

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1334535
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: _____

1334535

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

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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Cathodic Protection
Final Construction Report



Crude Helium P/L
Cimarron, KS

Project Manager:
Rusty Gann

Construction Completed:
December 29th, 2016

Reviewed By:
Rusty Gann



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 - c. Deep Anode Drill Logs



I. Overview

a. Scope of Work

i. Appendix A – Summary

Deep Anode Groundbed Installation

- The groundbed hole will be 8 inches in diameter and 200 feet deep.
- The hole will be a “below ground completion”.
- Twenty (20) feet of SDR 26 surface casing will be cemented in place per KCC requirements. Additional casing maybe required in some geographical areas.
- Ten (10) 2660Z Anotec High Silicon Cast Iron Tubular anodes will be utilized with a calculated capacity of 22 amps for 30 years.
- Anode lead wires will be #8 dual extruded HMWPE/Halar leads terminated in a 10 circuit fiberglass junction box mounted below the rectifier.
- A 1” vent will be installed & manufactured by Loresco in the coke column. The remainder from the top of the coke column to surface will be standard schedule 40 PVC pipe terminated at the rectifier.
- Loresco SWS Coke will be utilized for the anode backfill top loaded from the bottom of the hole to 20’ above the top anode.
- Drill fluid and cuttings will be contained above ground. A muddy puppy will contain the fluids and a roll-off box will be utilized to contain the solids.
- An approved KCC disposal service will be utilized to remove any drill spoils from the groundbed if required. Documentation will be provided to BLM for all disposal transactions.
- MESA will clean up and return the work site as close to the same condition as before work began.
- MESA will supply potable water for drilling. Water from creeks, ponds, or lakes is prohibited.
- A driller’s log shall be maintained during drilling operations and submitted to BLM in MESA’s final report. The log shall contain soil type information for each five or ten foot increment of drilling.
- Prior to loading anodes into the hole, an electrical log shall be performed to determining final anode placement. Readings will be taken at 5 foot intervals. The log shall be provided to BLM in the final report.



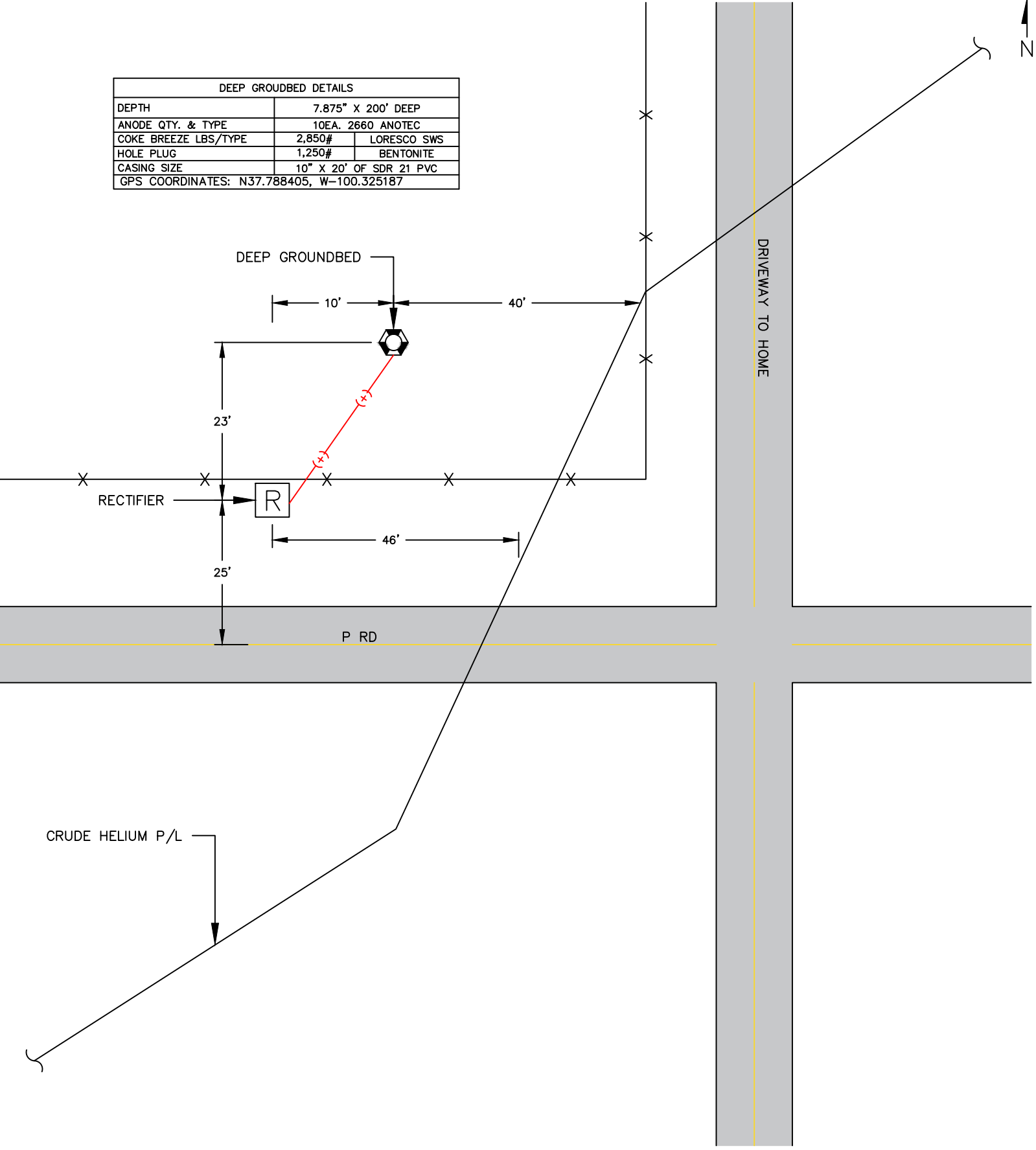
The following Materials were used:

Materials	
Description	Quantity Unit
#2 HMWPE Stranded Black	50 Feet
#8 Halar Stranded Black (Anode Lead)	1,850 Feet
1" Loresco All-Vent Pipe	120 Feet
1" Schedule 40 PVC Pipe	140 Feet
8" Schedule 40 PVC Cap	1 Each
8" Schedule 40 PVC Pipe	20 Feet
Anotec 2660 Cast Iron (LL=230,CC=10)	10 Each
10 Circuit Fiberglass Junction Box	1 Each
Loresco SWS (50# Bag)	57 Each
Miscellaneous Supplies	1 Each
Pure Gold Med Chips (50# Bag)	38 Each

MESA Scope of Work:

1. Provided all labor, materials and equipment to install the Deep Groundbed per the specifications described above.
2. Work (6) day weeks - 10 hours/day schedules.
3. Came equipped with all necessary safety equipment.

DEEP GROUNDBED DETAILS	
DEPTH	7.875" X 200' DEEP
ANODE QTY. & TYPE	10EA. 2660 ANOTEC
COKE BREEZE LBS/TYPE	2,850# LORESCO SWS
HOLE PLUG	1,250# BENTONITE
CASING SIZE	10" X 20' OF SDR 21 PVC
GPS COORDINATES: N37.788405, W-100.325187	



NOTES:

REV	DESCRIPTION	DATE	BY	CHK
REVISION				

MESA

TULSA, OK | Dallas-Ft. Worth, TX | Houston, TX | Tallahassee, FL | Wapakoneta, OH

THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF MESA. AND HAS BEEN PRODUCED SOLELY FOR THE USE OF OUR CLIENT. THIS DRAWING IS CONFIDENTIAL AND PROPRIETARY AND SHALL NOT BE USED, DIRECTLY OR INDIRECTLY, FOR ANY REASON OTHER THAN THAT WHICH IT IS INTENDED, OR IN ANY WAY DETRIMENTAL TO OUR INTERESTS.

