

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 Recompletion Date _____ 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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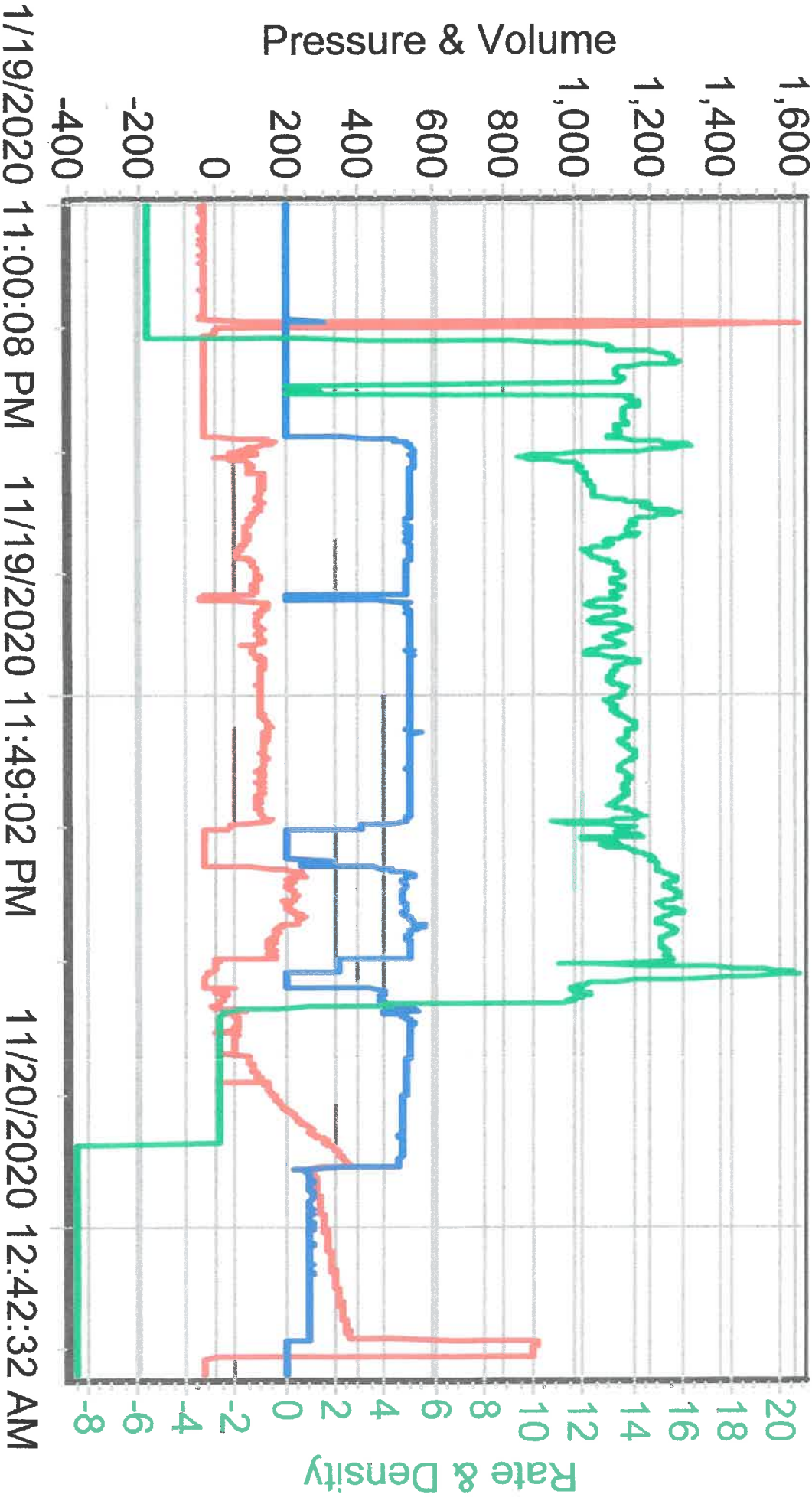
Form	ACO1 - Well Completion
Operator	O'Brien Energy Resources Corp.
Well Name	KEYSTONE 7-4
Doc ID	1563812

Tops

Name	Top	Datum
Heebner	4406	-1772
Toronto	4432	-1798
Lansing	4554	-1920
Marmaton	5177	-1543
Cherokee	5354	-2720
Atoka	5606	-2972
Morrow	5670	-3036
Mississippi Chester	5779	-3145
Ste. Genevieve	6002	-3368
St. Louis	6094	-3460

O'BRIEN ENERGY KEYSTONE 7-4 8 5/8

— Pressure 1 — Total Rate — Density





QUASAR ENERGY SERVICES, INC.

