O'Brien Energy Resources, Inc. Hush No. 1-16, Bruno Prospect Section 16, T33S, R30W

Meade County, Kansas January, 2014

Well Summary

The O'Brien Energy Resources, Corporation, Hush No. 1-16 was drilled to a total depth of 6360' in the Mississippian St. Louis Formation without any problems. It offset the Columbian Fuel Corp., Armentrout by approximately 1700' to the North. The Cherokee and Atoka ran 5' low relative to this offset. The Morrow came in 2' high and the Morrow "B" Sandstone, 10' high. The Morrow ran 27' low relative to the Butler No. 1-9 to the North.

An excellent hydrocarbon show was documented in the Morrow "B" Sandstone(5710'-5724') – Salt and pepper, light to medium brown, clear and translucent, very friable, fine upper to very course lower and conglomeritic in size, very poorly sorted subangular to angular grains, calcareous cement, clean to occasional clay infill, excellent intergranular porosity, bright light yellow to occasional pale blue hydrocarbon fluorescence in all the sand, good streaming cut, medium brown oil stain and live oil, with abundant very course and poorly sorted unconsolidated grains with light yellow hydrocarbon fluorescence and slow streaming cut on the individual grains. A 25 Unit gas increase occurred.

4 1/2" production casing was run on the Hush No. 1-16 on 1/8/14

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

Well: Hush No. 1-16, Bruno Prospect

Location: 1320' FNL & 1637' FEL, Section 16, T33S, R30W, Meade County,

Kansas – Southeast of Plains.

Elevation: Ground Level 2731', Kelly Bushing 2743'

Contractor: Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher

Terry Sorter, Drillers: Saul Garcia, Richard TaFaya, Darryl LaRoche

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 12/31/13

Total Depth: 1/7/14, Driller 5360', Logger 5356', Mississippi St. Louis

Casing Program: 35 joints of 8 5/8", J55, 24Lbs/ft, set at 1500'.

Mud Program: Mud Co./Service Mud Inc., Engineer Terry Ison, displaced 2644' with

Chemical Gel/LCM.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 3000', Box 350,

Drake, CO 80515, 720/220-4860.

Samples: 20' samples, dry cut sent to the KGS log Library, Wichita.

Electric Logs: Weatherford, engineer Adam Sill, 1)Dual Induction 2) Compensated

Neutron Litho Density 3) Microlog – high res. repeat.

Status: $4\frac{1}{2}$ " production casing set to TD on 1/8/14.

WELL CHRONOLOGY

DATE	6 AM E <u>DEPTH</u>	FOOTAGE	RIG ACTIVITY
12/26	5-12/28/13		Rig down and service rig. Work on mud pump.
12/30 up and	l mix spud mud	l.	Move and rig up rotary tools. Saul injured his finger. Rig
	1143' chole. Repack s	1143' swivel. Spud in	Service and change out swivel. Drill rathole and 12 1/4" surface hole to 1143.
deg.) a	-	_	To 1500' and circulate and condition mud. Drop survey(1 in and cement 35 joints of 8 5/8" casing set at 1500' – did of and pressure test BOP. Trip in and drill plug and cement
1/2 pump.	2535' To 2535'. Surv	1005' veys(1 deg.).	To 1798' and trip for Bit No. 3. Service mud lines and weld
1/3 survey	2735' y(1/2 deg.).	1200'	To 2644' and displace mud system. Service rig and
1/4	4870'	1135'	Service and survey(3/4 deg.).
1/5	5490'	835'	Service and survey(1 deg.).
1/6 circula	6360'TD ate and trip out	35' for logs.	To 6360' and circulate and condition mud. Wiper trip and
1/7	TD		Trip for logs and run Elogs. Trip in open ended.
1/8 casing	TD to TD. Rig dov	wn.	Trip out laying down and run and cement 4 1/2" production

BIT RECORD

<u>NO.</u>	MAKE	TYPE	SIZE	<u>OUT</u>	FOOTAGE
	HOURS				

1	J2	GA1PGC	12 ¼"	1500'	1500'	23
2	RR		7 7/8"	1798'	298'	8
3 1/2	HTC	DP506	7 7/8"	6360'	4562'	102
				Total Rota	ating Hours:	117 1/2
				Ay	verage:	54.12
				Ft/hr		

DEVIATION RECORD - degree

491' ¼, 254' ¼, 1299' ½, 1500' 1, 2518' 1, 3520' ¾, 4023' ¾, 4493' 1, 5560' 1, 6360' 3/4

MUD PROPERTIES

DATE LC	<u>DEPTH</u> M-LBS/BBL	$\overline{\mathbf{WT}}$	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	<u>WL</u>	<u>CL</u>	
12/31	643'	9.6	54	14	14	7.0	nc	225	3
1/2	1799'	8.8	28	1	2	7.0	nc	38.3	0
1/3	2887'	8.8	42	10	12	7.0	nc	51K	2
1/4	4563'	9.4	17	17	9.5	9.5	8.0	3.6K	3
1/5	5245'	9.4	63	16	20	10.5	6.4	3.5K	2
1/6	6046'	9.6	46	14	10	9.0	8.8	3.5K	1

ELECTRIC LOG FORMATION TOPS- KB Elev. 2679'

			*Armentrout No. 1	
FORMATION	DEPTH	DATUM	DATUM	POSITION
Surface Casing	1495'			
Heebner	4400'	-1661'	-1659'	-2'
Toronto	4418'	-1675'	-1680'	+5'
Lansing	4490'	-1757'	-1759'	+2'
Marmaton	5164'	-2421'	-2413'	-8'
Cherokee	5338'	-2595'	-2590'	-5'
Atoka	5630'	-2887'	-2882'	-5'
Morrow	5690'	-2947'	-2949'	+2'
"B" SS	5710'	-2967'	-2977'	+10'
Mississippi Chester	5772'	-3029'		
Ste. Genevieve	6010'	-3267'		
St. Louis	6186'	-5443'		
TD	6360'			

^{*}Columbian Fuel Corp., Armentrout No. 1, approximately 1700' to the South, KB Elevation 2745'.