KOLAR Document ID: 1427464

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:	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: 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 hald disposal in hadica 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 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.	Set	n.	i donei Al.				

Form	ACO1 - Well Completion
Operator	Vulcan Resources, LLC
Well Name	HATCH 5
Doc ID	1427464

All Electric Logs Run

Dual Induction	
Gamma Ray	
Neutron	
Cement Bond	
Completion Log	

Form	ACO1 - Well Completion
Operator	Vulcan Resources, LLC
Well Name	HATCH 5
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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	11.25	8.625	32	40	Portland	15	n/a
Production	6.75	4.5	11.6	1580	60/40 Pozmix &Thickset	180	Gel 6%

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



Cement or Acid Field Report
Ticket No. 4085

Foreman Kevin McCoy

Camp Eureka

API 15-031	-24330 - 0	00-00			V.			L				
Date	Cust. ID#	Le	ease & Well Numbe	er		Section	То	wnship	Range	County	T	State
8-24-18	1988	HA	Tch # TOS	5		2	2	25	13E	Coffey		Ks
Customer	_			Safe	ety	Unit#		Driv	/er	Unit #	Τ	Driver
Valca	N Resol	urces, L	40	Meet		105		DAVE	6.			
Mailing Address				KI DO	71	110		JASO.	J H.			
1102 1	V. LeNA	oah Ave		3 F		113		Zevi				
City	7	State	Zip Code	21	9	141		Allen				
	2.50		. '	AC		145		AlAN I	7			,
SKIATO	ok	OK	74070	AI	71							
						21	IRLI	1910				

Job Type Longstring	Hole Depth	Slurry Vol. 33 BL TAIL	Tubing
Casing Depth 1580	Hole Size 63/4"	Slurry Wt. 13.8 #- 13.7 #	Drill Pipe
Casing Size & Wt. 4½ 11.60 **	Cement Left in Casing	Water Gal/SK	Other
Displacement 25 86C	Displacement PSI 700	Bump Plug to 1/00 PS/	BPM

Remarks: SAFETY Meeting: Rig up to 41/2 CASING. BREAK CIRCUlation w/ 10 Bbl Fresh water.

MIXED 80 Sts 60/40 POZMIX CEMENT W/ 6% GEL 24 PhenoSeal SK @ 12.84/9AL YIELD 1.68 =

24 Bbl Slurry. Tail in w/ 100 SKS THICK SET CEMENT W/ 24 PhenoSeal /St @ 13.74/9AL

YIELD 1.85 = 33 Bbl Slurry. Wash out Pomp & Lines. Shut Jown. Release Plug. Displace

Plug to Seat w/ 25 Bbl Fresh water. Final Pumping Pressure 100 PSI. Bump Plug to

1100 PSI, WAIT 2 MINS. Release Pressure. Float Heid. Shut IN @ 0 PSI. Good CEMENT

Returns to Surface = 10 Bbl Slurry to Pit. Job Complete. Rig down.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C 102	1	Pump Charge	//00.00	1100.00
C 107	35	Mileage	4.20	147.00
C 203	80 SKS	60/40 POZMIX CEMENT \	13.40	1072.00
206	410 #	Gel 6% Lead Cement	.21	86.10
C 208	160 #	Phenoseal 2#/sk	1.30	208.00
201	100 5Ks	THICK SET CEMENT \ TAIL CEMENT	20.50	2050.00
208	200 *	Pheno Seal 2#/sk	1.30	260.00
108 A	8.94 TONS	TON MIKAGE BULK TRUCKS X 2	M/c x2	730.00
: 113	2.5 Hrs	80 BLL VAC TRUCK	90.00	225.00
113	2.5 HRS	80 BBL VAC TRUCK	90.00	225.00
224	4500 99/5		10.00/1000	45.00
653	1	4/2 Flapper Valve Float Shoe	251.00	251.00
2420	1	41/2 LATCH down Plug	210.00	2/0.00
			Sub TotAL	6609.10
		THANK YOU	Less 5%	344.05
		1 6.5%	Sales Tax	271.84
Authoriz	ation	Title	Total	6536.89

Mud Rotary Drilling Andrew King - Manager/Driller

Bar Drilling, LLC Phone: (719) 210-8806

-8806

1317 105th Rd. Yates Center, KS 66783

				Andy King	Driller/Crew		Job/Project Name/No.	Skiatook, OK 74070	1102 N Lenapah Ave	Vulcan Resources, LLC	Company/Operator
	Cement Type: Portland	Cement Used:	Casing Length:	Casing Size:	Bit Size:	our ace vecord	emetaca Do	15-031-24334	Well API#	5	Well No.
	Portland	15sx	40'	8 5/8	11 1/4	COLO		334			Leas
			,	PDC	PDC	Туре		으	Type/Well	Hatch	Lease Name
Enration Popul				6 3/4	11 1/4	Size	Bit R			4,	
موصيم						From	Bit Record	Coffey	County	4135' fsl, 1290' fel	Well Location
						То				<u>fel</u>	on
						Core#		SS	State	WS	1/4
								1600	Total Depth	WS	1/4
	-					Size	င်င	0	epth	NE NE	1/4
						From	Coring Record	8/21/2018	Date Started Date Completed	2	Sec.
					44	То		8/2	Date C	22	Twp.
						% Rec.		8/24/2018	ompleted	13	Rge,

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200	J	Eormation	T D	7 -	Econotica Formation	3	7	
0	24	Overburden	961	1002	1002 shale			
24	68	lime	1002	1133 lime	lime			
68	109	shale	1133	1306	1306 shale	~		
109	117	lime	1306	1317 lime	lime			
117	142	shale	1317	1360	1360 shale			
142	147	lime	1360	1366 lime	lime			
147	156	shale	1366	1382 shale	shale			
156	167	lime	1382	1386 lime	lime	ì		
167	178	shale	1386	1391 shale	shale			
178	182	lime	1391	1421 lime	lime			
182	198	shale	1421	1425 shale	shale			
198	207	lime	1425	1432	1432 oil sand			
207	232	shale	1432	1486 shale	shale			
232	236	lime	1486	1503	1503 oil sand good bleed			
236	325	shale	1503	1519	1519 oil sand (best bleed)			
325	335	lime	1519	1600 shale	shale			
335	349	shale						
349	406	lime				Well Notes:	?:	
406	604	shale				ran 1580' 4	ran 1580' 4 1/2" casing	
604	611	lime						
611	637	shale						
637	644	lime						
644	700	sandy shale						
700	961	lime						