Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1087494

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 32211
Name: O'Brien Energy Resources Corp.
Address 1: 18 CONGRESS ST, STE 207
Address 2:
City: PORTSMOUTH State: NH Zip: 03801 + 4091
Contact Person: Joseph Forma
Phone: (603) 427-2099
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Peter Debenham
Purchaser: NCRA

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

4/24/2012	4/30/2012	6/16/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21317-00-00
Spot Description:
SW NE NE SW Sec. 5 Twp. 34 S. R. 28 ☐ East ☑ West
2041 Feet from ☐ North / ☑ South Line of Section
2060 Feet from ☐ East / ☑ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Meade
Lease Name: Vanderpool Well #: 1-5
Field Name: Vanderpool
Producing Formation: Morrow
Elevation: Ground: 2361 Kelly Bushing: 2368
Total Vertical Depth: 6405 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1485 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 10800 ppm Fluid volume: 1100 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Max Papay LLC
Lease Name: Sneed License #: 34021
Quarter NW Sec. 14 Twp. 34 S. R. 30 ☐ East ☑ West
County: Meade Permit #: 15-119-20946-0001

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

☑ **Confidentiality Requested**
Date: 07/16/2012
☑ **Confidential Release Date:** 07/16/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 07/16/2012

[redacted] 1087494

Operator Name: O'Brien Energy Resources Corp. Lease Name: Vanderpool Well #: 1-5

Sec. 5 Twp. 34 S. R. 28 ☐ East ☑ West County: Meade

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☐ Yes ☑ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☐ Yes ☑ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Micro
Neutron
Induction

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	12.25	8.6250	24	1485	A-conn blend	350	CaCl & .25#floseal
PRODUCTION	7.8750	4.5	10.5	6287	AA2	220	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	-			
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
3	5686' to 5689'	acidize w/400gal NEFE 7 ½% HCL	perfs
		Frac w/ 14,000 gal gel wtr & 17,000# 20/40 mesh sand	perfs

TUBING RECORD: Size: 2 3/8 Set At: 5684 Packer At: 5680 Liner Run: ☑ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 6/16/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)* _____

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Vanderpool 1-5
Doc ID	1087494

Tops

Name	Top	Datum
Chase	2523’	-155’
Council Grove	2926’	-558’
Neva	3160’	-792’
Heebner	4298’	-1930’
Toronto	4344’	-1976’
Lansing	4454’	-2086’
Swope LS	4938’	-2570’
Pleasanton Group	5121’	-2753’
Marmaton	5140’	-2772’
Cherokee	5309’	-2941’
Atoka	5446’	-3078’
Morrow	5648’	-3280’
Mississippi	5720’	-3352’
Ste. Genevieve	6120’	-3752’
St. Louis	6216’	-3848’

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

July 16, 2012

Joseph Forma
O'Brien Energy Resources Corp.
18 CONGRESS ST, STE 207
PORTSMOUTH, NH 03801-4091

Re: ACO1
API 15-119-21317-00-00
Vanderpool 1-5
SW/4 Sec.05-34S-28W
Meade County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,

Joseph Forma
Vice President

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer O'Brien Energy	Lease No.	Date 11/26/12	
Lease Vanderpool	Well # 1-5	Service Receipt	
Casing 4 5/8	Depth 1500	County Meade	State KS
Job Type Surface	Formation Chase	Legal Description 5-34-28	

Pipe Data		Perforating Data		Cement Data
Casing size 4 5/8	Tubing Size	Shots/Ft		Lead 400sx A-Con @11.4
Depth 1500	Depth	From	To	
Volume 97.179	Volume	From	To	2.95y 18.10c-1
Max Press 1500	Max Press	From	To	Tail in 150 sx Premium Plus @ 14.8#
Well Connection P.C.	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	1.34y 6.33gal

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
0130					on Loc Spot Trucks, R.U. Safety Mtg
0334	250				Test Lines
0539	210		0	5	Start Mixing A-Con @ 11.4#
0618	230		210	5	Switch to Tail @ 14.8#
0624	0		36	-	Finished Mixing, Drop Plug
0633	0		0	5	Start Disp, Wash Up
0657	250		73	2	Slow Rate
0754	250		83	1	Slow Rate
0805	350 Stay		93	-	Plug Down
0810	0				Release PSI, Float held

Service Units	19488	39223 39926	30463 39924	31354 31254		
Driver Names	C. Hinz	R. Olds	R. Ochoa	J. Grigalva		

