



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1132164  
OIL & GAS CONSERVATION DIVISION

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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

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 #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ 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: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

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: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1132164

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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 <i>(Amount and Kind of Material Used)</i>	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
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	Vail 5-31
Doc ID	1132164

Tops

Name	Top	Datum
Heebner	4497	-1714
Toronto	4534	-1851
Lansing	4656	-1973
Marmaton	5294	-2611
Cherokee	5456	-2773
Atoka	5734	-3051
Morrow	5792	-3109
Mississippi Chester	5930	-3247
Ste. Genevieve	6192	-3509
St. Louis	6276	-3593

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



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

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

April 09, 2013

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

Re: ACO1  
API 15-119-21333-00-00  
Vail 5-31  
NW/4 Sec.31-33S-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: <u>O'Brien Energy</u>	Lease No.	Date: <u>1/25/13</u>
Lease: <u>Van</u>	Well # <u>5-31</u>	Service Receipt
Casing: <u>4 5/8</u>	Depth: <u>1490'</u>	County: <u>Meade</u> State: <u>KS</u>
Job Type: <u>Surface</u>	Formation	Legal Description: <u>31-33-29</u>

Pipe Data		Perforating Data		Cement Data
Casing size: <u>4 5/8</u>	Tubing Size	Shots/Ft		Lead: <u>400 SK A-G @ 11.4#</u>
Depth: <u>1490'</u>	Depth	From	To	
Volume: <u>92</u>	Volume	From	To	<u>2.95 18.10</u>
Max Press: <u>1500</u>	Max Press	From	To	Tail in: <u>150 SK PF @ 14.8#</u>
Well Connection: <u>P.C.</u>	Annulus Vol.	From	To	
Plug Depth	Packer Depth	From	To	<u>1.71 6.33</u>

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<u>21:50</u>					<u>on loc, spot trucks Rul., Sullyville</u>
<u>23:53</u>	<u>2000</u>				<u>test lines</u>
<u>23:55</u>	<u>230</u>		<u>0</u>	<u>5</u>	<u>Start Mixing @ 11.4#</u>
<u>0:30</u>	<u>210</u>		<u>210</u>	<u>5</u>	<u>on tail @ 14.8#</u>
<u>0:40</u>	<u>0</u>		<u>36</u>	<u>0</u>	<u>Finished Mixing</u>
<u>0:46</u>	<u>0</u>		<u>0</u>	<u>5</u>	<u>start disp, wash up</u>
<u>0:58</u>	<u>510</u>		<u>72</u>	<u>2</u>	<u>slow rate</u>
<u>1:03</u>	<u>610</u>		<u>82</u>	<u>1</u>	<u>slow rate</u>
<u>1:13</u>	<u>1200</u>				<u>Plug down</u>
					<u>Release Psi, float held</u>
					<u>Job Complete</u>

Service Units	<u>746939</u>	<u>39223344726</u>	<u>14354195746</u>	<u>1029619683</u>
Driver Names	<u>Chinz</u>	<u>R. Olds</u>	<u>G. Schaevel</u>	<u>C. Ibarra</u>

Roger Paulson Customer Representative      Ang Bennett Station Manager      Chad Hite Cementer



