

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				

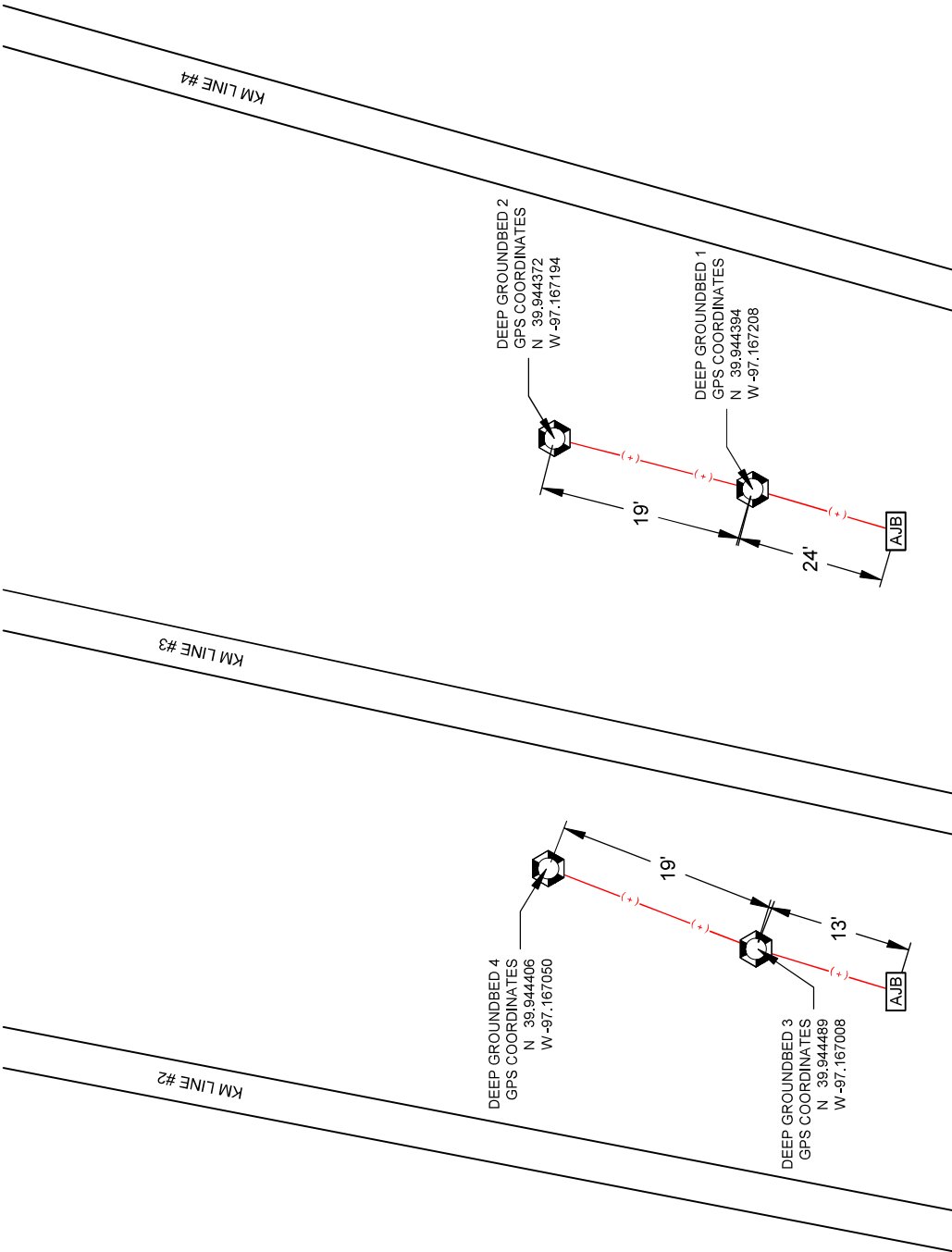
1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted 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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DEEP GROUND BED INSTALLATION
 (4) 10'X250'
 13 OF 2860 CAST IRON ANODES
 WITH #6 HMWPE ANODE LEADS
 5,000# LORESSCO SC-3 COKE BREEZE
 1,850# BENTONITE HOLE PLUG
 20' OF 10" SDR-21 PVC CASING WITH CAP

