KOLAR Document ID: 1425172

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:	SecTwpS. R
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.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:
□ Oil □ WSW □ SWD	Producing Formation:
Gas DH EOR	Elevation: Ground: Kelly Bushing:
☐ 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:	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)
Committed at Provider	Chloride content: ppm Fluid volume: bbls
Commingled Permit #: Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
EOR Permit #:	Location of fluid disposal if fladied offsite.
GSW Permit #:	Operator Name:
<u> </u>	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. 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 Drill Stem Tests Received							
Geologist Report / Mud Logs Received							
UIC Distribution							
ALT I II Approved by: Date:							

KOLAR Document ID: 1425172

Page Two

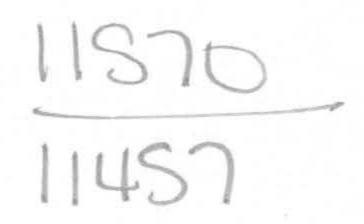
Operator Name:					Lease Nam	ne:			Well #:	
Sec Tw	pS. F	R [East	West	County:					
open and closed and flow rates if	, flowing and sh gas to surface t ty Log, Final Lo	nut-in pressurest, along wit	es, whe h final c ain Geo	ther shut-in pre hart(s). Attach physical Data a	essure reached extra sheet if r and Final Electr	station more : ric Loc	level, hydrosta space is needed	tic pressures, d.	bottom hole tempe	val tested, time tool erature, fluid recovery, Digital electronic log
Drill Stem Tests (Attach Addit			Ye	es No		Lo	og Formatio	n (Top), Deptl	n and Datum	Sample
Samples Sent to	Geological Sur	vey	Ye	es 🗌 No		Name)		Тор	Datum
Cores Taken Electric Log Run Geologist Repor List All E. Logs F	t / Mud Logs		Y€ Y€	es No						
			Repo		RECORD [Nev	w Used rmediate, producti	on. etc.		
Purpose of St		ze Hole Orilled	Siz	e Casing (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
				ADDITIONAL	OF MENTING /					
Purpose:	[Depth	Typo	of Cement	# Sacks Use		EEZE RECORD	Typo a	nd Percent Additives	
Perforate Protect Ca Plug Back	Top	Bottom	туре	or cement	# Sacks Use	,u		туре а	ia Percent Additives	
Plug Off Z										
Did you perform Does the volum Was the hydraul	e of the total base	fluid of the hyd	draulic fra	cturing treatmen		•	Yes ns? Yes	No (If No	, skip questions 2 an , skip question 3) , fill out Page Three o	,
Date of first Produ	ction/Injection or	Resumed Produ	uction/	Producing Meth			Coolift 0	thor (Fundain)		
Estimated Produc	otion	Oil Bb	le.	Flowing Gas	Pumping Mcf	Wate		ther <i>(Explain)</i> bls.	Gas-Oil Ratio	Gravity
Per 24 Hours		Oli Bb	15.	Gas	IVICI	vvale	ı Di	JIS.	Gas-Oil Hallo	Gravity
DISPO	OSITION OF GAS	S:		N	METHOD OF CO	MPLE.	TION:		PRODUCTIO	N INTERVAL:
Vented	Sold Use	d on Lease		Open Hole		Dually		nmingled	Тор	Bottom
(If vente	ed, Submit ACO-18	.)			(5	SUDITIIL I	ACO-5) (Subi	mit ACO-4)		
Shots Per Foot	Perforation Top	Perforation Bottom	on	Bridge Plug Type	Bridge Plug Set At		Acid,		Cementing Squeeze Kind of Material Used)	Record
TUBING RECOR	D: Size:		Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	S & B Operating LLC
Well Name	SHANNON SB-4
Doc ID	1425172

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight		Type Of Cement		Type and Percent Additives
Surface	11	8.625	24	20	Portland	5	NA
Production	6.75	4.5	10.5	1179	Thixoblen d II	111	See Ticket





TICKET NUMBER_	55466
LOCATION //2	Eawa, Ks
FOREMAN T	im Gheen

PO Ecx 884, Chanute, KS 66720 620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT CEMENT

Invol	a#81	HI3
WNSHIP	RANGE	COUNTY
5	17	Allen
	And recommend the contract of	
RIVER	TRUCK #	DRIVER
- /.0		€.

