Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1190452

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: 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 #:

12/13/2013	12/22/2013	2/24/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-119-21356-00-00
Spot Description:
NE - SW - NE - SE Sec. 30 Twp. 33 S. R. 29 ☐ East ☑ West
1976 Feet from ☐ North / ☑ South Line of Section
681 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 Well #: 6-30
Field Name:
Producing Formation: Morrow
Elevation: Ground: 2647 Kelly Bushing: 2659
Total Vertical Depth: 6360 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1473 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: 8100 ppm Fluid volume: 800 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 #: 15-119-20027-0001

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: 02/24/2014
☑ **Confidential Release Date:** 02/24/2016
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 02/25/2014

[redacted] 1190452

Operator Name: O'Brien Energy Resources Corp. Lease Name: Vail Well #: 6-30

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:

INDUCTION
NEUTRON
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	1473	ACON BLEND	550	2%CaCl, 1/4# floseal
PRODUCTION	7.875	4.5	10.5	6328	AA2	180	

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	5847-5857	acidize w/ 1200 ga 7.5% NEFE HCl	Perfs
		frac w/ 38000# 20/40 sand & 750 bbl gel wtr	perfs

TUBING RECORD: Size: 2.375 Set At: 5780 Packer At: 5775 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	Vail 6-30
Doc ID	1190452

Tops

Name	Top	Datum
Heebner	4482’	-1823’
Toronto	4510’	-1851
Lansing	4648’	-1989
Marmaton	5274’	-2615
Cherokee	5432’	-2773
Atoka	5722’	-3063
Morrow	5776’	-3105
Mississippi Chester	5912’	-3263
Ste. Genevieve	6169’	-3501
St. Louis	6262’	-3603

Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Vail 6-30
Doc ID	1190452

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	1473	ACON BLEND	550	2%CaCl, 1/4# floseal
PRODUCTION	7.875	4.5	10.5	6328	AA2	180	

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer O'Brien Energy	Lease No.	Date 12-14-13 12-15-13	
Lease Vail	Well # 6-30	Service Receipt 1717-04367 A	
Casing 8 5/8"	Depth	County Meade	State KS
Job Type Surface 242	Formation	Legal Description 30 - 33 - 29	

Pipe Data

Casing size 8 5/8"	Tubing Size
Depth 1486'	Depth
Volume 91.8	Volume
Max Press 1500	Max Press
Well Connection	Annulus Vol.
Plug Depth	Packer Depth

Perforating Data

Shots/Ft

From	To
From	To
From	To
From	To
From	To

Cement Data

Lead 400 sks 11.4 ppg
'A' Conv' Blend
3% CACl2
1/4 # Poly flake
.2% WCA1

Tail in 150 sks 14.8 ppg
Premium Plus Cement
2% CACl2
1/4 # Poly flake

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
1900					Called out 12-14-13
2200					On Location "
2210					SAfety Meeting
2215					Set up
					Run Casing 12-15-13
					On Bottom Circ Rig Pumps Safety Meeting
0320	1500		10	4	Pump Water Spacer Ahead Test Lines 1500psi
0335	200		209.4	4	Mix & Pump Lead cement
					11.4 ppg - 2.95 cuft./sk
0420	200		35.8	4	Mix & Pump Tail cement
					14.8 ppg - 1.34 cu.ft./sk
					Finished mixing cement
0430					Drop Top Plug - shutdown
0435	200 700		91.8	5	Displace
					Slowed down to 2 BPM LAST 20 BBLs
					And slow down to 1 BPM LAST 10 BBLs
0515	1480				Land Plug 500-600psi over Diff.
					Released
0520					Float Held - No cement to Surface
					~~Break out & Load truck~~ RWB
					~~Job Completed~~ RWB
					~~Released~~ RWB
					Thanks For this job - Basic Services

Service Units	21755	37223-37726	33021-19284	14355-377	25	
Driver Names	Roger	Tommy	Norma	Gabriel		

Roger Pearson
Customer Representative

Jerry Bennett
Station Manager

Cementer

Taylor Printing, Inc.

