

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

DEC 24 2014

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2014

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.  
NM 6681 NM LG-9090

6. Indian, Allottee or Tribe Name  
N/A

**SUBMIT IN TRIPLICATE - Other instructions on page 2.**

1. Type of Well  
 Oil Well     Gas Well     Other

2. Name of Operator  
Encana Oil & Gas (USA) Inc.

3a. Address  
370 17th Street, Suite 1700 Denver, CO 80202

3b. Phone No. (include area code)  
505-599-2411

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
SHL: 2192' FSL and 2551' FEL Section 31, T23N, R7W  
BHL: 1177' FSL and 2291' FEL Section 36, T23N, R8W

7. If Unit of CA/Agreement, Name and/or No.  
N/A

8. Well Name and No.  
Lybrook J31-2307 02H

9. API Well No.  
30-043-21215

10. Field and Pool or Exploratory Area  
Alamito-GALLUP

11. County or Parish, State  
Sandoval County, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Install Cathodic protection</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Encana Oil & Gas (USA) Inc. Encana is requesting to install cathodic protection on the Lybrook J31-2307 02H to be attached to the Chaco Trunk pipeline on location at the meter run, layout drilling procedure and plug and abandon procedure is attached.

OIL CONS. DIV DIST. 3

JAN 02 2015

ACCEPTED FOR RECORD

DEC 23 2014

FARMINGTON FIELD OFFICE  
BY \_\_\_\_\_

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)  
Norman Faver

Title Senior Regulatory Analyst

Signature *Norman Faver*

Date 12/23/2014

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by *Jim Hamib*

Title ENVIRONMENTAL COMPLIANCE TEAM LEAD

Office \_\_\_\_\_

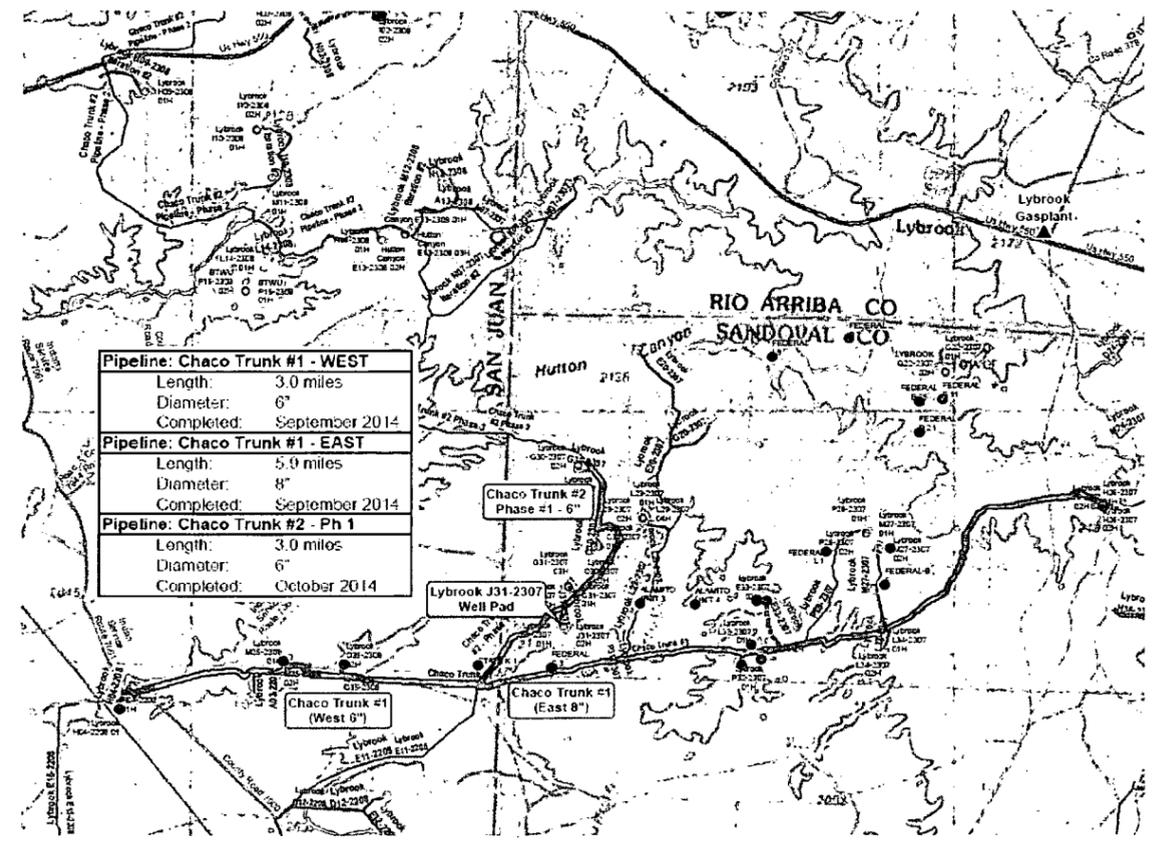
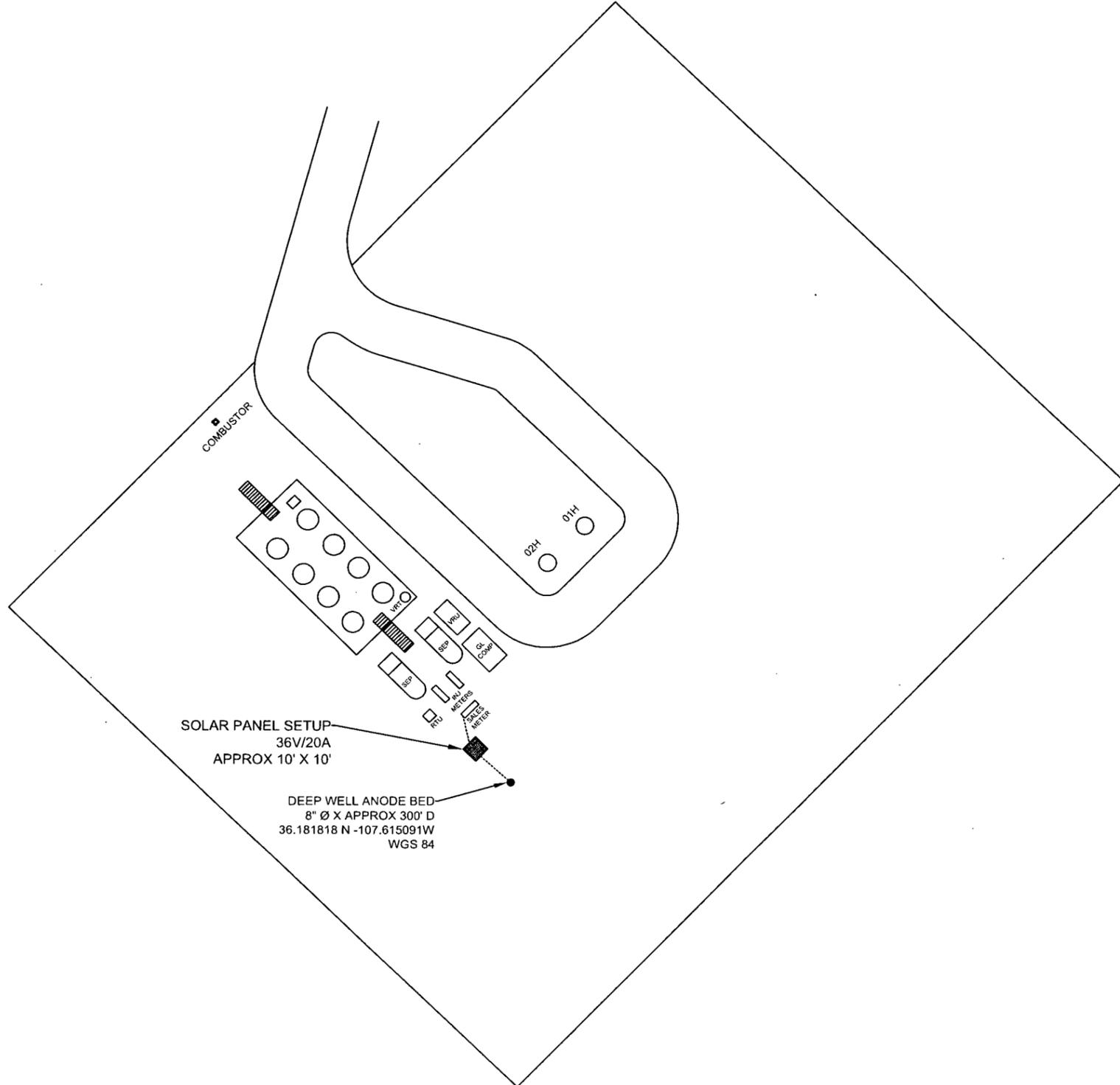
Date DEC 31 2014