REVISIONS		Date		Date	
No.	Description	Drawn By	Checked By	Drawn By	Checked By

DEEP GROUND BED ANODE JBOX POSITIVE CABLE NEGATIVE CABLE PIPELINE CONNECTION PIPELINE ASSETS	DEEP GROUND BED LEGEND POSITIVE CABLE NEGATIVE CABLE PIPELINE ASSETS
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Drawn By: J. GREENFIELD	Date: 6/2/23
Checked By: R. McCLAIN	Date: 6/2/23

Project No. MORROWVILLE 2023-0211	Sheet No. 1	Revision: 0
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	CATHODIC PROTECTION LAYOUT DEEP GROUND BED INSTALLATION AMA 434
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CITATION DEEP GROUND BED DRILL LOG & RECTIFIER FORM

DRILLING & BORING

CLIENT INFORMATION

Client	Kinder Morgan	Job Number	2023-0211
Facility	AMA 434N DW3	Customer Contact	Kevin Brown
City	Morrowville	County	Washington
State	Ks	Phone No.	+1 (308) 325-3563

DEEP GROUND BED & DRILLING LOG INFORMATION New Installation Existing Rectifier

Hole Dia.	10"	Total Depth	250'	Casing Feet	20'	Dia.	10"	Type	SDR21 PVC	Groundbed GPS
No. Anodes	13	Size & Type	2660 cast iron	Anode Lead	300'	Size	#6	Type	HWMPE	N 39.944480
Lbs. Coke	5000	Coke Type	SC3	Top of Coke Column	99'	Vent	140'	W	-97.167008	
Lbs. Plug	2900	Plug Type	Bentonite	Top of Plug	3'	Logging Volts	12.6			

Depth Ft.	DRILLER'S LOG	Anode NO.	Electric Log				Depth Ft.	DRILLER'S LOG	Anode NO.	Electric Log				
			Volts	Amps Before	Amps After	Remarks				Volts	Amps Before	Amps After	Remarks	
0														
5						205		5				6.2		
10	Casing					210	Sandy Clay			1.3				
15						215		4			6.3			
20	Casing					220	Sandy Clay			1.2				
25						225		3			5.9			
30	Sand stone		.4			230	Sandy Clay			1.2				
35						235		2			4.5			
40	Sand stone		.9			240	Sandy Clay			1.3				
45						245		1			3.4			
50	Sandy clay		.3			250	Sandy Clay			1.0				
55						255								
60	Sandy clay		.4			260								
65						265								
70	Sandy clay		.6			270								
75						275								
80	Sandy clay		.7			280								
85						285								
90	Sandy Clay		.3			290								
95						295								
100	Sandy clay		.5			300								
105						305								
110	Sandy Clay		.2			310								
115						315								
120	Red clay		.3			320								
125		13		7.7		325								
130	Red clay		1.5			330								
135		12		8.0		335								
140	Red clay		1.2			340								
145		11		7.7		345								
150	Red clay		1.1			350								
155		10		8.3		355								
160	Red clay		1.4			360								
165		9		8.4		365								
170	Red clay		1.6			370								
175		8		8.0		375								
180	Red clay		1.0			380								
185		7		5.4		385								
190	Sandy clay		1.1			390								
195		6		6.0		395								
200	Sandy Clay		1.2			400								
							Total							

ANODE JUNCTION BOX INFORMATION

ANODE JUNCTION BOX											COMMENTS
Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	Amp	Cir.	
1		6		11		16		21		26	
2		7		12		17		22		27	
3		8		13		18		23		28	
4		9		14		19		24		29	
5		10		15		20		25		30	
Shunt	Mv		Amp					TOTAL			