BASIC ENERGY SERVICES
Liberal, Kansas

Cement Report

Customer	O'Brien Energy	Lease No.	Date 12-23-13
Lease	Vail	Well # 6-30	Service Receipt
Casing	Depth	County Meade	State KS
Job Type	Formation	Legal Description	30-33-29

Pipe Data		Perforating Data		Cement Data
Casing size 4 1/2 10.5#	Tubing Size	Shots/Ft		Lead 180 SK @ 14.8 PPG 5# Gilsonite, 10% Salt, 6% C-15, 1/4 # Defoamer, 5# Gilsonite
Depth 6330'	Depth	From	To	AA2 Cement
Volume 100 bbl	Volume	From	To	Tail in
Max Press	Max Press	From	To	
Well Connection	Annulus Vol.	From	To	
Plug Depth 6288'	Packer Depth	From	To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumbed	Rate	Service Log
1100					On Location - Rig up
1400					Safety Meeting
1424	2500				Pressure Test
1426			12	3	Pump 500 gallons of Mud flush
1429	300		48	3.5	Pump 180 SK @ 14.8 PPG
1447	[illegible]				Drop Plug - Wash up
1450	175			5.5	Start Displacement with 2% KCL
1500	550		80	2	Slow Rate
1507	1200		100	2	Bump Plug
1512	0				Release Pressure - float Held
					~~Shut Down - Rig Down~~
1520	100		5	2	Plug Mouse Hole - 20 SK 15.6 PPG
1525	100		7	2	Plug Rat Hole - 30 SK @ 15.6 PPG
1530	0				Shut Down - Rig Down

Service Units	~~78940~~	387501842	78440	14353 37725		
Driver Names	78440	~~B~~ Carles	Ruben	Santiago		

Roger Pearson
Customer Representative

Jerry Bennett
Station Manager

Ruben Martinez
Cementer

Taylor Printing, Inc.

O'Brien Energy Resources, Inc.
Vail No. 6-30
Section 30, T33S, R29W

Meade County, Kansas
December, 2013

Well Summary

The O'Brien Energy Resources, Corporation, Vale No. 6-30 was drilled to a total depth of 6360' in the Mississippian St. Louis Formation without any problems. It offset the Vail Offset No. 3-30 by approximately 1000' to the South. The Cherokee and Atoka ran 2' and 4' low relative to this offset. The Morrow came in 8' high and the Morrow "B" Sandstone 3' high. The Mississippian Chester and Ste. Genevieve came in 2' low and the St. Louis 10' low. The Vail No. 6-30 ran 5' to 14' low relative to the Vale offset No. 4-30 from the Heebner to the Atoka. The Morrow came in 5' high and the Morrow "B" Sandstone, 9' high.

Excellent reservoir conditions were noted in the Morrow "B" Sandstone in samples and on logs(5846'5858') – Sandstone in up to 40% of the samples: Light brown with matrix oil staining, Salt and pepper, speckled green, hard to very friable in part, very fine upper to fine lower, well sorted subround grains, siliceous cement, slightly calcareous, glauconitic, pyritic, tight to excellent intergranular porosity, vuggy porosity, bright light yellow hydrocarbon fluorescence(all Sandstone), good streaming cut, light live oil and oil odor when crushed, good even light oil stain, some light gray to green clay infill and inclusions, excellent show. A 360 Unit gas increase occurred on the hotwire.

An additional characteristic hydrocarbon show occurred in the Lower Chester(attached mudlog) and with an additional 320 Unit gas increase.

4 ½ production casing was run on the Vale No. 6-30 for Morrow "B" Sandstone 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
Prospect Geologist:	Ed Schuett, David Ward
Well:	Vail No. 6-30, Singley Field
Location:	1976' FSL & 681' FEL, Section 30, T33S, R29W, Meade County, Kansas – Southeast of Plains.
Elevation:	Ground Level 2647', Kelly Bushing 2659'
Contractor:	Duke Drilling Rig No. 6, Type: Double jacknife, triple stand, Toolpusher Terry Sorter, Drillers: Saul Garcia, Richard TaFaya, Darryl LaRoche
Company Man:	Roger Pearson – Liberal, Kansas
Spud Date:	12/13/13
Total Depth:	12/22/13, Driller 5360', Logger 5356', Mississippi St. Louis
Casing Program:	35 joints of 8 5/8", J55, 24Lbs/ft, set at 1474'. 4 ½" production casing to TD.
Mud Program:	Mud Co./Service Mud Inc., Engineer Justin Whiting, Terry Ison, 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:	20' to 4700', 10' to TD. Zones of interest saved.
Electric Logs:	Weatherford, engineer D. Cole, 1)Dual Induction 2) Compensated Neutron Litho Density 3) Microlog – high res. repeat.
Status:	4 ½" production casing set to TD on 12/13/13.

