

O'Brien Energy Resources, Corp.

Clayton No. 5-33

Section 33, T33S, R29W

Meade County, Kansas

April, 2017

Well Summary

The Clayton No. 5-33 was drilled to a total depth of 6430' in a record setting 60 rotating hours for an average of 107 ft./hr. It offset the Clayton No. 1-33 by approximately 1200' to the Southeast. Formation tops ran relatively even to this offset from the Heebner to the Chester. The Ste. Genevieve and St. Louis came in 11' and 9' high. The Morrow "C" pay sand came in 7' high.

Minor hydrocarbon shows and gas increases occurred during the drilling of this test. The Morrow "C" Sandstone consists of a Sandstone in 15% of the samples: White, clear, speckled green and salt and pepper, friable to hard, very fine upper to fine lower well sorted subround grains, siliceous cement, glauconitic, clean to argillaceous in part, good to tight intergranular porosity, trace vuggy porosity, no fluorescence, no stain or cut. No gas increase occurred on the hotwire. This interval was drilled stem tested (5788' -5840') and recovered gas to surface in 28 minutes of the initial flow period and gauged at 89.47 Mcf/d.

A Chester sand was documented from 5986' to 5988' and consists of relatively tight Sandstone in less than .5% of the samples and with brown matrix oil staining and live oil, goldbrown hydrocarbon fluorescence and excellent streaming cut.

Additional live oil shows occurred in the Basal Chester (attached mudlog),

4 1/2" production casing was run on the Clayton 5-33 for Morrow gas sand production.

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. 5-33, Mohler Field

API No.: 15-119-21405

Location: 1855' FNL & 750' FEL, Section 33, T33S, R29W, Meade County, Kansas
– South of Meade.

Elevation: Ground Level 2539', Kelly Bushing 2551'

Contractor: Duke Drilling Rig No. 1, Type: Double jackknife, double stand, Toolpusher
Mike Godfrey, Drillers: Brothers Carlos and Saul Garcia and Henry Daiz

Company Man: Keith Clumsky – Liberal, Kansas

Spud Date: 4/13/2017

Total Depth: 4/17/2017, Driller 6430', Logger 6418', St. Louis Fm.

Casing Program: 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1543' with 385 sacks A-
Con(3%cc, ¼ floreal), 150 sacks PKem Plus(2%cc & ¼ lb floreal), did
circulate. Services by Basic. 4 ½", J 55, 10 ½ Lbs/ft production casing set
to TD.

Mud Program: Winter Mud, engineer Drew Smith. Displaced 2600'.

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.

Electric Logs: Weatherford, engineer Lynn Scott, 1)Array Induction, 2)Photo
Density/Neurton, 3) Microlog – High Res. repeat section.

Drill stem testing: DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Trilobite Testing
engineer Leal Cason

Status: 4 ½" production casing run to TD on 4/19/17.

WELL CHRONOLOGY

10 PM	<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
	4/12			Move to location and rig up rotary tools. Pump water and mix spud mud.
	4/13	1543'	1543'	Spud in 12 ¼" surface hole to 1543' and circulate. Drop survey(3/4 deg.) and trip for surface casing and run and cement 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1543' with 385 sacks A-Con(3%cc, ¼ floeal), 150 sacks PKem Plus(2%cc & ¼ lb floeal), did circulate. Services by Basic. Plug down 10 PM.
	4/14	2980'	1437'	Wait on cement. Nipple up and pressure test BOP to 300 PSI. Drill plug and cement and 7 7/8" hole to 2980'. Service rig and clean suction. Displace mud system at 2600'.
	4/15	4746'	1766'	Service and clean suction.
	4/16	5977'	1231'	To 5028' and circulate and wiper trip and circulate. To 5977'.
	4/17	6430'TD	453'	To 6430'TD and circulate. Wiper trip 37 stands and circulate. Drop survey(1 ¼ deg.) and trip out for logs. Wait on loggers and run eLogs.
	4/18	TD		Run eLogs. Wait on tester and trip in and run DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Morrow "C" Sandstone. Pull tool and wait on casing. Run and cement 4 ½" production casing.
	4/19	TD		Run and cement production casing to TD. Rig down.

BIT RECORD

<u>NO.</u>	<u>MAKE</u>	<u>TYPE</u>	<u>SIZE</u>	<u>OUT</u>	<u>FOOTAGE</u>	
	<u>HOURS</u>					
1	Varel	UTD 519	12 ¼"	1543'	1543'	10 ½
2	Varel	VDT 516	7 7/8"	6430'	4887'	49 ½
				Total Rotating Hours:		60
				Average:		107.2 ft/hr

DEVIATION RECORD - degree

1543' ¾, TD 1 ¼

MUD PROPERTIES

<u>DATE</u> <u>LBS/BBL</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>WL</u>	<u>pH</u>	<u>CL</u>	<u>LCM-</u>
4/12	0'	8.3	27						
4/14	1600'	8.6	28	1	1	nc	11.0	38K	--
4/15	3846'	8.7	40	9	20	32.0	9.0	9.5K	4
4/16	5028'	9.2	40	16	6	11.6	10.0	6.5K	2
4/17	6430'	9.0	56	24	9	7.0	10.5	4K	8

ELECTRIC LOG FORMATION TOPS- KB Elev. 2551'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Clayton No. 1-14</u> <u>DATUM</u>	<u>POSITION</u>
Surface casing	1535'			
Heebner	4401'	-1850'	-1851'	+1'
Toronto	4434'	-1883'	-1883'	0'
Lansing	4566'	-2015'	-2011'	-4'
Marmaton	5206'	-2655'	-2643'	-12'
Cherokee	5408'	-2857'	-2860'	+3'
Atoka	5598'	-3047'	-3053'	+6'
Morrow	5730'	-3179'	-3182'	+3'
Morrow "C" SS	5766'	-3215'	-3222'	+7'
Mississippi Chester	5824'	-3273'	-3271'	-2'
Ste. Genevieve	6134'	-3583'	-3594'	+11'
St. Louis	6272'	-3721'	-3730'	+9'
TD	6418'	-3867'		

*O'Brien Energy, Clayton No. 1-33, 990'FNL & 1650'FEL, Section 33, 33S, 29W, K.B. Elevation 2575', app. 1200' to the Northwest.

DRILL STEM DATA

DST NO. 1: (5788'-5840'), Log depths(5772'-5826'), Morrow "C" Sandstone

Type: Straddle Test Times: 30-60-60-120

<u>PERIOD</u>	<u>TIME</u>	<u>PSI</u>
IH		3043
IF	30	45 - 57
ISI	60	395
FF	60	61 - 95
FSI	120	390
FH		3106

BHT 128 deg. F.

BLOWS: IF – Strong, bottom of bucket in 2 minutes, gas to surface in 28 minutes. ISI – 1/2" blowback. FF – Strong, bottom of bucket immediate – gauged at 89.47 Mcf/d at end of period. FSI – 1/4" blowback.

RECOVERY: Gas to surface, 125' of slightly gas cut mud(2% gas, 98% mud).