**BASIC**  
ENERGY SERVICES  
Liberal, Kansas

**Cement Report**

Customer <i>O'Brien Energy</i>		Lease No.		Date <i>1-30-13</i>	
Lease <i>Vail</i>		Well # <i>5-31</i>		Service Receipt <i>03252</i>	
Casing <i>4 1/2</i>	Depth <i>6372</i>	County <i>Meade</i>		State <i>KS</i>	
Job Type <i>242 Long String</i>		Formation		Legal Description <i>31-33-29</i>	
<b>Pipe Data</b>			<b>Perforating Data</b>		<b>Cement Data</b>
Casing size <i>4 1/2 10.5#</i>	Tubing Size		<b>Shots/Ft</b>		<b>Lead</b>
Depth <i>6382</i>	Depth <i>55.43'</i>		From	To	Tail in <i>200skAA2</i> <i>1.51ft 3.5k</i> <i>6646sk 14.8#</i>
Volume <i>10165</i>	Volume		From	To	
Max Press <i>1500</i>	Max Press		From	To	
Well Connection <i>4 1/2</i>	Annulus Vol.		From	To	
Plug Depth <i>6339</i>		Packer Depth		From	To
Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>630</i>					<i>Arrive On location</i>
<i>700</i>					<i>Safety Meeting this up</i>
<i>645</i>					<i>Rig Running Casing</i>
<i>1120</i>					<i>Circulate w/ Rig</i>
<i>1150</i>					<i>Hook Up To BES</i>
<i>1155</i>	<i>2000</i>		<i>1.0</i>	<i>1.0</i>	<i>Pressure Test</i>
<i>1200</i>	<i>4150</i>		<i>5</i>	<i>5.0</i>	<i>Pump Water Spacer</i>
<i>1205</i>	<i>425</i>		<i>10</i>	<i>5.0</i>	<i>Pump Mud Flush</i>
<i>1210</i>	<i>400</i>		<i>5</i>	<i>3.0</i>	<i>Pump Water spacer</i>
<i>1215</i>	<i>300</i>		<i>54</i>	<i>5.0</i>	<i>Pump cement @ 14.8#</i>
<i>1230</i>					<i>Drop Plug - Wash Up</i>
<i>1235</i>	<i>400</i>		<i>91</i>	<i>6.5</i>	<i>Displace</i>
<i>1255</i>	<i>800</i>		<i>10</i>	<i>2.0</i>	<i>Slow Down</i>
<i>1300</i>	<i>1300</i>		<i>11</i>	<i>11</i>	<i>Land Plug - Float Held</i>
<i>1400</i>					<i>Plug - Post &amp; Mouse Holes</i>
<i>1500</i>					<i>Job Complete</i>
<i>Thanks For Using Basic Energy Services</i>					
Service Units	<i>78938</i>	<i>70897-19570</i>	<i>19827-19566</i>		
Driver Names	<i>J. Chauz</i>	<i>Eddie</i>	<i>Suan L.</i>		

*Royer*  
Customer Representative

*Ray Bentt*  
Station Manager

*Israel Chavez*  
Cementer

**O'Brien Energy Resources, Inc.**

**Vail No. 5-31**

**Section 31, T33S, R29W**

Meade County, Kansas

January, 2013

**Well Summary**

The O'Brien Energy Resources, Corporation, Vail No. 5-31 was drilled to a total depth of 6400' in the Mississippian St. Louis Formation in 98 rotating hours and without any problems. The closest offset was the Vail No. 1-30, 2080' to the North. Formation tops ran low relative to this well. The Heebner, Toronto and Lansing ran 9', 18' and 12' low respectively. The Cherokee and Atoka came in 22' and 14' low, the Morrow 16' low. The Chester and Ste. Genevieve came in 24' low and the St. Louis, 16' low.

A Morrow Lower B and or C Sandstone was documented from 5848' to 5872' and consists of a Sandstone in 30% of the samples: Speckled green, salt and pepper, medium to light brown to gray and graygreen, occasional white to clear, friable to hard in part, fine lower, well sorted subround grains, siliceous cement, calcareous, clean, very glauconitic, tight to good intergranular porosity, medium to light mottled pale blue hydrocarbon fluorescence in all the sand, slow bleeding to occasional weak streaming cut, no stain, show dissipates when dried and interbedded with a very sandy Limestone, also with show. A 260 Unit gas kick occurred.

Additional shows and gas increases occurred in the Lower Morrow Limestones and Chester Limestones(attached mudlog).

An interesting Sandstone with reservoir qualities occurred in the Chester from 6034' to 6040'. No samples show was noted although a 180 Unit gas kicked occurred. The gas documented may have come a hot shale immediately below the sand.

A characteristic log show commonly documented in wells in the area occurred in the Lower Chester(6132'-6170') and associated with 640 to 400 Unit gas kicks.

The St. Louis(6380'-6390') was documented as a sandy Limestone with mottled gold hydrocarbon fluorescence in 10% of the samples with excellent streaming cut and mottled brown oil stain and live oil and odor. An 80 Unit gas increase was recorded.

4 1/2" production casing was run on the Vail No. 5-31 on 1/29/13.

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, Land: Gordon Beamguard

Well: Vail No. 1-30, Novinger East Field

Location: 1320' FNL & 1320' FWL, Section 31, T33S, R29W, Meade County, Kansas – 10 miles South of Plains.

Elevation: Ground Level 2670', Kelly Bushing 2682'

Contractor: Duke Drilling Rig No. 6, Type: Double jackknife, triple stand, Toolpusher Rick Schollenbarger, Drillers: Saul Garcia, Danny White, Brett Bridwell

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 1/24/13

Total Depth: 1/29/13, Driller 6400', Logger 6400', Mississippi St. Louis

Casing Program: 36 joints of 8 5/8", J55, 24Lbs/ft, set at 1500'. 4 1/2" production casing to TD.