WELL CHRONOLOGY

DATE	6 AM DEPTH	FOOTAGE	RIG ACTIVITY
12/11			Move to rig up rotary tools. Set in sub and derrick.
12/12			Rig up and service. Change out clutch on 1 and 2. Service floor motor.
12/13	280’	280’	Mix spud mud. Finish rig up and install cathead boom. Drill rat and mouse holes. Drill 12 ¼” surface hole to 280’.
12/14	1486’	1206’	Trip for plugged bit at 280’ and 979’. To 1486’ and clean suction and mix mud and LCM and trip out for surface casing.
12/15	1690’	204’	Run and cement 35 joints of 8 5/8” casing set at 1474’ and wait on cement. Rig up 1” line and tap off cement with 177 sacks cement(250’) and wait on cement. Nipple up BOP and test blind rams. Trip in and test pipe rams. Drill plug and cement and 7 7/8” to 1690’.
12/16	2950’	1260’	To 1698’ and trip for Bit No. 3. Displace hole at 2541. To 2950’.
12/17	4060’	1110’	Service rig and survey(3/4 deg.).
12/18	4465’	405’	Survey(3/4 deg.).
12/19	5560’	1095’	To 5024’ and run 28 stand wiper trip. To 5560’.
12/20	6110’	550’	Survey(1 deg.) and drill.
12/21	6360’TD	250’	To 6360’TD and circulate and condition mud. Cold, windy and snowing.
12/22	TD		Circulate. Run 42 stand wiper trip and circulate and condition mud. Cold and 5” of snow. Circulate on bottom and wait on Weatherford for logs. Run logs. Trip in and circulate.

12/23 TD Trip out laying down. Runand cement 4 ½" production casing to TD and rig down.

BIT RECORD

NO.	MAKE	TYPE	SIZE	OUT	FOOTAGE	HOURS
1	J2	GA1PGC	12 ¼"	1486'	1486'	21 ¼
2	J2	GX-20	7 7/8"	1698'	212'	5
3	Logic	PLT516	7 7/8"	6360'	4662	131 ¼

Total Rotating Hours: 157 ½
Average: 40.4 Ft/hr

DEVIATION RECORD - degree

252' ¼, 730' ¼, 979' ¼, 1486' 1, 2541' 1, 3012' 1, 4013' ¾, 5619' 1,

MUD PROPERTIES

DATE	DEPTH	WT	VIS	PV	YP	pH	WL	CL	LCM-LBS/BBL
12/14	979'	10.0	32			7.0	--	110	2
12/16	2376'	9.5	29			7.0	--	90k	0
12/17	3536'	9.15	47	14	15	8.5	16.8	12k	2
12/18	4564'	9.3	40	14	15	8.5	12.4	8.8k	2.5
12/19	5326'	9.3	66	22	24	11.0	7.2	2.4K	2
12/20	5797'	9.3	46	14	15	10.5	8.0	3.8K	1
12/21	6291'	9.2	47	14	14	10.0	7.2	1.4K	3 ½

ELECTRIC LOG FORMATION TOPS- KB Elev. 2679'

FORMATION	DEPTH	DATUM	*Singley West No. 3-30 DATUM	POSITION
Surface Casing	1485'			
Heebner	4482'	-1823'	-1811'	-12'
Toronto	4510'	-1851'	-1841'	-10'
Lansing	4648'	-1989'	-1969'	-20'
Marmaton	5274'	-2615'	-1615'	0'
Cherokee	5432'	-2773'	-2771'	-2'

Atoka	5722’	-3063’	-3059’	-4’
Morrow	5776’	-3105’	-3113’	+8’
“B” SS	5846’	-3187’	-3190’	+3’
Mississippi Chester	5912’	-3263’	-3261’	-2’
Ste. Genevieve	6169’	-3501’	-3499’	-2’
St. Louis	6262’	-3603’	-3593’	-10’
TD	6360’			

*Singley West No. 3-30, 2308’FNL & 335’FEL, Sec. 30 – approximately 1000’ to the South. .