O'Brien Energy Resources, Inc. Shinogle No. 2-20, Singley Field Section 20, T33S, R29W

Meade County, Kansas May, 2016

Well Summary

The O'Brien Energy Resources, Corporation, Shinogle No. 2-20 was drilled to a total depth of 6400' in the Mississippi St. Louis Formation. The only drilling problem that occurred was stuck drill pipe at 5026' (pipe stuck at 3670') during a wiper trip and necessitated pumping Nitrogen to free up.

The Shinogle No. 2-20 was drilled approximately 1320' to the Southwest of the Shinogle No. 1-20. Formation tops ran relatively high relative to this offset. The Cherokee, Atoka and Morrow ran 4' high. The Morrow "A" SS and "B" SS came in 9' and 13' high. The Basal Chester and St. Louis ran 7' high.

An excellent hydrocarbon show occurred in the Morrow "B" Sandstone(5822'-5832') and consists of a sandstone in 25% of the samples: Light to medium brown, salt and pepper, speckled green, friable, fine upper to fine lower well sorted subround grains, siliceous cement, calcareous, clean, glauconitic, excellent intergranular porosity, vuggy porosity, bright light yellow hydrocarbon fluorescence in most the sand, excellent fast streaming cut, occasional medium brown matrix oil stain and traces of live oil, slight oil odor, excellent show. A 280 Unit gas kick was documented.

A Morrow "A" Sandstone was documented from 5800' to 5810' and consists of a Sandstone: Speckled green, medium to dark mottled gray to brown, dark green, hard to friable, very fine well sorted subround grains, siliceous cement, calcareous, very glauconitic, poor visible to occasional good intergranular porosity, very light mottled pale blue hydrocarbon fluorescence, faint streaming cut, trace mottled oil stain. No formation gas was recorded on the hotwire.

A 360 Unit gas kick was recorded from a Lower Morrow transitional zone from 5896' to 5910' and consisting of finely interbedded Sandstones and Shale. The Sandstones noted contained a light speckled bluegreen hydrocarbon fluorescence in 2% of the samples with a slow weak bleeding cut and traces of mottled oil staining.

Additional tight Limestone shows were noted in the Upper Chester and Basal Chester. 4 ½" production casing was run on the Shinogle No. 5/15/16.

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, David Ward, Denver,

Well: Shinogle No. 2-20, Singley Field

API No.: 15-119-21395

Field: Singley

Location: 1320' FSL & 1650' FWL, Section 20, T33S, R29W, Meade County, Kansas –

15 miles SE of Meade.

Elevation: Ground Level 2649', Kelly Bushing 2662'

Contractor: Duke Drilling Rig No. 9, T.P. Emidgio Rojas., Drillers Victor Martine z,

Alejandro V., Ferando Jurado

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 5/9/16

Total Depth: 5/14/2016, Driller 6400', Logger 6405', Mississippi St. Louis

Casing Program: 35 joints of new 8 5/8", J55, 24Lbs/ft, set at 1489' with 325 sacks

Acomm(3%cc, 1/5 floseal), tail 150 sacks Class C(2%cc & 1/4 lb floseal) –

serices by Basic Energy. 4 ½" production casing to TD.

Mud Program: Service Mud/Mud Co., engineer Justin Whiting, displaced 2600'.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 4400', Box 350, Drake,

CO 80515, 720/220-4860.

Samples: 30' to TD. Zones of interest saved.

Electric Logs: Weatherford, engineer Adam Sill, 1) Array Induction, 2) Neutron/Density, 3)

Microlog, high resolution.

Status: $4\frac{1}{2}$ " production casing run 5/15/16.

WELL CHRONOLOGY

6 AM DATE DEPTH FOOTAGE RIG ACTIVITY

5/9/16 Move to location and rig up rotary tools. Pump water and mix spud mud. Drill rath hole and mouse hole. Spud in $12 \frac{1}{4}$ " to 150'.

