KOLAR Document ID: 1461025

Confidentiality Requested:

Yes No

### Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
January 2018
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.:
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: ()	□NE □NW □SE □SW
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxxxx) (e.gxxx.xxxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
☐ Oil ☐ WSW ☐ SWD	Elevation: Ground: Kelly Bushing:
☐ Gas ☐ DH ☐ EOR	Total Vertical Depth: Plug Back Total Depth:
☐ OG ☐ GSW	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used? Yes No
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 EOR ☐ Conv. to SWD	Drilling Fluid Management Plan
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer	(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:
EOR Permit #:	Location of haid disposal if hadica offsite.
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R
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 Drill Stem Tests Received
Geologist Report / Mud Logs Received
UIC Distribution
ALT I II Approved by: Date:

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#### Page Two

Operator Name: _				Lease Name:	me: Well #:								
Sec Twp.	S. R.	Ea	ast West	County:									
	flowing and shu	ıt-in pressures, w	hether shut-in pre	ssure reached st	atic level, hydrosta	tic pressures, bot		val tested, time tool erature, fluid recovery,					
Final Radioactivity files must be subm						iled to kcc-well-lo	gs@kcc.ks.gov	. Digital electronic log					
Drill Stem Tests Ta			Yes No		_	on (Top), Depth ar		Sample					
Samples Sent to G	Geological Surv	ey	Yes No	Na	me		Тор	Datum					
Cores Taken Electric Log Run Geologist Report / List All E. Logs Ru	_		Yes No Yes No Yes No										
		R			New Used	on, etc.							
Purpose of Strir		Hole	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives					
			ADDITIONAL	CEMENTING / S	QUEEZE RECORD	I							
Purpose:		epth Ty	pe of Cement	# Sacks Used	red Type and Percent Additives								
Protect Casi													
Plug Off Zon													
<ol> <li>Did you perform a</li> <li>Does the volume o</li> <li>Was the hydraulic</li> </ol>	of the total base f	luid of the hydraulic	fracturing treatment	_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three (	,					
Date of first Producti Injection:	ion/Injection or Re	esumed Production	/ Producing Meth	nod:	Gas Lift 0	Other (Explain)							
Estimated Production Per 24 Hours	on	Oil Bbls.					Gas-Oil Ratio	Gravity					
DISPOS	SITION OF GAS:		N	METHOD OF COMP	LETION:			N INTERVAL: Bottom					
	_	on Lease	Open Hole			mmingled mit ACO-4)	Тор	Bottom					
,	, Submit ACO-18.)				· · · · · · · · · · · · · · · · · · ·								
Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid	Fracture, Shot, Cer (Amount and Kind	menting Squeeze  I of Material Used)	Record					
TUBING RECORD:	Size:	Set /	At:	Packer At:									
. 5213 (1200) 10.	JIEG.			. 30.0.71									

Form	ACO1 - Well Completion
Operator	StrataKan Exploration, LLC
Well Name	MORROW 2734 SWD
Doc ID	1461025

## All Electric Logs Run

DUCP	
MICRO	
BHCS	
DIL	

Form	ACO1 - Well Completion
Operator	StrataKan Exploration, LLC
Well Name	MORROW 2734 SWD
Doc ID	1461025

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	266	common		2%Gel 3%CC
Production	7.875	5.5	15.5	5445	AA-2	175	n/a



## Scale 1:240 (5"=100') Imperial **Measured Depth Log** Well Name: Morrow 2734 SWD

API: 15-077-21024-0100 Location: SW - NE - NE - NW of Section (34) T33S - R8W

License Number: 34975 Region: Harper, KS Drilling Completed: 11/6/2018 Spud Date: 11/3/2018 Surface Coordinates: NA

Coordinates: K.B. Elevation (ft): 1395' Ground Elevation (ft): 1384' Logged Interval (ft): 4750' To: 5450'

Bottom Hole NA

Address:

Total Depth (ft): 5450' Formation: Arbuckle Dolomite @ RTD Type of Drilling Fluid: Mud-Co. Chemical Drispac

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

**OPERATOR** 

# Plainville, KS 67663-2234

Company: StrataKan Exploration, LLC 100 S. Main Street

**GEOLOGIST** Name: Eli J. Felts Company: Gravity Oil, LLC Address: ejfelts47@gmail.com

(316) 204-5059

# 8.625" set @ 266' (Original Surface Pipe circa 1984')

**Pipe Setting** 

Remarks

OWWO (Texas Energies "Morrow 1-34")

Horizontal Well on this lease. 5.5" 15# Casing was run.

