

O'Brien Energy Resources, Inc.

Clayton No. 3-28

Section 28, T33S, R29W

Meade County, Kansas

May, 2014

Well Summary

The Clayton No. 3-28 was drilled to total depth of 6415' in the St. Louis Formation in 8 days from spud to logs and setting 4 ½" production casing. Drilling time was 131 rotating hours.

The closest offset is the Clayton No. 2-28, approximately 1200' to the west. The Clayton No. 3-28 ran 13' to 23' low relative to this offset from the Heebner to the Ste. Genevieve. Thinning occurred and structure gained as the St. Louis came in 2' low.

Several prominent hydrocarbon shows were documented while drilling. The Lower Chester(6094'-6112') consists of a Limestone: Medium to dark mottled brown with oil staining, microcrystalline, sucrosic, brittle, clean fossiliferous and oolitic with occasional good oomoldic and fine vuggy porosity, intercrystalline porosity, dark brown matrix oil stain, dull mottled gold brown hydrocarbon fluorescence, good fast streaming cut, live oil and gas bubbles. A 460 Unit gas kick was documented.

An excellent live oil show occurred in the Upper St. Louis(6261'-6166') and consists of a Dolomite: Medium to dark brown, microcrystalline, sucrosic, clean, good intercrystalline porosity, gold brown hydrocarbon fluorescence with excellent streaming cut, excellent even brown matrix oil stain and live oil. 180 Units of gas was noted.

A very interesting show with excellent porosity development occurred from 6272' to 6285' and consists of a Limestone: Light brown, white, buff, occasionally medium brown, oobiomicrite, microcrystalline, microsucrosic to sucrosic in part, brittle, clean, very chalky in part, oolitic and fossiliferous with moldic and interpartical porosity, occasional good intercrystalline porosity, dull speckled gold brown hydrocarbon fluorescence, brown matrix oil stain, good to excellent streaming cut trace light brown live oil, very chalky in part with pale blue fluorescence, stain and fair cut. Some of the very moldic porosity contained no show. A 280 Unit gas increase occurred.

4 ½" production casing was run to TD on 5/16/14 to further evaluate the above mentioned shows.

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. 3-28, Mohler Field

API No.: 15-119-21365

Location: 990'FSL & 1850'FEL, Section 28, 33S, R29W, Meade Co., KS – South of Meade.

Elevation: Ground Level 2566', Kelly Bushing 2577'

Contractor: Duke Drilling Rig No. 6, Type: Double jackknife, triple stand, Toolpusher Alan Cain, Drillers: Richard TaFaya, Saul Garcia, Darryl LaRoche

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 5/8/2014

Total Depth: 5/15/2014, Driller 6415', Logger 6413', St. Louis Fm.

Casing Program: 39 joints of 8 5/8", J55, 24Lbs/ft, set at 1492'. 4 1/2" production casing to TD.

Mud Program: Winter Mud, Engineer Don Ray Winter, displace 2618'.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 3000', Box 350, Drake, CO 80515, 720/220-4860.

Samples: 30' to 4700', 20' to 5200', 10' to TD. Dry sample cut sent to KGS Sample Log Library – Wichita, kS.

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

Status: 4 1/2 " production casing to TD on 5/16/2014.

WELL CHRONOLOGY

10 PM	<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
	5/7			Move to location and rig up rotary tools. Mix spud mud.
	5/8	1390'	1390'	Rig up and mix spud mud. Drill rat hole and mouse hole. Spud in 12 ¼" surface hole(2 am) to 1390'. Survey(1/2 deg.).
	5/9	1492'	102'	To 1492' and circulate and trip out and run and cement 29 joints of 8 5/5" surface casing set at 1492'. Plug down 2pm – did circulate. Service rig and change out yoke on hydromatic and clutch on no. 2 and work on light plant. Safety meeting with Basic and wait on cement. Back off and nipple up BOP and make up bit and trip in and drill plug and cement. Cut off flow nipple.
	5/10	2685'	1193'	Drill plug and cement and 7 7/8" hole to 1709'. Trip for Bit No. 3. Service pump and mud lines. Trip in and drill to 2685'. Survey(1 deg.) and clean suction. Service spinning chain. Displace mud system at 2618'.
	5/11	3810'	1125'	Clean suction.
	5/12	4965'	1155'	Survey(1 deg.) Change out rod packing and service rig. Very high winds.
	5/13	5730'	765'	To 5002' and circulate and wiper trip. Survey(1 ¼ deg.).
	5/14	6410'	680'	Service rig and change out rod packing.
	5/15	6415'TD	5'	To 6415'TD and circulate. Wiper trip 42 stands and circulate and condition hole. Trip out for logs and run Elogs. Trip in and circulate. Trip out laying down and run and cement 4 ½" production casing to TD.
	5/16	TD		Run and cement production casing. 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		GAIPGC	12 ¼"	1492'	1492'	23 1/2
2		HCI-20G	7 7/8"	1709'	217'	4 ½
3		DP506	7 7/8"	6415'	4706'	103
1/4						

Total Rotating Hours: 131
 1/4
 Average: 48.9
 ft/hr

DEVIATION RECORD - degree

524' 3/4, 988' 3/4, 1492' 1, 2023' 1, 3965' 1, 5567' 1 1/4, TD 3/4

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>
5/7	Spud								
5/8	525'	9.5	34	8	4	nc	9.0	900	6
5/9	1492'	run casing							
5/10	1900'	9.1	27	1	1	nc	8.0	60K	--
5/11	3227'	8.9	40	10	15	22	9.0	8.2K	3
5/12	4290'	9.4	54	18	10	10.4	8.5	5.4K	4
5/13	5220'	9.3	49	16	10	10.0	8.5	4.4K	4
5/14	6128'	9.1	57	25	13	6.4	9.0	2.0K	5
5/15	6415'TD	9.4	61	25	20	6.0	8.0	2.5K	10

ELECTRIC LOG FORMATION TOPS- KB Elev. 2577'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Clayton No. 2-28</u>	
			<u>DATUM</u>	<u>POSITION</u>
Surface casing	1488'			
Heebner	4438'	-1861'	-1838'	-23'
Toronto	4466'	-1889'	-1863'	-26'
Lansing	4580'	-2003'	-1985'	-18'
Marmaton	5248'	-2671'	-2656'	-15'
Cherokee	5435'	-2858'	-2842'	-13'
Atoka	5630'	-3053'	-3033'	-17'
Morrow	5761'	-3183'	-3164'	-19'
Mississippi Chester	5846'	-3269'	-3271'	-22'
Ste. Genevieve	6169'	-3592'	-3575'	-17'
St. Louis	6254'	-3677'	-3668'	-2'
TD	6415'	-3838		

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