

O'Brien Energy Resources, Inc.
Mary Etal No. 2-1, Dailey Prospect
Section 1, T31S, R22W
Clark County, Kansas
August 2016

Well Summary

The O'Brien Energy Resources, Corporation, Mary Etal No. 2-1, Daily Prospect, was drilled to a total depth of 7020' in the Arbuckle Formation in 143 ½ rotating hours and without any problems. It offset the Mary No. 1-1 by approximately 1700' to the North. Formation tops ran relatively even to this offset(3' high to 3' low) to the Mississippi. Structure was gained as the Warsaw and Viola came in 14' high. The Simpson Sandstone and Arbuckle ran 18' high.

Several very minor hydrocarbon shows with no significant mud gas increases were documented in the Lower Cherokee/Atoka Formation and Mississippi(attached mudlog).

The Mary Etal No. 2-1 was plugged and abandoned 8/21/16.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator: O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH
Geologist: Paul Wiemann – Denver, CO

Prospect Geologist: David Ward, Ed Schuett, Denver

Well: Mary Etal No. 2-1, Daily Prospect, Granger Creek Field

Location: SW NE NW NE, 615' FNL & 1750' FEL, Section 1, T31S, R22W, Clark Co., Kansas, South of Bucklin.

Elevation: Ground Level 2270', Kelly Bushing 2283'

Contractor: Duke Drilling Rig No. 7, Type: Double jackknife, triple stand, Toolpusher Galen Roach, Drillers: Jeremy Adelherd, Craig Mertens, Steven Green

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 8/11/16

Total Depth: 8/21/16, Driller 7020', Logger 6502', Arbuckle Formation.

Casing Program: 16 joints of 8 5/8", J55, 24Lbs/ft, set at 678' with 125 sacks A Con(3% cc, ¼ lb floseal) tailed with 100 sacks Class C(2% cc), topped with 75 sacks A Con, services by Basic. plug down 5:30 pm 8/12/16.

Mud Program: Service Mud/Mud-Co, Engineer Justin Whiting , Chemical/gel, displaced 3223'.

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

Samples: 30' to 5200', 20' to TD. One dry cut sent to the KS Sample Log Library, Wichita.

Electric Logs: Pioneer Energy Services, Engineer Tim Martin, Dual Induction, Dual Comp Porosity Log, Microresistivity Log

Status: Plugged and abandoned.

WELL CHRONOLOGY

6 AM

<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
8/11			Move to location and rig up rotary tools. Pump water and mix spud mud. Drill rat hole and mouse hole. Spud in 12 1/4" surface hole(11:00 pm).
8/12	682'	682'	Lost circulation at 465'. Run survey(1 deg.). To 682' and circulate and trip for surface casing and run and cement 16 joints of 8 5/8", J55, 24Lbs/ft, set at 678' with 125 sacks A Con(3%cc, 1/4 lb floseal) tailed with 100 sacks Class C(2% cc), topped with 75 sacks A Con, services by Basic. plug down 5:30 pm. Wait on cement and service rig.
8/13	1545'	863'	Wait on cement. Drill plug and cement and 7 7/8" hole to 838'. Trip for Bit No. 4 and drill to 1545' Survey(1 1/2 deg.) and service.
8/14	2575'	1030'	Surveys(3/4 deg.) and service.
8/15	3645'	1070'	Survey(1 deg.). Displace mud system at 3028'.
8/16	4645'	1000'	Survey(1 deg.), drilling ahead.
8/17	5380'	735'	Survey(1/2 deg.) To 5022' and circulate and wiper trip 40 stands.
8/18	6035'	655'	Survey(1 1/2 deg.).
8/19	6544'	509'	Survey(1/2 deg.) Circulate for samples at 6440'.
8/20	7020'TD	476'	To 7020'TD and circulate. Wiper trip 71 stands and circulate. Trip out for logs and run ELogs. Trip to bottom and circulate. Trip out laying down and plug and abandon well.
8/21	TD		Plug well and rig down.

BIT RECORD

<u>NO.</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>
1	12 1/4"	PDC	RR	496'	496'	3 3/4
2	12 1/4"	RR		682'	186'	4 1/4
3	7 7/8"	J2-RR		838'	156'	2 1/2
4	7 7/8"	PL61656	PDC	7020'	6182'	143 1/2
Total Rotating Hours:						154
Average:						45.6 Ft/hr

DEVIATION RECORD - degree

997' 1, 1300' 1 ½, 1600' ¾, 1982' 1, 2282' 1, 2800' 1, 3300' 1, 3800' ¾, 4300' 1 ½, 5300' 1 ½, 5600' 2, 5900' 2, 6200' ½, 6500' 1,

MUD PROPERTIES

<u>DATE</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	<u>WL</u>	<u>CL</u>	<u>LCM-LBS/BBL</u>
8/11-8/13	818'	Make up water							
8/14	1962'	9.5	30	--	--	7.0	nc	64K	--
8/15	3049'	8.7	60	18	20	12.0	9.2	5.8K	3
8/16	4008'	9.4	47	15	16	10.0	11.6	8.8	2
8/17	4940'	9.4	46	14	15	11.0	9.2	8.3	4
8/18	5589'	9.4	48	15	16	10.5	8.4	7.3K	4
8/19	6256'	9.3	53	17	17	10.0	8.8	6.1K	4
8/20	6732'	9.3	64	18	22	9.0	6.5	10	4
8/21	7020'TD	9.4	64	18	20	9.0	10.0	8.8	10

ELECTRIC LOG FORMATION TOPS- KB Elev. 2283'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Mary No. 1-1</u> <u>DATUM</u>	<u>POSITION</u>
Casing	678'			
Heebner	4330'	-2047'	-2050'	+3'
Lansing	4527'	-2244'	-2243'	-1'
Stark SH	4888'	-2605'	-2597'	-8'
Marmaton	5036'	-2753'	-2551'	-2'
Pawnee	5077'	-2794'	-2795'	+1'
Cherokee	5132'	-2849'	-2849'	0'
Morrow	5239'	-2956'	-2953'	-3'
Mississippi	5261'	-2978'	-2975'	-3'
Warsaw	6094'	-3811'	-3825'	+14'
Viola	6184'	-3901'	-3915'	+14'
Simpson SS	6431'	-4148'	-4166'	+18'
Arbuckle	6446'	-4163'	-4181'	+18'
TD	7020'			

*O'Brien Energy, Mary No. 1-1, 2277'FNL & 2262'FEL, Sec. 1 – app. 1700' to the South, K. B. Elev. 2265'.