## O'Brien Energy Resources, Inc. Weber No. 1-20 Section 20, T32S, R1E Sumner Co., Kansas August, 2014

## **Well Summary**

The O'Brien Energy Resources, Weber No. 1-20 was drill to a total depth of 4050' with no problems. The closest offset was the Weber "A" No. 1, approximately 1200' to the North. The Kansas City ran 8' low relative to this offset. Structure was gained as the Pawnee, Mississippi and Kinderhook ran 12', 6' and 17' high respectively. The Simpson Sandstone came in 15' high.

The Kansas City and Pawnee came in 8' and 16' low relative to the Weber No. 1-20, 1320' to the northeast and oil productive from the Simpson Sandstone. Thinning occurred in the Mississippi and the Kinderhook and Simpson Sandstone came in 12' and 14' high.

An excellent show occurred in the Simpson Sandstone(3989'-4006') and consists of a Sandstone – Light to medium brown with oil staining, friable, fine upper to fine lower, well sorted, subround to round grains, siliceous cement, clean, excellent intergranular porosity, bright light yellow to pale blue and occasional goldbrown hydrocarbon fluorescence in most of the sandstone, excellent fast streaming cut, even brown matrix oil staining and live oil, excellent oil odor, trace solid residual black oil, show dissipates when dried.

This interval was drillstem tested and recovered gas to surface in 30 minutes, 139' of highly gas cut oil and 2910' clean gassy oil and with a bottom hole pressure of 1327 PSI and flowing pressures of 436 to 834 PSI. The sample chamber contained 750 PSI, 4.8 cubic feet of gas and 1500 ml of oil with a gravity of 42.6 API at 60 deg. F. No water was noted in the recovery but the mud pit chlorides went up from 1600 to 5000.

5 ½" production casing was run to TD on the Weber No. 1-20. Appreciation to the C&G Drilling rig hands.

Respectfully Submitted,

Peter Debenham

#### WELL DATA

Operator: O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH

Geologist: Paul Wiemann – Denver, CO

Well: Weber No. 1, wildcat

API No.: 15-191-22759

Location: 1390'FSL & 430'FWL, Sec. 20, 32S, 1E, Sumner Co., KS

Elevation: Ground Level 2356', Kelly Bushing 2368'

Contractor: C&G Drilling Inc. Type: Double stand, double jackknife, T.P. and Company

man Duke Coulter, Drillers Mike Hatfield, Robert Curmtl

Spud Date: 7/26/14

Total Depth: 8/1/14, Driller 4050', Logger 4052', Simpson

Casing Program: 8 5/8" surface casing set at 303', 5 ½" production casing to TD.

Mud Program: Twister Mud Company, Engineer Charlie Coulter, Type: LSND, mud up 2541'.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 2500', Box 350, Drake,

CO 80515, 720/220-4860.

Samples: 10' - 3500' to TD.

Electric Logs: Nabors Completion and Production Services Co., Engineer Jason Cappellucci,

1) Dual Induction, 2) Compensated Density/Neutron, 3) Microlog, 4) Sonic

Status: 5 ½" production casing set a TD on 8/2/14 for Simpson Sandstone oil

production.

## **WELL CHRONOLOGY**

8 PM

8/2

TD

DATE DEP		RIG ACTIVITY
7/25 bushings. D	rill rathole.	Move to location and rig up rotary tools. Change out kelly
		Service rig and work on pump. Spud in 12 ½" surface to 314' cement 8 5/8" surface casing set at 303'. Plug down 3:40 PM. ad jet pits. Drill 7 7/8" to 781'. Under surface 1:30 AM.
7/27 2510	2196'	Service rig and jet pits. Survey(.75 deg.) and work on pump.
7/28 3573 button bit.	63'	Jet pits and mud up at 2541'. To 3573' and trip for Bit No. $3-$
7/29 3655	82'	To 3655'. Surveys(.575 deg.).
7/30 3858	203'	Service and jet.
7/31 4003 condition m		Circulate for samples at 4003'. Short trip and circulate and 3993'-4003'), Simpson SS and run test. Tool on bottom 4:37 PM.
-		Run test – gas to surface in 30 minutes. Trip out and break down to 4050'TD and circulate and condition mud. Trip out for logs and

