Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1205714

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:

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 #:

03/10/2014	03/17/2014	03/17/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-025-21573-00-00
Spot Description:
_ - _ - NW - SE Sec. 4 Twp. 31 S. R. 24 ☐ East ☑ West
1980 Feet from ☐ North / ☑ South Line of Section
1980 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: Clark
Lease Name: Prather Well #: 1-4
Field Name:
Producing Formation: Dryhole
Elevation: Ground: 2561 Kelly Bushing: 2573
Total Vertical Depth: 5700 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 734 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: 16500 ppm Fluid volume: 850 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Max Papay
Lease Name: Sneed License #: 34021
Quarter NW Sec. 14 Twp. 34 S. R. 30 ☐ East ☑ West
County: Meade Permit #: 15-119-20027

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: 05/19/2014
☑ **Confidential Release Date:** 05/18/2016
☑ **Wireline Log Received**
☐ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ I ☐ II ☐ III **Approved by:** NAOMI JAMES **Date:** 05/20/2014

[redacted] 1205714

Operator Name: O'Brien Energy Resources Corp. Lease Name: Prather Well #: 1-4

Sec. 4 Twp. 31 S. R. 24 ☐ East ☑ West County: Clark

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:

Neutron
Induction
Micro

☑ 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	734	aconn blend	300	3%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

TUBING RECORD: Size: Set At: Packer At: Liner Run: ☐ Yes ☐ No

Date of First, Resumed Production, SWD or ENHR. 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	Prather 1-4
Doc ID	1205714

Tops

Name	Top	Datum
Heebner	4504’	-1931
Toronto	4522’	-1949
Lansing	4674’	-2101
Stark	5052’	-2479
Cherokee	5343’	-2770
Morrow	5426’	-2853
Mississippi Chester	5470’	-2897
St. Louis	5662’	-3089

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Prather 1-4
Doc ID	1205714

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	734	aconn blend	300	3%CaCl & 1/4# floseal

O'Brien Energy Resources, Inc.
Prather No. 1-4
Section 4, T31S, R24W
Clark County, Kansas
March, 2014

The O'Brien Energy Resources, Prather No. 1-4 was drill to a total depth of 5688' in the Mississippian St. Louis Formation in 99 rotating hours for an average of 57.6 feet/hour and with no rig problems.

The closest offset was the Vess Oil Corporation, Brown "D" No. 1-4 – 1520' to the east. The Heebner and Toronto came in 15' high to this offset. Thinning was noted as the Stark Shale, Cherokee and Morrow ran 22', 37' and 39' high respectively.

Two minor hydrocarbon shows were documented in the Lower Lansing at 5135'-5140' and 5218'-5226'(drill time depths) and with an associated trace of light blue hydrocarbon fluorescence(<<1% of the samples), slow streaming cut, trace oil stain and with traces of moldic, fenestral and intercrystalline porosity. A 5 Unit gas increase was recorded on the hotwire from both zones.

No Morrow or Chester Sandstones were noted in samples. A very tight two foot Morrow Sandstone (5460'-5462') is noted on logs. No Chester Sandstones were developed and the Pranther No. 1-4 was plugged and abandoned 3/17/14.

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:	Prather No. 1-4
Location:	1980'FSL & 1980'FEL, section 4, T31S, 24W, Clark Co., KS
API No.:	1502521573
Elevation:	Ground Level 2563', Kelly Bushing 2575'
Contractor:	Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher Alan Cain, Drillers: Saul Garcia, Richard TaFaya, Darryl LaRoche
Company Man:	Roger Pearson – Liberal, Kansas
Spud Date:	3/10/14
Total Depth:	3/17/14, Driller 5700', Logger 5688', Mississippi
Casing Program:	17 joints of 8 5/8", J55, 24Lbs/ft, set at 723' with 175 sacks Class C(2%cc).
Mud Program:	Service Mud/Mud-Co, Engineer Terry Ison, Chemical/gel, displaced 3180'.
Wellsite Consultant:	Peter Debenham Call depth 3000', Box 350, Drake, CO 80515, 720/220-4860.
Gas Detection:	MBC Logging, Meade.
Samples:	30' to 4400', 10' to TD. One dry cut sent to the KS Sample Log Library, Wichita.
Electric Logs:	Weatherford, engineer Derek Carter, Array Induction, Compensated Neutron/Density, Hi Res.
Status:	Plugged and abandoned 3/17/14.

WELL CHRONOLOGY

DATE	6 AM DEPTH	FOOTAGE	RIG ACTIVITY
3/10			Move to location and rig up rotary tools.
3/11	734’	734’	Mix spud mud. Drill mouse hole and rat hole. Spud in 12 ¼” surface hole to 734’. Circulate and trip for casing and run and cement 17 joints of 8 5/8” set at 723’ – did circulate. Plug down 3 PM. Back off landing joint and nipple up BOP.
3/12	2045’	1311’	Nipple up and pressure test BOP. Trip in and drill plug and cement and 7 7/8” hole to 984’ and trip for Bit No. 3. Change out wash pipe, run survey(3/4 deg.) and drill to 2045’.
3/13	3530’	1485’	Service rig – clean suction and grease swivel. Survey(3/4 deg.). Change out draw works clutch. Clean suction and sisplace hole at 3180’.
3/14	4770’	1240’	Survey(3/4 deg.) and service.
3/15	5600’	830’	Work on clutch.
3/16	5700TD	100’	To TD and circulate. Wiper trip 36 stands and circulate and condition mud. Trip for and run elogs. Trip to bottom and circulate. Trip out laying down.
3/17	TD		Trip out and plug and abandon well. Rig down.