DATE	CUSTOMER #	WELL NAME & N	UMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9-11-18	2381	Shannon #	SB 4	NW 14	25	17	Allon
CUSTOMER	FB DO	erating In		TRUCK#	DRIVED		
MAILING ADDRE	SS	7		1191	DRIVER	TRUCK #	DRIVER
63	40 Gles	rwood Sur 1038	14 18	462	Het Car		
CITY	nd lark	STATE ZIP CODE		675	Ver Der		
		KS 6620		558	Har Becal		
JOB TYPE		DRILLANDE BOTH 1095	TUBING	14. 1226	CASING SIZE & W	EIGHT	1/211
SLURRY WEIGH	T	SLURRY VOL		sk	CEMENT LEFT in		
DISPLACEMENT		DISPLACEMENT PSI	MIX PSI		DATE		
REMARKS:	eld Safe	Mering.	Mix an	Aran	ICCA / /	+ - Sland	1/4/00.
THE X MAIN	y UUMY	III CF INCU	4 (5/ PD // T	1.14-11 /	# Nharala	1 1 -1	0.
Pump 4	1/2" 1400	per plug to t	stal der	the of ca	cite Cir	in lain	- July
tosur	face. Pro	ssure up to 6	DO PSE	well hel	d. Son E	bur.	c ceme
						DUCT 1	

CODE QUANTY OF UNITS DESCRIPTION OF SERVICES OF PRODUCT UNIT PRICE TOTAL CE0450 ONC PUMP CHARGE CE0002 40 MILEAGE Plump TK CE0711 MIN Ton Mijer WE 0883 3,5 88 VAL Sub Total 3.79k. Less 40% 1118 AD (L.77kd) CC5860 1				8	
CEOUS ONE PUMP CHARGE CEOUS 40 MILEAGE Plump TK CEOUS 11 Min Ton Mijer WE 0883 3.5 88 VAL Sub Torul 3.796 1118 MD 16.7764 CC5866 111 Stc Thixo Tt 2997 cyl CC5866 100 H Plump Seal 1498 1500 H CF 8178 One 45" Kubber Plug Sub total 2.231 1451 H Law York - 1300 74 1951 H		QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CEDO 2 40 MILEAGE Plump TK CEDO 711 Min Ton Mijer WE 0883 3,5 88 VAL Sub Torul 3.794. Sub Torul 3.794. LEGG 40 LE	CE04500	One	PUMP CHARGE	14/1/10	A
CERTIL MIN TON MIJOT WE OFF 3 3.5 80 VAL Sub Torul 3.796. Less 40% - 1118 MD 16-74 Mess 40% - 1300 Mess	CE0002	40	NU 5405 A. 111	2011	
Sub Total 3.79 Sub To	CETO 211	Min		11000	
Sub Toral 3.796 118 10 16-71	WE 0853	3,5	80 vac	- 104	
CC5861 /11 stc Thixo Tt 2997 of CC6079 / 1/1# Thenoseal 14988 (C5965 / 100 # Promism Gul 30 00 1 1951 # Subtotal 2231			Sub Torul	100	†
CC6079				1118 40	167860
CC6079					
CC6079	CC5861	1115k	Thixo It	70010	
18 010 4/3" Kubber flag Subtotal Last 40% - 130074 19514 Ravin 3737	CC6079 1	111#	Pheno seal	149850	
27.75 SALES TAX 15121	CC5965	180 #	Premium faul	3000	•
Subtotal 2251 Lastono - 130071 19514 7.75 SALESTAX 15121	CP 8178		43" Kubber flag	7180	
7.75 SALES TAX 15131			subtotal	2251	.,
7.75 SALES TAX 15121			Las 40%	-130074	19514
Ravin 3737					i i
Ravin 3737					
Ravin 3737					
Ravin 3737			775		
	Ravin 3737		1./7	The same of the sa	13/200

