

Confidentiality Requested:

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1309829

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.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:				
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 disposa if 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 Reached TD 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 III Approved by: Date:							

	Page Two	1309829
Operator Name:	Lease Name:	Well #:
Sec TwpS. R □ East □ West	County:	
INCTRUCTIONS. Show important tang of formations panatrated	Datail all aaraa Bapart al	I final conice of drill stome tests siving interval tested, time test

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 Sheets)		Yes No		-	Formation (Top), Depth and		Sample	
Samples Sent to Geolo	gical Survey	Yes No	Nam	e		Тор	Datum	
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No						
List All E. Logs Run:								
[
		CASING Report all strings set-o	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	Type of Cement	# Sacks Used		Type and F	Percent Additives		

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

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				ŀ		ement Squeeze Record d of Material Used)	Depth
TUBING RECORD:	Size:	Set At	: Packe	r At:	Liner Rı		No	
Date of First, Resumed Pr	roduction, SWD or I	NHR.	Producing Method:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas Mcf	Wat	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITION OF GAS: METHOD OF COMPLETION: PROD					PRODUCTION INTER	N/AL -		
Vented Sold	Used on Leas		Open Hole Perf.	_	Comp.	Commingled (Submit ACO-4)		
			Other (Specify)					

Form	ACO1 - Well Completion
Operator	RJ Energy, LLC
Well Name	Murray Twins 16
Doc ID	1309829

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	9.875	7	41	23	portland	21	
Production	5.625	2.875	6.5	1006	portland	100	

TOP SOIL		TO	. 4		
RED SILTY CLAY	4				JERRY RANES OIL COMPANY
RIVER GRAVEL	21 32	TO	32		617 FIRST STREET
					LEROY, KANSAS 66857
TO ' OF LANSING LIME	93	ТО	95		
SAND	95	TO	.24		MURRAY LEASE WELL # 16
LIME	124	ТО	125		SW SW NW NW SEC. 24 TWN. 23S. RGE 16E.
SAND	125	TO	129		WOODSON COUNTY
LIME	129	ТО	164		4045' FROM SOUTH LINE
DARK GREY SHALE	164		262		5240' FROM EAST LINE
LIME		ТО	268		API # 15-207-26367-0000
BLACK SHALE	268		285		SET 41' OF 23# 7" SURFACE PIPE 1-3-199
LIME	285		295		USED 21 SX. OF PORTLAND "A" CEMENT
SHALE		TO	298		USED 20 SX. OF PREMIUM GEL (BENTONITE)
LIME	293				USED $\frac{1}{2}$ SX. OF CALCIUM
VERY SOFT WHITE LIME					DRILLED 9 7/8" HOLE FOR SURFACE PIPE
			370		STARTED 6 ¹ / ₂ " HOLE ON 1-4-1997
HARD LIGHT BROWN LIME					TOOK L CODE EDOM 0/(1 TO 0(2)
BLACK SHALE					TOOK 1 CORE FROM 9462 TO 963'
LIME	382				REACHED T.D. OF 1020' ON 1-7-1997
SHALE	384		398		RAN 1006.70' OF 2 7/8" 8RD. EUE TUBING
	398	TO	399		SET 2 ¹ / ₂ " BY 8" S/N @ 944'
SHALE	399		-432		SET 2-2 7/8" BY 62" CENTRILIZERS
	432	ТО	435		CONSOLIDATED OIL SERVICES CEMENTED WEL
SHALE	435	то	441		CEMENTED LONG STRING WITH RIG OVER WEL
LIME	441	ТО	449		CONTACTED CLAYTON TITEL @ CORPOR. COMM
SHALE	449	ТО	451		CONTRACTOR
LIME	451	то	505		CONTRACTOR
STARK BLACK SHALE	505	TO	511		LINCOLN 77 INC.
SWOPE LIME	511	то	532		
HUSH.BLACK SHALE	532	ТО	537		530 REAPER LANE
LIME	537	ТО	543		LEROY, KANSAS 66857-9510
SHALE	543	TO	545		OPERATOR # 06448
LIME	545	ТО	557		DRILLER: RICHARD E. WINN
SHALE	557	ТО	560		
K.C. BASE LIME	560	то	562	6	FINISHED WELL 1-8-1997
PLEASINGTON SHALE	562	то	746		
LIME	746	ТО	758		
SHALE	758	то	820		
LIME	820	TO	833		
SHALE	833	TO	851		
LIME	851	TO	854		*
BLACK SHALE	854	TO			
CREY SHALE	857	TO	857		
LIME			869		
SHALE	869.	TO .	875		
COAL	875	TO	888		
LIME	888	ТО	889		
	889	ТО	895		
SHALE	895	TO	897		
LIME	897	ТО	900		
LITTLE OSAGE BLACK SHALE	900	ТО	905		
BLACK JACK CREEK LIME	905	то	909		
· EXCELLO BLACK SHALE ·	909	TO	913		
MULKY SHALE	913	ТО	916		
UPPER LAGONDA SHALE	916	ТО	942		
1ST. LIME CAP ROCK	942	TO	943		
SHALE & CRUDE OIL ODOR	943	TO	9451		· · · · · · · · · · · · · · · · · · ·
2ND. LIME CAP ROCK	945 2	то	9463		
PUT ON CORE BARREL					
VERY GOOD LAM. OIL SAND	9461	ТО	9473		
GREY SHALE	9474	ТО	9483		34
VERY GOOD LAM. OIL SAND	9483	ТО	9493		
EXCELLENT SOLID OIL SAND	9493	то	9523		(n)
GOOD LAM. OIL SAND	952	TO	953		())DR -
EXCELLENT SOLID OIL SAND	953	TO	9542		
VERY GOOD LAM. OIL SAND		TO	955		4
and a stand with the	1 - 1 - 1	112	/]]		

