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 # 33168
Name: Woolsey Operating Company, LLC
Address 1: 125 N MARKET STE 1000
Address 2:
City: WICHITA State: KS Zip: 67202 + 1729
Contact Person: DEAN PATTISSON
Phone: (316) 267-4379
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: BLAKE MILLER
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☐ Oil ☐ WSW ☐ SWD
☐ Gas ☑ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

3/5/2021	3/9/2021	3/9/2021
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-095-22337-00-00
Spot Description:
E2 - SW - NW - SW Sec. 29 Twp. 28 S. R. 9 ☐ East ☑ West
1650 Feet from ☐ North / ☑ South Line of Section
465 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
GPS Location: Lat: *(e.g. xx.xxxxx)*, Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Kingman
Lease Name: VIERTHALER Well #: 1
Field Name:
Producing Formation: NA
Elevation: Ground: 1714 Kelly Bushing: 1722
Total Vertical Depth: 3707 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 258 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 36900 ppm Fluid volume: 800 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: MESSENGER PETROLEUM
Lease Name: NICHOLAS 1 SWD License #: 4706
Quarter NE Sec. 20 Twp. 31 S. R. 8 ☐ East ☑ West
County: KINGMAN Permit #: D 27434

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:** Karen Ritter **Date:** 05/03/2021

Page Two

Operator Name: Woolsey Operating Company, LLC Lease Name: VIERTHALER Well #: 1

Sec. 29 Twp. 28 S. R. 9 ☐ East ☑ West County: Kingman

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Geologist Report / Mud Logs ☑ Yes ☐ No

List All E. Logs Run:

Compensated Density/Neutron PE
Dual Induction

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
CHASE	1652	70
INDIAN CAVE	2447	-725
DOUGLAS	3407	-1685
LANSING A	3585	-1863

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	258	60/40 POZ	200	SEE TICKET

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection:			Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity	

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*		

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
TUBING RECORD:	Size:	Set At:	Packer At:		

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Woolsey Operating Company, LLC
Well Name	VIERTHALER 1
Doc ID	1570623

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	258	60/40 POZ	200	SEE TICKET

CEMENT TREATMENT REPORT

Customer:	Woolsey Operating	Well:	Viethaler 1	Ticket:	wp1195
City, State:	Zenda Kansas	County:	Kingman Kansas	Date:	3/5/2021
Field Rep:	Alan Dick	S-T-R:	29-28s-09w	Service:	Surface

Downhole Information	
Hole Size:	12 1/4 in
Hole Depth:	258 ft
Casing Size:	8 5/8 in
Casing Depth:	258 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	15.0 bbls

Calculated Slurry - Lead	
Blend:	60/40 2 &3
Weight:	14.8 ppg
Water / Sx:	5.2 gal / sx
Yield:	1.21 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	130%
Total Slurry:	43.0 bbls
Total Sacks:	200 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
11:45 PM			-	-	on location job and safety
12:00 AM				-	spot trucks and rig up
1:15 AM				-	start casing
				-	casing on bottom
2:35 AM				-	rig up and circulate
2:45 AM	4.0	300.0	43.0	43.0	rig up to casing and start cement
				43.0	cement in
3:00 AM	2.0	100.0			start displacement
3:15 AM				15.0	displacement in and shut in well
				-	circulate 5 bbls to the pit

	CREW	UNIT
Cementer:	M Brungardt	916
Pump Operator:	R Osborn	179/522
Bulk #1:	G Mclemore	527/533
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3.0 bpm	200 psi	43 bbls

ftv: 15-2021/01/25
mplv: 105-2021/01/27

CEMENT TREATMENT REPORT

Customer:	WOOLSEY OPERATING LLC	Well:	VIERTHALER 1	Ticket:	WP1203
City, State:	ZENDA KS	County:	KINGMAN KS	Date:	3/9/2021
Field Rep:		S-T-R:	29-28S-09W	Service:	PLUG TO ABAN

Downhole Information	
Hole Size:	in
Hole Depth:	ft
Casing Size:	in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	H-PLUG
Weight:	13.3 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.43 ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0.0 bbls
Excess:	
Total Slurry:	45.0 bbls
Total Sacks:	175 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft^3 / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	#DIV/0! sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
7:30 AM			-	-	ON LOCATION, SAFTEY MEETING
8:45 PM	4.5	150.0	15.0	15.0	1ST PLUG AT 1500, PUMP 15 BBL WATER
8:50 PM	3.0	100.0	9.0	24.0	MIX 35 SKS H-PLUG
8:55 PM	3.0	100.0	5.0	29.0	PUMP 5 BBL WATER
9:00 PM	5.0	100.0	10.0	39.0	PUMP 10 BBL MUD
				39.0	2ND PLUG AT 900'
9:30 PM	4.0	125.0	10.0	49.0	PUMP 10 BBL WATER
9:33 PM	3.0	100.0	9.0	58.0	MIX 35 SKS H-PLUG
9:37 PM	3.0	50.0	7.0	65.0	PUMP 7 BBL WATER
				65.0	3RD PLUG AT 300'
10:00 PM	4.0	100.0	5.0	70.0	PUMP 5 BBL WATER
10:04 PM	4.0	100.0	9.0	79.0	MIX 35 SKS H-PLUG
10:07 PM	2.0	50.0	1.0	80.0	PUMP1 BBL WATER
				80.0	4TH PLUG AT 60'
11:30 PM	3.0	50.0	5.0	85.0	MIX 20 SKS H-PLUG
				85.0	CEMENT TO SURFACE
11:35 PM	3.0	50.0	7.0	92.0	MIX 30 SKS H-PLUG FOR RAT HOLE
11:40 PM	3.0	30.0	5.0	97.0	MIX 20 SKS H-PLUG FOR MOUSE HOLEzASX
				-	JOB COMPLETE, THANK YOU!
				-	MIKE MATTAL
				-	RILEY & DARLY
				-	
				-	
				-	
				-	
				-	

	CREW	UNIT
Cementer:	MATTAL	912
Pump Operator:	OSBORN	179/522
Bulk #1:	MARTINEZ	527/533
Bulk #2:		

SUMMARY		
Average Rate	Average Pressure	Total Fluid
3.4 bpm	85 psi	97 bbls

Well

Weatherford Laboratories (Canada) Ltd.
2519 - 5 Avenue N.E.
Calgary, Alberta, T2A 6K4
Phone: 403-248-5400 Fax: 403-248-5414

WELL NAME

Company:	1373 ZS 06-06-046-06W5	Date:	2009/08/13
Field:		File Name:	1373ZS06-06-046-06W5.Ltd
Province/State:	Alberta		
Surface Location:	06-06-046-06W5	Drilling Contractor:	
Latitude:			
Longitude:			
Elevation:	KB: 0 m	Total Depth:	1350
Logged Interval:	1 m - 1350 m	Drilling Fluid:	Air
Logging Company:	Weatherford Laboratories (Canada) Ltd.		
Logging Equipment:	Gas Chromatograph, Mass Spectrometer, Infrared Analyzer, Flame Ionization Detector		

OPERATOR

Contact: Michael Kaminski
Company: Bonterra Energy Corp.
Address: 1400, 350 - 7th Avenue S.W.
Calgary, Alberta, T2P 3N9

COMMENTS

Drilling Fluid: Air, Gas, Foam, Mud
Total Gas Chromatograph: C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40,