3288 FM 51

Gainesville, Texas 76240

Office: 940-612-3336

Fax: 940-612-3336 | qesi@qeserve.com

Form 185-2c

11/26/20

CEMENTING JOB LOG

CEMENTING JOB LOG

Company: OBRIEN ENERGY **Well Name:** KEYSTONE 7-4

Type Job: Cement- Production **AFE #:**

CASING DATA

Size: 4 1/2 Grade: J-55 Weight: 11.6

Casing Depths Top: Bottom:

Drill Pipe: Size: Weight:

Tubing: Size: Weight: Grade: TD (ft): 6250

Open Hole: Size: 7 7/8 T.D. (ft): 6250

Perforations From (ft): To: Packer Depth(ft):

CEMENT DATA

Spacer Type: **MUD FLUSH**

Amt. 420 GAL Sks Yield ft³/sk Density (PPG) 8.3

LEAD: Excess

Amt. Sks Yield ft³/sk Density (PPG)

TAIL: CLASS H 10%GYP, 10%SALT, 5#KOL SEAL, .6%C-15 Excess

Amt. 200 Sks Yield 1.55 ft³/sk Density (PPG) 14.8

WATER:

Lead: gals/sk: Tail: 6.9 gals/sk: 33 Total (bbls): 33

Pump Trucks Used: 210-DP11

Bulk Equipment: 227 660-24

Disp. Fluid Type: KCL 3% Amt. (Bbls.) Weight (PPG): 8.6

Mud Type: Weight (PPG):

COMPANY REPRESENTATIVE: DANA GREATHOUSE **CEMENTER:** CHAD HINZ

TIME AM/PM	PRESSURES PSI			FLUID PUMPED DATA		REMARKS
	Casing	Tubing	ANNULUS	TOTAL	RATE	
0600						ON LOC, SAFTEY MTG R.U.
0937	3200					TEST LINES
0937	440				5.3	PUMP MUD FLUSH
0940	440			10	5.3	H2O SPACER
0944						PLUG RAT AND MOUSE
1005	590				7	START MIXING @ 14.8
1015				55.2		SHUT DOWN, DROP PLUG, WASHUP
1020	260				7.3	START DISPLACEMENT
1033	480			86	2	SLOW RATE
1038	700-1260			96		PLUG DOWN
1040						RELEASE PSI, FLOATS HELD
						JOB COMPLETE
						THANK YOU FOR YOUR BUSINESS!!!

O'Brien Energy Resources, Inc.
Keystone No. 7-4, Angell SE Field
Section 4, T33S, R29W
Meade County, Kansas
November 2020

Well Summary

The O'Brien Energy Resources, Keystone No. 7-4 was drilled to a total depth of 6250' in the St. Louis without any problems. It offset the Keystone No. 2-4 by approximately 1000' to the North. The Heebner, Cherokee and Atoka came in 5' high relative to this offset. The Chester, Basal Chester and St. Louis came in 10', 13' and 15' high respectively. A Morrow "B" SS ran 2' high and the "C" SS, 13' high. The "B" SS came in 4' low relative to the Keystone 5-4, 660' to the East.

Excellent hydrocarbon shows occurred in Morrow "B" SS (5712'-5723') and consists of a Sandstone in 10% of the samples: White, very light brown, occasionally speckled green, friable, fine upper well sorted subround grains, calcareous cement, siliceous in part, clean, slightly glauconitic, excellent intergranular and occasional vuggy porosity, bright yellow to pale mottled blue hydrocarbon fluorescence, good streaming to bleeding cut, no visible stain or odor. A 325 Unit gas kick occurred on the hotwire.

The Lower Morrow "C" Sandstone (5731'-5738') consists of a similar looking sand as the "B" but with exceptionally bright light yellow hydrocarbon fluorescence throughout and with a good streaming cut. A very slight brown oil stain may exist along with excellent visible porosity. A 550 Unit gas increase was noted.

An excellent show occurred in the St. Louis (6097'-6117') along with a 675 Unit gas kick, Dolomite: Dark to medium mottled brown, sucrosic to granular, brittle, clean, sandy, Chert nodules, good intercrystalline and occasional excellent coarse vuggy porosity with dark brown free oil and matrix oil staining, very dark mottled goldbrown hydrocarbon fluorescence and excellent fast explosive cut, good oil odor and live free oil in mud system, excellent show.

4 ½" production casing was run to TD on 11/27/2020.

Respectfully Submitted,

Peter Debenham

WELL DATA

Operator: O'Brien Energy Resources, Inc., John Forma – Portsmouth, NH

Prospect Geologist: David Ward, Ed Schuett, Denver

Well: Keystone No. 7-4, Angell SE Field

API: 15-119-21449

Location: 1485' FSL & 660' FWL, Section 4, T33S, R29W, Meade County, Kansas
– Southeast of Plains.