Mud Program: Mud Co./Service Mud Inc., Engineer Justin Whiting, displaced 2582' 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. One set dry cut sent to KGS sample log library.

Electric Logs: Weatherford, engineer Lynn Scott, 1)Dual Induction 2) Compensated Neutron Litho Density 3) Microlog, high resolution.

Status: 4 1/2 " production casing to TD on 1/29/13.



**WELL CHRONOLOGY**

<b>6 AM</b>			
<b><u>DATE</u></b>	<b><u>DEPTH</u></b>	<b><u>FOOTAGE</u></b>	<b><u>RIG ACTIVITY</u></b>
1/23	75'	75'	Dig cellar and ditches. Move to location and rig up rotary tools. Rig up tarps. Pump water and mix spud mud. Spud in 12 1/4" surface hole to 75'.
1/24	1500'	1425'	Survey(1/2 deg.). To 1500' and trip out and wait on casing crew.
1/25	2335'	835'	Rig up and cement 8 3/4" surface casing to 1500' with 400 sacks A Com(3%cc, 1/4 lb floseal) followed by 150 sacks Class C(2% & 1/4 lb) and wait on cement. Nipple up BOP and trip in and drill plug and cement and pressure test same.
1/26	4050'	1715'	Displace mud system at 2582'. Survey(1/2 deg.). Safety meeting and service rig.
1/27	5035'	985'	Survey(1/2 deg.) and safety meeting. Work under sub and service rig. To 5023' and wiper trip. To 5035'.
1/28	6250'	1215'	Repair air line on clutch and service rig.
1/29	6400'TD	150'	6400'TD and circulate for samples and short trip to 3000' and circulate. Drop survey(1 deg.) and hold safety meeting and trip out for logs. Rig up loggers and run elogs. Trip in and circulate. Trip out laying down and run and cement 4 1/2' to TD. Rig down.

**BIT RECORD**

<b><u>NO.</u></b>	<b><u>MAKE</u></b> <b><u>HOURS</u></b>	<b><u>TYPE</u></b>	<b><u>SIZE</u></b>	<b><u>OUT</u></b>	<b><u>FOOTAGE</u></b>	
1	STC	RR3-13	12 1/4"	1500'	1500'	20 1/2
2	STC	MI616	7 7/8"	6400'	4900'	77 1/2
						Total Rotating Hours: 98

Average:  
Ft/hr

65.3

**DEVIATION RECORD - degree**

1500' ½, 2150' ½, 2582' ½, 4178' ½, 6400' 1

**MUD PROPERTIES**

<b><u>DATE</u></b> <b><u>LBS/BBL</u></b>	<b><u>DEPTH</u></b>	<b><u>WT</u></b>	<b><u>VIS</u></b>	<b><u>PV</u></b>	<b><u>YP</u></b>	<b><u>pH</u></b>	<b><u>WL</u></b>	<b><u>CL</u></b>	<b><u>LCM-</u></b>
1/24	1206'	9.1	33	3	4	7.0	nc	2.5K	6
1/26	3272'	9.2	35	4	6	7.0	nc	16.1K	6
1/27	4865'	9.4	43	13	14	9.0	14.0	6.6K	2
1/28	5725'	9.2	46	13	14	9.5	10.4	4.4K	5
1/29	6400'	9.3	52	16	17	9.0	8.0	4.4K	4

**ELECTRIC LOG FORMATION TOPS-** KB Elev. 2683

<b><u>FORMATION</u></b>	<b><u>DEPTH</u></b>	<b><u>DATUM</u></b>	<b><u>*Vail No. 1-30</u></b>	
			<b><u>DATUM</u></b>	<b><u>POSITION</u></b>
Heebner	4497	-1814'	-1805'	-9'
Toronto	4534'	-1851'	-1833'	-18'
Lansing	4656'	-1973'	-1962'	-12'
Marmaton	5294'	-2611'	-2597'	-14'
Cherokee	5456'	-2773'	-2751'	-22'
Atoka	5734'	-3051'	-3037'	-14'
Morrow	5792'	-3109'	-3093'	-16'
"B"/"C" SS	5848'-5872'	-3165'		
Mississippi Chester	5930'	-3247'	-3223'	-24'
Chester SS	6034'-6040'	-3351'		
Ste. Genevieve	6192'	-3509'	-3485'	-24'
St. Louis	6276'	-3593'	-3577'	-16'
TD	6400'			

\*Vail No. 1-30, sec. 30, 2080' to the North, K.B. Elev. 2679'.