Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1081436

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: Joe Forma
Phone: (603) 427-2099
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Peter Debenham
Purchaser: DCP & 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 #:

02/28/2012	03/07/2012	04/15/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21313-00-00
Spot Description:
NW SE SE NE Sec. 30 Twp. 33 S. R. 29 ☐ East ☑ West
2308 Feet from ☑ North / ☐ South Line of Section
335 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: Vail Offset Well #: 3-30
Field Name:
Producing Formation: Morrow
Elevation: Ground: 2639 Kelly Bushing: 2651
Total Vertical Depth: 6371 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1495 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: 2500 ppm Fluid volume: 300 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Dillco Fluid Service Co
Lease Name: Liz Smith License #: 6652
Quarter NE Sec. 26 Twp. 30 S. R. 34 ☐ East ☑ West
County: Meade Permit #: 15-081-20272-0002

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: 05/24/2012
☑ **Confidential Release Date:** 05/27/2014
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 05/24/2012

1081436

Operator Name: O'Brien Energy Resources Corp. Lease Name: Vail Offset Well #: 3-30

Sec. 30 Twp. 33 S. R. 29 ☐ 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
Induction
Nuetron Density

☑ 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	8.625	24	1495	ACON	550	3% CaCl 1/4# floseal
PRODUCTION	7.875	4.5	10.5	6355	AA2	175	2% CaCl & 1/4# floseal

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
2	5842-5850	acidize w/ 1200 gal 7.5% NEFE HCl	perfs
		frac w/ 30,000# 20/40 sand, 600 bbl gelled wtr	perfs

TUBING RECORD: Size: 2 3/8 Set At: 5790 Packer At: 5782 Liner Run: ☑ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 4/15/2012

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:

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Vail Offset 3-30
Doc ID	1081436

Tops

Name	Top	Datum
Heebner	4462’	-1811’
Toronto	4492’	-1841’
Lansing	4620’	-1969’
Marmaton	5266’	-2615’
Cherokee	5422’	-2771’
Atoka	5710’	-3059’
Morrow	5764’	-3113’
Mississippi	5912’	-3261’
Ste. Genevieve	6150’	-3499’
St. Louis	6244’	-3593’

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Vail Offset 3-30
Doc ID	1081436

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
SURFACE	12.25	8.625	24	1495	ACON	550	3% CaCl 1/4# floseal
PRODUCTION	7.875	4.5	10.5	6355	AA2	175	2% CaCl & 1/4# floseal

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/

May 24, 2012

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

Re: ACO1
API 15-119-21313-00-00
Vail Offset 3-30
NE/4 Sec.30-33S-29W
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,

Joe Forma
Vice President
O'Brien Energy Resources Corp.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer		Lease No.	Date
Lease		Well # 30	Service Receipt 7477
Casing 4 1/2	Depth 11407	County Meade	State KS
Job Type 7100 Surface	Formation	Legal Description 30 33 29	

Pipe Data		Perforating Data		Cement Data
Casing size 4 1/2	Tubing Size	Shots/Ft		Lead 100sk A Con
Depth 11495	Depth 5542	From	To	2.05 51.5H
Volume 43 bbls	Volume	From	To	18.46 bbl 51K 11.4
Max Press 1500	Max Press	From	To	Tail in 150sk
Well Connection 4 1/2	Annulus Vol.	From	To	1.31 51K
Plug Depth 11151	Packer Depth	From	To	6.536 bbl 51K 14.8#

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
2000					Arrive On Location
2010					Safety Meeting Rig Up
2230					Run Casing
115					Circulate W/Rig
1611					Hook up To Pump Truck
145	1800		1.0	1	Pressure Test
150	400		710	6.2	Pump Lead cmt @ 11.4#
230	300		36	6.0	Pump Tail cmt @ 14.8#
245					Drop Plug Wash Up
250	300		93	6.0	Displace
310	600		10	2.0	Slow Down Displace
315	1100		.1	.1	Land Plug Float Held
					Release PSI Set Float
					Job Complete
					Thanks For Using Basic Energy Services

Service Units	19520	20462	19301-19906	19928 19983		
Driver Names	C Chavez	Eddie	Nava	Martin		

Roger — Customer Representative

Terry Beutler — Station Manager

C Chavez — Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: OBrien Energy	Lease No.:	Date: 3-8-12	
Lease: Vail Offset	Well #: 3-30	Service Receipt: 1717 02628	
Casing: 4½ 11.6#	Depth: 6365	County: Meade	State: Ks
Job Type: Z42 4½ L.S.	Formation:	Legal Description: 30 33 29	

