

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1250259  
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: \_\_\_\_\_

1250259

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

<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	Keystone 1-5
Doc ID	1250259

Tops

Name	Top	Datum
Heebner	4386	-1754
Toronto	4410	-1778
Lansing	4528	-1896
Marmaton	5172	-2540
Cherokee	5345	-1713
Atoka	5598	-2966
Morrow	5656	-3024
Mississippi Chester	5763	-3131
Ste. Genevieve	5995	-3363
St.Louis	6094	-3462
Spergen	6290	-3658





# Cement Report

Customer	O'Brien Energy	Lease No.		Date	1-12-15
Lease	houstone	Well #	1-5	Service Receipt	05233
Casing	8 5/8" 24#	Depth	1750'	County	Meade
Job Type	74- 8 5/8" Surface	Formation		State	KS
				Legal Description	5-33-29

Pipe Data		Perforating Data		Cement Data
Casing size	8 5/8" 24#	Tubing Size		Lead 300 sk ACem
Depth	1750'	Depth	From To	
Volume	Disp-92 bbl	Volume	From To	Tail in 150 sk Prem. Pus
Max Press	1500#	Max Press	From To	
Well Connection	TD-1750'	Annulus Vol.	From To	
Plug Depth	42'	Packer Depth	From To	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					on loc-site assessment
					spot trucks- rig up
					safety meeting- JSA
					csg on bpm, break circ
					pressure test 2000#
700				5	mix + pump 300 sk ACem
700				5	switch to tail 150 sk CLASS C
100			0	5	drop plug, disp csg
700			80	2	slow rate
1200			92	0	land plug, float head
					circ cut to surface

Service Units	7840	37223-51720	30463-19166	30464-37724
Driver Names	A Owen	G Echorta	B Owen	R Mast

R Pearson Customer Representative     
 T Davis Station Manager     
 A Owen Cementer

### Cement Report

Customer	O'Brien	Lease No.		Date	1/14/15
Lease	Keystone	Well #	1-5	Service Receipt	1717-03590A
Casing	4 1/2	Depth	6375	County	Meade
Job Type	Production	Formation		Legal Description	5/33/29

Pipe Data			Perforating Data		Cement Data
Casing size	4 1/2" 10.5#	Tubing Size	Shots/Ft		Lead 1755 Ks AAZ @ 14.8
Depth	6375	Depth	From	To	
Volume	101.1 BBL	Volume	From	To	1.51 6.64
Max Press	2500 psi	Max Press	From	To	Tail-in 6040 Pbx
Well Connection	PK	Annulus Vol.	From	To	Butt Mouse @ 13.5
Plug Depth	6360	Packer Depth	From	To	1.48 7.37

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
18:00					On loc
18:20					Safety mtg w/ Bos Emp.
18:30					Spot in & Rig up
23:30					Safety mtg w/ Rig crew
23:45					Pressure test 2500 psi
23:50			12 BBL		Pump mud flush
23:57			7.9 BBL		Pump Rat hole
00:04			5.27 BBL		Pump Mouse hole
00:12	200		47.06	3.6	Start Pumping AAZ Down hole
00:30					Shutdown Drop plug
00:37					Washup to pit
00:37					Start Disp.
	80		8	4.3	
	120		16	5.3	
	120		24	5.3	
	120		32	5.3	
	120		40	5.3	
	120		48	5.3	
	120		56	5.3	
	240		64	5.2	
	380		72	5.1	
	630		80	5	
	800		88	4.7	

Service Units	86573	35117/19919	19827/37425		
Driver Names	Tommy Mc	Daniel B.	Angel E.		

Roger Pearson Customer Representative     
 Tyce Davis Station Manager     
 Tommy Marcellus Cementer

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

**Keystone No. 1-5**

**Section 5, T33S, R29W**

Meade County, Kansas

January, 2015

**Well Summary**

The O'Brien Energy Resources, Keystone No. 1-5 was drilled to a total depth of 6364' in the Mississippian Spergen Formation. It offset the Crooked Creek No. 4-8 by 3770' to the North. Formation tops ran high relative to this offset. The Heebner, Toronto and Lansing came in 33' high. The Marmaton, Cherokee and Atoka ran 52' and 53' and 58' high respectively. The Morrow came in 58' high and the Morrow "C" Sandstone, 65' high. The Chester and Ste. Genevieve came in 91' high and the St. Louis 72' high.

An excellent but subtle show in samples occurred in the Morrow "C" Sandstone(5716'-5728') and consists of a Sandstone in 4% of the sample: Medium to light brown to gray, hard to very friable in part, fine upper to fine lower, well sorted subround to subangular grains, siliceous cement, slightly calcareous, tight to good intergranular porosity – some clay infill, trace vuggy porosity, dull mottled gold green hydrocarbon fluorescence, slow streaming to bleeding cut, gas bubbles and slight oil sheen when crushed, trace oil stain, show dissipates. A 950 Unit gas kicked was documented.

An additional show was documented in the Upper St. Louis and with an associated 175 Unit gas increase(6094'-6104'): Limestone, Medium mottled brown, dolomitic and sucrosic, very siliceous in part, medium brown matrix oil stain with mottled gold brown hydrocarbon fluorescence in 2% of the samples with good streaming cut, trace live oil in vugs.

