KOLAR Document ID: 1283828

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

Name:	
Feet from   North /   South Li	
City: State: Zip:	∃ast
Contact Person:	ne of Section
Phone: ()         NE NW SE SW           CONTRACTOR: License #	ne of Section
CONTRACTOR: License #	
Name:	
Name:	
Wellsite Geologist:	xxx.xxxxx)
Purchaser:	
Designate Type of Completion:	_
New Well Re-Entry Workover Field Name:	
Producing Formation:	
Gas DH EOR	
OG GSW Total Vertical Depth: Plug Back Total Depth:	
CM (Coal Bed Methane)  Amount of Surface Pipe Set and Cemented at:	Feet
☐ Cathodic ☐ Other (Core, Expl., etc.): Multiple Stage Cementing Collar Used? ☐ Yes ☐ No	
If Workover/Re-entry: Old Well Info as follows:	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)	
Chloride content:ppm Fluid volume:	bbls
Commingled Permit #: Dewatering method used:	
SWD Permit #: Location of fluid disposal if hauled offsite:	
EOR 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 Countv: 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	e:					Well #:		
Sec Tw	γp	_S. R.	·	Eas	st 🔲	West	Count	y:								
INSTRUCTIONS open and closed and flow rates if	l, flowing	and shu	ut-in press	ures, wh	ether	shut-in pr	essure rea	ched s	statio	level,	hydrostat	ic pressure				
Final Radioactivi files must be sub										gs mus	t be emai	led to kcc-\	well-log	js@kcc.ks.go∖	/. Digital e	electronic log
Drill Stem Tests (Attach Addit		ets)			Yes	☐ No			Lo	•	Formatio	n (Top), De	pth and			ample
Samples Sent to	Geologic	cal Surv	vey .		Yes	No		N	lame	!				Тор	Da	atum
Cores Taken Electric Log Run Geologist Repor List All E. Logs F	t / Mud Lo	ogs			Yes Yes Yes	No No No										
				Re	port all		RECORD	surface,	Nev		Used e, productio	on, etc.				
Purpose of St	tring		Hole illed	5	Size Cas Set (In C	sing	We	eight . / Ft.		Se	etting epth	Type o		# Sacks Used		nd Percent ditives
					ΑĽ	DDITIONA	L CEMENT	ING / S	SQUI	EEZE F	RECORD					
Purpose:  Perforate  Protect Ca	asing		epth Bottom	Type of Cement			# Sack	# Sacks Used Type and Percent Additives								
Plug Back Plug Off Z																
Did you perform     Does the volum     Was the hydraul	e of the tot	tal base t	fluid of the h	nydraulic	fracturir	-			-	_	Yes Yes Yes	No (If	No, skip	o questions 2 and o question 3) out Page Three		-1)
Date of first Produ Injection:	ıction/Injec	tion or R	esumed Pro	oduction/		ducing Met	thod:	ng		Gas Lift	_ o	ther (Explain)	)			
Estimated Produc Per 24 Hours			Oil I	Bbls.		Gas	Mcf	,	Wate	r	Bb	ls.	G	as-Oil Ratio		Gravity
DISPO	OSITION (	OF GAS:					METHOD O	F COM	1PLE	ΓΙΟΝ:				PRODUCTIO		
Vented (If vented	Sold [		on Lease		Open	Hole [	Perf.	_		Comp. 4 <i>CO-5)</i>		nmingled nit ACO-4)		Тор	В	ottom
Shots Per	Perfor	ation	Perfora	tion	Bride	ge Plug	Bridge Pl	lua			Acid	Fracture Sh	ot Cam	enting Squeeze	Record	
Foot	То		Botto			ype	Set At				Acid,			of Material Used)		
TUBING RECOR	D:	Size:		Set A	t:		Packer At:									

