

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

*CASE NO. 11358  
ORDER NOS. R-7637-A and R-8139-A*

**APPLICATION OF NEARBURG EXPLORATION COMPANY/NEARBURG PRODUCING COMPANY TO TERMINATE INJECTION OPERATIONS INTO TWO CERTAIN SALT WATER DISPOSAL WELLS BY RESCINDING DIVISION ADMINISTRATIVE ORDER SWD-336 AND DIVISION ORDER NO. R-7637, EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 7, 1995, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 26th day of December, 1995, the Division Director, having considered the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) By Division Order No. R-7637, issued in Case No. 8234 and dated August 23, 1984, Anadarko Production Company ("Anadarko") was authorized to drill its Dagger Draw SWD Well No. 1 (API No. 30-015-25003) at an unorthodox location 1495 feet from the North line and 225 feet from the West line (Unit E) of Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, and to dispose of produced salt water into the Cisco/Canyon formation through the perforated interval from approximately 7,800 feet to 8,040 feet.

(3) In Division Case No. 8739, Chama Petroleum Company ("Chama") sought to have the New Mexico Oil Conservation Commission rescind the provisions of said Order No. R-7637. By Order No. R-8139, dated February 26, 1986, the Commission denied Chama's request and Anadarko was permitted to continue injecting produced salt water into said well.

(4) Yates Petroleum Corporation ("Yates") is the current owner and operator of the Osage Well No. 1 (API No. 30-015-20890), located 1980 feet from the North and East lines (Unit G) of Section 21, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico. Said well was originally drilled by Coquina Oil Corporation in 1973 to a total depth of 9,410 feet whereby the Undesignated Boyd-Morow Gas Pool tested dry and was subsequently plugged and

abandoned. In 1982 Anadarko re-entered this well and completed it as a producing oil well in the North Dagger Draw-Upper Pennsylvanian Pool with perforations from 7,672 feet to 7,680 feet and from 7,694 feet to 7,704 feet. In February 1989 Yates assumed ownership of said well from Anadarko and converted it into a salt water disposal well under the authority of Division Administrative Order SWD-336, dated March 3, 1988. In addition to the existing perforations the interval from 7,708 feet to 7,863 feet was also shot.

(5) Nearburg Exploration Company, a company based in Dallas, Texas that is a sole proprietorship owned by Charles E. Nearburg, is listed as owning certain mineral interests in all of said Sections 21 and 22, the S/2 of Section 16, and the SW/4 of Section 15, all in Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico. Nearburg Producing Company is the operations entity of Charles E. Nearburg for those properties owned by Nearburg Exploration Company.

(6) Nearburg Producing Company is the operator of the Ross Ranch "22" Well No. 2 (API No. 30-015-27458), located at a standard oil well location 1980 feet from the North line and 660 feet from the West line (Unit E) of said Section 22, which is a North Dagger Draw-Upper Pennsylvanian Pool producing oil well with perforations from 7,653 feet to 7,767 feet. Furthermore, Nearburg Producing Company has filed and obtained approval to drill 12 wells to the North Dagger Draw Upper Pennsylvanian Pool throughout said Section 22.

(7) According to the records on file with the New Mexico Oil Conservation Division ("Division"):

- (a). Yates currently operates six producing North Dagger Draw-Upper Pennsylvanian oil wells in said Section 21 and has proposed to drill eight additional wells to said pool;
- (b). in the S/2 of Section 16, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, Yates operates two producing North Dagger Draw-Upper Pennsylvanian oil wells and is proposing to drill six additional wells to said pool; and,
- (c). in the SW/4 of Section 15, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, Nearburg is proposing to drill two wells to test the subject upper-Pennsylvanian pool.

(8) The applicant in the immediate case, Nearburg Exploration Company/Nearburg Producing Company ("Nearburg"), seeks to rescind both aforementioned Division Orders and to have the disposal of produced salt water into the Cisco/Canyon formation into both the Yates Osage Well No. 1 and the Anadarko Dagger Draw SWD Well No. 1 cease.

