

**O'Brien Energy Resources, Inc.**  
**Angell No. 2-13, Angell Field**  
**Section 13, T32S, R30W**  
Meade County, Kansas  
October, 2014

## Well Summary

The O'Brien Energy Resources, Corporation, Angell No. 2-13 was drilled to a total depth of 6400' in the Mississippi. The closest offset was the Anadarko Petroleum Corp., Fox "G" No. 1-13, C-S/2-SW-SE, in Section 13, approximately 2000' to the South. The Angell No. 2-13 ran considerably low relative to this well. The Heebner and Marmaton came in 49' and 47' low. The Cherokee, Atoka and Morrow ran 55', 65' and 79' low respectively. The Chester, Ste. Genevieve and Morrow came in 78', 88' and 95' low.

Several minor hydrocarbon shows and minor gas increases were documented (mudlog). The most noteworthy occurred in the Atoka from a one foot interval and resulting 100 Unit gas kick. It proves tight on logs.

The Angell No. 2-13 was plugged and abandoned 10/26/14.

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: Angell No. 2-13, Angell Field

Location: 2305' FSL & 1320' FEL, Section 13, T32S, R30W, Meade County, Kansas – 3 miles east of Plains.

Elevation: Ground Level 2724', Kelly Bushing 2736'

Contractor: Duke Drilling Rig No. 6, Type: Double jackknife, triple stand, Toolpusher Alan Cain, Drillers: Jack Cargle, Saul Garcia, Paul Burns

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 10/19/14

Total Depth: 10/25/14, Driller 5600', Logger 6405', Mississippian St. Louis/Spergen.

Casing Program: 37 joints of 8 5/8", J55, 24Lbs/ft, set at 1493'. 4 1/2" production casing to TD.

Mud Program: Mud-Co/Service Mud. Inc. engineer Justin Whiting, displaced 2600' with Chemical Gel/LCM.

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

Samples: 30' to 5700', 20' to TD. One set dry cut sent to KGS Sample Log Library.

Electric Logs: Weatherford, engineer Adam Sill, 1)Dual Induction 2) Compensated Neutron Litho Density 3) Microlog 4) High Res.

Status: Plugged and abandoned 10/27/14.

## WELL CHRONOLOGY

<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
10/17			Move to and rig up rotary tools.
10/18			Rig up and weld on rig.
10/19	897'	897'	Mix spud mud and blow down mouse hole and rat hole. Spud in 12 1/4" surface hole(10AM) and drill to 497' and circulate and trip out for plugged bit. Survey(.1 deg.). Unplug bit and trip in and drill to 897'. Change out tong dies.
10/20	1493'	596'	To 1100' and circulate and trip out. Trip in and drill to 1493' and circulate and trip out and run 37 joints of 8 5/8" surface casing set at 1493' with 325 sacks A Con(3%cc & 1/4#CelloFlake) and 150 sacks Class C(2%cc & 1/4#cf). Cement did circulate. Plug down 4:45pm. Wait on cement. Back off and nipple up BOP. Clean cellar and wait on cement.
10/21	2291'	798'	Trip in and pressure test BOP. To 1855' and trip for Bit No. 3. To 2291'. Survey(.2 deg.). Rechain BOP and service rig.
10/22	3655'	1364'	Displace mud and 2600' and clean suction and service. Survey(.5 deg.). To 3655'.
10/23	4743'	1088'	Survey(.5 deg.) Clean suction.
10/24	5610'	861'	Survey(0.2 deg.). To 5022' and wiper trip 42 stands and circulate.
10/25	6400'TD	790'	Circulate for samples. Survey(.2 deg.). To 6400'TD and circulate and condition mud. Short trip 42 stands and circulate.
10/26	TD		Drop survey(0.2 deg.) and trip out for logs. Run Elogs and rig down. Trip in and trip out laying down. Plug and abandon well. 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	HTC	D605F	12 1/4"	1493'	1493'	14 1/4
2	But. Bit	HA2516	7 7/8"	1855'	362'	3
3	PDC	DP506	7 7/8"	5610'	3755'	71 1/4
4	HC	DP506	7 7/8"	6400'	790'	30 3/4
Total Rotating Hours:						119 1/4
Average:						53.7 Ft/hr

**DEVIATION RECORD - degree**

497' .1, 1493' .4, 2011' .2, 3033' .5, 4029' .5, 5022' .6, 6400' .2

**MUD PROPERTIES**

<b><u>DATE</u></b>	<b><u>DEPTH</u></b>	<b><u>WT</u></b>	<b><u>VIS</u></b>	<b><u>PV</u></b>	<b><u>YP</u></b>	<b><u>pH</u></b>	<b><u>WL</u></b>	<b><u>CL</u></b>	<b><u>LCM-LBS/BBL</u></b>
10/17	0'	Make up water							
10/19	45'	Water							
10/20	1265'	10.2	38	14	20	7.0	n/c	800	14
10/21	1701'	8.8	27	1	2	7.0	n/c	45K	0
10/22	2922'	8.8	36	4	7	8.0	n/c	7.4K	2
10/23	4094'	9.05	38	13	14	9.0	14.0	6.8K	2
10/24	5181'	9.25	46	13	14	9.2	9.2	4.6K	3
10/25	5706'	9.3	52	16	17	9.5	9.2	4.2K	4

**ELECTRIC LOG FORMATION TOPS- KB Elev. 2736''**

<b><u>FORMATION</u></b>	<b><u>DEPTH</u></b>	<b><u>DATUM</u></b>	<b><u>*Fox "G" No. 1-13</u></b>	
			<b><u>DATUM</u></b>	<b><u>POSITION</u></b>
Heebner	4426'	-1690'	-1641'	-49'
Toronto	4452'	-1716'	-1669'	-47'
Lansing	4554'	-1818'	-1780'	-38'
Marmaton	5178'	-2442'	-2395'	-47'
Cherokee	5342'	-2606'	-2551'	-55'
Atoka	5620'	-2884'	-2819'	-65'
Morrow	5682'	-2946'	-2867'	-79'
Chester	5785'	-3049'	-2971'	-78'
Ste. Gen.	6007'	-3271'	-3183'	-88'
St. Louis	6132'	-3396'	-3301'	-95'
Spergen	6283'	-3547'		
TD	6400'			

\*Anadarko Petroleum Corp., Fox "G" No. 1-13, C-S/2-SW-SE Section 13 – 2000' to the South, K.B. Elevation 2733'.