KOLAR Document ID: 1675797

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 □East □ West
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) Datum: NAD27 NAD83 WGS84
Wellsite Geologist:	
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:
	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?
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:
Dual Completion Permit #:	Leading of field Paragraph Charles and Market
EOR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Canad Date on Date Decembed TD Completing Date on	Quarter Sec TwpS. R
Spud Date or Date Reached TD Completion Date or 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 III Approved by: Date:					

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Page Two

Operator Name: _				Lease Name:			Well #:	
Sec Twp.	S. R.	E	ast West	County:				
	flowing and shu	ut-in pressures, v	vhether 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	v. Digital electronic log
Drill Stem Tests Ta			Yes No			on (Top), Depth ar		Sample
Samples Sent to 0	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					
		B	CASING eport all strings set-c		New Used	ion, etc.		
Purpose of Strir		Hole illed	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING / SO	UEEZE RECORD			
Purpose:		epth T Bottom	ype of Cement	# Sacks Used		Type and F	Percent Additives	
Perforate Protect Casi Plug Back T								
Plug Off Zor								
Did you perform a Does the volume Was the hydraulic	of the total base f	fluid of the hydrauli		_	=	No (If No, sk	ip questions 2 an ip question 3) out Page Three	,
Date of first Product Injection:	tion/Injection or R	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:			DN INTERVAL: Bottom
	Sold Used	I on Lease	Open Hole			mmingled mit ACO-4)	Тор	BOROTT
,	,			B.11 B1				
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	Δ+-	Packer At:				
TODING RECORD:	. 3126.		n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	WAUGH B 4
Doc ID	1675797

All Electric Logs Run

Dual Induction Log
Micro Resistivity Log
Compensated Density Neutron Log
Cement Bond Log

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	WAUGH B 4
Doc ID	1675797

Tops

Name	Тор	Datum
Mississippi	2282'	(-992)
Kinderhook	2605'	(-1315)
Hunton	2753'	(-1463)
Maquoketa	2840'	(-1550)
Viola	2873'	(-1583)
Simpson Sand	2988'	(-1698)
Arbuckle	3039'	(-1749)
L.T.D.	3100'	(-1810)

Form	ACO1 - Well Completion
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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	307	Common		3% C.C., 2% gel
Production	7.875	5.5	14	3096	Common	170	10% Salt, 5% Gilsonite

Waugh B #4 SWD

Casing leak repair. Open Hunton, open hole Arbuckle

410' FSL & 485' FWL Sec 18 Twp 15S Rge 12E Wabaunsee co

- 10-17-22 Watt's Tank Service pumped 20 bbls treated water down annulus loaded and went on a vacuum. Vacuum on tubing dropped.
- 10-18-22 Rig up Glacier Well Service, pulled 2" more tension in packer, Shane's Tank Service pumped 12 bbls treated water down annulus, tubing started to flow. Release packer, pull tubing, approximately 1/3 down, tubing had some scale on it. Shut down. Mai Excavating dug small pit at the end of the tubing.
- 10-19-22 Rig down, move to the Preston B #1. Tim's Truck Pipe Testing, pumped golf balls thru tubing, tested tubing to 2,500#, all jts tested good, 9 jts had pin ends bad. Scale was checked out by Chem-Tek, scale is some what acid soluble, appears to be iron sulfide.
- 10-20-22 Mai Excavating, moved workstring from the Preston B 1.
- 10-21-22 C H, JOF roustabout, cleaned collars, found an additional 8 jts that are bad. Rig up Glacier Well Service, run Reinhardts Services plug and packer. Set plug at 3,021', packer at 3,004. Hookup Shane's Tank Service, pressure plug and packer to 1,200#, held, locate 2 holes between 2,877' and 3,004'. Lower packer to 3,021', plug swinging, pump down tubing, blowing on annulus. Appears to have a hole below 3,021' or Arbuckle is communicated to the void. Pull tubing, packer and plug. Shut down.
- 10-24-25-22 Shut down, rain.

- 1 d

- 10-26-22 John's Dozer dug workover pit 15' wide, 24' long, 5' deep, put in liner. Rig up Perf Tech Wireline, perforate 4 holes at 2,765', 2,820' and 2,870'. Run packer to 2,750'. Shut down.
- 10-27-22 Lower tubing to 3,050', rig up Elite Cementing, circulate hole clean with fresh water, raise packer to 2,659', take injection rate of 3 bpm at 850#. Squeeze Arbuckle, and void behind casing with 225 sxs Common Cement with 2 1/2% Calcium with 1/2# Phenoseal per sack, squeezed to 2,550# pressure, stage cement for 1 hour, held at 1,500#, release packer, no flow back, wash tubing and casing clean, pull 5 jts tubing, pressure tubing to 1,000#, shut in. Rig down, move off.
- 11-1-22 Move in and rig up Glacier Well Service double drum unit. Spot power swivel in on location.

