KOLAR Document ID: 1348460

Confiden	tiality Re	quested:
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

		DECODIDEIO		
WELL	HISTORY	- DESCRIPTIO	N OF WELL	& LEASE

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
Oil WSW SWD Gas DH EOR	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #:	
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #: GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East _ West
Recompletion Date Reached TD Completion Date of Recompletion Date	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:				

KOLAR Document ID: 1348460

Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

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 (Attach Additional Sh	eets)	Y	es 🗌 No			og Formatio	n (Top), Depth	and Datum	Sample
Samples Sent to Geolog	*		és 🗌 No	Ν	lame	e		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:			ies No ies No ies No						
		Repo	CASING I] Ne	w Used rmediate, productio	on, etc.		
Purpose of String	Size Hole Drilled		ze Casing tt (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING /	SQU	EEZE RECORD			
Purpose: Depth Top Bottom Perforate		Туре	Type of Cement # Sacks		Jsed Type an			nd Percent Additives	
 Did you perform a hydra Does the volume of the is Was the hydraulic fractu Date of first Production/Inj 	total base fluid of the h ring treatment informa	nydraulic fra tion submit	acturing treatment	al disclosure regis	-	Yes ns? Yes Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Injection:			Flowing	Pumping		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er Bb	ls.	Gas-Oil Ratio	Gravity
DISPOSITION	I OF GAS:		M	ETHOD OF COM	IPLE	TION:			ON INTERVAL:
Vented Sold (If vented, Subm	Used on Lease		Open Hole		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)			Bottom	
		Bridge Plug Set At		Acid,		ementing Squeeze			
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	TYRRELL 3-17
Doc ID	1348460

All Electric Logs Run

Annular Hole Volume
Array Compensated True Resistivity Log
Microlog
Dual Spaced Neutron Spectral Density
Quad Combo
Repeat Section
Borehole Comp Sonic Array Log

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
Well Name	TYRRELL 3-17
Doc ID	1348460

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	3998-4003- Lansing	Frac w/500 gal 15% FeMCA & 22 bbl 2% KCL	3998-4003
4	4294-4300- Marmaton A	Frac w/10,000# 20/40 Sand & 397,726 mcf Nitrogen	4294-4300

Form	ACO1 - Well Completion
Operator	Linn Operating, Inc.
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Doc ID	1348460

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	1800	Class A/Class A Common	660	See Attached
Production	7.875	5.5	15.5	4874	Class A	350	See Attached



Job Number:	Lib1612102115 Job Purpos	se 01 Surface		1		
Customer:	Linn Energy				Date:	12/10/2016
Well Name:	Tyrrell		Number:	3-17	API/UWI:	
County:	Finney	City:			State:	Kansas
Cust. Rep:		Phone:		Rig Phone:		
Legal Desc:				Rig Name:	Quest	Drilling#211
Distance	50 miles (one	way)	Supervisor:	Hector Esqueda		

Employees:	Emp. ID:	Employees:	Emp. ID.	
Hector Esqueda		Carlos Ibarra		
Cristian Camacho		Alejandro Ayala	#N/A	
Equipment:				
993-541		774-1066		
870-744		1039-2		

		Well Info	ormation			
		Open Ho	le Section			
Description:	Size (in):	Excess	Top MD (ft)	Btm MD (ft)		
OPEN HOLE	12 1/4	100%	1540	1,800	TAIL C	EMENT
OPEN HOLE	12 1/4	100%	0	1,540	LEAD C	EMENT
OPEN HOLE	12 1/4			0		
OPEN HOLE	12 1/4					
1		Tubi	ılars		Contraction of the second second	
Description:	Size (in):	Wgt. (lb/ft)	ID (in)	Grade:	Top MD (ft)	Btm MD (ft
TOTAL CASING	8 5/8	24	8.097	J-55	0	1,800
SHOE	8 5/8	24	8.097	J-55	1,758	1,800

	Materials - Pi	umping Schedule	12		
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 1	FRESH WATER	10	8.30	n/a	n/a
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Lead 1	ALLIED MULTI-DENSITY CEMENT - CLASS A	460	11.81	2.77	16.50
Addl. Additive	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM
CA-100	CALCIUM CHLORIDE, PELLETS OR FLAKE	2.82	% BWOC	1297.2	lbm
CLC-CPF	CELLOPHANE FLAKES	0.5	lb/sk	230.0	lbm
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Tail 1	CLASS A COMMON	200	15.62	1.19	5.20
Addl. Additive	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM
CA-100	CALCIUM CHLORIDE, PELLETS OR FLAKE	1.88	% BWOC	376.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.25	lb/sk	50.0	
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Disp. 1	0	111.9556981	8.33	n/a	n/a

Distance	50 miles (one w	/ay)		Supervisor	Hect	tor Esqueda
Cust. Rep:		Phone:		Rig Phone:		0
County:	Finney	City:			State:	Kansas
Well Name:	Tyrrell		Number:	3-17	API/UWI:	
Customer:	Linn Energy				Date:	12/10/2016
Job Number:	Lib1612102115 Job Purpose	01 Surface				