Original TD in Mississippian. This well was washed down for an Arbuckle Disposal prior to commencement of

Curve Track 1

Drilling Fluid,

Curve Track 1 ROP (min/ft)——— Gas (units)						Ī	Ī			
Circulating Stops	Gas Gam				_	SMI	SW.	Lithology	Geological Descriptions	Drilling Fluid, Surveys, Etc.
Circulat						Shows IO	MD			
	0	ROP Gas Gam	(min (unit	ft) s) PI)	30 15	0	46			Eli J. Felts on location
						+	H		Mississippian 4660' (-3268')	11/4/2018 @ 7:15 PM
	<b>\</b>									
	}									
	\$									
	\ <u>\</u>						4700		Sample Descriptions are Lagged:	
	$\rightarrow$								Tops have been corrected to E-Log tops: (Pioneer Energy Services)	
	}									
	}									Washed Down to 4741', Displaced with
										Mud-Co Drilling Fluids & took off Drilling.
							0		OLD RTD 4750' (-3358')	g.
	\$	<u> </u>		>			4750		Abundant shale cavings; varicolored; trace LS - cream to It gry/green hue, fine to medium xIn, fossiliferous in part; trace pyrite; sl. sandy texture; chalky in part; strong reaction to HCL (warm)	Start 10' Wet and Dry Samples @ 4760'
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	>							As above; few pcs LS - tan, fine to micro-xln; dense; rare Dolomite; tan, fine xln; poor to fair visible porosity; no odor, nsfo  Sample remains >90% Shale: Occasional LS - cream to white; fine to medium xln; sl. dolomitic in part;	
	*	>						4 4	slightly fossiliferous w/ intraxin & intrafossiliferous porosity; no odor, nsfo  As above; primarily shale cavings; rare DOL - white, fine xin, si fossiliferous; chalky in part, wk reaction to HCL (cold)	Mud-Co Depth: 4753' Wt. 8.5
	3							44	90% Shale cavings; DOL - white to cream, med xln; sandy appearance; occasional LS - It tan; micro xln; dense	Vis. 65 Filtrate 8.8 Chl 6,000
	3									LCM 5#
		Gas	(min/	5)	1 30		4800		few	
		Gami	na (A	PI)	15	0			V. similar as previous; increase chert; occasional pyrite xIn dev in dolomitic limestone	
								44		
								7 7	Dolomitic LS - cream to It tan, fine xIn, occasional fossiliferous, mostly intraxIn porosity w/ occasional small vuggs, few pcs w/ edge gilsonitic staining (black); no odor or shows of free oil; no fluorescence	
	8									Switch to 20' wet & dry samples @ 4840'
	\$						4850		LS - cream to tan, fine xln, chalky in most, dolomitic in part (strong HCL reaction (cold)); CH - bone white; vitreous w/ abundant fossils; sharp & fresh in most	
	\$						48			
		5							LS & Dolomitic LS w/ transitional CH in most; abundant white, cream & It tan dolomitic LS, fine to med xIn	
	X					C			w/ abundant Chert formed throughought, abundant fossils; most pcs dense; no odor (1) drop free oil in tray with no shows found with sample break or cut, possible caving ?	
	<b>V</b>									
	\$							A A A A A A A A A A A A A A A A A A A	CH - white to grey; largley dolomitized through fractures; dolomite; white to cream, fine xln w/ fair to good interxln porosity, sm vuggular in some; foss in part; no odor, nsfo	
	\$						4900			
	<b>X</b>	>						Z Z	Dolomitic Limestone & CH; Dol - cream to white; tan, fine xIn sucrosic, appears stained (poss weathering) many pcs in direct contact to CH - white to It gry, vitreous, fossiliferous w/ spicule-like fossils; sharp, fresh; no odor, nsfo	Switched back to 10' Samples through RTD
		>	>					<u>/, /,</u> /, /,	Dolomite; cream to It tan; cottony, fine to med xIn; decrease chert; several pcs dolomite w/ edge shaley/sandy contacts; SH - varicolored; greys, black, green	g
	Š							*/ *		
	\$								DOL - cream to it grey, fine to med xin, foss in part, some chalk, abundant chert throughouht, cream/grey, translucent, foss	
	2	)					4950	- / - / - / / - / /	DOL & CH - v. similar as above; creams to tans, fine xin dolomite; cottony, transitions to vitreous CH - translucent to dolomitized; poor visible porosity, dense & tight	
	3									
	8	>						7 / 1 / 1 /	DOL - cream to grey, fine xin, less chert	
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		>					0 % 0 % 0 % 0 %	CH & DOL - white, cream, tan & It grey; vitreous to dolomitized chert, some translucent w/ foss; Dol - white to cream/greay, fine xln, cottony, fair visible porosity; overall dense; no odor, nsfo	
