

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top _____ Bottom _____
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	REXFORDS 1-32
Doc ID	1509641

Tops

Name	Top	Datum
Heebner	4428	-1720
Toronto	4456	-1748
Lansing	4568	-1860
Marmaton	5198	-2490
Cherokee	5374	-2666
Atoka	5618	-2910
Morrow	5669	-2961
Mississippi Chester	5780	-3072
Ste. Genevieve	6006	-3298
St. Louis	6106	-3398

QUALITY WELL SERVICE, INC.

7293

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish
12-13-19	32	32S	29W	MEADE	Ks		
Lease	Well No.		Location				
DEX F2005	1-32		MEADE, Ks. W to 9th Rd 4 S E into				
Contractor				Owner			
DUKE DRIG. RIG #1				To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job	T.D.		Charge To				
85/3	1582'		O'BRIEN ENERGY				
Hole Size	Depth		Street				
12 1/4	1570'						
Csg.	Depth		City				
85/3 24"			State				
Tbg. Size	Shoe Joint		The above was done to satisfaction and supervision of owner agent or contractor.				
	43.10		Cement Amount Ordered				
Tool	Displace		375 x MOC 3/4" CL 1/2" PS				
	97.24		200 x Common 2/4" CL 3/4" CL 1/2" PS				
Cement Left in Csg.				EQUIPMENT			
Meas Line				Pumptrk			
				Common			
				Bulktrk			
				Bulktrk			
				Pickup			
				JOB SERVICES & REMARKS			
				Rat Hole			
				Mouse Hole			
				Centralizers			
				Baskets			
				D/V or Port Collar			
Run 37 #1's 85/3 24" CS6 SET @ 1571				Sand			
START CSG CS6 ON Bottom Hook up to				Handling			
CS6 Break circ wiring Drop Ball				Mileage			
circ w/ RIG				85/3 FLOAT EQUIPMENT			
START Pumping 10 Bbl H2O				Guide Shoe			
START MIX Pump 340 x MOC 3/4" CL 1/2" PS				Centralizer			
12 1/4" 4 BPM 200"				Baskets			
START MIX Pump 150 x Common 2/4" CL				AFU Inserts			
3/4" CL 1/2" PS 1/2" CL 4 BPM 200"				Float Shoe			
SHUT DOWN Release T R. RUBBER Plug				Latch Down			
START DISP 4 BPM 50"				SERVICE Supv			
6000' circ out 250"				LMV			
7000' circ out 300"				Pumptrk Charge			
985 at Plug Down 1000'				Mileage			
Rough circ thru JDS				Tax			
circ out TOP +				Discount			
Signature				Total Charge			
				13,095.10			

THANK YOU
PLEASE CALL
ABRAN
TODD
5/10/19

QUALITY WELL SERVICE, INC.

