

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) (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	MARY 2-1
Doc ID	1321625

Tops

Name	Top	Datum
Heebner	4330	-2047
Lansing	4527	-2244
Stark SH	4888	-2605
Marmaton	5036	-2753
Pawnee	5077	-2794
Cherokee	5132	-2849
Morrow	5239	-2956
Mississippi	5261	-2978
Warsaw	6094	-3811
Viola	6184	-3901
Simpson SS	6431	-4148
Arbuckle	6446	-4163



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING

Job Log

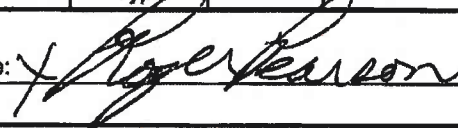

Customer:	O'Brien Energy	Cement Pump No.:	38117, 19919 7.5Hrs.	Operator TRK No.:	78938
Address:	18 Congress St. Suite 207	Ticket #:	1718 13695 L	Bulk TRK No.:	14354, 19578 Santiago
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z41 Cement Surface Casing		
Service District:	1718 Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Mary 2-1	Well Location:	1,31,22	County:	Clark State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
A-Con' Blend	200	3% Calcium Chloride, 1/4# Polyflake, .2% WCA1	14354, 19578 Santiago	Front	Back
Premium Plus Cement	100	2% Calcium Chloride, 1/4# Polyflake	14354, 19578	Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	11.4	2.95	18.1	590	Man Hours:	7.5
Tail:	14.8	1.34	6.33	134	# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLS)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Casing	
13:15							ON LOCATION
13:45							SAFETY MEETING
2:15 PM							RIG UP
2:45 PM							WAIT ON RIG
3:00 PM							RIG UP TO CIRCULATE
16:28							RIG TO P.T.
16:32							PRESSURE TEST TO 2300PSI
4:39 PM	4	65.6 slurry				10	PUMP 125SX 'A-CON' BLEND @ 11.4#
17:02	4	23.8 slurry				10	PUMP 100SX PREMIUM @ 14.8#
17:09							SHUTDOWN / DROP PLUG
17:12	4	10					DISPLACE
	3.7	20					
17:21	3.7	30				50	SLOW RATE TO 2.0B.P.M. @ 20PSI
17:27	2	40.5				90	LAND PLUG PRESSURE UP TO 700PSI
17:29							RELEASE BACK --- FLOAT HELD
18:28	1.7	18 slurry				100	1" W/ JOINTS CEMENT TO SURFACE FROM 53'
18:50							CEMENT TO SURFACE / SHUTDOWN / W.P.
							JOB COMPLETE

Size Hole	12 1/4"	Depth			TYPE	PLUG CONTAINER	
Size & Wt. Csg.	8 5/8" 24#	Depth	680'	New / Used	Packer	Depth	
tbg.		Depth			Retainer	Depth	
Top Plugs		Type			Perfs	CIBP	

Customer Signature:  Basic Representative: Daniel Beck
 Basic Signature:  Daniel Beck
 Date of Service: 8/12/2016



Liberal Yard #1717 - Phone 620-624-2277 - 1700 S. Country Estates Road, Liberal KS 67901

PRESSURE PUMPING

Job Log

Customer:	Obrien Energy	Cement Pump No.:	38117, 19919 12Hrs.	Operator TRK No.:	78938
Address:	18 Congress St. Suite 207	Ticket #:	1718 13699 L	Bulk TRK No.:	19827, 19808 Jason
City, State, Zip:	Portsmouth NH 03801	Job Type:	Z41 Plug to Abandon		
Service District:	1718 Liberal, Ks.	Well Type:	OIL		
Well Name and No.:	Mary 2-1	Well Location:	1,31,22	County:	Clark State: Ks

Type of Cmt	Sacks	Additives	Truck Loaded On		
60/40 POZ	210	4% Total Gel	19827, 19808 Jason	Front	Back
				Front	Back
				Front	Back

Lead/Tail:	Weight #1 Gal.	Cu/Ft/sk	Water Requirements	CU. FT.	Man Hours / Personnel	
Lead:	13.5	1.5	7.5	315	Man Hours:	12
Tail:					# of Men on Job:	3