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

6P NMOCD Accepted For Record



PLOTTED: 2014-11-17 12:04:53 PM BY: MARC DYLAN P.  
 LAST SAVED: 2014-11-17 12:04:50 PM BY: DMMK

REFERENCE DRAWINGS	DWG. NO.	NO.	DATE (yy/mm/dd)	PROJECT DESCRIPTION	PROJ.	AFE	EPCM Co.	EPCM No.	APPD.	ISSUE STAGE	DATE (yy/mm/dd)	BY	CHKD.	APPD.	PERMIT STAMP	ENGINEER'S STAMP
			11/17/14	CATHODIC PROTECTION DEEP WELL GROUNDBED AND SOLAR SETUP	DPM											
<b>CAUTION : READ BEFORE EXCAVATION</b> ALL EXCAVATIONS MUST BE CARRIED OUT AS PER "ENCANA'S GROUND DISTURBANCE PRACTICE"																

MAIN PAC: LYBROOK J31-2307-01H & 02H	
TITLE: LYBROOK J31-2307-01H & 02H	AREA:
CLASS: A	FILE NO.: CP DRAWING

## **CORRPRO - DEEP ANODE BED PROCEDURE**

**Permits:** Corrpro will assist the Company in applications for well drilling permits required by any City, County and/or State agencies.

**Field Location:** Location of the deep anodes are approximate. Exact placement shall be determined and verified in the field by the Corrpro foreman and the Company representative.

**Anode Hole Drilling:** The anode hole shall be 7 7/8-inches diameter to the depth shown on the Drawings (top 20-feet shall be drilled to accommodate 8" casing). Drilling shall be accomplished with rotary bit. Driller shall use standard techniques (i.e. trough and vacuum truck) to capture and contain the drilling fluids, mud and cuttings at the top of the hole. The driller shall select the type and consistency of drilling fluids to be consistent with soil characteristics. The drilling rig shall be leveled to provide a round, straight and plumb anode hole.

**Casing:** Install a 8" diameter casing to a depth of 20-feet.

**Anode Hole Geological Logs:** As the hole is drilled, the driller shall maintain a record describing the depth and type of the geological formations encountered. Copies of the log shall be submitted.

**Anode Hole Resistance Log:** Record electric log of the hole using one of the anodes. The anode lead wire shall be manually lowered into hole, with a counter reel, while taking measurements every 5 feet. The anode lead wire shall be marked for a distance equaling or exceeding the maximum anticipated depth of the hole. As the anode is lowered into the hole, measure the resistance by temporarily impressing a minimum of 12-volts DC between the anode and a very well grounded structure. A volt meter shall be used to perform this test. A recommended 12-volt DC power source is a heavy-duty, lead acid, automobile battery. Lower the anode into the hole and at ten-foot increments, hold in place while the voltage and current output of the DC current source are measured and recorded. This information shall be recorded and submitted.

**Vent Pipe Installation:** The vent pipe (1-inch Allvent to the top of the coke breeze column) shall be installed in the hole with the first anode. One-inch PVC non-perforated pipe will be installed from the top of the coke breeze column to five feet above the top of the hole. The bottom of the vent pipe shall be capped. The top of the vent pipe shall be capped throughout the anode and coke breeze backfill installation procedure to prevent intrusion of foreign material. Drilling mud shall not be allowed to enter in the vent pipe.

**Anode Installation:** The deep anode shall consist of 10 – 2.2" x 84" long high silicon cast iron anodes spaced at 10-foot intervals. The anodes shall be centered in the hole. The anodes shall be installed by lowering them individually into the hole by the lead wire. The final depth shall be recorded with the first anode in the hole (i.e. the bottom anode) identified as anode number one. The anode lead wires shall not be damaged during handling or lowering into the hole. Under no circumstances shall the anode lead wires be clamped or pinched around another object while lowering. If the insulation for any anode lead wires are cut, broken, or nicked, the complete anode shall be rejected and shall be

removed from the job site. Corrpro shall replace all damaged anodes at no additional expense to Company.

**Anode Column Coke Backfill:** The coke backfill shall be top loaded. A sufficient amount of backfill shall be used such that the coke breeze column will extend a minimum of 10-feet above the top of the uppermost anode and no closer than 30-feet from the top of the hole. Installation of the coke backfill shall be uniform with no voids around the anodes.