4 1/2" production casing was run on the Keystone No. 1-5 on 1/16/15 for Morrow "C" gas production.

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: Keystone No. 1-5

API: 15-119-21385

Location: 760' FSL & 341' FEL, Section 5, T33S, R29W, Meade County, Kansas – Southeast of Plains.

Elevation: Ground Level 2620', Kelly Bushing 2632'

Contractor: Duke Drilling Rig No. 9, Type: Double jackknife, double stand, Toolpusher  
Emidgio Rojas, Drillers: Victor Martinez, Alejandro V., Feraindo Juroeb

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 1/10/15

Total Depth: 1/16/15, Driller 6400', Logger 6364', Spergen Formation

Casing Program: 35 joints of 8 5/8", J-55, 24Lbs/ft, set at 1484' with 300 sacks Comm A Blend(3% cc, ¼ lb Floseal) and 150 sacks tail. Plug down 6:30 pm 1/11/15.

Mud Program: Winter Mud, engineer Kris McCume, displaced 2800', Chem. gel/LCM.

Wellsite Consultant: Peter Debenham with mudlogging trailer, Call depth 3000', Box 350, Drake, CO 80515, 720/220-4860.

Samples: 30' to 5700', 20' to TD.

Electric Logs: Weatherford, engineer Ben Weldin , Array Induction, Compensated Neutron/Density, Microlog, Hi Res.

Status: 4 ½" production casing run 1/16/2015.



**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>
	1/10	300	300'	Move to and rig up rotary tools. Spud in 12 ¼" to 300'.
	1/11	1490'	1190'	Surface hole to 1490' and circulate and clean hole. Drop survey(1 deg.) and trip out and run and cement 35 joints of 8 5/8", 24 lbs/ft, J55 set at 1484' with 300 sacks A Comm Blend(3%cc, 1/4 # Floseal) and 150 sacks tail. Plug down 6:30 pm. Wait on cement.
	1/12	2400'	910'	Wait on cement and nipple up BOP. Trip in and pressure test BOP. Drill plug and cement.
	1/13	4350'	950'	Surveys(1/2 – 1 ¼ deg.).
	1/14	5590'	1240'	Survey(1 ¼ deg.). To 5021' and wiper 40 stands(2 ¾ hrs). To 5590'.
	1/15	6400'td	810'	To TD and circulat. Short trip 60 stands and circulate.
	1/16	TD		Circulate and trip out for logs. Rig up loggers and run ELogs. Loggers TD 6364' – pipe tally off, 34' uphole correction. Trip in and circulate. Trip out laying down and run and cement 4 ½" production casing to TD.

**BIT RECORD**

<b><u>NO.</u></b>	<b><u>MAKE</u></b>	<b><u>TYPE</u></b>	<b><u>SIZE</u></b>	<b><u>OUT</u></b>	<b><u>FOOTAGE</u></b>	<b><u>HOURS</u></b>
1	STC	PH516	12 ¼"	1490'	1490'	12 ¾
2	HTC	PLT616	7 7/8"	6400'	4910'	65 1/4
Total Rotating Hours:						78
Average:						82.0 Ft/hr

**DEVIATION RECORD - degree**

788' 1, 1490' 1 ¼, 2526' 1, 4579' 1 ¼, 6400' 1

**MUD PROPERTIES**

<b><u>DATE</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-LBS/BBL</u></b>
1/11	926'	10.3	37	14	11	8.5	100	1900	6
1/12	1589'	8.9	30	7	6	7.5	100	2200	0
1/13	3220'	8.6	45	15	11	10	10	4600	2
1/14	5021'	9.4	56	25	20	10	9.5	4900	4
1/15	6114'	9.5	52	22	18	10.5	8.6	4500	4

**ELECTRIC LOG FORMATION TOPS- KB Elev. 2632'**

<b><u>FORMATION</u></b>	<b><u>DEPTH</u></b>	<b><u>DATUM</u></b>	<b><u>*Crooked Creek No. 4-8</u></b>	
			<b><u>DATUM</u></b>	<b><u>POSITION</u></b>
Casing	1486'			
Heebner	4386'	-1754'	-1786'	+32'
Toronto	4410'	-1778'	-1810'	+32'
Lansing	4528'	-1896'	-1930'	+34'
Marmaton	5172'	-2540'	-2592'	+52'
Cherokee	5345'	-1713'	-2766'	+53'
Atoka	5598'	-2966'	-3025'	+59'
Morrow	5656'	-3024'	-3082'	+58'
"C" SS	5716'	-3084'	-3149'	+65'
Mississippi Chester	5763'	-3131'	-3222'	+91'
Basal Chester	5958'	-3326'	-3414'	+88'
Ste. Genevieve	5995'	-3363'	-3454'	+91'
St. Louis	6094'	-3462'	-3534'	+72'
Spergen	6290'	-3658'		
TD	66364'			

\*O'Brien Energy Resources, Crooked Creek Offset No. 4-8, 2271'FSL & 526'FEL, Sec. 8 – app. 3770' to the South, K.B. Elev. 2656'.