Time (am/pm)	(BPM)	Volume (BBLs)	Pumps		Pressure(PSI)		Description of Operation and Materials
			T	C	Tubing	Drill Pipe	
19:30							ON LOCATION
19:35							SAFETY MEETING
7:45 PM							RIG UP
8:53 PM							PRESSURE TEST TO 2800PSI
8:56 PM	2.4	13.3 slurry				600	PUMP 50SX @ 13.5# / 6450'
21:07	4.7	10				570	SHUTDOWN / W.P. / DISPLACE W/ MUD
	4.7	20				530	
	4	30				490	
	4.7	40				520	
	5.3	50				570	
	5.8	60				550	
	5.8	70				530	
	5.8	80				560	
21:30	5.8	88.2				600	SHUTDOWN & WAIT
0:18	4.5	13.3 slurry				140	PUMP 50SX @ 13.5# / 1290'
0:30	5.5	14.8				80	DISPLACE W/ MUD
0:35							SHUTDOWN & WAIT
1:05	4	13.3 slurry				80	PUMP 50SX @ 13.5# / 720'
1:09	4.1	6.7					DISPLACE W/ H2O
1:13							SHUTDOWN & WAIT
5:43	3	5.3 slurry					PUMP 20SX @ 13.5# / 60' - SURFACE
5:55	2.5	13.3 slurry					PUMP 30SX RAT & 20 MOUSE HOLE
6:05							JOB COMPLETE

Size Hole	7 7/8"	Depth			TYPE	
Size & Wt. D.P.	4 1/2" 16.6#	Depth		New / Used	Packer	Depth
tbg.		Depth.			Retainer	Depth
Plugs	6450'	1290'	720'	60'	Rat & Mouse Perfs	CIBP

Customer Signature: <i>X</i>	Basic Representative:	Daniel Beck
	Basic Signature:	<i>Daniel Beck</i>
	Date of Service:	8/21/2016

O'Brien Energy Resources, Inc.
Mary Etal No. 2-1, Dailey Prospect
Section 1, T31S, R22W
Clark County, Kansas
August 2016

Well Summary

The O'Brien Energy Resources, Corporation, Mary Etal No. 2-1, Daily Prospect, was drilled to a total depth of 7020' in the Arbuckle Formation in 143 ½ rotating hours and without any problems. It offset the Mary No. 1-1 by approximately 1700' to the North. Formation tops ran relatively even to this offset(3' high to 3' low) to the Mississippi. Structure was gained as the Warsaw and Viola came in 14' high. The Simpson Sandstone and Arbuckle ran 18' high.

Several very minor hydrocarbon shows with no significant mud gas increases were documented in the Lower Cherokee/Atoka Formation and Mississippi(attached mudlog).

The Mary Etal No. 2-1 was plugged and abandoned 8/21/16.

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: Mary Etal No. 2-1, Daily Prospect, Granger Creek Field

Location: SW NE NW NE, 615' FNL & 1750' FEL, Section 1, T31S, R22W, Clark Co., Kansas, South of Bucklin.

Elevation: Ground Level 2270', Kelly Bushing 2283'

Contractor: Duke Drilling Rig No. 7, Type: Double jackknife, triple stand, Toolpusher Galen Roach, Drillers: Jeremy Adelherd, Craig Mertens, Steven Green

Company Man: Roger Pearson – Liberal, Kansas

Spud Date: 8/11/16

Total Depth: 8/21/16, Driller 7020', Logger 6502', Arbuckle Formation.

Casing Program: 16 joints of 8 5/8", J55, 24Lbs/ft, set at 678' with 125 sacks A Con(3% cc, ¼ lb floseal) tailed with 100 sacks Class C(2% cc), topped with 75 sacks A Con, services by Basic. plug down 5:30 pm 8/12/16.

Mud Program: Service Mud/Mud-Co, Engineer Justin Whiting , Chemical/gel, displaced 3223'.

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

Samples: 30' to 5200', 20' to TD. One dry cut sent to the KS Sample Log Library, Wichita.

Electric Logs: Pioneer Energy Services, Engineer Tim Martin, Dual Induction, Dual Comp Porosity Log, Microresistivity Log

Status: Plugged and abandoned.