**Vent Pipe Conditions:** The 1-inch diameter internal vent pipe shall terminate with a glued slip-fit fitting then secured with a threaded vented plug. The top end of the vent pipe shall be left open to allow gases from the anode hole to exit.

**Mud and Cuttings:** Drilling mud, cuttings and other waste shall be disposed of onsite in a manner which complies with the rules and regulations of the State, City and County.

### **ANODE LEAD JUNCTION BOX**

**Location:** Install anode lead junction box immediately adjacent to the deep anode. Place to allow ready access for testing with the bottom of the box at a minimum height of 3-feet above grade.

**Concrete Pad:** Junction box support (post or unistrut) shall be set in a Portland cement concrete anchor. Pour a minimum 4 inch thick by roughly 3-foot square concrete pad around the junction box.

### **HEADER CABLE**

Dig a 4-inch wide x 18-inch deep trench from the junction box to the power unit pole. Install the DC positive cable in the bottom of the trench. Leave slack in the cable and avoid damage to the cable during installation.

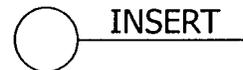
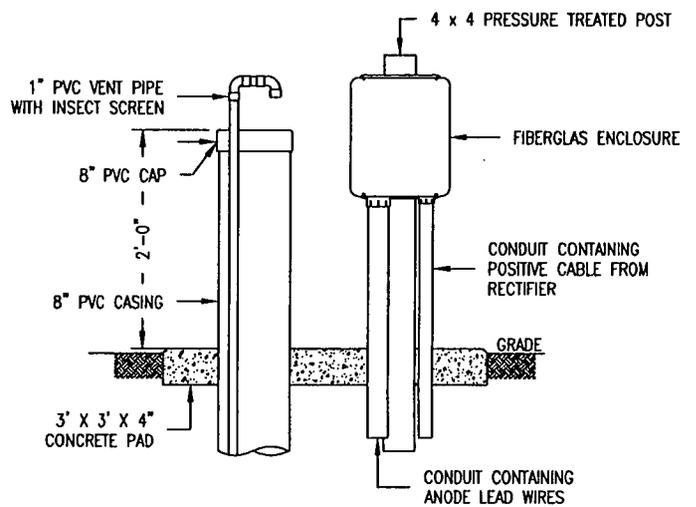
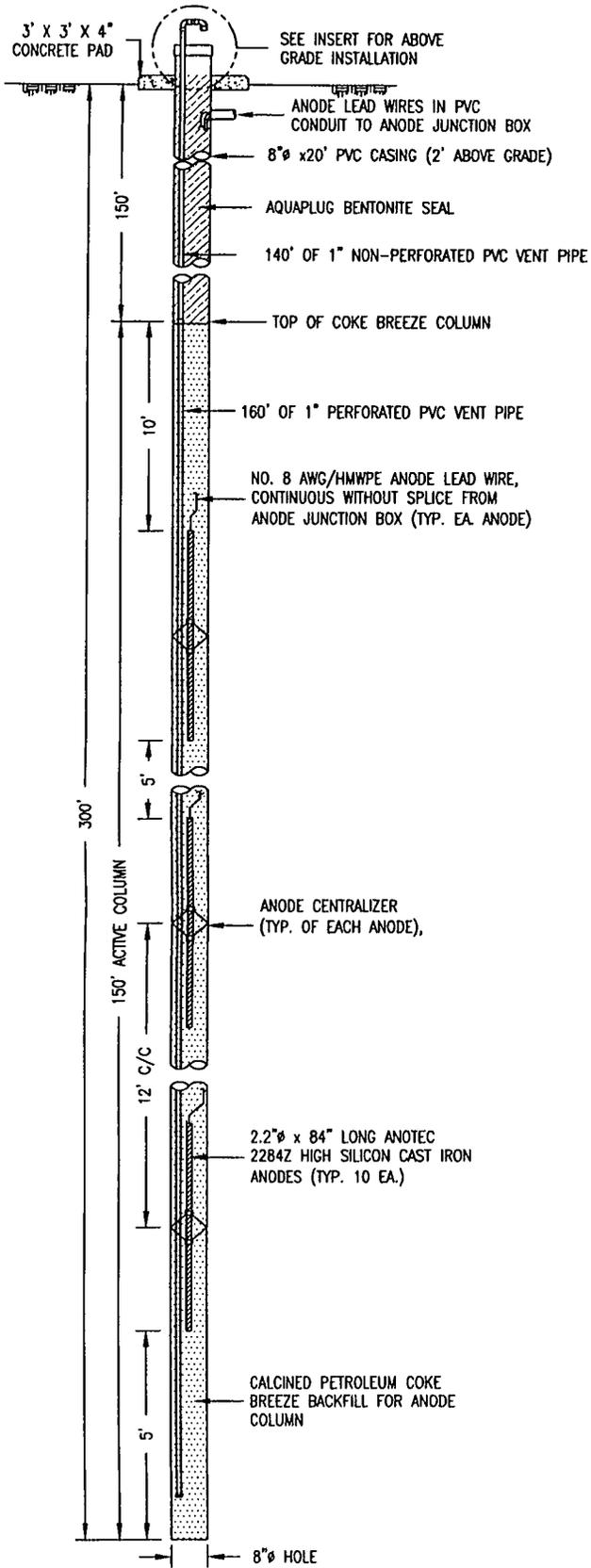
### **NEGATIVE CABLE AND TEST LEAD**