	\$	5	<i>&gt;</i>	-					DOL & DOLO CH - cream to it grey, fine xin, transition to med xin (lighter pcs) w/ foss, cherty throughout	
		ROP	(min/	ft)	1	0	2000		Kinderhook Shale 4911' (-3516')  SH-mostly greys, It to dark; occasional maroon, greens, dense, slippery, some CH like appearance when broken	
		Gas Gami	(unit	s) PI)	30 >15	0			Diokeii	
					}	>			SH - greys, reds & greens; some mottled, firm to soft, some waxy, dense; overall sub silty-smooth	
	5				}				SH - greys to green, dark green; silty, few pcs dense w/ cherty appearance; occasional scattered CH - tan,	
	<b>\}</b>				\(\frac{1}{2}\)				opaque blocks	
	$\frac{2}{3}$				>	2	20		SH - grys & greens, some mottled, silty as above, few blocky/dense	
	7						5050		SH - dark brown to black, organic appearance; vss gas in few pcs	
	\$		V							
							+		Viola 5075' (-3680')  CH - cream to It tan, vitreous in some; dolomitized in most; dense; few pcs LS - It grey, fine xln; emerald	
									green mineralization; pyritic fossil replacement  DOL - as above; v. rare cluster SS - white cluster, fine grained, well sorted, sub rounded, glauc &	
	\ <u>\</u>								claybound matrix	
		ſ				1	5100		DOL - cream to It grey, fine xIn; sandy appearance in some; dense (v. fine cuttings) few pcs SS - tan to It gry, fine grained, well sorted & rounded; no odor, nsfo *fair amount CH remains in sample	
		\ 	<b>&gt;</b>	>					DOL & DOLO CH - cream to tan, fine xin as above; few clusters SS (rare) gry to brown; fine grained; well	
		8						4 4	sorted; soft; nsfo	
		8				1	+	<u> </u>	Simpson (Sand) 5130' (-3735')  Mostly SH - grey to It brown, silty, laminated; some greenish hue w/ black specks	
	5	<b>2</b>	5						SS - white clusters w/ green shale contact; white frosted grains, fine to med grained, sub rounded; claybound matrix; v. friable; no odor, nsfo	
		2					5150		Mostly SH (cavings ?) - grey to dark grey, brown & greens; few SS clusters as above; sub angular to sub rounded, fairly sorted med grains; shaley	
	()								SH & SS, as above; sI increase in SS sample presence; v. friable (few loose sand grains in edges of tray)	
	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	5							SS - clear to frosted grains, med grains, fairly sorted sub rounded to sub angular grains; v. friable ; picking up cluster w/ tweezers crushes into individual grains	
	15					1			SS, as above w/ some interbedded shales	
									SS - clear to frosted grains, medium to coarse xln, sub rounded to sub angular, good friability; abundant CH - white/opaque; dolomitized	
		ROP	(min/	ft)	1		5200		SS - as above, transition to finer grained, dolomitic SS, slightly dense	
		Gas Gami	(unit	s) PI)	30 15	0			Flood SS - white to tan, clear, frosted grains, sub rounded; fair friability, good porosity; barren, no odor, no shows	7 AM Depth
		5		-		1	+	<u> </u>	Simpson Shale 5217' (-3822') SS - as above & flood SH - grey to dark grey, green, some mottled to speckled in part, blocky & firm	
					<				, journal in party blooky willing	Mud-Co Depth: 5249'
		}							SH - grey/dark grey, green, mottled as above, blocky & firm, silty	Depth: 5249' Wt. 8.9 Vis. 49 Filtrate 7.2
	3					S	50		SH - grey to It grey, brown, green, carries fair amount of SS, as prior samples	Chi 9,000 LCM 8#
	~	}	-	<b>-</b> <b>≥</b>			5250	= =	SH-green, grey mottled nyritic in man few langue de la mitte SS interfered de la mitte SS interf	
	<	<u> </u>			\				SH - green, grey, mottled, pyritic in man, few lenses dolomitic SS interbedded, tan to brown, dense, scattered green CH	
			4			1			SH - gry, it to dark green, speckled, blocky to stringy, some pcs maroon colored, ~30% SS; clear, frosted grains, sub rounded, fairly well sorted, pyritic in part; no odor, nsfo	
					2				SS & sandy SH; as above SH - grey to green, sm mottled, pyritic in part, flood SS- clear, frosted; fine to medium grained, sub rounded, dense to partly friable	Built LCM up to 10#/gal prior to Arbuckle
									ARBUCKLE 5296' (-3901')	penetration

