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				
Contact Person:	Footages Calculated from Nearest Outside Section Corner:				
Phone: ()	□NE □NW □SE □SW				
CONTRACTOR: License #	GPS Location: Lat:, Long:				
Name:	(e.g. xxx.xxxxx) (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:				
☐ 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)				
	Chloride content: ppm Fluid volume: bbls				
☐ Commingled Permit #:	Dewatering method used:				
SWD Permit #:	Location of fluid disposal if hauled offsite:				
EOR Permit #:	Location of fluid disposal if flauled offsite.				
GSW Permit #:	Operator Name:				
	Lease Name: License #:				
Spud Date or Date Reached TD Completion Date or	QuarterSecTwpS. 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 III Approved by: Date:							

KOLAR Document ID: 1455711

Page Two

Operator Name: _				Lease Name:			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.go\	. 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	ed Type and Percent Additives				
Protect Casi									
Plug Off Zon									
 Did you perform a Does the volume o Was the hydraulic 	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 Type Set At Acid, Fracture, Shot, Cementing Squeeze Recor (Amount and Kind of Material Used)				Record	
TUBING RECORD:	Size:	Set /	At:	Packer At:					
. 5213 (1200) 10.	JIEG.			. 30.0.71					

Form	ACO1 - Well Completion
Operator	Patterson Energy LLC
Well Name	HENDRICH 2-18
Doc ID	1455711

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	260	80/20		3% cc 2% gel
Production	7.875	5.5	15.5	3840	Common	175	10% Sale 5% Gils

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Call 705 204 1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1057

Cell 785-324-1041		and the commence of the commen					
Se	c. Twp.	Range		County	State	On Location	Finish
Date - 0 - 18	3 1 7	00	Kook	on Palco i	Ball Park Zw	Minter	1 Scontin
Lease Hendrich		Well No. 2 - 1		Owner	MII IAIR SA	70 1112	
Contractor Muntin #2				To Quality C	Dilwell Cementing, In	c. t cementing equipme	nt and furnish
	String			cementer ar	nd helper to assist ov	vner or contractor to	do work as listed.
Hole Size 778	T.D.	3848	34	Charge To	Imerican O:1		2
Csg. 35 /2 /7#	Depth	3840		Street	and the second		84
Tbg. Size	Depth			City		State	
Tool Port Coller \$15	O Depth	1768				and supervision of owner	er agent or contractor.
Cement Left in Csg. 17.6	7 Shoe J	loint 17.6	7	Cement Am	ount Ordered / 75	10/501 57	Caisonite
Meas Line		88ABL	_	20BL1	KCL 500gal	mid Clar	
	JIBMENT			Common/	75		
Pumptrk No. Cementer Helper No. Driver	lenn			Poz. Mix		P	
Bulktrk Driver				Got. 19	01 2 ga	/	
Bulktrk 5 Driver	Tom			Calcium	(7)	2	
JOB SERVIO	CES &/REMA	ARKS		Hulls			
Remarks:				Salt /5			
Rat Hole 305K		•	4	Flowseal	212 Hz		
Mouse Hole 153K				Kol-Seal	130H	$-\rho$	
Centralizers				Mud CLR 4		rol	
Baskets	112		(*	.CFL-117 or	CD110 CAF 38		
D/V or Port Collar	- ad		- 27	Sand	c- 10b		
5/250 3840	2 Battle	6382	2	Handling	13/9/		
Est. Cirwlation.	tomp 5	. //	2 Clan	Mileage			88.
+ 19BL KCL. PI		lex mouse			FLOAT EQUIP		
Cement 5/24	21th 130	OSK. Ola	٧-	Guide Shoc	1	Ρ	
ines & Displace P	Wg - 127	9BLKCL	_	Centralizer			
Plug lander (# 1500	24			Baskets -	2 . 11		
Lift pressure - 7	90 W			AFU Inserte	Fort Collar		
		11		Float Shoe	1		
	1	()		Latch Down	1 /		4 0
	haw'						10
		•			4 0 /	1.	
	6			1	harge pro25	Tring	
	/			Mileage 4	31	Ta	x
		2				Discour	
X /	1			-			
Signature Www est	wiley		3 3	Jon 197 12	27	Total Charg	G .

QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Call 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 1052

Cell 785-324-1041		,								
	Sec.	Twp.	Range	0	County	State	On Location	Finish		
Date 10:31-18	18	9	20		bK3	K5	4	11,000m		
786		_		Location	on Pales.	Ball Park In	1 Vinto			
Lease Hendrich	74 74		Well No 2 -/8		Owner			400		
Contractor Mendon &	24				To Quality O	ilwell Cementing, Inc	c. cementing equipmer	nt and furnish		
Type Job Surkall				.5	cementer an	d helper to assist ow	ner or contractor to d	o work as listed.		
Hole Size 12-14	T.D.	261		Charge To Mercan Oil						
Csg. \$ 5/8		Depth	260		Street					
Tbg. Size		Depth			City		State	M		
Tool	Tr	Depth	-		The above wa	as done to satisfaction a	and supervision of owne	r agent or contractor.		
Cement Left in Csg. 10		Shoe J	loint		Cement Am	ount Ordered	8/20 3./12	24.662		
Meas Line		Displac	ce /GBL			n# 192 1	-			
	EQUIPA				Common	260 1	48			
Pumptrk 5 No. Ceme	er 🚽	aig_			Poz. Mix	32				
Bulktrk No. Drive	r				Gel.	3				
Bulktrk 9 No. Drive		ock			Calcium	6		*		
JOB SE	ERVICES	& REMA	ARKS	ý.	Hulls					
Remarks:	e ³		1		Salt					
Rat Hole					Flowseal					
Mouse Hole		12	1/		Kol-Seal					
Centralizers					Mud CLR 4	8				
Baskets					CFL-117 or CD110 CAF 38					
D/V or Port Collar					Sand					
5/ 5/8 ou Dot	tom. E	Z3+. C	simulation.		Handling /	64				
Mix Keosu	a Dr≥	Dace	2		Mileage	,				
1		7	7			FLOAT EQUIP	MENT	<u> </u>		
Cement	Cir	20 1	400		Guide Shoe)				
	-				Centralizer					
					Baskets					
		1	Ŋζ		AFU Inserts	5				
		1/2 1/	MISS		Float Shoe					
	1	111 0	·		Latch Down	1		500		
•		1						•,,,		
		6						*		
					Pumptrk Ch	narge Surfac	<u> </u>			
42					Mileage 4	13		10.		
				4 1			Tax			
	01		2				Discoun	t		
X Signature Albel	My	HA					Total Charge	9		

QUALITY JILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 975

Date //- 26-/8	Twp.	Range	Roa	County	State K S	On Location	Finish		
1, 20 3					ball park	2) / 0/:			
Lease Hendrick	w	ell No. 2 · 1		Owner	Dall park	2W Ninto			
Contractor Western h	rell Se	rvice		To Quality Oi	lwell Cementing, In	C.			
Type Job Port Collar		9,0	100	cementer and	d helper to assist ov	t cementing equipment wner or contractor to do	and furnish work as listed.		
Hole Size	T.D.			Charge A	merican O	-1			
Csg. 3 1/2	Depth			Street	···Can O	- I			
Tbg. Size 2 7/8	Depth		e se como Historia de Servicio	City		State			
Tool Port Collar -	Depth -	768'			s dene to satisfaction	and supervision of owner	agent or contractor.		
Cement Left in Csg.	Shoe Joir	nt		Cement Amo			DC		
Meas Line	Displace	9661			011				
EQUI	PMENT			Common 3	50 % D	MEC			
Pumptrk 20 No. Cementer Helper	Brett			Poz. Mix	or a con	y _y			
No. Driver	ny			Gel. 6 5%		:			
Bulktrk No. Driver Driver	ck	30-30-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		Calcium	2				
JOB SERVICE	S & REMARI	KS		Hulls					
Remarks:			115. 750-1111-1111-1111	Salt					
Rat Hole				Flowseal 2710					
Mouse Hole				Kol-Seal					
Centralizers				Mud CLR 48					
Baskets				CFL-117 or CD110 CAF 38					
D/V or Port Collar				Sand					
				Handling 356					
Tested PC to 1	000 lb.	5 + Ope	ned	Mileage			0		
			Tool		FLOAT EQUIPA	MENT	- 2		
Mix 6sx gel +	350 s	r		Guide Shoe					
Displaced 9 bbi				Centralizer					
Coment did not a	irculate	- Comme		Baskets	The same of the sa				
				AFU Inserts					
Closed + Tested	PC to	1000 Ibc		Float Shoe	M 5 500				
Ran 5 Jtg & wa		oan	10.	Latch Down					
		**							
	1	1/2							
	Tha	uly		Pumptrk Char	ge parta	ollar Job			
	1	9		Mileage 4	130				
	6		60			Tax			
						Discount			
Signature Brown 1914		LINE				Total Charge			
7000						L			

