Form 3160-5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

rondi	APPRO	OVED
Budget Bure	au No.	1004-0135
Expires:	March	31, 1993

	Expires:	March	31, 199	13
Lease	Designat	ion and	Serial	No.

SUNDRY NOTICES	AND	REPORTS	ON	WELLS
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Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

NM-012647 6. Il Indian, Allottee or Tribe Name

Use "APPLICATION FOR	R PERMIT—" for such proposals	•
. SUBMIT IN TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of Well  Oil  Well  Well  Other		8. Well Name and No.
2. Name of Operator  Amoco Production Company  3. Address and Telephone No.	ÄTTN: J.L.Nampton	Riddle D LS #4  9. API Well No.  30-045-10604
P. O. Box 800 Denver, Colo 4. Location of Well (Footage, Sec., T., R., M., or Survey D.		10. Field and Pool, or Exploratory Area  Blanco Mesaverde
990' FNL, 990' FEL Unit "A" S	Sec. 22, T31N-R9W	11. County or Parish, State  San Juan, NM
iż. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
XX Notice of Intent	Abandonment	Change of Plans

New Construction Recompletion Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection Cathodic Protection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form )

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Amoco requests permission to drill a ground bed cathodic protection well at the above location to service the producing well.

Please see the attached procedures.

ACCEPTED FOR RECORD FARMINGTON RESOURCE AREA

019 FARMINGTON, N.M.

Oll CON. DIV.)
Please contact Cindy Burton (303 Plane 3119 if you have any questions.

14. I hereby certify that the foregoing is true and correct		
4. Thereby certify that the foregoing is true and correct  Signed A. Hamp for Mal.	Tile So Stall admin Super	Date 5/3/92
,. (This space for Federal or State office use)	76	
Approved by Conditions of approval if any:	Tid NAMOOR	Date

## Attachment 2: Deep Groundbed Installation

Construction Practices for the installation of deep groundbeds will include, but are not limited to the following:

- 1. MIRSU. Trench out pit for drill cuttings and drilling fluid. Holes should be drilled with air, if possible. If it becomes necessary to drill with mud, water used to drill must be readily identified as potable.
- 2. Drill a 6 3/4 inch hole to a depth of 320 feet. Monitor and document drill cuttings to characterize subsurface strata from surface to TD.
- 3. If hole will stand open, no casing shall be used. If hole will not stand open, 100 feet of 6" PVC casing shall be installed and cemented behind pipe for the total length of the casing. This will be an adder where necessary; please include cost as a separate item.
- 4. Load hole with water if it was not required for drilling. If water was used for drilling, circulate the hole bottoms up to clean out the drill cuttings and to displace drilling muds with fresh water. All water used must meet the requirements outlined in step #1.
- 5. Log the hole with an anode utilizing a portable power supply with a minimum voltage of 12V DC at 5 foot intervals beginning at 50 feet to TD, recording both voltage and amperage at each point.
- 6. From the log, choose 12 anode locations meeting the following criteria:
  - a. Minimum anode spacing 10 feet center to center.
  - b. Balanced current distribution along anode string.
- c. Insure top anode is below water table. Please include cost of further drilling if required to meet the above criteria.
- 7. Anodes will be 2" x 60" high silicon cast iron. Lower PVC vent pipe (bottom plugged) to TD. Vent pipe will be slotted below the water table, with no perforations at or above the water table. Lower each anode to its desired depth. Carefully inspect each anode cable for defects; care should be taken to insure that the anode and its cable does not become damaged during installation. Confirm the exact location of each anode to its desired depth by matching its current output to the amperage taken during the logging operation.
- 8. Rig up coke breeze pumping unit and carefully lower discharge hose to the bottom of the hole. With hose in place, begin pumping slurried backfill while monitoring bottom anode's current output. When backfill reaches the bottom anode, slowly retract the discharge hose at a rate roughly equal to the rate that the

backfill is rising in the hole. Move the applied power to the next anode and continue this process until the backfill is 50 feet above the top aquifer, or to surface, whichever is lower. If 50 feet above the top aquifer leaves the hole open, fill the remaining hole with metallurgical coke breeze/30% portland cement mix by volume.

- 9. Wire the anodes and power supply leads into the junction box. Each junction box will be equipped with numbered 0.01 ohm shunts, and provisions to allow for connection of groundbed supply leads from old or future parallel groundbeds. Securely attach the junction box to a 4" x 4" treated hardwood post in close proximity to the groundbed with the top of the junction box 24" above grade. Conduit should be provided for the entrance of anode and power supply leads into the junction box from below grade.
- 10. Within 10 days of completing each groundbed (deep or conventional), provide as-built drawings showing exact cable and anode locations and depths, resistance logs, groundbed anode placement, subsurface strata findings, as well as initial operational data of the cathodic protection system.
- 11. Backfill all trenches, pits and augured holes to grade and remove all debris generated during the installation.