DOL - cream to buff, fine xln - sucrosic, fair visible porosity

\*abundant Simpson type shales remain in tray ~70%

 ${\bf DOL\ - cream\ to\ buff, lt\ grey, fine\ to\ med\ xln, sucrosic\ ip, fair\ to\ poor\ visible\ porosity; traces\ chert}$ 

Abundant Shales & sandy shale (simpson type) few traces Dolomite; cream to buff, fine xln

Dol - cream to buff, fine to medium xln, sucrosic in part, few pieces cherty, mostly shales; green

Dol - cream to grey, fine to medium xln, \*very finely ground cuttings \*poor quality sample

Dol - cream to light grey, fine xln, sub-sucrosic, cherty in most, flood shale, greens and black, some

Dol - cream, fine to v. fine xln, few pcs w/ large crystalline growth; few pcs w/ red/iron oxide mineral

Dol, as above; flood of loose sand grains in tray (70%), much of the dolomite has sandy texture &

Dol - cream to brown, very fine xln, dense; abundant chert - cream to brown, sandy, medium to large

Dol - cream to brown, fine to medium xI, cherty in part, dense; no shows, slight light brown mineral

Dol - cream to brown, some light grey, fine to med xln, dense, sample remains >50% shales (cavings ?)

grains

\*cuttings in sample pulverized: Dol - grey, fine xln, abundant shales & pyrite

\*VERY poor quality sample: Dolomite, cream to buff, fine xln (10%) most sample ground into powdery bits

Depth: 5249' Wt. 8.9 Filtrate 7.2 Chl 9,000 Built LCM up to 10#/gal prior to penetration

RTD @ 10:30 PM 11/6/2018

LTD matched



## TREATMENT REPORT

Customer						Anne Mi-				_		Date . /						
Stistaken Exploision						Lease No.							11	/ .	0 /	1000		
Lease mo	rrow .	SWE	)		^	Well # 2734						11/8/2018						
Field Order	Statio	n Р	(9)+	, KS		Casing 51/2 Depth 5445					County Harper State 165							
Type Job	242	15.	1/2 /	ung	50	ring		-	Fo	rmation	10-5	450	,	Legal De	escription j	74-33.	5-86	
	E DATA					DATA		FLUID										
Casing/Size Tubing Size Shots/Ft			t			Acid					RATE PRESS		ISIP					
Depth 5445 Depth			From		То		Pre	Pad			Max				5 Min.			
Volume 129	Volume		From	To			Pa	d			Min				10 Min.			
Max Press	Max Pres	s	From		To		Fra	iç .			Avg				15 Min.		<del></del>	
Well Connection	on Annulus \	/ol.	From		To	<del></del>	1				HHP Used				Annulus	Pressure	<del></del>	
Plus Arbits	Packer D	epth	From		To		Flu	sh W92	Pr		Gas Volun	ne			Total Loa	d		
Customer Rep	resentative.					Station	Man	ager Jus	<u> </u>	10105	1000	Treate	er D	Frin	Ecc	nicin		
Service Units	92911			2092	~	8498	7	19918	) <del>(</del> ( ) ( )	ov e S	ramsn		<i>,,</i> 	<u> 77771</u>	<i></i>	1107/1		
Driver Names	Dron	E		Ed		DSVIC		DSVID			· · · · · · · · · · · · · · · · · · ·					<del>-  </del> -		
/_Jime	Casing Pressure	Tu	bing	Bbls.	Pum			Rate				-	Servic		<u></u>			
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														•				
											SS, C, 3% Friction reducer, C, 25 pps							
																ממן כים.	<del>}</del>	
					<del></del>				Cellofiske, Spps gilsonite									
1										15,0 pps, 1.43 Veild, 6.00 Wader 85 SIC 60140 POZ+4% Cel								
								-		_	pps, I	-				ter		
11/8				,						<i>· · o ,</i>	<u> </u>	<u> </u>	<u> </u>	-10017	<u> </u>			
5:30pm	600			3			5	Pu	mo	366	Is W	9401	^			<del></del>		
	600			C		5 5 7 5				Pump 3 bhis Water MIX 35 SIC 60/40 poz 49/0 gel Scauens								
	600			3	8			5	MIX 150 SK DAZ CEMENT									
											900V							
								<del></del>					25 A	20)09	So Pl.	<u> </u>	-	
	300			(	っ	6/2			Start displacement									
	<b>300</b> 6	20			<u>0</u> 95			1/2	Li	f+	Press	Vie			<del></del>			
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6:copn	1500				28			3			Plug							
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	0				7		,	3			29+ h					N. Sp. S.		
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6:30pm										_	Job	Com	sple.	e/DS	(in 90	crev		
	NE Hiv	iav 6	61 • P	.O. B	ox (	8613 •	Pr	att. KS 6	5712	4-861	3 • (620	672-	120	1 • Fa>	(620)	672-538	33	