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Hush 2-9
Doc ID	1283828

# Tops

Name	Тор	Datum
Heebner	4393	-1651
Toronto	4418	-1676
Lansing	4490	-1748
Marmaton	5156	-2414
Cherokee	5331	-2589
Atoka	5623	-2881
Morrow	5667	-2925
Mississippi Chester	5740	-2998
Ste. Genevieve	6013	-3271
St. Louis	6178	-3436

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Hush 2-9
Doc ID	1283828

## 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	24	1475	a-conn blend		2%CaCl & 1/4# floseal
Production	7.875	4.5	10.5	6383	AA2	175	

## O'Brien Energy Resources, Inc. Hush No. 2-9, Bruno NE Prospect Section 9, T33S, R30W

Meade County, Kansas October, 2015

# Well Summary

The O'Brien Energy Resources, Corporation, Hush No. 2-9, Bruno NE Prospect, was drilled to a total depth of 6400' in the Mississippian St. Louis Formation without any problems. It offset the Hush No. 1-16 by approximately 2000' to the Northeast. The Heebner came in 10' high relative to this offset. The Lansing, Marmaton and Cherokee ran 7', 8', and 9' high respectively. The Morrow came in 8' high and some structure was gained as the Chester came in 13'.

An excellent hydrocarbon show occurred in the Upper Chester from 5754' to 5766' and consists of Limestone: Medium brown, biomicrite, microcrystalline, microsucrosic to sucrosic in part, brittle, clean, subchalky in part, fossiliferous, sandy, occasionally good interparticle porosity, intercrystalline porosity, even light brown matrix oil stain, bright light yellow hydrocarbon fluorescence in 20% of the samples, excellent streaming cut, abundant live bleeding oil and gas bubbles, oil odor, excellent show, dissipates somewhat when dried. A 600 Unit gas kick occurred on the hotwire.

No Morrow 'B" Sandstone was encountered however an upper Morrow Sandstone with show was documented from 5674' to 5676' and consisting of a very fine Sandstone to Siltstone, Medium to dark brown to gray, hard, very fine well sorted grains, calcareous cement, no fluorescence, slow bleeding cut. A trace of formation gas was recorded.

Typical shows and of low quality were documented in the Basil Chester/Ste. Genevieve (attached mudlog).

 $4\frac{1}{2}$ " production casing was run on the Hush No. 2-16 on 11/3/15 to production test the Upper Chester.

Respectfully Submitted,

Peter Debenham

## **WELL DATA**

Operator: O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH

Geologist: Paul Wiemann – Denver, CO

Prospect Geologist: Ed Schuett, David Ward

Well: Hush No. 2-9, Bruno NE Prospect

Location: 100' FSL & 660' FEL, Section 9, T33S, R30W, Meade County, Kansas – 5

miles South of Plains.

Elevation: Ground Level 2729', Kelly Bushing 2742'

Contractor: Duke Drilling Rig No. 9, Type: Double jacknife, triple stand, Toolpusher

Emigdio Rajas, Drillers: Victor Martinez, Alejandro V., Fernando Jurado

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 10/28/15

Total Depth: 1/7/14, Driller 5360', Logger 5356', Mississippi St. Louis

Casing Program: 35 joints of 8 5/8", J55, 24Lbs/ft, set at 1495'.

Mud Program: Winter Mud, engineer Kris McCune, displaced 2600' with Chemical Gel/LCM.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 3000', Box 350, Drake,

CO 80515, 720/220-4860.

Samples: 30' samples, dry cut sent to the KGS log Library, Wichita.

Electric Logs: Weatherford, engineer Adam Sill, 1)Dual Induction 2) Compensated Neutron

Litho Density 3) Microlog – high res. repeat.

Status:  $4\frac{1}{2}$  production casing run on the Hush No. 2-9 on  $11\frac{3}{15}$ .