TIME	PRESSU	RE - (PSI)	FLUID PUI	MPED DATA	COMMENTS
AM/PM	CASING	ANNULUS	VOLUME	RATE (BPM)	COMMENTS
12/9/2016					
22:00					arrived to location
22:15					rig up iron
12/10/2016					casing got stuck in the well. So they took
					casing out and went back in with drill pipe
					and circulated and triped back out. Waiting
					for crew to finish casing
19:00					rig up head and manifold and the rest of
					the iron
19:30					prime up the pump
19:52	3000				pressure test line to 3000Psi
19:55	80		10	5	start the 10bbls spacer
19:56	50		226	5	start the lead cement @ 11.81#
20:05	180	5		6.5	increased the rate to 6.5Bpm
20:36	120		42	5	start the tail cement @ 15.62#
20:46					shut down (drop the plug) and start washing
					the tub
20:51	20		110	4.5	start the 110bbl displacment with fresh H2o
20:56	20		20	5	20bbls gone
10:58	100		30	6	30bbls gone
20:59	130		40	5.8	40bbls gone
21:01	180		50	5.7	50bbls gone
21:03	240		60	5.2	60bbls gone
21:05	300		70	4.6	70bbls gone
21:08	410		80	5.5	80bbls gone
21:10	480		90	4.6	90bbls gone
21:12	549		100	4.1	100bbls gone
21:15	1100		110		landed plug @ 1100Psi with 110BBLS
				1	waited aa few minuted to make sure
					plug landed right
					released pressure to make sure that the
					floats are holding and they are
					got 1/2 bbl back to the tank
					100bbls of cement circulated to surface
					rig down released from location
					at 22:00



Job Number:		Job Purpose	02 Production	n/Long String			
Customer:	Linn Energy					Date:	12/16/2016
Well Name:	Tyrell			Number:	3-17	API/UWI:	
County:	Finney		City:			State:	Kansas
Cust. Rep:			Phone:		Rig Phone:		
Legal Desc:					Rig Name:	Quest	Drilling#211
Distance	5	50 miles (one wa	y)		Supervisor	Ald	o Espinosa

Employees:	Emp. ID:	Employees:	Emp. ID:
ALDO ESPINOZA			
CRISTIAN CAMACHO			
GERARDO BURCIAGA			
Equipment:			
984-			
1071-545			
1080-842			

		Well Info	ormation			
	Strate Manager	Open Ho	le Section			and the second
Description:	Size (in):	Excess	Top MD (ft)	Btm MD (ft)		Course and the
OPEN HOLE	7 7/8	10%	3700	4,900	TAIL C	EMENT
OPEN HOLE	7 7/8	30%	1800	3,700	LEAD C	EMENT
OPEN HOLE	7 7/8			1,800		
OPEN HOLE	7 7/8					
BAR DA ST		Tubi	ılars	1 - A.S 46. 34	and the second states	States - 14.2
Description:	Size (in):	Wgt. (lb/ft)	ID (in)	Grade:	Top MD (ft)	Btm MD (ft
PREVIOUS CASING	8 5/8	24	8.097	J-55	0	1,800
TOTAL CASING	5 1/2	15.5	4.892	J-55	0	4,874
SHOE	5 1/2	15.5	4.892	J-55	4,827	4,874

	Materials - Pu	Imping Schedule		The second second	
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Spacer 1	HIVIS SWEEP	12	8.50	n/a	n/a
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Lead 1	ALLIED MULTI-DENSITY CEMENT - CLASS A	230	11.74	2.80	16.62
Addl. Additive	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM
CLC-CPF	CELLOPHANE FLAKES	0.5	lb/sk	115.0	lbm
CLC-KOL	KOL-SEAL	3	lb/sk	690.0	lbm
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Tail 1	ALLIED SPECIAL BLEND CEMENT - CLASS A	120	13.60	1.92	9.56
Addl. Additive	Description	Conc. (lb/sk)	Determined by	Load Volume	UOM
CFL-210	FLUID LOSS ADDITIVE - LOW TEMP	0.47	% BWOC	56.4	lbm
CLC-KOL	KOL-SEAL	5	lb/sk	600.0	lbm
CLC-CPF	CELLOPHANE FLAKES	0.25	lb/sk	30.0	lbm
Fluid Name	Description	Rqstd Qty	Density	Yield	Water (gal/sk)
Disp. 1	2% KCL Water	111.9	8.33	n/a	n/a

Job Number:	lib1612160230	Job Purpose	02 Productio	n/Long String	1		
Customer:	Linn Energy					Date:	12/16/2016
Well Name:	Tyrell			Number:	3-17	API/UWI:	
County:	Finney		City:			State:	Kansas



Cust. Rep:			Phone:	<u>o Stillinger</u>	Rig Phone:	
Distance	50	miles (one way)		Supervisor	Aldo Espinosa
TIME	PRESSU	RE - (PSI)	FLUID PUI	MPED DATA		DA AD ACAUTO
AM/PM	CASING	ANNULUS	VOLUME	RATE (BPM)	C	DMMENTS
12/15/2016						DATE
945pm					0	n location
1030pm						rig up
100pm					safe	ety meeting
1120pm	2000			1	pressure ·	test lines 2000 psi
1135pm	160		12	3	12 bł	ol hivis sweep
1155pm	60		115	4	230sk/11.	5 bbl lead cement
12-16 1240am	40		41	4	120sk/4	1 bbl tail cement
120am				5	wash pur	mping lines to pit
125am				4	release plu	ug, start displacing
132am	20		20	6	20) bbl gone
142am	40		20	6	40) bbl gone
152am	20		10	3	50 bbl in	to displacement
				0	pumps lost pi	rime , ice building up
					on suc	ction manifold
					talk to company n	nen and swap to rig pump
				25 str/min	complete displa	acement w/524 strokes
					didn't try to bu	mp plug since we don't
				.14371 bbl/str	know how	acurate rig pump is
230am	1500				stop ar	nd check floats
233am	0				floa	ats holding
300am					r	ig down