KOLAR Document ID: 1378795

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 # 32211
Name: O'Brien Energy Resources Corp.
Address 1: 18 CONGRESS ST, STE 207
Address 2:
City: PORTSMOUTH State: NH Zip: 03801 + 4091
Contact Person: Joseph Forma
Phone: (603) 427-2099
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Peter Debenham
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 #:

9/23/2017 — Spud Date or Recompletion Date
10/01/2017 — Date Reached TD
11/01/2017 — Completion Date or Recompletion Date

API No.: 15-119-21412-00-00
Spot Description:
SW - SW - NE - SW Sec. 28 Twp. 33 S. R. 29 ☐ East ☑ West
1450 Feet from ☐ North / ☑ South Line of Section
1450 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: Meade
Lease Name: CLAYTON Well #: 6-28
Field Name:
Producing Formation: Chester
Elevation: Ground: 2594 Kelly Bushing: 2607
Total Vertical Depth: 6452 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1557 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: 11200 ppm Fluid volume: 1000 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:
Operator Name: Max Papay LLC
Lease Name: Feldman 1-18 License #: 34021
Quarter SW Sec. 18 Twp. 34 S. R. 28 ☐ East ☑ West
County: Meade Permit #: D23094.0

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: 01/09/2018
☑ **Confidential Release Date:** 01/09/2020
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 01/16/2018

Operator Name: O'Brien Energy Resources Corp. Lease Name: CLAYTON Well #: 6-28

Sec. 28 Twp. 33 S. R. 29 ☐ East ☑ West County: Meade

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:

NEUTRON
INDUCTION
MICRO

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

Name: Attached Top: Attached Datum: Attached

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	1557	A-con blend	535	3%CaCl, 1/4# floseal
Production	7.875	4.5	10.5	6450	AA2	280	10%CaCl, 1/4# floseal

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:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

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)*
4	5986	5996			Acidize w/ 1500 gal 7.5% NE/FE HCl
					Frac w/ 21,046# 30/50 sand, 149 bbls foamed wtr, 866,000 SCF N2
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	O'Brien Energy Resources Corp.
Well Name	CLAYTON 6-28
Doc ID	1378795

Tops

Name	Top	Datum
Heebner	4422	-1815
Toronto	4448	-1841
Lansing	4575	-1968
Marmaton	4255	-1648
Cherokee	5446	-2839
Atoka	5640	-3033
Morrow	5773	-3166
Mississippi Chester	5861	-3254
Ste. Genevieve	6174	-3567
St. Louis	6290	-3683

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	CLAYTON 6-28
Doc ID	1378795

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	1557	A-con blend	535	3%CaCl, 1/4# floseal
Production	7.875	4.5	10.5	6450	AA2	280	10%CaCl, 1/4# floseal

BASIC ENERGY SERVICES

PRESSURE PUMPING

Job Log

Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Customer:	Obrien Energy	Cement Pump No.:	38117, 19919 Hrs.	Operator TRK No.:	78938		
Address:	18 Congress St. Suite 207	Ticket #:		Bulk TRK No.:	33021, 14284 Willie	30463, 37547 Santiago	
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z42 Cement Surface Casing				
Service District:	1718 - Liberal, Ks.	Well Type:	OIL				
Well Name and No.:	Clayton 6-28	Well Location:	28,33,29	County:	Meade	State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
A-Con' Blend	385	3% Calcium Chloride, 1/4# Polyflake, .2%WCA1	33021, 14284 Willie	Front	Back
Premium Plus Cement	150	2% Calcium Chloride, 1/4# Polyflake	30463, 37547 Santiago	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	11.4	2.95	18.1	1135.75	TT Man Hours:	52
Tail:	14.8	1.34	6.33	201	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
13:30							ON LOCATION & SAFETY MEETING
18:30							RIG UP
7:25 PM							RIG TO CIRCULATE
7:50 PM							RIG TO P.T.
19:55							PRESSURE TEST TO 2200PSI
19:58	6	202.2 slurry				170	PUMP LEAD @ 11.4#
8:30 PM	6.1	35.7 slurry				200	PUMP TAIL @ 14.8#
20:38							SHUTDOWN / DROP PLUG
20:40	5.3	10				40	DISPLACE
	6	20				110	
	6	30				110	37BBLS IN CEMENT RETURNS
	6	40				150	
	6	50				210	
	6	60				280	
	6	70				350	
	5.9	80				410	
21:01	6	86				450	SLOW RATE TO 2.0BPM @ 380PSI
	2	90				410	
21:09	2	96.3				440	LAND PLUG / PRESSURE UP TO 1040PSI
21:12							RELEASE BACK — FLOAT HELD
							JOB COMPLETE