### WELL CHRONOLOGY

# Midnight DATE DEPTH FOOTAGE RIGACTIVITY

10/28 1495' 1495' Rig on location and rigged up – dry watch. Mix spud mud. Drill rat hole and mouse hole. Spud in 12 ½" to 1495' and circulate. Survey(1 deg.). Wiper trip and circulate. Drop survey(3/4 deg.) and trip out and rig up casing crew.

10/29 2250' 755' Run and cement 35 joints of 8 5/8" casing set at 1495'. Wait on cement – did circulate. Clean pits and nipple up BOP. Drill plug and cement and 7 7/8" to 1650' and trip for bit no. 3. To 2250'.

10/30 3900' 1650' Clean pits and surveys(1 deg.). Displace mud system at 2600'.

10/31 4970' 1070' To 4545' and circulate and wait on Geologist. Survey(1 deg.). To 4970' and drilling.

11/1 5990' 1020' To 5024' and circulate. Wiper trip 54 stands and break circulation. To 5990'. Work on mud pump, change piston head.

11/2 6400'TD 410' To 6400'TD and circulate. Wiper trip and circulate. Drop survey(1 deg.) and trip for logs and run Elogs.

11/3 TD Run Elogs. Trip in and circulate. Trip out laying down and run and cement 4 ½" production casing to TD. Rig down.

#### BIT RECORD

<u>NO.</u>	MAKE	<b>TYPE</b>	SIZE	<u>OUT</u>	<b>FOOTAGE</b>	<b>HOURS</b>
1 2 3	PDC RR HA28Q PLT 616	12 1/4"	12 ½" 7 7/8" 7 7/8"	1495' 1650' 6400'	1495' 155' 4750'	6 3/4 3/4 60 1/4
				Total Rotatin Avera	_	67 95.5 Ft/hr

## **DEVIATION RECORD - degree**

825' 3/4, 1495' 3/4, 3606' 1, 2596' 1, 6400' 1

#### **MUD PROPERTIES**

<b>DATE</b>	<b>DEPTH</b>	$\overline{\mathbf{WT}}$	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	$\underline{\mathbf{WL}}$	<u>CL</u>	LCM-LBS/BBL
10/29	1495'	8.3							
10/30	2976'	8.8	46	16	12	9.0	18.8	7.2K	4
11/1	5295'	9.3	44	17	9	10.0	8.8	4.8K	6

11/2

## **ELECTRIC LOG FORMATION TOPS-** KB Elev. 2742'

		*Hush No. 1	<u>-16</u>
<b>DEPTH</b>	<b>DATUM</b>	<b>DATUM</b>	POSITION
1492'			
4393'	-1651'	-1661'	+10'
4418'	-1676'	-1675'	-1'
4490'	-1748'	-1757'	+9'
5156'	-2414'	-2421'	+7'
5331'	-2589'	-2595'	+8'
5623'	-2881'	-2887'	+6'
5667'	-2925'	-2933'	+8'
NP		-2967'	
5740'	-2998'	-3011'	+13'
6013'	-3271'	-3267'	-4'
6178'	-3436'	-3435'	-1'
6399'	-3657'		
	1492' 4393' 4418' 4490' 5156' 5331' 5623' 5667' NP 5740' 6013' 6178'	1492' 4393' -1651' 4418' -1676' 4490' -1748' 5156' -2414' 5331' -2589' 5623' -2881' 5667' -2925' NP 5740' -2998' 6013' -3271' 6178' -3436'	1492' 4393' -1651' -1661' 4418' -1676' -1675' 4490' -1748' -1757' 5156' -2414' -2421' 5331' -2589' -2595' 5623' -2881' -2887' 5667' -2925' -2933' NP -2967' 5740' -2998' -3011' 6013' -3271' -3267' 6178' -3436' -3435'

<sup>\*</sup>Hush No. 1-16, 1320' FNL & 1637' FEL, sec. 16 – app. 2000' to the SW, KB Elev. 2743'.



