Confidentiality Requested: Yes No

KANSAS CORPORATION COMMISSION **OIL & GAS CONSERVATION DIVISION**

1229352

Form ACO-1 August 2013 Form must be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15			
Name:	Spot Description:			
Address 1:				
Address 2:	Feet from North / 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.xxxxx) (e.gxxx.xxxxx)			
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84			
Purchaser:	County:			
Designate Type of Completion:	Lease Name: Well #:			
New Well Re-Entry Workover	Field Name:			
	Producing Formation:			
	Elevation: Ground: Kelly Bushing:			
Gas D&A ENHR SIGW	Total Vertical Depth: Plug Back Total Depth:			
OG GSW Temp. Abd. 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 ENHR Conv. to SWD	Drilling Fluid Management Plan			
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)			
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls			
Commingled Permit #: Dual Completion Permit #:	Dewatering method used:			
SWD Permit #:	Location of fluid disposal if hauled offsite:			
ENHR Permit #:	Location of huld disposal in hadred offsite.			
GSW Permit #:	Operator Name:			
	Lease Name: License #:			
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West			
Recompletion Date 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				
Geologist Report Received				
UIC Distribution				
ALT I II Approved by: Date:				

	Page Two	
Operator Name:	Lease Name:	Well #:
Sec TwpS. 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 (Attach Additional She	eets)	Yes No		-	on (Top), Depth ai		Sample
Samples Sent to Geolog	jical Survey	Yes No	Name	9		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
			RECORD New New Conductor, surface, inte		ion, 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 / SQU	EEZE RECORD			
_							

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing Plug Back TD				
Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

(If No, skip questions 2 and 3) (If No, skip question 3)

No

No

No

(If No, fill out Page Three of the ACO-1)

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated			Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)			Depth			
TUBING RECORD:	Siz	ze:	Set At:		Packer	r At:	Liner R	un:	No	
Date of First, Resumed	Product	ion, SWD or ENHF	}.	Producing N		ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	er	Bbls.	Gas-Oil Ratio	Gravity
		I				1			1	
DISPOSITION OF GAS:		METHOD OF COMPLE		ETION:		PRODUCTION IN	TERVAL:			
Vented Solo	J 🗌 t	Jsed on Lease	(Open Hole	Perf.		Comp.	Commingled		
(If vented, Su	bmit ACC	9-18.)		Other (Specify)	(Submit)		(Submit ACO-4)		

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

RECEIVED JUN 0 4 2014

Jackman Oilfield Services 1 West Mulberry St. Colony, KS 66015 620-852-3350

WELL LOG Kansas Resource Exploration & Development, LLC Cartwright KR-27

May 21, 2014

<u>Thickness</u> of Strata		Formation	Total		
	11	soil/clay	11		
	14	lime	25		
	25	shale	50		
	1	lime	51		
	41	shale	92		
	18	lime	110		
	6	shale	116		
	30	lime	146		
	5	shale	151		
	29	lime	180		
	6	shale	186		
	3	lime	189		
	6	shale	195		
	3	lime	198		
	136	shale	334		
	6	grey sand	340		
	14	shale	354		
	12	lime	366		
	9	grey sand	375 slight odor		
	2	shale	377		
	1	coal	378		
	34	shale	412		
	3	coal	415		
	6	lime	421		
	12	shale	433		
	4	lime	437		
	2	coal	439		
	15	shale	454		
	10	lime	464		
	15	shale	479		
	1	lime	480		
	6	shale	486		

1	lime	487	
1	lime	488	oil show
5	shale	493	
2	oil sand	495	no bleed
1	oil sand	496	very light bleed
2	broken sand	498	very light bleed
2	oil sand	500	very light bleed
1	broken sand	501	very light bleed
2	very broken sand	503	no bleed
2	broken sand	505	no bleed 50% sand
1	very broken sand	506	no bleed 95% shale
2	grey sand	508	no bleed
12	sandy shale	520	TD

Drilled a 5 7/8" hole to 520'

Set 20' of 7" surface casing cemented with 5 sacks of portland cement No pipe ran

Cartwright KR-27