Size Hole	12 1/4"	Depth			TYPE	Plug Container	
Size & Wt. Csg.	8 5/8" 24#	Depth	1557.74'		Packer	Depth	
Shoe Jt.	42.25'	Depth			Retainer	Depth	
Landing Press.	313.3psi	Type			Perfs	CIBP	

Customer Signature: X 9-25-17	Basic Representative:	Daniel Beck
	Basic Signature:	Daniel Beck
	Date of Service:	7/25/2017

BASIC ENERGY SERVICES
PRESSURE PUMPING

Job Log

Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

Customer:	Obrien Energy	Cement Pump No.:	38119, 19570 3Hrs.	Operator TRK No.:	78938		
Address:	18 Congress St. Suite 207	Ticket #:	1718 14502 L	Bulk TRK No.:	30463, 37547 Angel	30463, 37547	
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z42 Cement Production Casing				
Service District:	1718 - Liberal, Ks.	Well Type:	OIL				
Well Name and No.:	Clayton 6-29	Well Location:		County:	Meade	State:	Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
AA2	280	5% W-60, 10% Salt, .6% C-15, 1/4# Defoamer, 5# Gilsonite	30463, 37547 Angel	Front	Back
AA2 (Rat & Mouse)	50	5% W-60, 10% Salt, .6% C-15, 1/4# Defoamer, 5# Gilsonite	30463, 37547	Front	Back
				Front	Back

	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead/Tail:						
Tail:	14.8	1.51	6.64	422.8	TT Man Hours:	37.5
Rat & Mouse:	14.8	1.51	6.64	75.5	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps T	Pumps C	Pressure(PSI) Tubing	Pressure(PSI) Casing	Description of Operation and Materials
12:00							ON LOCATION
12:05							SAFETY MEETING
4:55 PM							RIG TO CIRC.
6:02 PM							RIG TO P.T.
6:06 PM							PRESSURE TEST TO 3200PSI
18:08	5.4	11.9				130	PUMP 500 GALLONS MUD FLUSH
18:15		13.4 slurry					PLUG RAT & MOUSE W/ 50SX
6:50 PM	7	75.3 slurry				350	PUMP TAIL @ 14.8# 280SX
18:43							SHUTDOWN / DROP PLUG / W.P.
18:26	7.1	10				180	DISPLACE W/ 3%KCL FLUSH
	7.2	20				180	
	7.2	30				180	
	8.8	40				240	
	9	50				250	
	7.8	60				400	
	7.1	70				490	
	6	80				640	
	4.6	90				850	
19:05	4.4	91				860	SLOW RATE TO 3.4BPM @ 820PSI
	2.8	100				1030	
19:08	2.7	101.8				1060	LAND PLUG / PRESSURE UP TO 1610PSI
19:10							RELEASE BACK — FLOAT HELD
							JOB COMPLETE

Size Hole	7 7/8"	Depth	6450'			TYPE	Plug Container	
Size & Wt. Csg.	4 1/2" 10.5#	Depth	6450.36'	New / Used		Packer	Depth	
Landing Press.	819.4psi	Depth				Retainer	Depth	
Top Plugs		Type				Perfs	CIBP	

Customer Signature: X	10-4-17	Basic Representative: Daniel Beck
		Basic Signature: Daniel Beck
		Date of Service: 10/4/2017

