

Confidentiality Requested:

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1202031

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) 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: 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	
Plug Back Conv. to GSW Conv. to Producer	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
ENHR Permit #:	
□ 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 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	1202031
Operator Name:	Lease Name:	Well #:
Sec TwpS. R	County:	
INCTRUCTIONS: Chain important tang of formations paratrated De	tail all aaraa Danart all final	appiag of drill stamp tasta giving interval tastad, time task

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)	Yes No		-	n (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
			RECORD Ne				
		Report all strings set-o	conductor, surface, inte	ermediate, producti	on, 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	JEEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing							
Plug Off Zone							

Did you perform a hydraulic fracturing treatment on this well?	Yes	No	(
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes	No	(
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes	No	(

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

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

Shots Per Foot		PERFORATION Specify Foo		RD - Bridge Pl Each Interval F		e		Acid, Fracture, Shot, Ce (Amount and Kind	ement Squeeze Record of Material Used)	Depth
TUBING RECORD:	Siz	e:	Set At:		Packer	r At:	Liner R	un:	No	
Date of First, Resumed	Production	on, SWD or ENHR	ł.	Producing M	ethod:	oing	Gas Lift	Other <i>(Explain)</i>		
Estimated Production Per 24 Hours		Oil Bbl	S.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIO	ON OF G	AS:		1	METHOD		TION:		PRODUCTION IN	TERVAL:
Vented Sold		Jsed on Lease		Open Hole	Perf.		Comp.	Commingled (Submit ACO-4)		
(If vented, Sub	omit ACO	-18.)		Other (Specify)				(300/11/700 4)		

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



Oil & Gas Well Drilling Water Wells Geo-Loop Installation

Paola, KS 66071

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

WELL LOG Kansas Resource Exploration & Development, LLC Kitchen #KR-17 API # 15-121-29,983 March 19 - March 20, 2014

Thickness of Strata	Formation	Total
12	soil & clay	12
5	shale	17
22	lime	39
25	shale	64
2	lime	66
35	shale	101 red bed
1	lime	102
4	shale	106
16	lime	122
10	shale	132
11	lime	143
2	shale	145
16	lime	161
9	shale	170
21	lime	191
5	shale	196
2	lime	198
2	shale	200
7	lime	207 base of the Kansas City
12	shale	219
6	sand	225 green sand, no oil, no gas
4	silty shale	229
5	shale	234
5	sand	239 green sand & shale, gassy
73	shale	312
3	limey sand	315 green hard sand
57	silty shale	372
9	lime	381
2	shale	383
5	lime	388
2	shale	390
8	silty shale	398
	broken sand	399 15% green sand, 85% sitly shale
		ok bleeding
23	shale	422
1	coal	423
5	shale	428

Kitchen #KR-17

Page 2

8	lime	436	
13	shale	449	
3	lime	452	
17	shale	469	
9	lime	478	
17	shale	495	
1	lime	496	
5	shale	501	
6	lime	507	oil show
4	shale	511	
1.5	silty shale	512.5	few light brown sand seams minimal show
1.5	broken sand		80% brown sand 20% shale good bleeding
1	silty shale		green sandy shale few light brown sand
			seams no show
6.5	oil sand	521.5	brown sand good bleeding good saturation
			few thin shale seams
2	broken sand	523.5	90% brown sand 10% shale, light bleeding
2.5	shale	526	
2	broken sand	528	30% brown sand 70% shale, no bleeding
3.5	shale	531.5	
3.5	lime	535	
46	shale	581	
2	oil sand	583	hard brown sand light bleeding
4	grey sand	587	
3	silty shale	590	
10	shale	600	TD

Drilled a 9 7/8" hole to 21.1' Drilled a 5 5/8" hole to 600'

Set 21.1' of 7" surface casing cemented with 5 sacks of cement

Set 590.8' of 2 7/8" 8 round upset tubing with 3 centralizers, 1 float shoe and 1 clamp, 1 baffle. Baffle set 31.4' from bottom of tally.

