## O'Brien Energy Resources, Inc. Vail No. 8-30 Section 30, T33S, R29W

Meade County, Kansas October, 2014

#### Well Summary

The O'Brien Energy Resources, Corporation, Vale No. 8-30 was drilled to a total depth of 6420' in the Mississippian St. Louis Formation. It is located 1655' to the North of the Vale No. 4-30 in the Singley Field. Formation tops ran high relative to this offset. The Heebner to the Chester ran 7' to 13' high. The Ste. Genevieve came in 2' high and the St. Louis, 2' low. Note all depths are sample picks as no logs were run due to hole conditions, 300' of surface casing parted and fell down hole.

An excellent hydrocarbon show was noted in the Morrow (5846'-5852') and consists of a Sandstone in 10% of the samples. Specked green, salt and pepper, light brown, translucent, hard to friable, very fine well sorted subround grains, siliceous cement, calcareous, clean, glauconitic, fair to good intergranular porosity, vuggy porosity, bright light orange hydrocarbon fluorescence and dissipates to a blue fluorescence when dried, good bleeding to streaming cut, gas bubbles when crushed, no stain or free oil. A 140 Unit gas kick was noted.

An additional show and gas increase occurred in the Lower Chester.

Production casing was run on the Vale No. 8-30 for Morrow Sandstone gas and or oil production.

A cased GR and porosity log will be run prior to perforating for depth corrections.

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: Vail No. 8-30, Singley Field

Location: 1320' FNL & 2305' FEL, Section 30, T33S, R29W, Meade County, Kansas –

Southeast of Plains.

Elevation: Ground Level 2667', Kelly Bushing 2679'

Contractor: Duke Drilling Rig No. 10, Type: Double jacknife, triple stand, Toolpusher Alex

Ordonez, Drillers: Mario Chavez, Miguel Molina, Chad Hallmark

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 10/8/14

Total Depth: 10/15/14, Driller 6420', Logger – no logs run, Mississippi St. Louis.

Casing Program: 35 joints of new 8 5/8", J55, 24Lbs/ft, set at 1479'. 4 ½" 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 4700', 20' to TD. Zones of interest saved.

Electric Logs: No logs were run due to hole conditions, 300' of surface casing parted and fell

downhole. A cased GR and porosity log will be run.

Status:  $4\frac{1}{2}$ " production casing set to TD on 10/17/14.

### WELL CHRONOLOGY

DATE DEPTH	<b>FOOTAGE</b>	RIG ACTIVITY
10/7		Move to location and rig up rotary tools.
10/8 1500' hole and spud in 12 1/2 joints of new 8 5/8" 2	` ′	Rig up and dig ditches. Mix spud mud. Drill rat hole and mouse 500' and circulate. Drop survey(1/2 deg.) and run and cement 35 479'.
10/9 1857' trip for bit no. 3, PDC	357' C. Repair rotary	Cement and wait on cement. 7 7/8" to 1857' with button bit and chain and service rig.
10/10 2814'	957'	Work on pump and clean suction. Displace mud system at 2594'.
10/11 4296'	1482'	Work on rotary chain. Clean suction. Premix in at 3650'.
10/12 4958'	662'	To 4845' and circulate and trip for Bit No. 4. To 4958'.
10/13 5307' pipe and hose. To 530	349° 07°.	To 4990' and trip out and wait on kelly hose and work on stand
10/14 5995' 5856' and 5876'.	688'	Service rig and pump premix. Circulate for samples at 5844',
10/15 6420'TD stands and circulate. I	425' Drop survey(1	Service rotary chain. To 6420'TD and circulate. Wiper trip 42 Deg.) and trip out for logs.
10/16 TD casing). Trip in with b	oit and hit bridg	Rig up loggers and run in, hit bridge at 1111'(bottom of surface ge. Trip out and in open ended and bridged out. Wait on orders.
10/17 TD casing fell downhole a	and remained s	Run in with and impression block and tag fish. 300' of surface traight. Run and cement production casing to TD. Rig down.

### **BIT RECORD**

<u>NO.</u>	MAKE	<b>TYPE</b>	<b>SIZE</b>	<u>OUT</u>	<b>FOOTAGE</b>	<b>HOURS</b>
1	J2	PDC	12 1/4"	1500'	1500'	7 1/4
2	J2	But bit	7 7/8"	1857'	357'	1
3	J2	PDC	7 7/8"	4845'	2988'	42 3/4
4	J2	PDC	7 7/8"	6420'	1575'	44 3/4
				Total Rotating Hours:		95 3/4
					erage:	67 Ft/hr

#### **DEVIATION RECORD - degree**

**6 AM** 

# MUD PROPERTIES

<b>DATE</b>	<b>DEPTH</b>	$\overline{\mathbf{WT}}$	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	$\underline{\mathbf{WL}}$	<u>CL</u>	LCM-LBS/BBL
10/7	0'	Make	Up Wa	ıter				100	
10/8	807'	10.5	42	10	10	8.5	n/c	100	3
10/10	2281'	9.4	29	2	2	7.0	n/c	56K	0
10/11	3499'	9.15	43	10	13	8.0	19.6	5.8K	2
10/12	4844'	9.45	46	14	16	9.0	11.6	4.8	2
10/13	5014'	9.3	42	12	14	9.0	11.6	6.2K	2
10/14	5645'	9.25	49	16	17	10.5	8.4	3.1K	2
10/15	6278'	9.25	57	18	21	10.5	8.8	2.3K	2
10/16	6420'	9.0	47	14	15	9.5	9.2	3.1K	5 ½

### **SAMPLE PICK FORMATION TOPS-** KB Elev. 2679'

		*Vale No. 4-30		
<b>FORMATION</b>	<b>DEPTH</b>	<b>DATUM</b>	<b>DATUM</b>	POSITION
Surface Casing	1479'			
Heebner	4481'	-1802'	-1809'	+7'
Toronto	4508'	-1829'	-1841'	+12
Lansing	4596'	-1917'	-1930'	+13'
Marmaton	5278'	-2599'	-2610'	+11'
Cherokee	5429'	-2750'	-2761'	+11'
Atoka	5718'	-3039'	-3052'	+13'
Morrow	5780'	-3101'	-3110'	+9'
"A,B?" SS	5846'-5852'	-3167'		
Mississippi Chester	5910'	-3231'	-3246'	+15'
Ste. Genevieve	6164'	-3485'	-3487'	+2'
St. Louis	6265'	-3586'	-3487'	-2'
TD	6420'			

<sup>\*</sup>Vale No. 4-30, 2305' FSL & 2305' FEL, Section 30-1655' to the South, K.B. Elevation 2684'.