O'Brien Energy Resources, Inc.
Clayton No. 6
Section 28, T33S, R29W
Meade County, Kansas
September, 2017

Well Summary

The Clayton No. 6 was drilled to a total depth of 6450' in the Mississippian St. Louis. It offset the Clayton No. 2-28 by approximately 1200' to the Northwest. Formation tops ran 11' to 23' high from the Heebner to the Marmaton relative to this offset. The Cherokee, Atoka and Morrow ran 6', 3' and 1' high respectively. The primary objective Chester Rickers Ranch Sandstone did occur and came in 1' high. This 4' Sandstone(5998'-5992') consists of a Sandstone in 6% of the sample: Medium to dark brown with matrix oil stain, friable, fine lower to fine upper, well sorted subround grains, siliceous cement, slightly calcareous, good to excellent intergranular porosity, dull goldbrown hydrocarbon fluorescence(all sandstone), excellent fast streaming cut, medium brown matrix oil stain, traces live oil, oil odor. A 220 Unit gas kick was recorded, and with calcareous Siltstone with hydrocarbon fluorescence and cut.

The Upper Morrow contained sketchy shows from 5806' to 5828', Sandstone(10% spl): Medium to dark speckled green, salt and pepper, mottled gray to brown, hard to friable in part, very fine well sorted subround grains, siliceous cement, calcareous, very glauconitic, argillaceous to marly, poor visible porosity, mottled pale blueyellow hydrocarbon fluorescence, fair streaming cut, trace light mottled oil stain, weak show. 60 to 80 Unit gas increase was documented.

4 ½" production casing was run on the Clayton No. 6 on 10/4/17 to production test the Rickers Ranch Sandstone.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator:	O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH Geologist: Paul Wiemann – Denver, CO
Prospect Geologist:	Ed Schuett and Dave Ward
Well:	Clayton No. 6, Singley Field
API No.:	15-119-21412
Location:	1450'FSL & 1450'FWL, SW SW NE SW, Section 28, 33S, R29W, Meade Co., KS – South of Meade.
Elevation:	Ground Level 2594', Kelly Bushing 2607'
Contractor:	Duke Drilling Rig No. 7, Type: Double jacknife, triple stand, Toolpusher Galen Roach, Drillers: Todd Elsen, Scott Edwards, Steven Green
Company Man:	Keith Clumsky, Liberal, KS
Spud Date:	9/23/17
Total Depth:	10/1/2017, Driller 6450', Logger 6452', St. Louis Fm.
Casing Program:	37 joints of 8 5/8", J55, 24Lbs/ft, set at 1572' with 385 sacks A-conblend(3%cc, ¼ lb Poly Flake), tail with 150 sacks Premium Plus(2%cc & ¼ lb PF) – did circulate. 4 ½" production casing to TD.
Mud Program:	Sevice Mud engineer Justin Whiting
Wellsite Consultant:	Peter Debenham with mudlogging trailer, Call depth 3000', Box 350, Drake, CO 80515, 720/220-4860.
Samples:	30' to 4700', 20' to TD. Dry sample cut sent to KGS Sample Log Library – Wichita, kS.
Electric Logs:	Weatherford, engineer Nicholas Rupert, 1)Array Induction, 2) Density/Neurton, 3) Microlog – High Res. repeat section.
Status:	4 1/2 " production casing to TD on 10/4/2017.