CLIENT NAME & ADDRESS:
BUREAU OF LAND MANAGEMENT
 801 S. FILLMORE ST
 AMARILLO, TX 79101

DESCRIPTION: CATHODIC PROTECTION LAYOUT DEEP GROUNDBED INSTALLATION CRUDE HELIUM P/L			
KS	CIMMARON	GRAY	
JOB NO.: 10-16-6736	SCALE: DO NOT SCALE	SHEET: 1 OF 1	
DRAWN BY: LW/WM	DRAWN DATE: 01/17/17	CHK'D BY: RG	CHK'D DATE: 01/17/17
DWG NO.: BLM-06092-0			REV: 0



Job No. 10-16-6736
 Client BUREAU OF LAND MANAGEMENT
 Location CRUDE HELIUM P/L CIMARRON, KS

PO/WO No. _____ Date 12/28/2016
 Drilling Co.: DARLING DRILLING CO.
 GPS: Lat: 37.788405 Long: -100.325187

Calibrated Instrument Used: FLUKE-177 S/N 97001156

Depth	Logging Volts: 14.16		Geological Log	Depth	Logging Volts: 14.16		Geological Log	No.	Depth	No Coke	With Coke	
	Amps	Ohms			Amps	Ohms						
5			0-3 TOP SOIL	205			BLACK SHALE	1	190	1.40	3.70	
10			3-10 BROWN CLAY	210				2	180	0.80	3.60	
15				215				3	170	0.60	2.90	
20			10-19 MED.-COURSE SAND	220				4	160	0.60	3.60	
25				225				5	150	1.70	3.10	
30				230				6	140	1.90	4.40	
35			19-35 TAN CLAYFINE	235				7	130	1.70	4.70	
40			SAND MIX	240				8	120	1.50	4.60	
45				245				9	110	2.20	4.60	
50	1.00			250				10	100	1.30	3.90	
55	1.20		35-55 FINE SAND	255				11				
60	1.20			260				12				
65	1.10			265				13				
70	1.80			270				14				
75	1.40			275				15				
80	1.30			280				16				
85	0.90			285				17				
90	1.00			290				18				
95	1.30			295				19				
100	1.30		55-100 TAN CLAY, CALICHE	300				20				
105	1.90		FINE SAND W/ STRKS OF	305				21				
110	2.20		SAND	310				22				
115	1.80			315				23				
120	1.50			320				24				
125	1.30			325				25				
130	1.70			330				26				
135	1.90			335				27				
140	1.90		100-140 TAN CLAY	340				28				
145	1.90			345				29				
150	1.70			350				30				
155	0.70			355				31				
160	0.60			360				32				
165	0.60			365				33				
170	0.60			370				34				
175	0.80			375				35				
180	0.80			380				36				
185	1.50			385				37				
190	1.40		140-190 MED. COURSE	390				Volts		14.16	14.16	
195	1.40		GRAVEL W/STRKS TAN CL	395				Amps		13.70	39.10	
200	1.30	10.89	190-201 DARK BROWNISH	400				Ohms		1.03	0.36	
Hole Dia.:		7.875"	Total Depth:		200'		Casing Feet:	20'	Dia.:	10"	Type:	SDR-21 PVC
No. Anodes:		10	Size and Type:		2660 ANOTEC		Anode Lead:		Size:	#8	Type:	HALAR
Lbs. Coke:		2,850#	Coke Type:		LORESCO SWS		Top of Coke Column:	90'	Vent:	1"ALL VENT		
Lbs. Plug		1,250#	Plug Type:		PURE GOLD MED CHIPS		Top of Plug:	5'				



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1907 EAST 17TH AVENUE
HUTCHINSON, KS 67501 (620)728-0460

2214 00001 99208 12/22/16 03:36 PM
CASHIER ALEXIS

0000-320-212 92LB ASHLAND <A>
ASHGROVE 92.6LB TYPE I-II PORT CMNT

XXXXXXXXXXXX8565 HOME DEPOT
AUTH CODE 022605/2013783

ROSENCRANTZBEMIS
DODSON CHRIS

P.O.#/JOB NAME: MASE CEMERON

**** DUPLICATE RECEIPT ****
**** NOT VALID FOR REFUND ****

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