WELL CHRONOLOGY

6 AM

<u>DATE</u>	<u>DEPTH</u>	<u>FOOTAGE</u>	<u>RIG ACTIVITY</u>
8/11			Move to location and rig up rotary tools. Pump water and mix spud mud. Drill rat hole and mouse hole. Spud in 12 1/4" surface hole(11:00 pm).
8/12	682'	682'	Lost circulation at 465'. Run survey(1 deg.). To 682' and circulate and trip for surface casing and run and cement 16 joints of 8 5/8", J55, 24Lbs/ft, set at 678' with 125 sacks A Con(3%cc, 1/4 lb floseal) tailed with 100 sacks Class C(2% cc), topped with 75 sacks A Con, services by Basic. plug down 5:30 pm. Wait on cement and service rig.
8/13	1545'	863'	Wait on cement. Drill plug and cement and 7 7/8" hole to 838'. Trip for Bit No. 4 and drill to 1545' Survey(1 1/2 deg.) and service.
8/14	2575'	1030'	Surveys(3/4 deg.) and service.
8/15	3645'	1070'	Survey(1 deg.). Displace mud system at 3028'.
8/16	4645'	1000'	Survey(1 deg.), drilling ahead.
8/17	5380'	735'	Survey(1/2 deg.) To 5022' and circulate and wiper trip 40 stands.
8/18	6035'	655'	Survey(1 1/2 deg.).
8/19	6544'	509'	Survey(1/2 deg.) Circulate for samples at 6440'.
8/20	7020'TD	476'	To 7020'TD and circulate. Wiper trip 71 stands and circulate. Trip out for logs and run ELogs. Trip to bottom and circulate. Trip out laying down and plug and abandon well.
8/21	TD		Plug well and rig down.

BIT RECORD

<u>NO.</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>
1	12 1/4"	PDC	RR	496'	496'	3 3/4
2	12 1/4"	RR		682'	186'	4 1/4
3	7 7/8"	J2-RR		838'	156'	2 1/2
4	7 7/8"	PL61656	PDC	7020'	6182'	143 1/2
Total Rotating Hours:						154
Average:						45.6 Ft/hr

DEVIATION RECORD - degree

997' 1, 1300' 1 ½, 1600' ¾, 1982' 1, 2282' 1, 2800' 1, 3300' 1, 3800' ¾, 4300' 1 ½, 5300' 1 ½, 5600' 2, 5900' 2, 6200' ½, 6500' 1,

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-LBS/BBL</u>
8/11-8/13	818'	Make up water							
8/14	1962'	9.5	30	--	--	7.0	nc	64K	--
8/15	3049'	8.7	60	18	20	12.0	9.2	5.8K	3
8/16	4008'	9.4	47	15	16	10.0	11.6	8.8	2
8/17	4940'	9.4	46	14	15	11.0	9.2	8.3	4
8/18	5589'	9.4	48	15	16	10.5	8.4	7.3K	4
8/19	6256'	9.3	53	17	17	10.0	8.8	6.1K	4
8/20	6732'	9.3	64	18	22	9.0	6.5	10	4
8/21	7020'TD	9.4	64	18	20	9.0	10.0	8.8	10

ELECTRIC LOG FORMATION TOPS- KB Elev. 2283'

<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>*Mary No. 1-1</u> <u>DATUM</u>	<u>POSITION</u>
Casing	678'			
Heebner	4330'	-2047'	-2050'	+3'
Lansing	4527'	-2244'	-2243'	-1'
Stark SH	4888'	-2605'	-2597'	-8'
Marmaton	5036'	-2753'	-2551'	-2'
Pawnee	5077'	-2794'	-2795'	+1'
Cherokee	5132'	-2849'	-2849'	0'
Morrow	5239'	-2956'	-2953'	-3'
Mississippi	5261'	-2978'	-2975'	-3'
Warsaw	6094'	-3811'	-3825'	+14'
Viola	6184'	-3901'	-3915'	+14'
Simpson SS	6431'	-4148'	-4166'	+18'
Arbuckle	6446'	-4163'	-4181'	+18'
TD	7020'			

*O'Brien Energy, Mary No. 1-1, 2277'FNL & 2262'FEL, Sec. 1 – app. 1700' to the South, K. B. Elev. 2265'.