TO O. & G

Form 9-331 Dec. 1973 UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY	Form Approved. Budget Bureau No. 42-R1424 5. LEASE <u>LC-029409(Q)</u> 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.) 1. oil gas well other Wardor InJection 2. NAME OF OPERATOR COTTINET for for for Company 3. ADDRESS OF OPERATOR Bax 460 Hobbs N.M. 883400 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) AT SURFACE: 660 FSL + 660' FWL- AT TOP PROD. INTERVAL: Sime AT TOTAL DEPTH: Sime 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	<ul> <li>7. UNIT AGREEMENT NAME</li> <li>8. FARM OR LEASE NAME</li> <li>9. WELL NO.</li> <li>2.</li> <li>10. FIELD OR WILDCAT NAME</li> <li>10. FIELD OR WILDCAT NAME</li> <li>11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA</li> <li>5. ELEVATIONS (SHOW DF, KDB, AND WD)</li> </ul>
REQUEST FOR APPROVAL TO:       SUBSEQUENT REPORT OF:         TEST WATER SHUT-OFF	(NOTE: Report results of multiple completion or zone change on Form 9–330.)

COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, **17.** DESCRIBE PROPOSED OR 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.)\* IT /S PIOPOSed TO Plug and Abandon This Por soll Queen Water Injection Woll Since we have coased Queen Water/losd Operations Thome are no herompletion Possibilities, and we have no function theoe for This well bore. Plug AS Follows: 1. Losd The woll and Pull Tbg and Phr. 2. Kold The Holo With Mud Consisting of 25 sx 6-1/100 Bils Brime War. 3. Sof Cant Returner AT 3370. Pump 50 sx chass c Cant and spot 25x CMT ON TOP Rotainer. 4. Pull up toloand SPOT 25 5x CMT Plug 47 1216-1364' 5. SPOT 25 SX CMT Jurfoce Plug. 6. Plugging mud loft botwoon Chat Plug SCONDITIONS OF APPROVAL 7. Erect Dry Holo Marker + Cloin The Location, 1 History ; Reammendo fier, Wo / TITLE ADMIN. SUPLE DATE, SIGNED Mu Alla AF (This space for Federal or State office use)-AB A APPROVED BY CONDITIONS OF APPROVAL, IF ANY: DISTRICT ENGI 4565(5), F, le See Instructions on Reverse Side

Well History and Recommendation

Plug and Abandon Poorsoll AX NO. 2

It is recommended that we plug and abandon this Pearsall Queen water injection well since we have ceased Queen waterflood operations, there are no recompletion possibilities, and we have no further need for this well bore.

## Initial Completion

Location: 660' FS & WL's of Sec. 33-T17S-R32E, Lea Co., N. M.

Completion Date: July 14, 1942

Total Depth: 4873'

Casing: 7" at 3435' with 100 sacks

Completion Interval: Queen 3435-3647' open hole

Initial Potential 12 BOPD

Initial Treatment: Shot with 80 quarts nitro from 3594-3610'

Cumulative Production: 29,696 barrels oil

Remedial Work

April 1950 Shot from 3562-3616' with 140 quarts nitro Increased production from 1 to 3 BOPD

April 1954 Fracture stimulated with 10,000 gallons oil, 18,000# sand. Increased production from 1 to 35 BOPD

- January 1965 Clean out and convert to waterflood injection service. Well was producing at a rate of less than 1 BO and less than 1 BWPD prior to conversion. Initial injection rate was 630 BPD at 130#
- August 1967 Cleaned out and acidized with 1500 gallons Increased injection from 0 to 150 BPD at 1750#.

## Present Status

The Pearsall AX No. 2 is a shut-in Queen waterflood injection well. A total of 330,800 barrels of water were injected during its 6 1/2 years of waterflood injection service. The well produced a total of 29,696 BO from the Queen prior to injection.

## Discussion

The Pearsall AX No. 2 was drilled with cable tools to 4873', which is approximately 600' into the San Andres Section. The well was then plugged back and the Grayburg 3rd and 6th Zones were nitro shot and pump tested at the rate of 35 barrels fluid/day, 95% water. The well was then plugged back and completed in the Queen sand for 12 BOPD after nitro shot. Two re-stimulation jobs were performed on the Queen producing interval during its producing life: a nitro shot in 1950 and a sand-oil frac in 1954 before it was converted to Queen waterflood injection service in January, 1965. Pearsall Queen waterflood injection was discontinued in 1971 because the project had reached an unprofitable state. A total of 330,800 barrels of water were injected over a 6 1/2 year period in the Pearsall AX No. 2. Remedial work consisted of a clean out and acid job in 1967 to maintain injection capacity.

There is no shallow production above the Queen in this area and the Grayburg and San Andres formations were adequately tested during completion operations. Since remedial and recompletion possibilities have been condemned and the well bore is not needed for salt water disposal, it is recommended that the well be plugged and abandoned.

This federal acreage is held by MCA Unit production.

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U. S. GEOLOGICAL SURVEY P. O. Box 1157 Hobbs, New Mexico 88240

Re: Permanent Abandonment

Well: 2 Pearsall AX

## CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases".
- 2. The Hobbs office (telephone (505) 393-3612) is to be notified in sufficient time for a representative to witness all plugging operations.
- 3. Blowout prevention equipment is required.
- 4. In addition to normal filling of pits and cleanup of location, additional surface restoration work may be required, i.e. ripping of pad and/or access road, reseeding, etc. We have asked the Bureau of Land Management for the surface restoration requirements for this well and we should be able to furnish you these requirements within 30 days. After plugging the well and before making final clean-up, you should contact this office unless you have already been advised as to what additional surface restoration work is required.
- 5. Place additional 25 sack cement plug inside 7" casing in the interval 2300-2400 feet.
- 6. If no 7" casing is pulled, perforate casing at 1100 feet and place sufficient cement for 300' plug outside 7" casing and a 200' plug inside 7" casing. This would be in place of Step 4.