- 11-2-22 Release pressure on tubing, pull tubing and packer. Run 4 3/4" Varel rock bit, 5 1/2" casing scraper and 5 3 1/2" drill collars to 2,660', hookup mud pump and power swivel, drill from 2,660-2,717', circulate clean, pull joint in air. Drilling at 4-5 minutes per foot. Shut down.
- 11-3-22 Drill from 2,717-2,871', circulate clean, pull joint air. Shut down.
- 11-4-22 Shut down, rain.
- 11-7-22 Drill from 2,871-2,997', circulate clean, pressure casing to 450#, held. Shut down.
- 11-8-22 Drill from 2,997-3,056', circulate clean, took 1 1/2 hours! Pull tubing, drill collars, scraper and bit. Rig up Perf-Tech Wireline, run Cement Bond Log from TD to top of cement at 2,115'. Cement looks good in the void area. Start to rerun tubing with 4 7/8" Varel Rock bit and 5 drill collars. Shut down.
- 11-9-22 Finish running tubing to 3,056', get circulation, pressure casing to 450#, held. Drill from 3,056-3,084', circulate clean, pull joint in air. Shut down.
- 11-10-22 Drill from 3,084-3,114', lost circulation, lost 130 bbls in 35 minutes. Pull 16 joints of tubing, take injection rate, averaged 1.4 bpm with 100 bbls water. Pull tubing collars and bit. Shut down.
- 11-11-22 Rig up Perf Tech Wireline, perforate the Hunton Zone 2,756-62′ (6′) (4 SPF) with 22 gram expendable charges. Run 2 3/8″ tubing with Reinhardts Services packer with tailpipe to 3,112′. Hookup RPM Services LLC acid truck, treat open hole Arbuckle with 1,000 gallons 28% DWA and 20 bbls saltwater flush, treated at 3.5 bpm at 250#, slowed to 3 bpm at 50-75# pressure, ISIP 1.7 bpm vacuum. Total load pumped, 57 bbls, let set 30 minutes, move packer to 2,732′, pressure annulus to 400#, held. Pull tubing and packer. Shut down.

11-14-22 Run packer and lined tubing:

```
15.00'
                2 3/8" Fiberglass tubing, tailpipe
     7.60'
                2 3/8" x 5 1/2" Arrowset 1x Packer (Sealtite lined)
     4.00'
                2 3/8" Sealtite lined tubing sub
 1,451.93'
                46 jts 2 3/8" Duolined tubing
 1.262.56'
                39 jts 2 3/8" Sealtite lined tubing
     10.00
                2 3/8" x 10' Sealtite lined tubing sub
       6.00'
                ΚB
2,738.49'
               Center of rubber on packer.
```

Bottom of tailpipe is at 2,757.09'.

Pack head off, Shane's Tank Service, pumped 62 bbls treated freshwater down annulus, set packer, fill annulus with water, pressure to 300#, had to bleed off air 3-4 times. Finally held. Rig down, move off.

A Section

To set packer, tubing going down, turn to the right, pull up 15,000#, set tubing down, pull up 15,000#, set tubing in any tension. To release packer, coming down with tubing, turn to the right, pull up, tubing may jump before releasing.

11-17-22 Pressure annulus with nitrogen to 300#, MIT passed, Levi Short KCC Rep.

Val Dreher Production foreman

810 E 7TH PO Box 92 EUREKA, KS 67045 (620) 583-5561



Cement o	Acid Field Report
Ticket No.	6779
Foreman	David Gardner
Camp Eu	

Date	Cust. ID#	Leas	se & Well Number		Section	Tananalain	Ta		
			o a troil ramber		Section	Township	Range	County	State
10-27-22	1277	Waugh	B #4 SWI)	18	155.	126.	Wabaunsee	KS
Customer	_			Safety	Unit#	Dri	THE RESERVE THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE OW	Unit#	Driver
John O	tarmer	, INC.		Meeting	105	Jas	0.0		Dilvei
Mailing Address				DG	110	Dan			
P.O. Box	352			DK 2H					
City Russell		State	Zip Code						-
hussell		KS	67665-0352					7.	
The second of the last	1t. 51/2" 01/4 Bb1 Fety Meets G @ 3042	Hole Siz Cement L Displace 2' - 3052'.	th 3056' K.L. te eft in Casing ement PSI ind 5½" @ 275 Run Tubing + F	59'-29: PKP :-	+ 315A	6.4* fed @ 276	Dri Ott	les between 28	
SKS Class A'	Cement w	1 21/2 % Cacl	1/2 Phoneseal	rate in	23/8 Jubin	y = 38PM (2 850 PSI	1.13DP-0951.M	ixed 225
2100 PSI. Shu	t down. S	tage cemen	+ for I HR. Ho	Iding	1500 PSI Ro	lease Aces	06 PSI. 10	1/4 Bb1@ 2550	PSI. 15DP -
COLLEGE TO THE	Smort Day	1 00/ 20 DDI	fresh water. 1 E	Sbl cem	ent slurry	to pit. Pul	1 5 Jts	+ reset PKR. 1	Pressure

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C104	1	Pump Charge	1180.00	
2/07	80	Mileage	5.60	400.00
200	225 sks	Class A' Cement	18.55	4173.75
C205	5304	Cacle 21/2%	.75	397.50
C208	115#	Phenoseal 1/2 5k	1.55	178.25
C108B	10.57 Tons	Ton Mileage - 80 Miles	1.50	1268.40
2//7	1	Squeeze Manifold Rental	//5.00	115.00
		Thank You	Sub Total Less 5%	7,712.90
Authoriz	ration by Va	1 0 /8	8 % Sales Tax	389.16
	,	Title Co/Rep.	Total	7,696.96