BIT RECORD

NO.	SIZE	MAKE	TYPE	OUT	FOOTAGE	HOURS
1	12 ¼”	Varel	RR	733’	734’	10
2	7 7/8”	htc	ha22512	1580’	846’	4 ¼
3	7 7/8”	HTC	DP506F	5700’	4120’	1116 ¼

Total Rotating Hours: 99
Average: 57.6
Ft/hr

DEVIATION RECORD - degree

526’ ¼, 734’ ¼, 1486’ ¼, 2143’ ¼, 2707’ 1, 3588’ ½, 4185’ 1, TD ¾

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
3/12	1557’	9.9	32	--	--	7.0	NC	95K	--
3/13	2811’	9.6	33	--	--	7.0	NC	81K	--
3/14	4247’	9.2	58	16	26	8.5	12.0	8K	2
3/15	5073’	9.4	52	16	20	10.5	9.6	6K	1
3/16	5700’	9.4	45	16	18	9.5	8.8	6K	2

ELECTRIC LOG FORMATION TOPS- KB Elev. 2573’

FORMATION	DEPTH	DATUM	*Brown “D” No. 1-4 DATUM	POSITION
Casing	732’			
Heebner	4504’	-1931’	-1945’	+14’
Toronto	4522’	-1949’	-1965’	+16’
Lansing	4674’	-2101’	-2067’	+34’
Stark SH	5052’	-2479’	-2501’	+22’
Cherokee	5343’	-2770’	-2807’	+37’
Morrow	5426’	-2853’	-2892’	+39’
Morrow SS	NA			
Mississippi Chester	5470’	-2897’	-2967’	+70’
St. Louis	5662’	-3089’		
TD	5688’			

*Vess Oil Corp., Brown “D” No. 1-4, 1520’ to the East, KB Elev. 2571’.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer: O'Brien Energy	Lease No.:	Date: 3-11-14	
Lease: Prather	Well #: 1-4	Service Receipt:	
Casing: 8 5/8	Depth: 734	County: Meade	State: Kansas
Job Type: Surface	Formation:	Legal Description:	

Pipe Data

Casing size: 8 5/8	Tubing Size:		
Depth: 734	Depth:		
Volume: 44.0112 BBLS	Volume:		
Max Press: 1800 psi	Max Press:		
Well Connection: PC	Annulus Vol.:		
Plug Depth: 692 ft	Packer Depth:		

Perforating Data

Shots/Ft	From	To

Cement Data

Lead 150 sk Accon @ 11.4

2.45 ft³/sk 15.10 gal/sk

Tail in 150 sk PPC @ 14.8

1.34 ft³/sk 6.33 gal/sk

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
10:00					On Location
13:07					Spot in
13:45					Safety Meeting and Rig up
14:10					Pressure test to 2000 psi
14:13	30 psi			4BPM	Start lead
14:35	30 psi		78	4BPM	Start tail
14:45	60		36	4BPM	Drop Plug Wash up on plug Start Disp
	60		10	4BPM	~~Reload~~
	70		20	4BPM	~~Reload~~
	50		30	2BPM	Slow Rate to 2BPM
	140		40	1BPM	Slow Rate to 1BPM
15:13	730		44	0	Landed Plug Released did not hold
15:17	400		45		Pressured up and shut head in with 400 on it float did not hold leaving head on location
					Job Complete

Service Units	78939	37223/37426	30463/19566			
Driver Names	Chad Hine	Tammy Meralls	Norma Bowers			

Roger Pearson
Customer Representative

Jerry Bennett
Station Manager

Cementer

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer O'BRIEN Energy	Lease No. 1-4	Date 03-17-14	
Lease Prather	Well # 1-4	Service Receipt 1717-05629A	
Casing 4½" DP	Depth 1560'	County Meade	State KS
Job Type PTA	Formation	Legal Description 4-31-24	

Pipe Data		Perforating Data		Cement Data
Casing size 4½" DP	Tubing Size	Shots/Ft		Lead 220 sks 60/40 Poz 4% Gel 1.5 cuft/sk
Depth	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
0100					Called out
0330					On Location
0340					Safety Meeting
0400					Set up
0630			13 BBLs	2	1st Plug 50 sks - 9 BBLs MW
0638			18 BBLs	3	13.3 BBLs slurry 20 BBLs Displacement
0735			13 BBLs	2	2nd Plug 50 sks - 9 BBLs MW
0740			8 BBLs	2	13.3 BBLs slurry 9 BBLs Displacement
0800			13 BBLs	2	3rd Plug 50 sks 9 BBLs MW
			2 BBLs	2	13.3 BBLs slurry 3 BBLs Displacement
0910			5 BBLs	2	4th Plug 20 sks 3.6 BBLs MW
			½ BBL	½	5.3 BBLs slurry
0915			8 BBLs		Rat Hole - 30 sks
			½ BBL		8 BBLs Slurry
0930			5 BBLs		Mouse Hole 20 sks
			½ BBL		5 BBLs slurry
1000					Job Completed - Thanks

Service Units	27555	7089-19570	30463-19566			
Driver Names	Roger	Gabriel	Mario			

Roger Pearson
Customer Representative

Tommy Bantwell
Station Manager

Roger Brown
Cementer