RECTIFIER INFORMATION

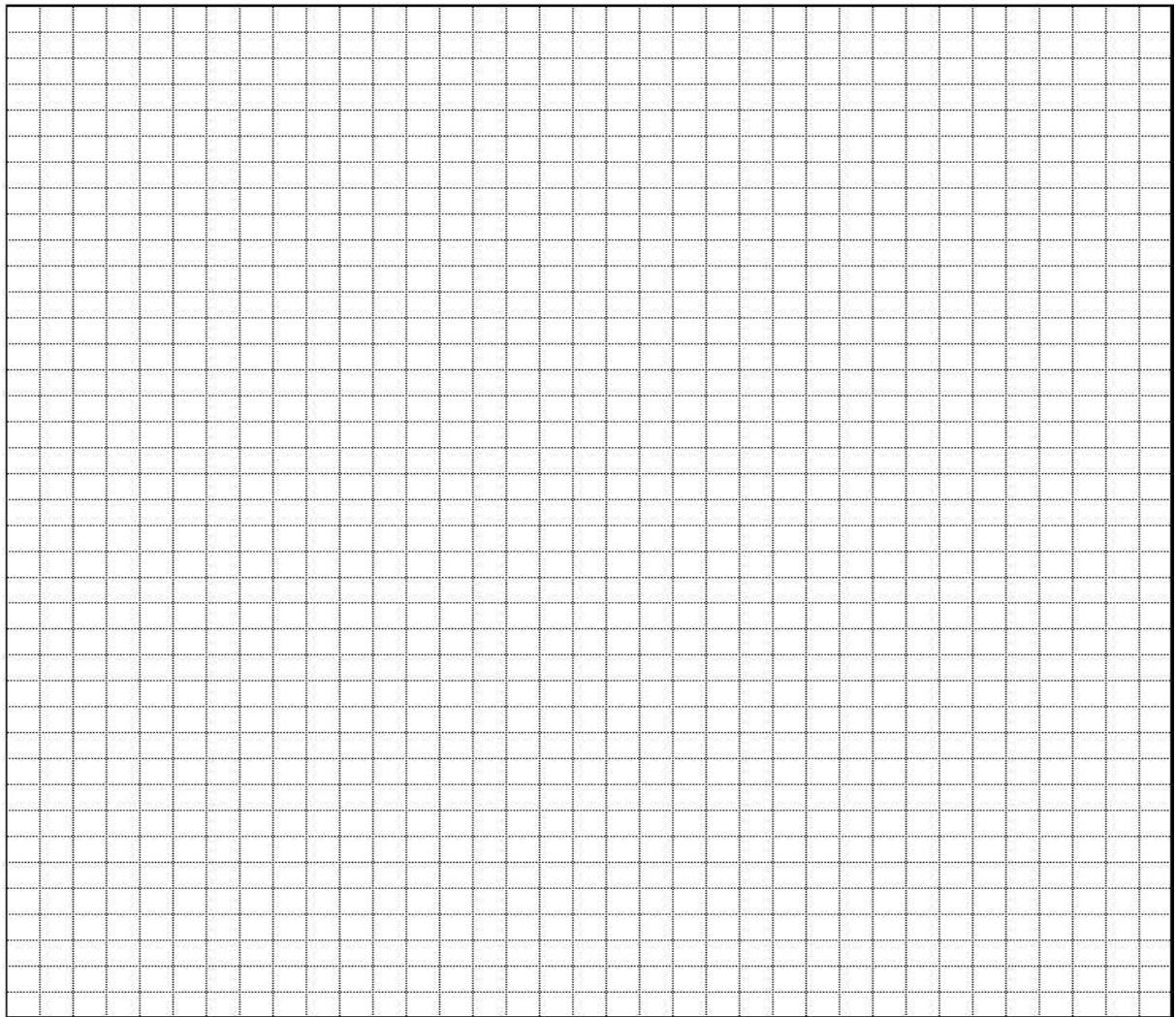
Manufacturer		Rectifier ID Number					
Model No.		DC Volts		AC Volts		Max Coarse	Shunt Amp
Serial No.		DC Amps		AC Amps		Max Fine	Shunt mV
GPS Coordinates	Latitude	N		Longitude	W		
RMU Type				Serial Number			

ENERGIZED INFORMATION No A/C Power #12 Lead Installed with Negative

Coarse Tap Setting		of	AC Volts		DC Volts		DC Amps	
Fine Tap Setting		of	AC Amps		DC mV		Structure PS	
Calculated Ground Bed Resistance			Calculated Rectifier Efficiency					

ASBUILT DRAWING

DEEP BED NEGATIVE JUNCTION BOX POSITIVE JUNCTION BOX ANODE JUNCTION BOX RECTIFIER WELL HEAD POWER POLE COUPON TEST STATION AC POWER POLE BLOCK VALVE REFERENCE CELL MAG ANODE VERTICAL CAST-IRON ANODE HORIZONTAL CAST-IRON ANODE



Remarks: _____

Technician/Foreman _____ Date _____