Roger Pearson
Customer Representative

Jerry Bennett
Station Manager

Chad Hinz
Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: O'Brien Energy	Lease No.	Date: 5-2-12	
Lease: Vanerpool	Well #: 1-5	Service Receipt	
Casing: 4½	Depth: 6298	County: Meade	State: Ks
Job Type: 4½ L.S	Formation	Legal Description: 5-34S-28W	

Pipe Data		Perforating Data		Cement Data
Casing size: 4½	Tubing Size	Shots/Ft		Lead: 240sx AA2 14.8#/gal 1.5 13
Depth: 6298	Depth: JTL	From	To	
Volume: 99.6	Volume	From	To	
Max Press: 1500	Max Press	From	To	Tail in
Well Connection	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
2:30					Called out
4:00					on loc
					Hold safety mtg & RU to tks
6:54					csg on Bottom
7:00					Hook up to csg & Drop Ball
7:10					Break circ w/ rig
7:41	50			3	Pump 12 Bbls Mud Flush
			12		Pump 3 Bbls H2O
			15		Shut down
7:55			7		Mix 50sx R-M Hole
9:05				5	Start Mixing Cmt Down Csg
					240sx AA-2 14.8#/gal 1.5 13
			65		Shut down
3:26			15		Wash up tks & Release 4½ SW Plug
3:29	100			6	Start Disp
	650		92		Lift PSI
8:53	1200		99.6		Plug down
					Release / Held
					Thanks
					Todd Juan Cody Ezel
					Please Call Again

Service Units	36878	19902				
Driver Names	Todd	Juan				

Roger — Customer Representative

Jerry Bennett — Station Manager

Juan — Cementer

O'Brien Energy Resources, Inc.
Vanderpool No. 1-5
Section 5, T34S, R28W
Meade County, Kansas
April, 2012

Well Summary

The O'Brien Energy Resources, Vanderpool No. 1-5 wildcat was drilled to a total depth of 6400' in the St. Louis Formation without any problems. It was drill approximately ¾ of a mile NW of the Pan American Petroleum Corp., Goff Gas Unit No. 1. Formation tops ran high relative to this offset. The Heebner, Lansing and Marmaton ran 30', 20' and 21' high respectively. The Ft. Scott, Cherokee and Atoka came in 18', 14' and 31' high. The Morrow ran 32' high.

An excellent hydrocarbon show occurred in the Morrow from 5685' to 5690' and consists of a Sandstone in 20% of the samples: Dark to light brown, friable, fine lower, well sorted subround grains, clean, siliceous cement, slightly calcareous, slightly glauconitic and arkosic, good intergranular porosity and occasional vuggy porosity, dull gold brown hydrocarbon fluorescence in all the sandstone, excellent streaming cut, medium mottled brown matrix oil stain and abundant light brown live oil and gas bubbles when crushed, trace very black heavy black oil, excellent show. A 145 Unit gas kick occurred.

Minor shows occurred in the Marmaton and Cherokee.

4 ½" production casing was run on the Vanderpool No. 1-5 on 5/2/12 for Morrow oil production.

Appreciation to Duke Rig 6 hands.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator:	O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH Geologist: Paul Wiemann – Denver, CO
Well:	Vanderpool No. 1-5, wildcat
API No.:	15-119-21317
Location:	2041' FSL & 2060' FWL, Section 5, T34S, R28W, Meade County, Kansas – 10 miles SW of Meade
Elevation:	Ground Level 2356', Kelly Bushing 2368'
Contractor:	Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher Rick Schollenbarger, Drillers: Terry Sorter, Danny White, Saul Garcia
Company Man:	Roger Pearson – Liberal, Kansas
Spud Date:	4/24/12
Total Depth:	5/1/12, Driller 6400', Logger 6404', Mississippian St. Louis
Casing Program:	60' of 20" conductor pipe, 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1500'. 4 ½" production casing set.
Mud Program:	Mud Co./Service Mud Inc., Engineer Tony Maestas, mud up 2500'.
Wellsite Consultant:	Peter Debenham with mudlogging trailer, Call depth 2500', Box 350, Drake, CO 80515, 720/220-4860.
Samples:	30' to 5600', 20' to TD. One set dry cut sent to KGS sample log library.
Electric Logs:	Weatherford, Engineer Adam Giambalvo, 1) Array Induction, 2) Neutron/Density, 3) Microlog, 4) High Res.
Status:	4 1/2 " production casing set 5/2/12.