AUSTIN B. KLAUS

Cell 785.650.3629 Work 785.483.3145 Ext 225

PO BOX 352 Russell, KS 67665 austin.klaus@johnofarmer.com

Scale 1:240 (5"=100') Imperial Measured Depth Log

Well Name: Hendrich #2-18
Location: Rooks County

License Number: API #15-163-24375-00-00 Region: Kansas

Surface Coordinates: Section 18, Township 9 South, Range 20 West

990' FSL & 2,310' FEL

Bottom Hole Vertical well w/ minimal deviation, same as above

Coordinates:

Ground Elevation (ft): 2,246 K.B. Elevation (ft): 2,251 Logged Interval (ft): 3,200 To: RTD Total Depth (ft): 3,848

Formation: LKC-Arbuckle Type of Drilling Fluid: Chemical (K.D.T)

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

OPERATOR

Company: American Oil, LLC Address: 1200 Main, Suite 410

Hays, KS 67601

GEOLOGIST

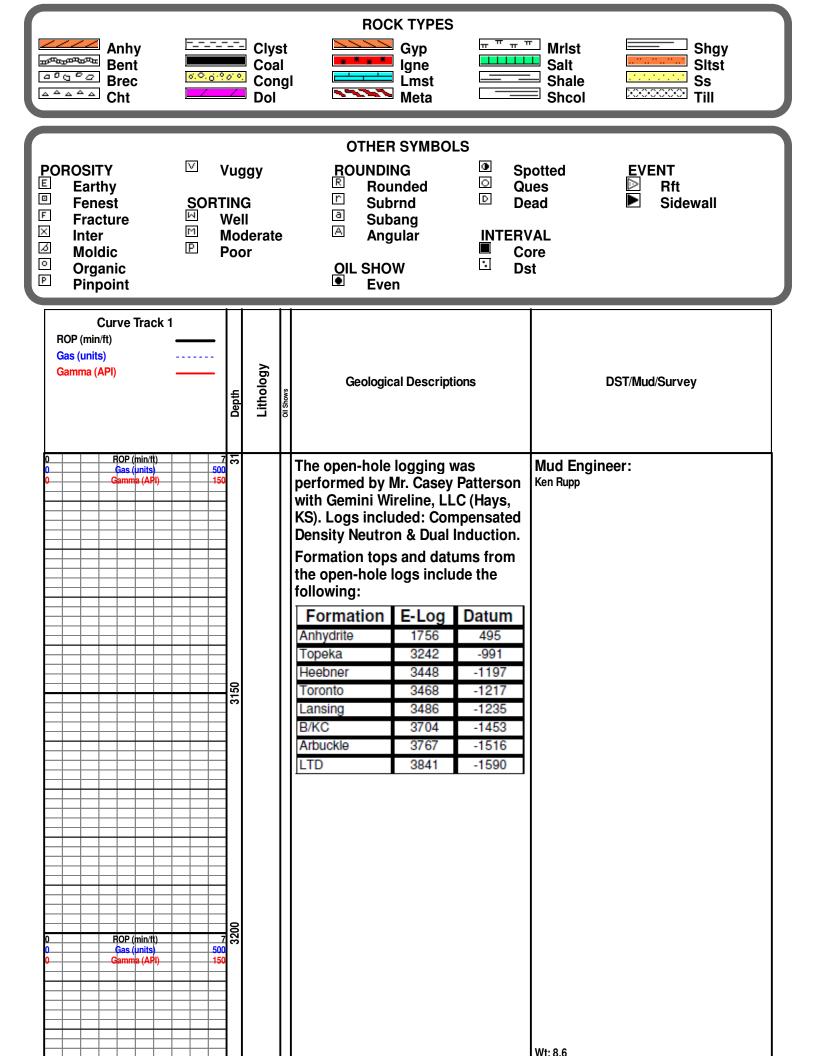
Name: Austin Klaus

Company: John O. Farmer, Inc. Address: 370 W. Wichita Ave. Russell. KS 67665