Kitchen #KR-17

Core Times

	Minutes	Seconds
512		46
513		39
514		44
515		42
516		35
517		39
518		37
519		46
520		45
521		49
522		38
523		43
524		40
525		39
526		39
527		48
528		50
529		50
530	1	39
531	1	52

Page 3

Co	NSOLIDATED	26680	10	TICKET NUMB	ttawg	
	FI FI	ELD TICKET & TRE	ATMENT RE		Ten Na	eer
884, Chai	nute, KS 66720 Fi 800-467-8676	CEM				
		ELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
	NHUR Kite	here KR 17	NE 13	18	21	111
VER	1100 1 1110	nen 111-11		High - High - H		
ansas	Resources,	E+D	TRUCK #	DRIVER	TRUCK #	DRIVER
ADDRES	5 ·		730	AlaMad	Suter	Meet
93	W 110	ZIP CODE	646	Car/MDO		
1 0	Park 165	10/0210	TID	Jas Aic		
land	S GY IN HOLE SIZE	5718 HOLE DE		CASING SIZE & W	FIGHT 2	
PE_VON	590, 9 DRILL PIPE				OTHER 539	iy br.
DEPTH Y WEIGHT	SLURRY VO			CEMENT LEFT in		95
CEMENT				RATE 56	n	~
KS: Hel	& moosine	Customer wa	25 mile	e quare	thata	nnules
65 A	lowing Est	g blished rat	e down	605/19.	Mixed	t
MDP	I IND # SPI	fellowed by	sk sk	50150	emen	1
145	27 apl and	2 1/2# Pheno	seal po.	reck. C	inculat	ed
Puer	+. Flusher	Q- RIAMA. 1	rympere	plue to	batt.	e
MACIN		A A				^
Voll	hed 800 1	SI. Set f	logt C	irculation	seer	nod
Vell be	hed 800 1 stoffed	51. Set f	loat. C	irculat; ou	Seer	nod
Vell be	hed 800 1 stoffed	51. Set f	logi. C	irculat; pe		nod
Vell be	hed 800 1 stoffed	51. Set f	logt. C	A land	seer	med
	Ned 800 1 Stoffed M:tchell	51. Set f	loat. C	Jan	aler.	
OUNT DE	hed 800 1 stoffed	DESCRIPTIC		Jan		TOTAL
	Ned 800 1 Stoffed M:tchell	DESCRIPTIC	loat. C	Jan	aler.	TOTAL
	Ned 800 1 Stoffed M:tchell	PUMP CHARGE MILEAGE	UN of SERVICES or	PRODUCT 666 (elde	aler.	
	<u>Ned 800</u> <u>Stoffed</u> <u>M:tchell</u> QUANITY OF UNITS	PUMP CHARGE MILEAGE	loat. C	PRODUCT 666	aler.	TOTAL 1085-00 84-00
COUNT DDE 21 DG 22	<u>Hed 800</u> <u>Stuffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u>	PUMP CHARGE MILEAGE CGS:MS Ton Mile	UN of SERVICES or	PRODUCT 666 666 510	aler.	TOTAL 1085-00 84-00
OUNT DDE 21 DG 22 DG 22 27	Med 800 Stuffed M:tchell QUANITY OF UNITS 1 2D 590, B	PUMP CHARGE MILEAGE CGS: MS	UN of SERVICES or	PRODUCT 666 (elde	aler.	TOTAL
COUNT DDE 21 DG 22	Med 800 Stuffed M:tchell QUANITY OF UNITS 1 2D 590, B	PUMP CHARGE MILEAGE CGS:MS Fon Mile	UN of SERVICES or	PRODUCT 666 666 510		TOTAL 1085-00 84-00
OUNT DDE 21 DG 22 DG 22 27	Med 800 Stuffed M:tchell QUANITY OF UNITS 1 2D 590, B	PUMP CHARGE MILEAGE CGS:NS Ton Mile BD UGG	20 N of SERVICES or	PRODUCT 666 666 510	UNIT PRICE	TOTAL 1085-00 84-00
000NT DDE 21 06 22 20 20	<u><u>Hed</u><u>800</u> <u>Stuffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>20</u> <u>590.8</u> <u>13</u> <u>MIA</u> <u>12</u> <u>83</u></u>	PUMP CHARGE MILEAGE CGS:MS Fon Mile	20 N of SERVICES or	PRODUCT 666 666 510	UNIT PRICE	TOTAL 1085-00 84-00
