Confidentiality Requested: Yes No

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

1210270

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

Address 2:	OPERATOR: License #	API No. 15
Address 2:	Name:	Spot Description:
City:	Address 1:	
Contact Person:	Address 2:	Feet from Dorth / South Line of Section
Phone:	City: State: Zip:+	Feet from East / West Line of Section
CONTRACTOR: License #	Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Name:       (e.g. xxxxxxx)       (e.g. xxxxxxx)         Wellsite Geologist:	Phone: ()	
Name:	CONTRACTOR: License #	GPS Location: Lat:, Long:
Wellsite Geologist:	Name:	
Purchaser:	Wellsite Geologist:	
Designate Type of Completion:       Field Name:         New Well       Re-Entry       Workover         Oil       WSW       SWD       SIOW         Gas       D&A       ENHR       SIGW         OG       GSW       Temp. Abd.       Producing Formation:       Producing Formation:         CAIr Coal Bed Methane)       Elevation:       Grad Cemented at:       Feed Multiple Stage Cementing Collar Used?       Yes No         If Workover/Re-entry:       Old Well Info as follows:       If yes, show depth set:       Feed depth to:       Feed depth to:         Operator:       Well Name:       Original Total Depth:       Feed depth to:       w/	Purchaser:	
Field Name:       Field Name:         Oil       WSW       SWD         Gas       DXA       ENHR         OG       GSW       Temp. Abd.         CM (Coal Bed Methane)       Temp. Abd.         CAthodic       Other (Core, Expl., etc.):       Multiple Stage Cementing Collar Used?       Yes No         If Workover/Re-entry: Old Well Info as follows:       If yes, show depth set:       Fe         Operator:       Original Total Depth:       feet depth to:       w/         Original Comp. Date:       Original Total Depth:       feet depth to:       w/       sx c         Dial Completion       Permit #:       Chloride content:       ppm Fluid volume:       b         Dual Completion       Permit #:       Location of fluid disposal if hauled offsite:       Operator Name:       Coperator Name:       Coperator Name:       Coperator Name:       Lease Name:       License #:       Coperator Name:       <	Designate Type of Completion:	Lease Name: Well #:
Producing Formation:         Oil       WSW         Gas       D&A         Coli       Gas         OG       GSW         CM       Coal Bed Methane)         Cathodic       Other (Core, Expl., etc.):         Cathodic       Other (Core, Expl., etc.):         Multiple Stage Cementing Collar Used?       Yes         Yes       No         If Workover/Re-entry: Old Well Info as follows:       If yes, show depth set:         Operator:		Field Name:
Gas D&A ENHR SIGW   OG GSW Temp. Abd.   CM (Coal Bed Methane) Temp. Abd.   Cathodic Other (Core, Expl., etc.):   Multiple Stage Cementing Collar Used? Yes   Multiple Stage Cementing Collar Used? Yes   Operator: Well Name:   Original Comp. Date: Original Total Depth:   Plug Back Conv. to ENHR   Commingled Permit #:   Dual Completion Permit #:   SWD Permit #:   SWD Permit #:   GSW Permit #:   SWD Permit #:   Operator Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:   Operator Name: Location of fluid disposal if hauled offsite:		Producing Formation:
Image: Construction of the construc		Elevation: Ground: Kelly Bushing:
Amount of Surface Pipe Set and Cemented at:   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 Completion   Permit #:   Dual Completion   Permit #:   SWD   Permit #:   GSW   Permit #:   Casto or   Date Reached TD   Completion Date or      Amount of Surface Pipe Set and Cemented at:    Synd Date or   Date Reached TD Completion Date or		Total Vertical Depth: Plug Back Total Depth:
Cathodic Other (Core, Expl., etc.):   If Workover/Re-entry: Old Well Info as follows:   Operator: If Alternate II completion, cement circulated from:   Well Name: Original Comp. Date:   Original Comp. Date: Original Total Depth:   Deepening Re-perf.   Conv. to ENHR Conv. to SWD   Plug Back Conv. to GSW   Commingled Permit #:   Dual Completion Permit #:   SWD Permit #:   Operator of fluid disposal if hauled offsite:   Operator Name:   Lease Name:   License #:   Quarter   Spud Date or		Amount of Surface Pipe Set and Cemented at: Feet
If Workover/Re-entry: Old Well Info as follows:       If yes, show depth set:		Multiple Stage Cementing Collar Used?
Operator:		If yes, show depth set: Feet
Original Comp. Date:       Original Total Depth:         Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD         Plug Back       Conv. to GSW       Conv. to Producer         Commingled       Permit #:	·	If Alternate II completion, cement circulated from:
Original Comp. Date:       Original Total Depth:         Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD         Plug Back       Conv. to GSW       Conv. to Producer       Drilling Fluid Management Plan         Dual Completion       Permit #:       Chloride content:       ppm         SWD       Permit #:       Dewatering method used:       Dewatering method used:       Dewatering method used:         GSW       Permit #:       Completion of fluid disposal if hauled offsite:       Operator Name:       Lease Name:       License #:         Spud Date or       Date Reached TD       Completion Date or       Quarter       Sec.       Twp.       S. R.       East       Wo	Well Name:	feet depth to:w/sx cmt.
Plug Back       Conv. to GSW       Conv. to Producer       (Data must be collected from the Reserve Pit)         Commingled       Permit #:		
Plug Back       Conv. to GSW       Conv. to Producer       (Data must be collected from the Reserve Pit)         Commingled       Permit #:	Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Commingled       Permit #:         Dual Completion       Permit #:         SWD       Permit #:         ENHR       Permit #:         GSW       Permit #:         Operator Name:       License #:         Lease Name:       License #:         Quarter       Sec         TwpS. R       East	Plug Back Conv. to GSW Conv. to Producer	
Dual Completion       Permit #:         SWD       Permit #:         ENHR       Permit #:         GSW       Permit #:         Operator Name:       Lease Name:         Lease Name:       License #:         Out Date or       Date Reached TD       Completion Date or		Chloride content: ppm Fluid volume: bbls
SWD       Permit #:       Location of fluid disposal if hauled offsite:         ENHR       Permit #:       Operator Name:         GSW       Permit #:       Lease Name:         Spud Date or       Date Reached TD       Completion Date or		Dewatering method used:
ENHR       Permit #:         GSW       Permit #:         Date or       Date Reached TD         Completion Date or       Completion Date or		Location of fluid disposal if bauled offeite:
GSW       Permit #:       Operator Name:         Spud Date or       Date Reached TD       Completion Date or    Operator Name: License #: Quarter Sec TwpS. R EastWe		Location of huid disposal if nauled offsite.
Spud Date or       Date Reached TD       Completion Date or    Lease Name: License #: Quarter Sec TwpS. R East We		Operator Name:
Spud Date or Date Reached ID Completion Date or		Lease Name: License #:
	Spud Date or Date Reached TD Completion Date or	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
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Two	1210270
Operator Name:	Lease Name:	Well #:
Sec TwpS. R □ East □ West	County:	
INCTOLICTIONS. Chave important tang of formations panetrated	Datail all aaraa Bapart all fi	nal capica of drill atoma toata giving interval toatad, time toal