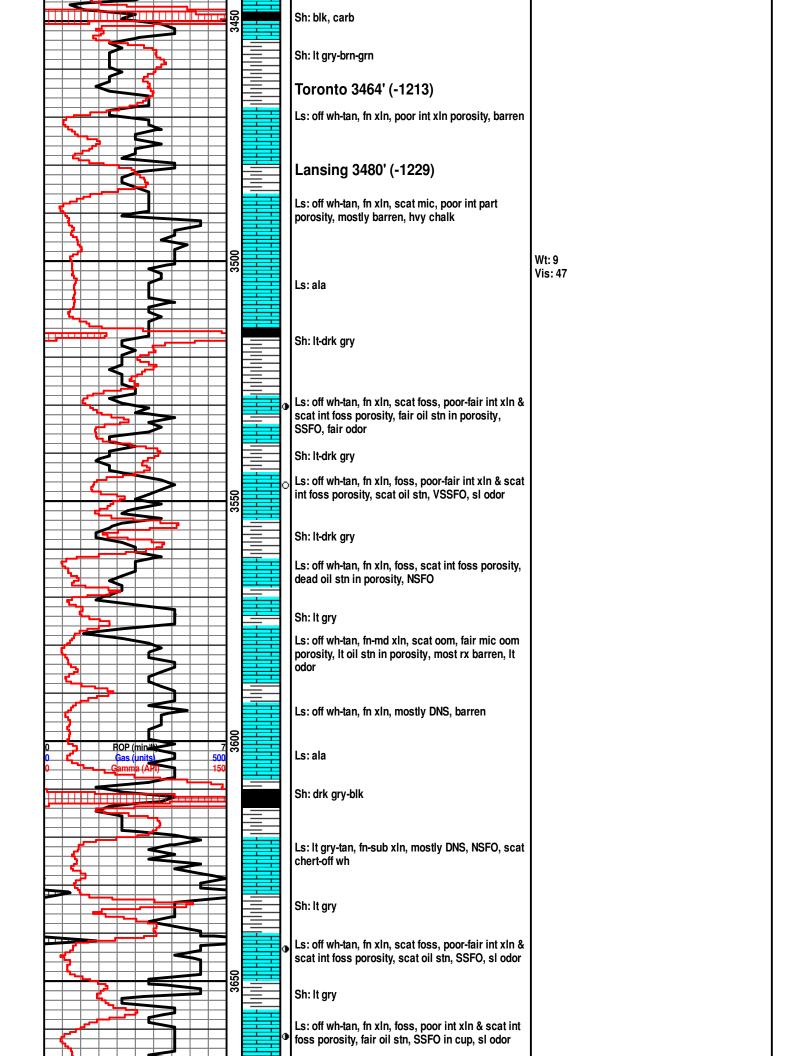
Comments

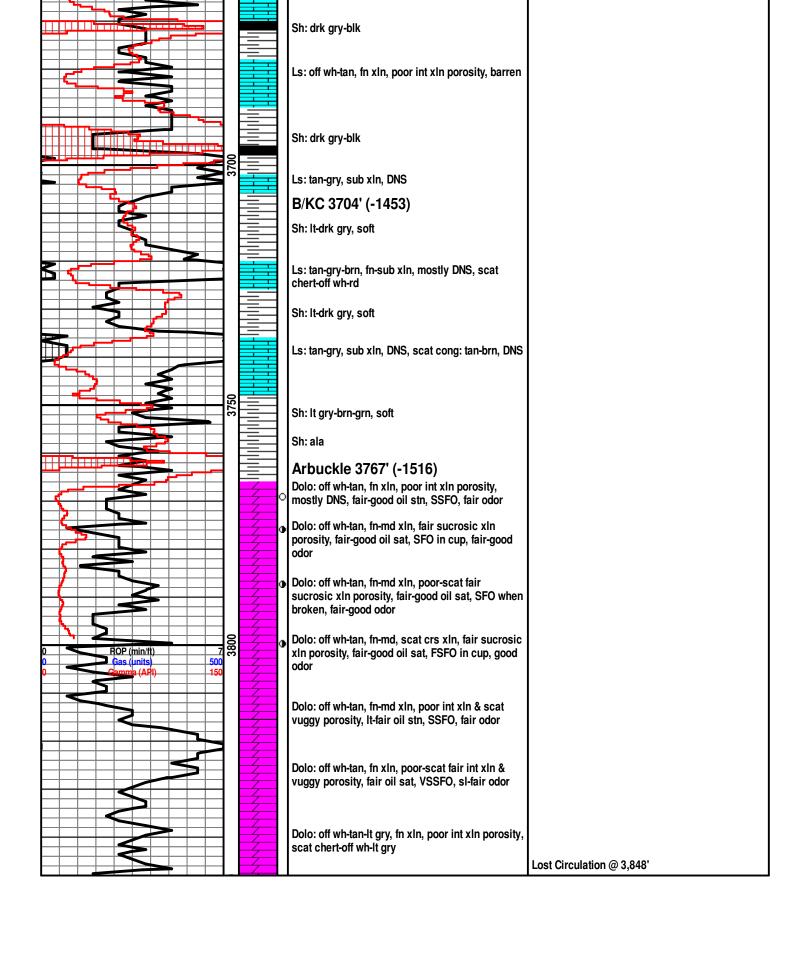
The Hendrich #2-18 well was drilled by Murfin Drilling Rig #24.

The Hendrich #2-18 was discovered via 3D seismic survey. Rock samples were gathered and evaluated from 3,200'- 3,848'. Oil shows were encountered in the LKC C,I,J and Arbuckle. Structurally, the Lansing top was picked 6' high to the comparison well, Hendrich Unit #1-18. Structure remained consistent throughout the LKC, which resulted in an Arbuckle picked 5' high to the comparison well. After evaluation of all oil shows, and electric logs, it was decided that 5 1/2" production casing be set to further evaluate the Hendrich #2-18 on 11/6/2018.



Heebner 3445' (-1194)





QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

1080 Home Office P.O. Box 32 Russell, KS 67665 Phone 785-483-2025 Cell 785-324-1041 Finish On Location State County Sec. Twp. Range Well No 2-18 Owner To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. Charge therican Oil Hole Size 95/8 Street Depth Csq. State City Depth Tbg. Size The above was done to satisfaction and supervision of owner agent or contractor. Depth Tool Cement Amount Ordered 200 Shoe Joint Cement Left in Csg. Displace Meas Line EQUIPMENT Pumptrk No. Driver Gel. Bulktrk Driver Jany Calcium Bulktrk JOB SERVICES & REMARKS Hulls Salt KOC Rich Williams Remarks: Flowseal 50# Rat Hole Kol-Seal Mouse Hole Mud CLR 48 Centralizers CFL-117 or CD110 CAF 38 Baskets Sand D/V or Port Collar Pressures 1/k to 800# mix 200 5 k down backside 5 hut in \$ 300# Handling Mileage FLOAT EQUIPMENT **Guide Shoe** Centralizer Baskets AFU Inserts Float Shoe Latch Down Pumptrk Charge Squeez e Tax Discount Total Charge Signature