AUTHORIZTION LON

TITLE_

TOTAL DATE

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 fo



Mound City, KS 620.224.7406

Well #
Shannon #SB4
S&B Operating, LLC

API #: 15-001-31560 S-T-R: 14-25S-17E County: Allen Date: 9/4/2018

Casing						
Surface			Longstring			
Size:	8 5/8	"	Size:	4 1/2 "		
Tally:	20	1	Tally:	1179 '		
Cement:	5	sx	Bit:	6.75 "		
Bit:	11	11	Date:	9/11/2018		

County:	Alleli	Date:	9/4/2018			BIT:	1.	L	Date:	9/11/2018)
Тор	Base	Formation			Тор	Base	For	mation			
0	1	Soil			1177	1222	Lime		Mississi	ppian	
1	21	Lime			1222		TD				
21	147	Shale									
147	236	Lime					Baffle:	1095.20'			
236	265	Shale									
265	267	Lime									
267	270	Sandy Shale									
270	370	Lime									
370	387	Shale									
387	409	Lime									
409	412	Black Shale									
412	430	Lime									
430	433	Shale									
433	443	Lime									
443	574	Shale									
574	575	Lime									
575	620	Shale									
620	624	Lime									
624	625	Shale									
625	631	Lime									
631	705	Shale									
705	709	Lime									
709	724	Shale									
724	734	Lime									
734	761	Shale					Sand	d / Core D	etail		
761	778	Lime			Core #1:	1047	-1067	Core #2:			
778	787	Shale					Squirre				
787	790	Lime			820	825	Sand, so	me shale,	soft, good	d odor & bleed	d
790	815	Shale			825	828	Sand w	more shale	e, soft, go	od bleed	
815	820	Sandy Shale	Slight odor		828	832	Laminat	ed, mostly	shale, od	lor, little bleed	d
820	832	Sand	See details				Bartlesville				
832	846	Sandy Shale			1045	1049	Sand, good oil saturation, good bleed				
846	1009	Shale					Core better than the samples				
1009	1045	Sandy Shale	with sand		1049	1067	Shale, sandy shale, no show				
1045	1049	Sand	See details				Mississi	ppi			
1049	1093	Sandy Shale	with sand		1193	1204	Mississi	ppi - hard			
1093	1177	Shale			1204	1211		ppi - 1st br	eak, no o	il show	
			Total Depth:	12	222						

