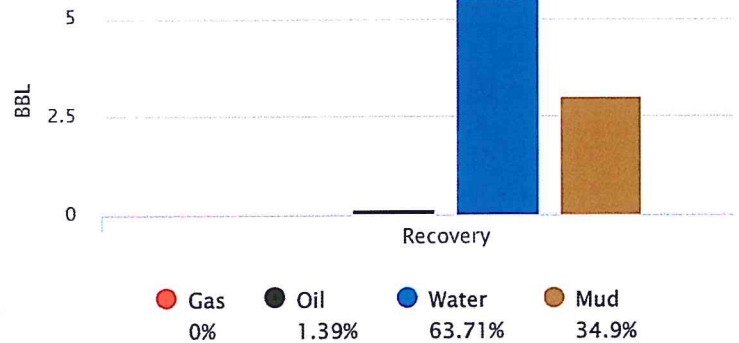
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
253	3.60019	SLOCHMCW	0	2	65	33
1	0.01423	O	0	100	0	0
252	3.58596	SLOCHWCM	0	1	49	50
189	1.5669633	SLMCW	0	0	95	5

Total Recovered: 695 ft  
 Total Barrels Recovered: 8.7673433

**Reversed Out**  
**NO**

Initial Hydrostatic Pressure	1627	PSI
Initial Flow	16 to 219	PSI
<b>Initial Closed in Pressure</b>	<b>1074</b>	<b>PSI</b>
Final Flow Pressure	221 to 347	PSI
<b>Final Closed in Pressure</b>	<b>1073</b>	<b>PSI</b>
Final Hydrostatic Pressure	1625	PSI
Temperature	111	°F
Pressure Change Initial Close / Final Close	0.1	%

**Recovery at a glance**





**Company: C & K Operating, LLC**

**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**11**  
2018

**DST #2      Formation: Arbuckle      Test Interval: 3344 - 3390'      Total Depth: 3390'**  
Time On: 09:51 12/11      Time Off: 16:14 12/11  
Time On Bottom: 11:48 12/11      Time Off Bottom: 13:48 12/11



**BUCKET MEASUREMENT:**

1st Open: 1/4 in. blow building. BOB in 6 1/2 mins.  
1st Close: Weak blow back.  
2nd Open: 3/4 in. blow building. BOB in 9 1/2 mins.  
2nd Close: No blow back.

**REMARKS:**

Tool Sample: 0% Gas 2% Oil 95% Water 3% Mud

Ph: 7

Measured RW: .2 @ 35 degrees °F

RW at Formation Temp: 0.071 @ 111 °F

Chlorides: 85,000 ppm

Max H2S Reading: 2 ppm



# Company: C & K Operating, LLC

## Lease: Cynthia Reimann #5

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC - Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**11**  
2018

**DST #2**    **Formation: Arbuckle**    **Test Interval: 3344 - 3390'**    **Total Depth: 3390'**  
Time On: 09:51 12/11    Time Off: 16:14 12/11  
Time On Bottom: 11:48 12/11    Time Off Bottom: 13:48 12/11



### Down Hole Makeup

<b>Heads Up:</b> 34.29 FT	<b>Packer 1:</b> 3338.7 FT
<b>Drill Pipe:</b> 3232.26 FT <i>ID-3 1/2</i>	<b>Packer 2:</b> 3343.7 FT
<b>Weight Pipe:</b> FT <i>ID-2 7/8</i>	<b>Top Recorder:</b> 3330.7 FT
<b>Collars:</b> 120.57 FT <i>ID-2 1/4</i>	<b>Bottom Recorder:</b> 3382 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> 46.3	<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> 3 FT <i>4 1/2-FH</i>	
<b>Change Over:</b> .5 FT	
<b>Drill Pipe: (in anchor):</b> 31.80 FT <i>ID-3 1/2</i>	
<b>Change Over:</b> 1 FT	
<b>Perforations: (below):</b> 9 FT <i>4 1/2-FH</i>	



**Company: C & K Operating,  
LLC**  
**Lease: Cynthia Reimann #5**

SEC: 33 TWN: 16S RNG: 11W  
County: BARTON  
State: Kansas  
Drilling Contractor: WW Drilling, LLC -  
Rig 8  
Elevation: 1926 EGL  
Field Name: Kraft-Prusa  
Pool: Pool Ext  
Job Number: 295

**Operation:**  
Test Complete

**DATE**  
December  
**11**  
2018

**DST #2    Formation: Arbuckle    Test Interval: 3344 -    Total Depth: 3390'**  
**3390'**  
Time On: 09:51 12/11    Time Off: 16:14 12/11  
Time On Bottom: 11:48 12/11    Time Off Bottom: 13:48 12/11



**Mud Properties**

**Mud Type:** Chemical    **Weight:** 9.3    **Viscosity:** 52    **Filtrate:** 8.8    **Chlorides:** 2,900 ppm



Conservation Division  
266 N. Main St., Ste. 220  
Wichita, KS 67202-1513

Phone: 316-337-6200  
Fax: 346-337-6211  
<http://kcc.ks.gov/>

Dwight D. Keen, Chair  
Shari Feist Albrecht, Commissioner  
Jay Scott Emler, Commissioner

Laura Kelly, Governor

April 12, 2019

Jim Kraft  
C & K Operating LLC  
413 S. MAIN  
PRATT, KS 67124

Re: ACO-1  
API 15-009-26244-00-00  
CYNTHIA REIMANN 5A  
SE/4 Sec.33-16S-11W  
Barton County, Kansas

Dear Jim Kraft:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 12/3/2018 and the ACO-1 was received on April 12, 2019 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department