7300

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	Sec.	Twp.	Range	County	State	On Location	Finish		
12-19-19	32	32S	29W	MEADE	KS				
Lease	Rexfoods		Well No.	1-32				Location	MEADE, KS W to R th Rd 4 E E th Jct
Contractor	Duke Delg RA #1			Owner				To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Type Job	4 1/2 LS			Hole Size				7 7/8	
Hole Size	7 7/8			T.D.				6200	
Csg.	4 1/2			Depth				6168	
Tbg. Size				Depth					
Tool				Depth					
Cement Left in Csg.				Shoe Joint				4 LSS	
Meas Line				Displace				97.4	
EQUIPMENT				Charge To				OBREIN ENERGY RESOURCES CORP.	
				Street					
				City				State	
				The above was done to satisfaction and supervision of owner agent or contractor.					
				Cement Amount Ordered				260 x PROC 5% Flyash	
				S ^{1/2} x K ^{1/2} x 10% SALT 6% C ^{1/2} A 25" x C ^{1/2} -P 1/2" PS					
Pumptrk	8	No.		Common				260.	
Bulktrk	7	No.		Poz. Mix					
Bulktrk		No.		Gel.					
Pickup		No.		Calcium					
JOB SERVICES & REMARKS				Hulls					
Rat Hole				30 x				Salt	1432"
Mouse Hole				20 x				Flowseal	65"
Centralizers				1-3-5-7-9-11-13-14-15-17				Kol-Seal	1300"
Baskets				15				Mud CLR 48	500 GAL.
D/V or Port Collar								CFL-117 or CD110 CAF 38	C ^{1/2} A 147"
Run				4 1/2 105" CSG SET 0				SAF	C ^{1/2} P = 65"
START CSG				35 2 1/2" CIR 10 MIN 82 2 1/2" C ^{1/2} A 10				Handling	319/15450
CSG ON				Bottom Hook UP TO C66'				Mileage	50
BREAK				CIR W/ RIG DROP BALL 1/2 CIR W/ RIG				4 1/2 FLOAT EQUIPMENT	
START				Pumping 10 Bbls 1 1/2 12 Bbls MF 10 Bbls H ₂ O				Guide Shoe	HEAD & MANIFOLD
PLUG				D. M. HOLES 50 x				Centralizer	10 EA
START				Mix Pump 210 sec 14.8% CAL + CSG				Baskets	1 EA
SHUT				DOWN WASH W/ TRK? RELEASE 20 PLUG				AFU Inserts	1 EA
START				DISP 7 1/2 KCL				Float Shoe	1 EA
LOST				CIR FOR BACK 23 OUT				Latch Down	1 EA
60				OUT 300' 70 OUT 500' 82 OUT 700'				SERVICE SUP	1 EA
PLUG				DOWN 1200'				LMV	50
PS				UP ON CSG 1700'				Pumptrk Charge	LONGSTRING
RELEASE				HELD 1/2 Bbl BACK				Mileage	100
THANK YOU								Tax	
PLEASE CALL AGAIN								Discount	11,126.95
Signature				12/19/19				Total Charge	

O'Brien Energy Resources, Inc.

Rexfords No. 1-32

Section 32, T32S, R29W

Meade County, Kansas

December 2019

Well Summary

The Rexfords No. 1-32 was drilled to a total depth of 6200' in the St. Louis Formation without any problems. Minor lost circulation occurred at 5055'. The closest offset to this well was the Imperial Oil, Elliott No. 1-5, approximately 2250' to the south. This well cummed over 1 BCF of gas from a middle Morrow sandstone. Formation tops came in high relative to this well. The Heebner came in 48' high. The Cherokee and Atoka ran 40' high. The Morrow and Chester came in 39' and 36' high. The middle Morrow Sandstone, 36' high.

The Rexfords No. 1-32 came in high relative to the Keystone No. 4-4, approximately 4000' to the South. The Heebner, Marmaton and Cherokee ran 48', 46' and 40' high respectively. The Morrow, Chester and St. Louis came in 51', 52' and 54'.

Two excellent reservoir Morrow Sandstone were documented. The Upper Sandstone(5688'-5706') consists of a Sandstone in 15% of the samples: Light to medium brown to green, buff to tan, white, firm to friable, fine upper well sorted subround grains, occasionally fine to medium and moderately sorted, siliceous cement, calcareous, very glauconitic in part, excellent to tight intergranular porosity, no visible hydrocarbon fluorescence stain or cut. A 30 Unit gas increase was recorded.

The Lower Morrow Sandstone(5734'-5748'): Light brown, tan, white, light green, friable, fine upper to fine lower well sorted subround grains, calcareous, clean to argillaceous in part, glauconitic, fair to excellent intergranular porosity, no visible show. A 45 Unit gas increase was documented on the hotwire.

It's not unusual for productive Morrow Sandstone intervals not to exhibit shows in samples. Excellent gas crossover is noted on logs. 4 1/2" production casing was run on the Rexfords No. 1-32.

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: Rexfords No. 1-32, Angell Field

API: 15-119-21442

Location: 990' FSL & 335' FEL, Section 32, T32S, R29W, Meade County, Kansas
– Southeast of Plains.

Elevation: Ground Level 2696', Kelly Bushing 2708'

Contractor: Duke Drilling Rig No. 1, Type: Double jackknife, double stand, Toolpusher
Mike Godfrey, Drillers: Carlos and Saul Garcia, Juan Nanadyo

Company Man: Dana Greathouse

Spud Date: 12/12/19

Total Depth: 12/17/19, Driller 6200', Logger 6200', St. Louis Formation

Casing Program: 37 joints of 8 5/8", J-55 STC, 24Lbs/ft, set at 1571' with 375 sacks
MDC(3% cc, 1/2 lb Floseal) Tail with 150 sacks Class Common(2 lbs
cement gel, 3 lbs cc, 1/2 Polyflake). Plug down 8 am 12/13. 147 joints used
4 1/2" production casing set at 6168' – did circulate.