Dig a 4-inch wide x 18-inch deep trench from the power unit to the structure. Install the DC negative cable in the bottom of the trench. Leave slack in the cable and avoid damage to the cable during installation, and attach to structure.

**Method:** Attach negative DC cables to the structure by a mechanical clamp at the location shown on the Drawings.

**Preparation:** Clean and dry the structure surface to which the negative cable is to be attached. Technician will remove all dirt, coating, oxide and mill scale from the structure surface. Use a solvent to remove oil and grease, if necessary. Clean the surface to bright metal.

**NOTE:** All cable connections will not be performed without the assistance of a certified/licensed low-voltage technician.



NOTE: CATHODIC PROTECTION SYSTEM TO BE INSTALLED AT ENCANA LYBROOK J31-2307 WELLPAD

G:\Regional\JOBS\2014\14 FARMINGTON\340140633 - ENCANA - LINDRITH, NM\Drawings\340140633 ep\_drawings.dwg LAYOUT: 340140633-01

REVISED		REVISIONS		REV.	CHK.	APP.
NO.	DATE					
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△						
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**COMPRO**  
An Aegion Company

DRAWN BY	FMoreno
DESIGNED BY	BSchupp
DATE	11-14-14
SCALE	N.T.S.
JOB NO.	340140633
DWG. NO.	340140633-01

<b>ENCANA</b>
CATHODIC PROTECTION SYSTEM DEEP ANODE GROUNDBED DETAILS PIPELINE: CHACO TRUNK LINDRITH, NM

<b>Corrpro Specific Safety Plan</b>		
<p><b>New-hire training and SSE identification policy:</b> New hires receive orientation and safety training as required for their job. SSE's are put under the direct supervision of experienced employees and under the more stringent SSE program whether that is Corrpro or Encana.</p>		
<p><b>Corrpro's policy/procedure for stopping unsafe acts:</b> Through Corrpro and Encana Stop Work Authority Program, all employees are given the authority to suspend individual tasks or group operations when the control of health, safety and/or environmental risk is not clearly established or understood.</p>		
<p> </p>		
<b>Developed for: Corrpro Farmington</b>		<b>Date: 12/15/2014</b>
<b>Location: J31-2307 Well Pad</b>	<b>City: Lybrook</b>	<b>State: NM</b>
<b>Job ID: 340140731</b>		
<p><b>Job Description:</b> Installation of Deep anode Groundbed for Cathodic Protection including the installation of the Rectifier/Solar Unit. Cable will be installed to Rectifier to Groundbed (Positive cable) and to Rectifier from pipe (Negative cable). Inspection and Commissioning will occur after installation of ground bed</p>		
<b>Project Manager: Bryan Schupp</b>	<b>Phone: 505-325-1946</b>	<b>Cell: 505-635-7744</b>
<b>Safety Manager: Greg Sawka</b>	<b>Phone: 562-944-1636</b>	<b>Cell: 562-505-7404</b>
<b>Other: Donavon Wright (Construction Sup.)</b>	<b>Phone: 505-325-1946</b>	<b>Cell: 801-834-5118</b>
<b>Injury and Illness Management</b>		
(Here is what you will do in the event of an injury / illness on this job)		
<b>First Aid/Minor Treatment Facility:</b> On site by first aid trained personnel		<b>Phone: n/a</b>
<b>Contact:</b> Nearest hospital can be located via GPS and The Health Bridge.		<b>Phone: 800-633-4350</b>
<b>Emergency Transportation Provider:</b> Ambulance service call 911		<b>Phone: 911</b>

## **CORRPRO – PLUG AND ABANDON - DEEP ANODE GROUND BED**

Permits: Corrpro will assist the Company in applications for permits required by any City, County and/or State agencies.