Elevation: Ground Level 2622', Kelly Bushing 2634'

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

Company Man: Dana Greathouse

Spud Date: 11/18/20, 8PM

Total Depth: 11/25/20, Driller 6250', Logger 6251', St. Louis

Casing Program: 37 joints of 8 5/8", J-55, 24Lbs/ft, set at 1573' with lead 360 sacks Class
A and 180 sacks Class A tail, 148 joints 4 1/2" production casing set to TD.

Mud Program: Service Mud/Mudco, engineer Justin Whiting, displaced 2590', Chem.
gel/LCM.

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

Mudlogging Trailer: MBC Logging, Meade, KS, Austin Gardner

Samples: 30' to 5700', 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 11/27/20.

WELL CHRONOLOGY

11 PM	<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
	11/18			Move to location and rig up. Mix spud mud. Drill rat hole and mouse hole and spud in 12 ¼: surface hole(8 pm) to 788'.
	11/19	788'	788'	Survey(1/2 deg.), 12 ¼" surface hole to 788'.
	11/20	1585'	798'	To 1585' and circulate and wiper trip to surface and circulate. Drop survey(1 deg.) and trip for casing and run and cement 37 joints of 8 5/8" surface casing set at 1573'. Cement did circulate. Wait on cement.
	11/21	2630'	1045'	Drill cement and plug and 7 7/8" hole to 2630'. Displace mud system at 2583'.
	11/22	4001'	1371'	
	11/23	4977'	976'	Wiper trip at 4977' and circulate. Survey(1 deg.).
	11/24	5828'	851'	Wiper trip to surface, pulled tight, and circulate.
	11/25	6250'TD	422'	TD and circulate. Wiper trip and circulate. Rig up loggers and attempt to log – hit bridge at 4816'. Work tool and pull same. Trip in and break out bridge and circulate. Trip out.
	11/26	TD		Run Elogs. Trip in and circulate. Trip out laying down and run and cement 4 ½" production casing to TD.
	11/27			Cement production casing, good returns. Plug rathole and mousehole. Put cap on well and rig down. Rig released 10:45 am, 11/26.

BIT RECORD

<u>NO.</u>	<u>MAKE</u> <u>HOURS</u>	<u>TYPE</u>	<u>SIZE</u>	<u>OUT</u>	<u>FOOTAGE</u>	
1	516		12 ¼"	1585'	1585'	17 ¾
2	TXT 516		7 7/8"	6250'	4665'	78 ½
				Total Rotating Hours:		96 1/4
				Average:		64.9 Ft/hr

DEVIATION RECORD - degree

599' ½, 1585' ¾, 2014' 1, 3024' 1, 4001' 1, 4600' 1, 6250' 1

MUD PROPERTIES

<u>DATE</u> <u>LBS/BBL</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>
11/18	90'	9.4	41	14	11	9.0	17.6	2.2K	12
11/19	733'	9.5	34	7	11	7.0	nc	1.5K	9
11/19	1355'	9.9	35	7	14	7.0	nc	4.5K	10
11/20	1585'	8.3	27	1	2	7.0	nc	125	0
11/20	2260'	9.2	28	1	2	7.5	nc	56.8K	tr
11/21	2617'	8.6	46	19	17	11.5	6	2.65K	1
11/21	3090'	8.9	47	15	15	10.5	9.6	4.2K	2
11/22	4108'	9.3	44	15	14	10.5	9.2	4.3K	2
11/22	4870'	9.2	54	17	16	11.0	8.4	3.3K	4
11/23	4979'	9.3	56	17	14	11.0	7.6	3.6K	4
11/23	5199'	9.2	52	18	16	11.0	7.6	2.9K	4
11/24	5916'	9.2	53	18	15	11.0	7.2	2.7K	5
11/24	6211'	9.3	55	19	16	11.0	6.4	1.8K	6
11/25	6250'	9.0	66	20	17	10.5	6.4	2.6K	6

ELECTRIC LOG FORMATION TOPS- KB Elev. 2634'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>DATUM</u>	<u>POSITION</u>
Casing	1573'			
Heebner	4406'	-1772'	-1777'	+5'
Toronto	4432'	-1798'	-1801'	+3'
Lansing	4554'	-1920'	-1919'	-1'
Marmaton	5177'	-1543'	-1557'	+14'
Cherokee	5354'	-2720'	-2725'	+5'
Atoka	5606'	-2972'	-2977'	+5'
Morrow	5670'	-3036'	-3036'	0'
"A" SS	na		-3055'	
"B" SS	5712'	-3078'	-3080'	+2'
"C" SS	5731'	-3097'	-3110'	+13'
Mississippi Chester	5779'	-3145'	-3155'	+10'
Basal Chester	5964'	-3330'	-3343'	+13'
Ste. Genevieve	6002'	-3368'	-3374'	+6'
St. Louis	6094'	-3460'	-3475'	+15'
TD	6250'			

*O'Brien Energy Resources, Keystone No. 2-4, 500' FSL & 716' FWL, Section 4, 33 S, 29W – app. 1000' to the South., K.B. Elev. 2597'.