WELL CHRONOLOGY

DATE	10 PM DEPTH	FOOTAGE	RIG ACTIVITY
9/23	45’	45’	Move to location and rig up rotary tools. Cut 80’ drilling line. Mix spud mud and rig up. Spud in 12 ¼” surface hole(10 pm).
9/24	1180’	1135’	Surveys(1/2 – 1 deg.). Repair rotary chain and drill to 1180’.
9/25	1575’	395’	To 1445’ and pump flag and check valve in pump and trip for Bit No. 2. To 1575’ and circulate and trip out and lay down 8” drill collars. Rig up and run 37 joints of 8 5/8”, J55, 24Lbs/ft, set at 1572’ with 385 sacks A-conblend(3%cc, ¼ lb Poly Flake), tail with 150 sacks Premium Plus(2%cc & ¼ lb PF) – did circulate. Wait on cement.
9/26	1985’	410’	Wait on cement. Trip in and pressure test BOP. Drill plug and cement and 7 7/8” hole to 1985’.
9/27	3145’	1160’	Surveys(1/2 – 1 deg.) and service rig. Clean pump screens.
9/28	4180’	1035’	Surveys(3/4 deg.). Drilling ahead.
9/29	5115’	935’	Survey(1 deg.) Circulate for samples at 5013’ and wiper trip to casing and circulate. To 5115’.
9/30	6225’	1110’	Work on mud pump, rod oilers.
10/1	6450’TD	225’	To 6450’TD and circulate. Wiper trip(tight) and circulate on bottom. Trip for logs, stuck pipe at 5363’. Spot 40 bbls of oil at 11:45 pm and wait on oil. Wait on spotted oil and work pipe. Still stuck. Rig up jarring or slam hammer joint and jar pipe.
10/3	TD		Jar loose and trip out tight. Mix and condition mud and circulate. Trip out and run ELogs. Logging tool stuck logging up at 3735’. Wait on fishing tools and fish out tool.
10/4/17			Fish out tool and trip in and circulate. Trip out laying down and run and cement 4 ½” production casing to TD. Rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	Varel	RR RT	12 ¼”	1545’	1545’	28
2	Varel	J-2	12 ¼”	1575’	30’	¾
3	Varel	RR	7 7/8’	1904’	329’	4 ¾
4	HTC	DP 506	7 7/8”	6450’	4546’	74 1/4
				Total Rotating Hours:		107 3/4
				Average:		59.8 ft/hr

DEVIATION RECORD - degree

300’ ½, 600’ ½, 900’ 1, 1500’ 1, 2000’ 1, 2500’ 1, 3000’ ½, 3500’ ¾, 4000’ ¾, 4500’ 1, 5000’ ¾,

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
9/24	618’	10.1	43	8	10	7.5	nc	400	5
9/25	1473’	9.9	34	7	9	7.5	nc	750	6
9/26	1575’	Water							
9/27	2448’	9.6	31	2	3	7.0	nc	60.8K	0
9/28	3622’	9.0	53	14	18	11.6	9.5	4.8K	3
9/29	4730’	9.3	48	14	15	9.2	9.5	2.4K	2
9/30	5618’	9.6	55	17	17	7.6	9.5	3.6K	3
10/1	6450’	9.4	51	16	17	8.0	10.5	2.2K	4
10/2	6450’	8.9	68	16	22	9.5	10.0	7.7K	2
10/2	6450’	8.9	64	16	21	9.0	8.8	7.2K	4

ELECTRIC LOG FORMATION TOPS- KB Elev. 2607’

FORMATION	DEPTH	DATUM	*Clayton No. 2-28 DATUM	POSITION

Surface casing	1571’			
Heebner	4422’	-1815’	-1838’	+23’
Toronto	4448’	-1841’	-1863’	+22’
Lansing	4575’	-1968’	-1985’	+17’
Marmaton	4255’	-1648’	-2656’	+11’
Cherokee	5446’	-2839’	-2842’	+6’
Atoka	5640’	-3033’	-3033’	+3’
Morrow	5773’	-3166’	-3164’	+1’
Mississippi Chester	5861’	-3254’	-3271’	-7’
Richers Ranch SS	5998’	-3391’	-3392’	+1’
Ste. Genevieve	6174’	-3567’	-3575’	+8’
St. Louis	6290’	-3683’	-3668’	-16’
TD	6452			

*O’Brien Energy, Clayton No. 2-28, 335’FNL & 2281’FWL, Section 28, 33S, 29W, K.B. Elevation 2603’, app. 1200’ to the SE.