000NT DDE 21 DG 22 22 27 22 27 22 2 2	Med 800 Stuffed M:tchell QUANITY OF UNITS 1 2D 590, B	PUMP CHARGE MILEAGE CGS:MS Ton Mile 80 UGG 50/50 CEN SEL	20 N of SERVICES or	PRODUCT 666 666 510	UNIT PRICE	TOTAL 1085-00 84-00
000NT DDE 21 DG 22 22 27 22 27 22 2 24 8 8 8 8 8 8 8 8	<u><u>Hed</u><u>800</u> <u>Stuffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>20</u> <u>590.8</u> <u>13</u> <u>MIA</u> <u>12</u> <u>83</u></u>	PUMP CHARGE MILEAGE CGS:MS Jon Mile 80 UGL 50/50 CEW	2 2 2 2 2 2 2 2 2 2	PRODUCT 666 666 510 320	UNIT PRICE	TOTAL 1083-22 84-20 122.6 150-2
OUNT DDE 21 06 22 27 22 27 22 27 22 27 22 27 22 27 22 27 22 27	<u>Hed 800</u> <u>Stoffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u> <u>590.8</u> <u>1/2</u> <u>83</u> <u>239</u>	PUMP CHARGE MILEAGE CGS:MS Ton Mile 80 UGG 50/50 CEN SEL	2 2 2 2 2 2 2 2 2 2	PRODUCT 666 666 510	UNIT PRICE	TOTAL 1083-22 84-20 122.6 150-2
000NT DDE 21 DG 22 22 27 22 27 22 2 24 8 8 8 8 8 8 8 8	<u>Hed 800</u> <u>Stoffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u> <u>590.8</u> <u>1/2</u> <u>83</u> <u>239</u>	PUMP CHARGE MILEAGE CGS:MS Ton Mile 80 UGG 50/50 CEN SEL	DN of SERVICES or I DON OF SERVICES OF I DON OF SER	PRODUCT 666 666 510 370 370	UNIT PRICE	TOTAL 1085-00 8400 122,6, 150
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000NT DDE 21 DG 22 22 27 22 27 22 2 24 8 8 8 8 8 8 8 8	<u>Hed 800</u> <u>Stoffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u> <u>590.8</u> <u>1/2</u> <u>83</u> <u>239</u>	PUMP CHARGE MILEAGE CGS:'NS Ton Mile 80 UGC 50/50 CEN SEL Pheno Sea (DN of SERVICES or I DON of SERVICES or I DOD TASE S 1Pat Less Mater	PRODUCT 666 666 510 370 370	UNIT PRICE 954.53 52.58 52.58 52.70 1063.78 - 319.13 1	TOTAL 1085 840 122.6, 130 130 130 130 130 130 130 130
ount DDE 21 DG 22 27 22 27 22 24 8 8 8 7 4 	<u>Hed 800</u> <u>Stoffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u> <u>590.8</u> <u>1/2</u> <u>83</u> <u>239</u>	PUMP CHARGE MILEAGE CGS:'NS Ton Mile 80 UGC 50/50 CEN SEL Pheno Sea (DN of SERVICES or I DON of SERVICES or I DOD TASE S 1Pat Less Mater	PRODUCT 666 666 510 370 370	UNIT PRICE 954.50 52.58 52.70 1063.78 -319.13 1 25.34.95	TOTAL 123.6 122.6 150 744.65 29.50
ount DDE 21 DG 22 27 22 27 22 24 8 8 8 7 4 	<u>Hed 800</u> <u>Stoffed</u> <u>M:tchell</u> <u>QUANITY OF UNITS</u> <u>1</u> <u>2D</u> <u>590.8</u> <u>1/2</u> <u>83</u> <u>239</u>	PUMP CHARGE MILEAGE CGS:'NS Ton Mile 80 UGC 50/50 CEN SEL Pheno Sea (DN of SERVICES or I DON of SERVICES or I DOD TASE S 1Pat Less Mater	PRODUCT 666 666 510 370 370	UNIT PRICE 954.53 52.58 52.58 52.70 1063.78 - 319.13 1	TOTAL 1085 840 122.6, 130 130 130 130 130 130 130 130
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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 form. ----