LIME	202	1110	2015
BLACK SHALE	268	TO	285 295
LIME	285		298
SHALE	295	TO	338
LIME	298	TO	370
VERY SOFT WHITE LIME	338	TO TO	381
HARD LIGHT BROWN LIME	370	TO	382
BLACK SHALE	381	TO	384
LIME	382	TO	398
SHALE	384	TO	399
LIME	398		432
SHALE	399	TO	432
TOP OF K.C. LIME	432	ΤO	
SHALE	435	TO	441 449
LIME	441	TO TO	449
SHALE	449	TO	505
LIME	451	TO	511
STARK BLACK SHALE	505 511	TO	532
SWOPE LIME	532	TO	537
HUSH BLACK SHALE	537	TO	. 543
LIME		TO	545
SHALE	543	TO	557
LIME	545	TO	560
SHALE	557	TO	562
K.C. BASE LIME	560	TO	746
PLEASINGTON SHALE	562	TO	758
LIME	746	TO	820
SHALE	758	TO	833
LIME	820		851
SHALE	833	TO TO	854
LIME	851	TO	857
BLACK SHALE	854		869
GREY SHALE	857	ТО	
LIME	869	TO	875
SHALE	875	TO	888
COAL	888	TO	889 895
LIME	889	TO TO	895
SHALE			900
LIME	897		900
LITTLE OSAGE BLACK SHALE			903
BLACK JACK CREEK LIME	905 909		913
EXCELLO BLACK SHALE	909		915
MULKY SHALE	915 916		
UPPER LAGONDA SHALE	910		943
1ST. LIME CAP ROCK	942		945
SHALE & CRUDE OIL ODOR	9452		940
2ND. LIME CAP ROCK	9492	10	5402
PUT ON CORE BARREL VERY GOOD LAM. OIL SAND	9/11	٦.()	947
	9402		
GREY SHALE			
VERY GOOD LAM. OIL SAND EXCELLENT SOLID OIL SAND			
	9492 9521		953
GOOD LAM. OIL SAND			
EXCELLENT SOLID OIL SAND	9552	TP(A)	055
VERY GOOD LAM. OIL SAND	9542	TO	0578
EXCELLENT SOLID OIL SAND	900		958
EXCELLENT LAM. OIL SAND	9375		961
FAIR LAM. OIL SAND			963
SHALEY LAM. OIL SAND	9613		
DRILL BIT	000	111()	998
GREY SHALE	963		998 1000
COAL SEAM	998		1000
GREY SHALE	1000		1012
BIVERIA COAL	1012		1015
LIME	1015		
CREY SHALE (T.D.)		10	1020
T.D.	1020		
	and the second se		

SET 41' OF 23# 7" SURFACE PIPE 1-3-193	
USED 21 SX. OF PORTLAND "A" CEMENT	
USED 20 SX. OF PREMIUM GEL (BENTONITE	
USED & SX. OF CALCIUM	
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CONSOLIDATED OIL SERVICES CEMENTED WE	
CEMENTED LONG STRING WITH RIG OVER WE	
CONTACTED CLAYTON TITEL @ CORPOR. COM	N

CONTRACTOR

LINCOLN 77 INC. 530 REAPER LANE LEROY, KANSAS 66857-9510 OPERATOR # 06448 DRILLER: RICHARD E. WINN

FINISHED WELL 1-8-1997

COPY