

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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 #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

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: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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STIMULATION TREATMENT REPORT

Customer:	Barnard Oil Operations	Well:	Austin Horst #1	Ticket:	ICT2281
City, State:	Madison, KS	County:	Greenwood KS	Date:	8.23.2019
Field Rep:	Dick	S-T-R:	12-22S-10E	Service:	LG Frac

Downhole Information	
Formation:	Bartlesville
Casing:	4.5 in
Tubing:	in
Treatment Via:	Casing
Perforations	
Top Perf:	2074 ft
Bottom Perf:	2112 ft
Shots Per Foot:	1 spf
Total Shots:	38 shots

Capacity			
Casing / Tubing:	0.01595 bbls/ft		
Displacement:	33.1 bbls		
Pressure Test			
Iron Test:	3,000 psi		
Max Pressure:	3,000 psi		
Proppant (#)			
20/40		12/20	8,700
16/30	300	8/12	3,000
Diversions			
Salt	-	Balls	14

Treatment Fluid		
Product	GPT	Gal
Water		15,000
Gel	6.0	90.0
Xlink		
KCl	1.0	15.0
Biocide	0.3	4
FLC		50#
Breaker	0.3	5.0
Acid - 15% NEFe		250.0

Time	Rate	PSI	PPG	Stage Pounds	Stage BBLs	Total BBLs	Remarks
	-	-	-		-	-	On location, job & safety meeting, rig up to casing
4.0	1,050				39.0	39.0	Spot 250 gal acid on perfs, load casing, stage in acid to breakdown well
20.0	1,000				70.0	109.0	Start pad with FLC500 in pad water
20.0	1,000	0.50	300.0	14.3	123.3	123.3	Start 16/30 sand
20.0	950	1.00	1,000.0	23.8	147.1	147.1	Start 12/20 sand
20.0	950	1.50	1,000.0	15.9	163.0	163.0	Increase sand concentration to 1.5 ppg
20.0	950	2.00	2,200.0	26.2	189.2	189.2	Increase sand concentration to 2.0 ppg
20.0	1,000			-	189.2	189.2	Start 8/12 sand
20.0	1,000	2.00	1,500.0	17.9	207.0	207.0	Drop 5 balls with 8/12 sand
20.0	1,100	1.00	1,000.0	23.8	230.8	230.8	Back to 12/20 sand; drop 5 balls
20.0	1,400	1.50	1,500.0	23.8	254.6	254.6	Increase concentration to 1.5 ppg; drop 4 balls
20.0	1,400	2.00	2,000.0	23.8	278.4	278.4	Increase concentration to 2.0 ppg, finish 12/20 sand
20.0	1,200	2.00	1,500.0	17.9	296.3	296.3	Pump remaining 8/12 sand
20.0	1,200				35.0	331.3	Flush casing
20.0					-	331.3	Release pressure off casing to release balls
20.0	1,050				20.0	351.3	Overflush
	775				-	351.3	ISIP - 775#
	770				-	351.3	5 min shut in - 770#
					-		
					-		
					-		
					-		
					-		
					-		

	CREW	UNIT	SUMMARY		
Treater / Foreman:	Josh	807	Average Rate (bpm)	Max Rate (bpm)	Total Proppant (#)
Pump Operator:	Landon	815	17.8	20.0	12000
Sand:	Gary	809	Average PSI	Max Pressure (psi)	Total Load (bbls)
Water:	Ryan	134/131	988	1400	351
Acid:	Keith	195/125			

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY: Barnard Oil Operations
LEASE: Austin-Horst #1 (15-073-24244)
FIELD: Demalorio-Sowder
LOCATION: 3960FSL/330FWL (W2W2/NW)
SEC: 12 TWP: 22S RGE: 10E
COUNTY: Greenwood STATE: Kansas
CONTRACTOR: C & G Drilling
SPUD: 8/6/19 COMP: 8/9/19
R/D: 2172 L/TD: _____
MUD UP: _____ TYPE MUD: Chemical
Cased Hole Gamma Ray (Neutron) _____

ELEVATIONS
KB 1217 est.
DF _____
CI 1210 est.
Measurements Are 4.11
Fom KB
CASINO
SUN ACI 8.08 (ZON)
PRODUCTION 4 1/2" (2172)
ELECTRICAL SURVEYS
Cased Hole Gamma Ray (Neutron) _____

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION
KC	1411	-194	A	C
BKC	1586	-369	A	C
Bartlesville Sand (Lower)	2084	-867	A	C
Base of Bartlesville Sand	2134	-917	A	C

REFERENCE WELLS FOR STRUCTURE

WELL NAME	FORMATION	DEPTH (ft)	LOG TOP	DATE
A				
B				
C				

**Austin-Horst #1
Geologist Report**

Barnard Oil Operations
Geologist: Jarred Leis

Gentlemen,

The following information is based on my microscopic examination of the drilling cuttings in this well from 1400 ft to Total Depth. All measurements for this well were taken from an estimated Kelly Bushing elevation of 1217ft.

The Zone of interest in the Austin-Horst #1 was the Lower Bartlesville Sand. The Bartlesville Sand looked comparable in thickness to the other old wells in the field nearby, and the samples had good oil-bearing characteristics. I did not have access to a Geo Report to a nearby well to compare sample descriptions to but this well appeared to run fairly flat structurally to the nearby comparable wells.

Lower Bartlesville Sand (2084-2134 samples)

2090-2100: Sandstone: brown to grey, medium-grained, sub-rounded, good porosity, strong odor, scattered oil spots, good fluorescence, scattered gas bubbles.

2100-2018: Sandstone: grey to brown, fine-grained, sub-angular, good porosity, good to strong odor, scattered oil spots, 60% fluorescence, scattered gas bubbles.

2118-2126: Sandstone: grey to brown, fine-grained, sub-angular, fair porosity, good to strong odor, scattered oil spots, 50% fluorescence, scattered gas bubbles. / Scattered grey Shale

2126-2134: Sandstone: grey to brown, medium-grained, sub-angular, good odor, fair fluorescence, no scattered oil spots.

Summary

Due to significant oil shows in Lower Bartlesville the decision was made to run 4 1/2" casing to further evaluate this zone through perforations.

Respectfully Submitted,

Jarred Leis
Jarred Leis
Petroleum Geologist