	. 2	Shows / Rcmd Perfs	By David B. Griffin, PG Griffin Geological Resources, (GGR)			Well No: Shannon SB-4	Pg. 1 of 2
Depth Ft Lithology	cilla reli		Penetration Rate	% SS, Shaded If Oil Stained		Location: NE NE NE NW/4, 5100' fsl, 2840' fel, Sec.14-T25S-R17E API No.: 15-001-31560 Operator: S & B Operating LLC	Date: 10-Sep-18 Datum/Elev.: GL,1051' est.
	_ Ľ	0	0 0.5 1Min	0 50 100	Sli Fr Gd Exc	Sample Descriptions	Tops/Remarks
9-10-18		1					McGown Drilling
950	-					e.	Mud Rotary 6 ⅔ PDC Bit
							No Samples examined above 982'
8:45A —	=					sh,gy to vdg	982 Start Sampling,
1,	-	CF3				sh, AA, min bk	Sampling, circulate after each Kelly
1000						AA	
1000		cÐ	0.45	Tar		cod Shigfo bk	
	— D7	ar Vo Free Sil	0.45 0.37 0.47 0.43 0.43 0.45 0.45 0.45 0.45	NS 30		55,30, vlg, vf 45: 1ty, Prø, putchy tar 5%,NFO 56, 14gy ~120% 51+1am	
1			0.50 0.50 0.57			shirly to min gy-bn, sity, ws	
		ar Inly	0.48 0.47 0.45 0.45 0.45 0.47 0.47 0.40 0.53	V5 30		\$5/5c,30, prø,NFO, patchy tor 5%, shudg?o \$5,20, 1tgy, prø,NFO, patchytar 5%; shudg	
1.1.1	-	Tur	033 0 0,80 0 0.23 0 043 0 033 0 033 0 035 0 037 0 0,40 0	m'S		SS,30, AA, +ar,100/6; NFO; Sh,70, vdg SS,20, AA,NS; SS,10, +ar; NFO; Sh, vdg,80	
1050	: M	645.5 €45.5 645.6	0.67 0.67 0.68 0.68 0.68 0.62 0.71	70 %	11211	SSID, HBN, VF-Silty, Frø, Sliodor, gassystnin FO SSID, HBN, VF-Silty, Frø, Sliodor, gassystnin FO SSIDO, AA, Resid Sfn, MFO SSIDO, HBN, Fr-GROOF, SliSFD SSBO, HBN, Fr-GROOF, Fr SFD, Core Point	BVSS (mid?) 5.3'
1050		\$50 0 F	0.63 +ime 0.85 0.65 0.65 0.67 0.67 0.65		V. Gd-)	1047-1047.5; SS. Dk. Bn. Gdb. Fr-65FO initially but no bleed back, 1047.5-1049.3; SS. V OK. Bn., Gd-V6. d. Vg- Exc. SFO W/bleed bock, pay ruality sand.	Gasso 1044-47. 011 SD 10475-49. (See photolog) For core pics
Fe -FC		2 7 9 7	0.65 0.75 0.85 0.85 0.87 0.87			1049.3-10500:55, 20, DKBn, Res Sth, NF6; Sh(54,80) 1050.0-1052; Sh, dkgy, St, 50,149y lam. 1052.0-1053; Sh, dkgy 1052.0-1054.4; Str, 80,14gy, Sh, 20,dgy,20 1054.4-1059,4; Sh, 90, St, 20,1am,14gy	TOT LOTE PIOS
1.1.1.	<u></u> λ μ	lvy o:1	0.70 0.83 0.87 0.87 0.80 0.80 0.80	No.	SII E	1055.4-1056.0; 54,20, 514, 80 1056.0-1056.0; 54,55,514; 5 1056.7-1058.6; 54,80,44; 51,20,1499 1058.6-1063.5; 54,90,49; 54,10,1459 1063.5-1066.5-5; 54,80,40; 54,10,1459	L. BV 55 10741 Heavy 0:1 show 1070-8.
	· // '	ficky Hvy oil Tar	0.50 0.48 0.63 0.53 0.43 0.49 0.50 0.50 0.50	TA P	SHI CHURIN PTOS	\$5.20, dkgy, v4, frof, gd res stu, 51:550, Howy \$5,40, AA, 51: - Fr 5 F0, Hvy \$5,50, g-dg, v4-fgy, Fr 5 F0:56,50, dg, 5MC \$5,50, AA, 51:5 F0 \$5,60, BK, 6d by fgn, 6d Tarstn + 5ticky oil	V. Huy oilftar show 1082-8 Taronly 1089'-47 No Show Below 109
: (·)			0.62 0.45 0.45 0.65 0.65			\$5,30, BK, 5,744, VLY, 251NS	30100 70
1100	_		0.30 0.30 0.45 0.45 0.45 0.05 0.05 0.06 0.07 0.50	100	N 0	55,30 blg,v +grn, 4rd,Ns; 56,70,9-dg 55,50, 14gg, 5114y+5hly, frd,Ns; 56,50,54,NS	
	11		0.45 0.45 0.45 0.45 0.45 0.47 0.50 0.47 0.52 0.47	Stain	Free	ss, 70, 5h, 30, AA \$s, 80, /+gy, v+-fgn, fr-gd∮, NS	Ĭį.
4PM -	1	Ų	0.47 0.45 0.42 0.42 0.43 0.47 0.43 0.55 0.55 0.55	Stair	01	\$5,95,1+99, AA,NS \$5,90,1+99,t0+on, pr-gd \$1,min lmy,NS	