5/10 1587' 1437' Survey(3/4 deg.). To 1500' and circulate. Trip out and run 35 joints of new 8 5/8", J55, 24Lbs/ft, set at 1489' with 325 sacks Acomm(3%cc, 1/5 floseal), tail 150 sacks Class C(2%cc & ¼ lb floseal) – services by Basic Energy. Plug down 1 pm – did circulate to surface. Breat down landing joint and nipple up BOP. Trip in and pressure test BOP to 600 PSI in 15 minutes. Drill plug and cement and 7 7/8" hole to 1587' and circulate. Trip for Bit No. 3.

5/11	3380'	1793'	Bit trip. Displace mud system at 2600'. Survey(1 deg.).				
5/12	5026	1646'	Survey(1 $\frac{1}{4}$ deg.). To 5026' and circulate and short trip.				
	5370'	344'	Wiper trip – stuck pipe at 3670'. Wait on Nitrogen and rig up				
same. Pump nitrogen and work stuck pipe. Free up and trip out. Trip in and ream 3000' to 4000' and							
circula	ite on bottom.						

5/14 6400'TD 1030' Survey($1\frac{1}{2}$ deg.). To 6400'TD and circulate. Wiper trip and circulate and trip out for logs and run Elogs.

5/15 TD Run logs. Trip to bottom and circulate. Trip out laying down and run and cement 4 $\frac{1}{2}$ " production casing to TD. Rig down.

BIT RECORD

<u>NO.</u>	MAKE	TYPE	SIZE	<u>OUT</u>	FOOTAGE	HOURS
1 2 3	PLT 619 A28Q PLT 616	RR	12 ½" 7 7/8" 7 7/8"	1500° 1587° 6400°	1500' 87' 4813'	6 1/4 3/4 50 ½
				Total Rotating Hours: Average:		57 1/2 113.3 Ft/hr

DEVIATION RECORD – degree

767' 3/4, 1500' 1 1/2, 2594' 1, 3574' 1, 4489' 1 1/4, 5656' 1 1/2, TD 1/4

MUD PROPERTIES

DATE	DEPTH	WT	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	$\underline{\mathbf{WL}}$	<u>CL</u>	LCM-LBS/BBL
5/9	0'	Make	up wate	r					
5/10	1500'	10.2	38	8	8	8.0	n/c	14.8K	12
5/11	2380'	9.5	29	2	2	7.0	N/C	78k	0
5/12	4143'	9.0	45	13	15	12.0	8.4	4.35k	1/2
5/13	5026'	9.0	52	16	18	10.5	8.4	5.7k	2
5/13	5026'	9.0	46	13	14	10.5	8.0	6.3k	2
5/14	6153'	9.2	50	1717	10.0	10.0	8.0	4.6k	4
5/15	6400'TD	9.25	52	16	17	10.5	8.0	3.6k	4

ELECTRIC LOG FORMATION TOPS- KB Elev. 2662'

			*Shinogle No. 1-20		
FORMATION	DEPTH	DATUM	DATUM	POSITION	
Heebner	4438'	-1776'	-1769'	+6'	
Toronto	4474'	-1812'	-1807'	-5'	
Lansing	4608'	-1946'	-1945'	-1'	
Marmaton	5274'	-2612'	-2609'	-3'	
Cherokee	5429'	-2767'	-2769'	+2'	
Atoka	5715'	-3053'	-3057'	+4'	
Morrow	5770'	-3108'	-3111'	+3'	
Morrow "A" SS	5798'	-3136'	-3145'	+9'	
Morrow "B" SS	5822'	-3160'	-3173'	+13'	
Mississippi Chester	5914'	-3252'	-3250	+3'	
Basal Chester	6103'	-3441'	-3447'	+6'	
Ste Genevieve	6151'	-3489'	-3497'	+16'	
St. Louis	6252'	-3590'	-3597'	+7'	
TD	6400'	-3738'			

^{*}O'Brien Energy Corp., Shinogle No. 2-20, 660'FSL & 2310'FWL, Sec. 20 – approximately 1320' to the NE., K.B. Elev. 2675'.