WELL CHRONOLOGY

DATE	8 PM DEPTH	FOOTAGE	RIG ACTIVITY
4/23			Move to location.
4/24	200’	140’	Rig up rotary tools. Pump water and mix spud mud and spud in 12 ¼” surface hole 200’. Conductor pipe previously set to 60’.
4/25	1385’	1185’	Surveys(1/2 – ¾ deg.) and drill.
4/26	1775’	390’	To 1500’ and trip out and rig up casing crew and run and cement 36 joints of 8 5/8” set at 1500’. Plug down 5:15am. Wait on cementand nipple up and pressure test BOP. Trip in and drill plug and cement and 7 7/8” hole to 1720’ and trip for Bit No. 3. To 1775’.
4/27	3170’	1395’	Surveys(1/2 – 1 deg.). To 2500’ and clean suction and displace hole.
4/28	4645’	1475’	Surveys(1/2 – 1 deg.).
4/29	5505’	860’	To 5004’ and wiper trip 27 stands and clean suction.
4/30	6385’	880’	
5/1	6400’	15’	To 6400’TD and circulate and short trip 41 stands and circulate and condition mud. Drop survey(1 deg.) and trip for logs and run e-logs. Trip to bottom and circulate and condition. Trip out for casing.
5/2	TD		Trip for casing and run and cement 4 ½” production casing. Rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	HTC	RR	12 ¼”	1500’	1440’	28 1/4
2	RR		7 7/8”	1720’	220’	3
3	HTC	Q506F	7 7/8”	6400’	4680’	92 1/2
				Total Rotating Hours:		123 3/4
				Average:		51.7 Ft/hr

DEVIATION RECORD - degree

513’ ½, 1030’ ¾, 2219’ 1, 2531’ ½, 3001’ 1, TD 1

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
4/25	887’	9.65	34	3	6	7.0	n/c	61K	6
4/27	2533’	9.6	30	2	3	7.0	n/c	92K	0
4/28	3972’	9.0	52	14	15	9.0	14.0	6.2K	4
4/29	5004’	9.2	60	18	19	10.5	8.8	3.8K	4
4/30	6143’	9.1	51	16	17	9.5	8.8	3.8K	4

ELECTRIC LOG FORMATION TOPS- KB Elev. 2424’

			*Goff Gas Unit No. 1	
FORMATION	DEPTH	DATUM	DATUM	POSITION
Surface casing	1500’	+868		
Chase	2523’	-155’	-162’	+7’
Odell SH	2632’	-264’	-276’	+12’
Gage SH	2687’	-319’	-330’	+11’
Towanda LS	2719’	-351’	-352’	+1’
Wreford LS	2876’	-508’	-522’	+14’
Council Grove	2926’	-558’	-574’	+16’
Hooser SH	3024’	-656’	-668’	+12’
Cottonwood LS	3099’	-731’	-734’	+3’
Neva	3160’	-792’	-816’	+24’
Penn. Wabaunsee	3388’	-1020’	-1066’	+46’
Heebner	4298’	-1930’	-1960’	+30’
Toronto	4344’	-1976’	-1985’	+9’
Lansing	4454’	-2086’	-2106’	+20’
Dewey LS	4758’	-2390’	-2400’	+10’
Stark Shale	4934’	-2566’	-2587’	+21’
Swope LS	4938’	-2570’	-2597’	+27’
Hushpuckney SH	5020’	-2652’	-2666’	+14’
Hertha LS	5047’	-2679’	-2687’	+8’
Pleasanton Group	5121’	-2753’	-2766’	+13’
Marmaton	5140’	-2772’	-2788’	+16’
Novinger/Pawnee	5208’	-2840’	-2859’	+35’
Ft. Scott	5272’	-2904’	-2922’	+18’
Cherokee	5309’	-2941’	-2955’	+14’
Atoka	5446’	-3078’	-3109’	+31’
Morrow	5648’	-3280’	-3308’	+28’
Mississippi Chester	5720’	-3352’	-3384’	+32’
Ste. Genevieve	6120’	-3752’	NDE\	
St. Louis	6216’	-3848’		
TD	6400’	-4032’		

*Pan American Petroleum Corp., Goff Gas Unit No. 1, S/2 N/2 NE, Sec. 8, 34S, 28W – app. ¾ mile to the SE, K.B. Elev. 2424’.