Pipe Data		Perforating Data		Cement Data
Casing size: 4½ 11.6#	Tubing Size:	Shots/Ft:		Lead: See Cd/l sheet
Depth: 6365	Depth:	From:	To:	
Volume:	Volume:	From:	To:	
Max Press:	Max Press:	From:	To:	Tail in:
Well Connection:	Annulus Vol.:	From:	To:	
Plug Depth:	Packer Depth:	From:	To:	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
14:00					on Loc. / Held Safety Meeting
					Start Csg.
17:30					Csg on Bottom Cir. w/ Rig
					TP: 6365 SJ: 45
17:49	3200				Test Pump + Lines
17:51	300		12	5.3	Start Mud flush
~~17:54~~	350		47	5.3	Start CMT 175sk @ 14.8#
18:08					Shutdown + Wash up
18:09					Drop Plug
18:14	200		0	7	Start Disp. w/ 1gal/1000gal CC-1
~~18:26~~	750		90	2	Slow Rate
18:29	1250		98	2	Bump Plug
18:30	~~0~~		98	~~0~~	Release / Float Held
18:35					Rig Down Head + Wait on Rig
19:14	200		5	3	Plug Mouse Hole w/ 20sk @ 13.5#
19:19	200		8	3	Plug Rat Hole w/ 30sk @ 13.5#
19:23					Shutdown + Knock Loose
19:25					Wash Pump + Lines
19:30					End Job
	825				Pressure Before Plug Landed

Service Units	21755	38119 19842	14355 14284			
Driver Names	Cochran	Mendoza	Swafford			

R. Pearson
Customer Representative

J. Bennett
Station Manager

M. Cochran
Cementer

Taylor Printing, Inc.

O'Brien Energy Resources, Inc.
Vail Offset No. 3-30, Singley Field
Section 30, T33S, R29W

Meade County, Kansas
February, 2012

Well Summary

The O'Brien Energy Resources, Vale Offset No. 3-30 was drilled as a wildcat to a total depth of 6370' in the Mississippian St. Louis Formation. One of the closest offsets was the Vail No. 2-30, approximately 4000' to the Northwest. Formation tops came in low relative to this offset. The Toronto, Lansing and Marmaton ran 26', 20' and 30' low respectively. The Cherokee and Atoka came in 26' low and the Morrow, 16' low. The Chester ran 58' low and the Ste. Genevieve and St. Louis, 32' and 38' low. Formation tops ran similarly low relative to the Vale No. 1-30, to the Southwest. The Morrow came in 24' low.

Formation tops ran generally even to high relative to the Singley West No. 3-29, approximately 2000' to the Northeast. The Morrow ran 15' high and the Chester came in 21' low.

Several excellent hydrocarbon shows were documented during the drilling of this well. An Upper Morrow "A" Sandstone (5792'-5802') consists of excellent porosity from 18 to 26 percent. A 160 Unit gas increase was noted and with just a weak show in a small percentage of samples noted in a tight sandstone. It is thought that this Sand was too friable to have been noted in samples and that just a trace of the tighter sand survived.

An excellent oil show occurred in either the Morrow "B" or "C" Sandstone interval(5841'-5850') and consists of a Sandstone in 35% of the samples: Medium to light mottled brown, white to clear and occasionally salt and pepper with glauconite, hard to friable, very fine upper, well sorted, subround grains, siliceous cement, calcareous, clean, carbonaceous inclusions, pyritic in part, tight to fair intergranular and trace vuggy porosity, very bright light yellow to orange hydrocarbon fluorescence(all sandstone), excellent fast streaming cut, light brown matrix oil stain, live oil and gas bubbles when crushed, strong oil odor. A 350 Unit gas kick occurred. Porosity of 13% to 18% is noted on logs.

A hydrocarbon show with an associated 240 Unit gas increase occurred from a lower Morrow "D" Sandstone from 5901' to 5912': Medium to light brown, hard, dense to trace intergranular porosity, siliceous and clay cement, calcareous, pale blue to light yellow fluorescence, fair cut oil stain and slight odor.

Additional minor shows occurred in the Chester.

4 ½" production casing was run on the Vale Offset No. 3-30 on 3/8/12 for the above mentioned shows.