Mud Program: Winter Mud, engineer Lou Hutchinson. displaced 2595', Chem. gel/LCM.

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

Samples: 30' to 5600', 20' to TD.

Electric Logs: Gemini Wireline, Hays KS, engineer C. Patterson, Array Induction,
Compensated Neutron/Density, Microlog, Hi Res.

Status: 4 1/2" production casing run to TD on 12/19/19.

WELL CHRONOLOGY

<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
12/12	516'	516'	Move to location and rig up rotary tools. Mix spud mud. Drill rat hole and mouse hole. Spud in 12 ¼" surface hole and drill to 516'.
12/13	1581'	1065'	To 1581' and circulate and wiper trip. Drop survey(3/4 deg.) and trip out and run and cement 37 joints of 8 5/8", J-55 STC, 24Lbs/ft, set at 1571' with 375 sacks MDC(3% cc, 1/2 lb Floseal) Tail with 150 sacks Class Common(2 lbs cement gel, 3 lbs cc, ½ Polyflake). Plug down 8 am 12/13 – did circulate. Bump plug 8am and wait on cement.
12/14	1995'	414'	Wait on cement and trip in and pressure test annular to 500 psi/15 min. Drill float and 7 7/8" to 1901' and trip for bit no. 3 – broke cutters. Drill to 1995' and trip for new PDC bit.
12/15	3192'	1197'	Displace mud system at 2595'.
12/16	4382'	1190'	
12/17	5200'	818'	To 5013' and wiper trip. Survey(1 deg.). To 5055 and lost circulation(50 bbls). Mix mud and LCM. To 5200'.
12/18	6200'TD	1000'	To 6200'TD and circulate. Wiper trip.
12/19	TD		Circulate and trip out for logs and run ELogs. Trip in and circulate.
12/20	TD		Trip out laying down and run and cement 147 joints used 4 ½" production casing set at 6168 – did circulate. Plug rat hole and mouse hole. Rig down. Rig released 11 PM 12/19.

MUD PROPERTIES

<u>DATE</u>	<u>DEPTH</u>	<u>WT</u>	<u>VIS</u>	<u>PV</u>	<u>YP</u>	<u>pH</u>	<u>WL</u>	<u>CL</u>	<u>LCM-</u>
<u>LBS/BBL</u>									
12/12	600'	9.8	41	60	12	8	17.2	1K	20
12/13	1581'	9.6	39	14	19	7.5	81	30K	17
12/14	2006'	9.3	29	5	4	7.5	100	46K	0
12/15	3250'	8.9	44	15	19	11	48	28K	4
12/16	4415'	9.3	60	18	24	11	12	21K	3
12/16	4652'	9.1	38	8	7	10.8	9.8	17K	2
12/17	5295'	9.2	43	16	10	11	82	14K	8
12/18	6200'	9.3	65	27	23	9.5	7.2	8.5K	5

DEVIATION RECORD - degree

516' ¼, 1581' ¾, 1995' ¾, 2501' ¾, 3663' ¾, 5013' 1, 6200' ¾

ELECTRIC LOG FORMATION TOPS- KB Elev. 2708'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Keystone No. 4-4 DATUM</u>	<u>POSITION</u>
Casing	1571'			
Heebner	4428'	-1720'	-1768'	+48'
Toronto	4456'	-1748'	-1796'	+48'
Lansing	4568'	-1860'	-1916'	+56'
Marmaton	5198'	-2490'	-2536'	+46'
Cherokee	5374'	-2666'	-2706'	+40'
Atoka	5618'	-2910'	-2958'	+48'
Morrow	5669'	-2961'	-3012'	+51'
Upper SS	5688'	-2980'		
Lower SS	5734'	-3026'		
Mississippi Chester	5780'	-3072'	-3124'	+52'
Basal Chester	5978'	-3270'	-3316'	+46'
Ste. Genevieve	6006'	-3298'	-3355'	+57'
St. Louis	6106'	-3398'	-3452'	+54'
TD	6200'			

*O'Brien Energy Resources, Keystone No. 4-4, 2305' FSL & 445' FWL, Section 4, 33 S, 29W – app. 4000' to the South, K.B. Elev. 2656'.