Confidentiality Requested: Yes No

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

1206467

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 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.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:		
GG GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet		
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used?		
Cathodic Other (Core, Expl., etc.):			
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)		
	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 huid disposal if hadred offshe.		
GSW Permit #:	Operator Name:		
	Lease Name: License #:		
Spud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. R East _ West		
Recompletion Date Reached TD Recompletion 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
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Two	1206467
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	
INCTRINCTIONS. Charge important tang of formations parastrated	atail all aaraa Bapart all final	appias of drill stamp tools giving interval toolad, time tool

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 ar		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
			RECORD Ne		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:	Depth	Trace of Ocean ant	III On also I land		Turne and D		

Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Protect Casing				
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

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

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					e			ement Squeeze Record I of Material Used)	Depth
TUBING RECORD:	Siz	re:	Set At:		Packer	At:	Liner F	lun:	No	
Date of First, Resumed	Producti	on, SWD or ENHF	} .	Producing Me	thod:	oing	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	ər	Bbls.	Gas-Oil Ratio	Gravity
									1	
DISPOSITION OF GAS: METHOD OF			OF COMPLE	TION:		PRODUCTION INTI	ERVAL:			
Vented Sold Used on Lease Open Hole Perf. Dually Com						Commingled (Submit ACO-4)				
(If vented, Su	bmit ACO	-18.)		Other (Specify) _		(000)	,			

						TICKET NUMB	er <u>4 /</u>	144
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		FIE	LD TICKET	& TREAT	MENT REP			
	anute, KS 6672 800-467-8676	0 11		CEMEN	ſ			COLINITY
DATE	CUSTOMER #	WEL	L NAME & NUMBE		SECTION	TOWNSHIP	RANGE	COUNTY
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<u>4070</u>	w ng	STATE	ZIP CODE		36.9	M:K Hag		1
	nd Park	KS	66210		548	Casken	- 13	-
DB TYPE LOU		HOLE SIZE	5718	HOLE DEPTH	580	CASING SIZE & W	^	8 AP
ASING DEPTH				TUBING			OTHER 342	
LURRY WEIGH		SLURRY VOL		WATER gal/s	k	CEMENT LEFT in	CASING YE	2
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 Ravin 3737
 NO
 COMPANY
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 ESTIMATED

 AUTHORIZTION
 J:M
 DIGO
 TITLE
 DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this for

SALES TAX

RECEIVED MAY 1 4 2014

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

WELL LOG Kansas Resource Exploration & Development, LLC Cartwright KR-33

May 7, 2014

Thickness of Strate	Formation	<u>Total</u>	
of Strata			
6	soil/clay	6	
22	lime	28	
8	shale	36	
4	lime	40	
5	red bed	45	
35	shale	80	
18	lime	98	
10	shale	108	
11	lime	119	
6	shale	125	
10	lime	135	
9	shale	144	
23	lime	167	
4	shale	171	
14	lime	185	
121	shale	306	
2	coal	308	
20.	shale	328	
2	lime	330	
16	shale	346	
15	lime	361	
12	grey sand	373	light gas smell
24	shale	397	
3	coal	400	
8	shale	408	
4	lime	412	
13	shale	425	
4	lime	429	
11 .	shale	440	
12	lime	452	
14	shale	466	
2	lime	468	

4	coal	472	
7	lime	479	
4	shale	483	
1	broken sand	484	no bleed
2	oil sand	486	light bleed
2	oil sand	488	medium bleed
5	broken sand	493	light to no bleed
35	shale	528	
1	lime	529	
21	shale	550	
1	lime	551	
29	shale	580	TD

Drilled a 9 7/8" hole to 19'7" Drilled a 5 7/8" hole to 580'

Set 20' of 7" surface casing cemented with 5 sacks of portland cement Set 573.50' of 2 7/8" round upset tubing. Baffle @ 542'

Cartwright KR-33