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 Offset No. 3-30, Singley Field
Location:	2308' FNL & 335' FEL, Section 30, T33S, R29W, Meade County, Kansas – East of Plains.
Elevation:	Ground Level 2639', Kelly Bushing 2651'
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:	2/28/12
Total Depth:	3/7/12, Driller 6370', Logger 6371', Mississippian St. Louis
Casing Program:	37 joints of 8 5/8", J55, 24Lbs/ft, set at 1495'. 4 ½" production casing to TD.
Mud Program:	Winter Mud, engineer K.L. Rice, 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, 10' through zones of interest. One dry cut sent to KGS Sample Log Library, Wichita.
Electric Logs:	Weatherford, engineer Anthony Giambalvo, 1)Dual Induction 2) Compensated Neutron Litho Density 3) Microlog
Status:	4 1/2 " production casing to TD on 3/8/12.

WELL CHRONOLOGY

DATE	6 AM DEPTH	FOOTAGE	RIG ACTIVITY
2/28	165’	165’	Move to location and rig up rotary tools. Mix spud mud. Drill rathole and mousehole. Spud in 12 ¼” surface hole to 165’.
2/29	1495’	1330’	Survey(1 deg.) and service rig. To 1495’ and circulate. Drop survey(1 deg.) and trip out for surface casing.
3/1	1785’	290’	Rig up casing crew and run and cement 37 joints of 8 5/8” casing set at 1495’ with 400 sacks Lite and 150 Class C tail. Cement did circulate. Plug down 3 am. Wait on cement. Back off 8 5/8” and nipple up BOP and pressure test to 500 PSI. Trip in and drill plug and cement and shoe and new 7 7/8” hole to 1750’ and trip for Bit No. 3. Survey(1 deg.) and drill to 2970’.
3/2	2970’	1185’	Service mud pumps. Survey(3/4 deg.). Displace hole at 2600’ and drill to 2970’.
3/3	4125’	1155’	
3/4	5009’	884’	Service rotary table and rig. Clean suction. To 5009’ and circulate and wiper trip 27 stands. Survey(3/4 deg.) and clean suction and change fuel filters on draw works.
3/5	5755’	746’	Trip in and drill to 5755’.
3/6	6255’	500’	Repair rotary chain and service rig. To 6255’ and drop survey(1/2 deg.) and trip out for Bit No. 4. Service clutch.
3/7	6370’TD	115’	Service clutch. Trip in with Bit No. 4 breaking circulation and drill to 6370’TD and circulate. Trip for logs and run elogs.
3/8	TD		Logging(LTD 12:00 am). Trip in and break circulation at 3000’ and 5000’ and TD and trip out laying down and run and cement 4 ½” production casing to TD. Rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	HTC	MXCI	12 ¼”	1495’	1495’	23 ½
2	STC	F27I	7 7/8”	1750’	255’	4 ½
3	HTC	HC5062	7 7/8”	6255’	4505’	107 ¾
4	STC	F27I	7 7/8”	6370’	115’	11
					Total Rotating Hours:	146 3/4
					Average:	43.4 Ft/hr

DEVIATION RECORD - degree

1495’ 1, 1750’ 1, 2534’ ¾, 4538’ ¾, 6370’ 1

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
2/28	Water								
2/29	1020’	9.1	34				N/C		20
3/1	1500’	8.3	Water						
3/2	2645’	8.6	55	20	30	10.5	16.0	8.5K	4
3/3	3720’	8.3	45	12	14	10.5	16.0	10K	4
3/4	4665’	9.0	45	10	10	10.0	12.0	4K	6
3/5	5468’	8.9	48	18	14	11.0	8.0	4K	6
3/6	6246’	8.9	45	14	10	11.0	6.0	2.4K	6
3/7	6370’	8.9	52	18	14	11.0	6.0	2K	6

ELECTRIC LOG FORMATION TOPS- KB Elev. 2679’

			*Vale No. 2-30	
FORMATION	DEPTH	DATUM	DATUM	POSITION
Surface csg	1495’			
Heebner	4462’	-1811’	-1797’	-14’
Toronto	4492’	-1841’	-1815’	-26’
Lansing	4620’	-1969’	-1949’	-20’
Marmaton	5266’	-2615’	-2585’	-30’
Cherokee	5422’	-2771’	-2745’	-26’
Atoka	5710’	-3059’	-3033’	-26’
Morrow	5764’	-3113’	-3097’	-16’
“A” SS	5792’	-3141’		
“B” or “C” SS	5841’	-3190’		
“D” SS	5901’	-3250’		
Mississippi Chester	5912’	-3261’	-3203’	-58’
Ste. Genevieve	6150’	-3499’	-3467’	-32’
St. Louis	6244’	-3593’	-3555’	-38’
TD	6370’	-3719’		

*Vale No. 2-30, 380’FNL & 1320’FWL, Sec. 30, T33S, R29W – app. 4000’ to the NW, K.B. Elev. 2697’.