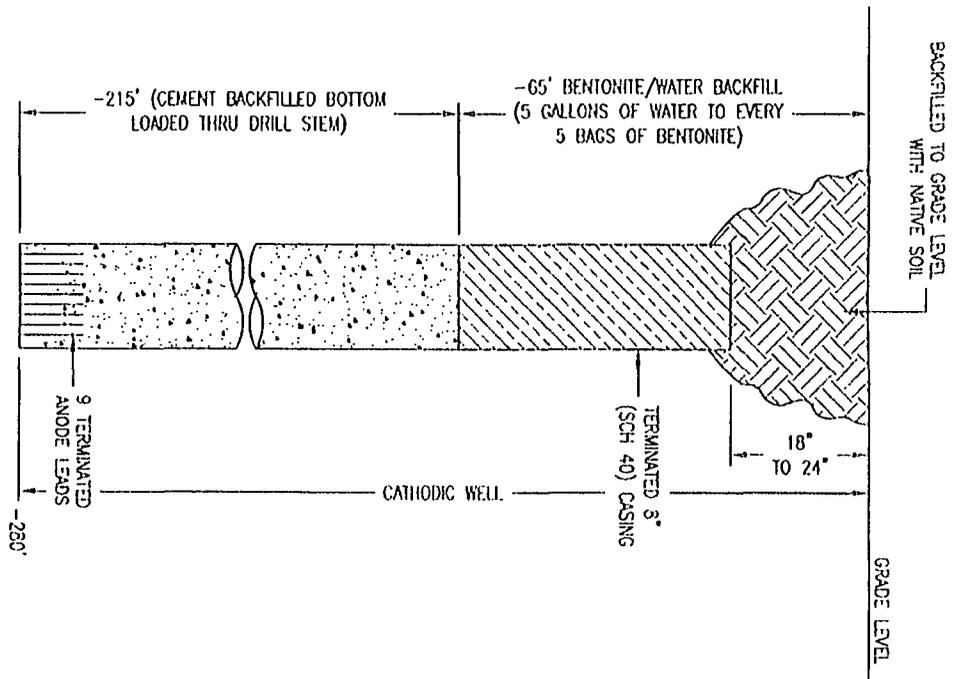
Anode Hole/Surface Casing: At the surface of the anode bed the surface casing shall be excavated or hydro-excavated at a depth of 3' below grade. All conduits and wires shall be terminated and removed. The surface casing and vent pipe will be cut down flush at 2' below grade. Anode leads, after terminated, will be left in the anode bore. If the anode bore is open, a bentonite and water mixture will be poured in to backfill. A cement mixture of Portland cement shall be poured as backfill around the anode bed bore to approximately 6" above remaining surface casing. The excavation shall then be backfilled to grade with native soil.

## **ANODE LEAD JUNCTION BOX**

Removal: The anode lead junction box immediately adjacent to the deep anode bed will be removed along with all remaining conduits and wiring. The 4x4 post will be removed along with the concrete pad and backfilled to grade with native soil.

## **NEGATIVE/POSITIVE CABLES**

Termination of negative/positive leads will be left to the discretion of the owner.



NO.	DATE	REVISIONS	BY	CHK	APP.	NOTES
1						NOT DOCUMENT IS THE PROPERTY OF CORROSION ENGINEERS, INC. NO PART OF THIS DOCUMENT IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF CORROSION ENGINEERS, INC. IF THIS DOCUMENT IS LOANED BY OR WITH THE AUTHORITY OF CORROSION ENGINEERS, INC. THE BORROWER IS CONSIDERED TO BE RESPONSIBLE FOR THE PROPER RETURN OF THIS DOCUMENT TO THE BORROWER.
2						
3						
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**CORROPRO**  
An Aegion Company

DESIGNED BY	Flotrens
DRAWN BY	Rhadin
CHECKED BY	3-20-14
DATE	N.T.S.
SCALE	340140538
PROJECT NO.	340140538-01