	r		By	David B. Griff	in, PG	Well No: Shannon SB-4	Pg. 2 of 2
	듩	Shows / Rcmd Perfs		ological Reso		Location: NE NE NE NW/4, 5100' fsl,	Date:
Depth	Lithology	ow:	Penetration	% SS, Shaded If	Free Oil Show	2840' fel, Sec.14-T25S-R17E API No.: 15-001-31560	10-Sep-18 Datum/Elev.:
Ft	ogy	s / enf	Rate	Oil Stained	riee on snow	Operator: S & B Operating LLC	GL,1051' est.
1130		S.	0 1	0 50 100	Sli Fr Gd Exc	Sample Descriptions	Tops/Remarks
9-10-18			(0.50 (0.55 (0.52 (0.52 (0.55	No ad		55,95, 1+99, vf-fgm, 3d\$,NS	McGown Drilling
1 10 10			0.55 0.50 0.46 0.50	νο 4 5	No	55,95, It gy, mostly figen, od 6, NS	Mud Rotary
		(<u>FS</u>	0.47 0.50 0.40	Stain		55, 50, 1+gy, f-m grn, frb, N5; sh, 50, dkgy smc	6 🕯 PDC Bit
	÷ -		0.50 0.40 0.42 0.47 0.47 0.50 0.46 0.47	50	Free	55, 50, 1499, 4 = 11 91 11 12 11 5MC	
1150	7		6.49 6.48			55,20, AA, NS; Sh, 80,AA	
	<u>;</u> ;;,		0.45 0.40 0.40 0.43 0.35 0.32 0.32	9,	oit	33,20, 47,100, 34,00,00	
	· -		0.42 0.38 0.38	20		1	
	11111	-	0.38 0.35 0.20 0.55 0.24 0.33 0.30 0.30 0.30			ssim, AAisiity; sh,90	
	-		0.33	10		55, 5, 54,95	
			0.27 0.28 0.28 0.40 0.45 0.45 0.45 0.55			La Ludka u to blk	
			0.69 .48 .0.67		1/0	chrt, 60, wh, prø, sli weatur, NS; chy, 20, th.g slisdy, t-mgn; sk, 20, Bk, NS	Cht Cg/
	2-1 A	Μ٥	0.55		Tree		1/77'(-126) Miss. 1182'(-131)
	Ž _Q	Show,	0.45 0.45 0.35 0.35 0.32 0.32			Dol, 50, 1+99, med xtln, frixd Novyss, Brt Fir, Noodor, Nosta; cht, 60, AA, NS Dol, 90, 1+94, vfxtln, Pro, NS, BFlr, NS	1182'(-131)
	A JAZ	Buti Brt	0.53 0.56 0.50		0.1	Do1, 90, 1+94, vf x+1n, Prop, NS, BF1r, NS	
	<u>^/</u> /#/	Flv in	0.27	200		Dol, 80, 1+gy, p+ly LS, vf-m xtl; propos; ch+20 No Vag Ø, NS	
4000	生/ 五/	Dol	0.70 0.70 0.81 0.78	2.00		· '	
1200	AT-Z	-	0.556 0.93			LS,75, cream, f-mxtl, frix \$, NS; cht,25 sharp, o-wh to cir	
	TAT	1	0.57 0.58 0.58 0.60			4	
	AAA		0.48 ⁶⁰			LS, 95; Cht, 5, AA, NS	
	TÂ.		1.08 1.08 1.28			cs, 70, crm, mintu, profind, us; cht, 30, for clr	
9-10-18	14		1.02 1.05 1.05			cs, 70, crm, mintu, pn-frø, Ns; cht, 30, th-cht 54p, Ns Ls, 50, crm, f-mxtlh, fr9xø, Ns; cht, AA	TD
7 PM			0.13				1222 (-171)
							4 1/2" Pipe
							to be set thru BV
	 -						
							Not open Hole Logged
1250							
]	
	<u> </u>					1	
						j	
						1	
						1	
4000						1	
1300						1	
	-	1]	
						1	
						1	

Bartlesville Sandstone Core Photograph Log, 1047.0'-1051.0' Shannon SB-4 September 10, 2018 By David Griffin

Fresh Unrinsed Core



1049.0 1048.0 1047.0

Rinsed Core, Note Bleed Back



1049.0 1048.0 1047.0

Fresh Unrinsed Core



1051.0 1050.0 1049.0

Rinsed Core



1051.0 1050.0 1049.0