## **BIT RECORD**

Run and cement 5 1/2" production casing to TD. Rig down

<u>NO.</u>	<b>MAKE</b>	<b>TYPE</b>	SIZE	<u>OUT</u>	<b>FOOTAGE</b>	<b>HOURS</b>
1A 1 2 3	RBI Force HTCO Dttel	1661RR N61660 6X286 Z228	12 ¼" 7 7/8" 7 7/8" 7 7/8"	313' 3573' 4003' 4050'	313' 3260' 430' 47'	1.25 40.75 44.25 4.75
				Total Rotatin Avera	•	91 44.5 Ft/hr

# <u>DEVIATION RECORD - degree</u>

313' 1/4, 812' 1/4, 1251' 1/2, 1785' 1/2, 2352' 3/4, 2761' 7/8, 3351' 7/8, 3573' 7/8, 4004' 1

### **MUD PROPERTIES**

<b>DATE</b>	<b>DEPTH</b>	$\overline{\mathbf{WT}}$	<u>VIS</u>	<u><b>PV</b></u>	<u>YP</u>	<u>pH</u>	$\underline{\mathbf{WL}}$	<u>CL</u>	<u>LCM-</u> LBS/BBL
7/27	843'	8.4	Wate	r				2.5K	
7/28	2470'	9.2	Wate	r				4.7K	3
7/29	3573'	9.4	38	11	6	10.5	13.3	1.75	4
7/30	3830'	9.4	41	11	9	9.5	13	1.9K	1.5
7/31	4003'	9.2	48	16	12	9.5	11.8	1.6K	1.5
8/1 11am	4050'	9.0	49	9	13	9.5	17.4	6K	2.5
8/1 2pm	4050'	9.0	58	17	14	10.4	10.4	5K	2.5

#### **DRILL STEM DATA**

DST NO.1: (3993'-4003'), Simpson Sandstone

Type: Conventional Bottom Hole Test Times: 30-45-60-60

<u>PERIOD</u>	<u>TIME</u>	<u>PSI</u>
IH		1904
IF	30	1325 - 1330
ISI	60	1327
FF	45	436 - 834
FSI	60	1314
FH		1900

BHT 123 deg. F.

BLOWS: IF & ISI: Weak to no blow – Tool failed to open. FF: Strong blow, bottom of bucket in 30 Seconds, gas to surface in 30 minutes, gauged at 41.88 Mcf/d. FSI: Bled off and remained strong and off the BOB throughout.

RECOVERY: Gas to surface in 30 minutes, 139' gassy oil cut mud, 2910' of clean gassy oil.

Sample Chamber: 750 PSI, 4.8 cfg, 1500ml oil – Oil Gravity 42.6 API at 60 deg. F.

Note: No pressures or recovery for the IF & ISI as the tool did not cycle open.

### **ELECTRIC LOG FORMATION TOPS-** KB Elev. 1217'

			*Weber "A" No. 1		
<b>FORMATION</b>	<b>DEPTH</b>	<b>DATUM</b>	<b>DATUM</b>	POSITION	
Surface casing	304'				
Kansas City	2976'	-1759'	-1755'	-8'	
Base Kansas City	3222'	-2005	-2004'	-1'	
Pawnee	3304'	-2086'	-2099'	+12'	
Mississippi	3608'	-2391'	-2397'	+6'	
Kinderhook	3922'	-2705'	-2722'	+17'	
Simpson SS	3989'	-2772'	-2787'	+15'	
Base Simpson SS	4006'	-2798'	-2802'	+13'	
TD	4052'				

<sup>\*</sup>Cities Services Oil and Gas, Weber "A" No. 1, approximately 1200' to the North, K.B. Elev. 1228'.

			*Weber No	*Weber No. 1-20		
<b>FORMATION</b>	<b>DEPTH</b>	<b>DATUM</b>	<b>DATUM</b>	<b>POSITION</b>		
Kansas City	2976'	-1759'	-1751'	-8'		
Base Kansas City	3222'	-2005	-2008'	-3'		
Pawnee	3304'	-2087'	-2103'	-16'		
Mississippi	3608'	-2391'	-2390'	-1'		
Kinderhook	3922'	-2705'	-2712'	+12'		
Simpson SS	3989'	-2772'	-2786'	+14'		
Base Simpson SS	4006'	-2798'	NDE			
TD	4052'					

<sup>\*</sup>Eagle Creek Corp., Weber No. 1-20, approximately 1320' to the NE, K.B. Elevation 1216'.