Liberal, Kansas		· <del></del>		(	ement Report
Customer O Brien En	enqu	Lease No.		Date /	1-29-15
Lease Hush	00	Well # 2	~9	Service Receipt	06633
Casing State 1	5001	County M	leade	State KS	YW.
Job Type 247- 85/8 51	Formation	,	Legal Description		30
Pipe I			Perforatin	g Data	Cement Data
Casing size 85% (1 24#	Tubing Size		Shots	/Ft	Lead - 200 2
Depth (500 /	Depth		From	То	3000
Volume 93 Mbl	Volume		From	То	A Con
Max Press / O O 分 本	Max Press		From	То	Tail in (SD) Sh
Well Connection (SOO)	Annulus Vol.		From	То	
Plug Depth ST-491	Packer Depth		From	То	Preu hus
Casing Tubing Time Pressure Pressure	Bbls. Pumbed	Rate		Service Log	
9200			on (oc-s	He asses	ment
			spot trud	er de u	<u> </u>
10:00			Start CS	e & flood	earlo
12:00			CSR on &	Stry pre	at che
12:15			Safety	meetilo.	-JSA
12:40			pressure &	est OK	<b>200 ₹</b>
1500 100	[84	_5_	hun Jour	10 350	sh AConc 114
1:40 150	36	_5_	Switch to	1 150 S	E fremum Plus
1155 100			<u> </u>	- 1,654	-Yet
1:05 100	70	$-\overset{\circ}{\sim}$	aros pu	1-0136	) <u>Se</u>
310 500	00	3	Slow B	N. I	
20 100	92		land bri	1- 100t	NIA
		***************************************	Chr cm		MTOICE
			, eb co	up leste	
			<u> </u>		
			A		
			·		
Service Units 78940					
	3849-14570	14355-	19078 19831-14 Juda M. Cu	1954	

Taylor Printing, Inc.



	Libera	ıl, Kansas					Cement Report
Customer	) Brown	on E	nerou	Lease No.		Date	0-3-15
Lease	Lush		77	Well #	-9	Service Receipt	06635
Casing 4	61100	Depth (	383	County	Mode	State CS	
Job Type	242-	4/20	Dormation Lin		Legal Descri	ption 9-33	-30
		Pipe D	ata	7-1	Perforat		Cement Data
Casing size	464	10.5#	Tubing Size		Shot	ts/Ft	Lead
Depth	639	83'	Depth		From	То	-
Volume	Di=0-	101 161	Volume		From	То	
Max Press	150	DO#	Max Press		From	То	Tail in (75 sk
Well Connec	ction		Annulus Vol.		From	То	14142
Plug Depth	SJ-4	2'	Packer Depth		From	То	- MMZ
Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate		Service L	.og
1:30			***************************************		on 100-3	He assesu	nout
					Spot th	rebs de	J0
0.00					Start age	+ 400t	- ROUND
3:30					CSR on	lotin R	orale circ
3:30					Safety 1	noothis -	BA
41:00		******************************			press the	text 20	1004
4110	200		5	4	Dung 56	AL HO :	spacer
4115	<i>700</i>		12	L	Durin 12	bld mudf	Fish
4:20	200		5	Ÿ	burn Si	161 H20 3	PAGO
4:30			13	3	plue got	- + Mause	hale w/ 50,36
					60/40	102 C1	3.5*
4:45	200		47	5	myo & De	MO 175	Sc 148
5.20					wash pu	uplie the	\$
5:10	100		0	6	dog Aug	uping in	CSC
5,25	700		40	2	Slow 150		<i>O</i> '
6:30	1300		101	Ö	and ply	e Plat	hold
					V \	<u> </u>	
					***************************************		
					3		
						······································	
				***************************************		The state of the s	
Service Units	7894	(O 9	13410 10927	70000	-27774		
Driver Names	1	w.a	13419-19842 E Mudora	111 /2	2110 V		
	IV) CC	win	- WUNDOW		yu -		

Customer Representative

diea

Taylor Printing, Inc.