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	jical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
		CASING	RECORD Ne	w Used			
		Report all strings set-	conductor, surface, inte	rmediate, product	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 / SQL	EEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and F	Percent Additives	
Protect Casing							

	Plug Back TD Plug Off Zone						
	Did you perform a hydraulic	fracturing treatment	on this well?		Yes	No	(If No, skip questions 2 and 3)
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?				Yes	No	(If No, skip question 3)	
	Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?					No	(If No, fill out Page Three of the ACO-1)

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?

Shots Per Foot		PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated							ement Squeeze Record d of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packer	r At:	Liner F	Run:	No	
Date of First, Resumed	l Producti	on, SWD or ENHF	<b>?</b> .	Producing M	ethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wat	ər	Bbls.	Gas-Oil Ratio	Gravity
DISPOSIT	ION OF G	AS:			METHOD		TION:		PRODUCTION INTE	RVAL:
Vented Sole	Sold Used on Lease Open H		Dpen Hole Perf. Dually (Submit A		Comp. ACO-5)	Commingled (Submit ACO-4)				
(If vented, Su	ıbmit ACC	-18.)		Other (Specify)		1		()		

Form	ACO1 - Well Completion
Operator	A & L Energy Operations LLC
Well Name	Alma 4
Doc ID	1210270

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set		Setting Depth	Type Of Cement		Type and Percent Additives
Surface	9	7	10	23	Portland	5	50/50 POZ
Completio n	5.6250	2.8750	8	703	Portland	100	50/50 POZ

NG

GY

NC.

**Oil & Gas Well Drilling** Water Wells **Geo-Loop Installation** 

# PMENT **11 Lewis Drive**

Paola, KS 66071

Phone: 913-557-9083 Fax: 913-557-9084

WELL LOG A & L Energy Operations, LLC Alma #4 API #15-059-26,667 May 20 - May 21, 2014

Thickness of Strata 10	Formation	Total
8	soil & clay	10 -
5	lime	18
	shale	23
22	lime	45
26	shale	71
16	lime	87
4	shale	91
6	lime	97
82	shale	179
20	lime	199
27	shale	226
5	lime	231
29	shale	260
11	lime	271
2	shale	273
2	lime	275
16	shale	291
23	lime	314
7	shale	321 oil show
24	lime	345
6	shale	351
8	lime	359 base of the Kansas City
51	shale	410
6	sand	416
92	shale	508
8	lime	516
23	shale	539
17	sand	556 white, no oil
1	coal	557
8	shale	565
8	lime	573
11	shale	584
4	lime	588
19	shale	607
3	lime	610
3	shale	613
5	lime	618 good bleeding
6	shale	624

Alma #4	Page 2
Alma #4 1 3 2 4 1 1 2 9 5 61	broken sand625 brown & green, light bleedingoil sand628 brown, light bleedingbroken sand630 brown & green, light bleedingoil sand634 brown, light bleedingbroken sand635 brown & green, light bleedingbroken sand635 brown & green, light bleedinglimey sand636 white, no oilbroken sand638 brown & grey, 90% bleedingoil sand647 brown 80% bleedingoil sand652 black 20% bleeding
01	sandy shale 713 brown & grey snd, no bleeding 713 TD

Drilled a 9 7/8" hole to 22.6' Drilled a 5 5/8" hole to 713'

Set 22.6' of 9 7/8" casing threaded and coupled cemented with 5 sacks of cement.

Set 703' of 2 7/8" 8 round upset 3 centralizers, 1 float shoe, 1 clamp.

Alma #4

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