(9) At the time of the hearing Nearburg, Yates, and Anadarko appeared at the hearing and presented testimony and evidence to support its position in this matter.

(10) The technical evidence presented in this case indicates that the productive interval within this pool to be limited in this area to the upper one-third of the Canyon dolomite general found to be above the subsea depth of approximately 4,350 feet, as referenced in Nearburg's Exhibit No. 16 presented in this case, which should be incorporated by reference into this order. Although there does not appear to be a well defined oil/water contact at this depth, well test data and well logs below this point indicate the reservoir rock to be water saturated and the likelihood of obtaining commercial oil production below this depth in this general area to be remote.

(11) At the time both Yates and Anadarko received their respective approvals to inject produced salt water into the Cisco/Canyon formation for disposal purposes, North Dagger Draw-Upper Pennsylvanian Pool production had not advanced to within the immediate quarter sections surrounding each water disposal well. With current and proposed development of the North Dagger Draw-Upper Pennsylvanian Pool on each quarter-quarter section surrounding both disposal wells, Nearburg's concerns for the continued use of both wells for disposal is warranted under Section 70-2-12.B(4) N.M.S.A. Laws of 1978, which requires the Division to prevent the drowning by water of any stratum or part thereof capable of producing oil in paying quantities and to prevent the premature and irregular encroachment of water or any other kind of water encroachment which reduces or tends to reduce the total ultimate recovery of oil from any pool.

(12) In the operations and reporting of their respective disposal wells, both Yates and Anadarko have acted as prudent operators and have demonstrated that all applicable rules and procedures in the management of these wells have been followed.

(13) Since the authorized disposal interval in the Anadarko Dagger Draw SWD Well No. 1, located in Unit "E" of Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, through the perforated interval from approximately 7,800 feet to 8,040 feet lies almost entirely under the subsea datum point of 4,350 feet, cumulative evidence presented in this matter would indicate that the continued use of this well for the disposal of produced salt water through said interval is not likely to adversely affect production in the subject pool nor serve to impair correlative rights. Therefore, Division Order No. R-7637, issued in Case No. 8234 and dated August 23, 1984, which authorized Anadarko to drill said Dagger Draw SWD Well No. 1 at an unorthodox location 1495 feet from the North line and 225 feet from the West line (Unit E) of said Section 22 and to dispose of produced salt water into the vertical limits of the North Dagger Draw-Upper Pennsylvanian Pool through the perforated interval from approximately 7,800 feet to 8,040 feet, should remain in full force and effect and the application by Nearburg to rescind said order should be denied.

(14) However, there is a potential for water encroachment into the productive interval above the 4,350 feet subsea datum point of the North Dagger Draw-Upper Pennsylvanian Pool should the Yates Osage Well No. 1 located in Unit "G" of Section 21, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico be allowed to continue injecting produced salt water into the cumulative perforated interval from 7,672 feet to 7,863 feet. Therefore, Division Administrative Order SWD-336, dated March 3, 1988, which order authorized Yates to convert said well from a producing oil well in the North Dagger Draw-Upper Pennsylvanian Pool, with perforations from 7,672 feet to 7,680 feet and from 7,694 feet to 7,704 feet, to a salt water

disposal well with injection through said perforations and into an additional perforated interval from 7,708 feet to 7,863 feet, should be rescinded at this time.

IT IS THEREFORE ORDERED THAT:

(1) That portion of the application by Nearburg Exploration Company/Nearburg Producing Company ("Nearburg") to rescind Division Order No. R-7637, issued in Case No. 8234 and dated August 23, 1984, which order authorized Anadarko Production Company ("Anadarko") to drill its Dagger Draw SWD Well No. 1 (API No. 30-015-25003) at an unorthodox location 1495 feet from the North line and 225 feet from the West line (Unit E) of Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, and to dispose of produced salt water into the vertical limits of the North Dagger Draw-Upper Pennsylvanian Pool through the perforated interval from approximately 7,800 feet to 8,040 feet, is hereby denied.

(2) All provisions of said Order No. R-7637 shall therefore remain in full force and effect.

HOWEVER:

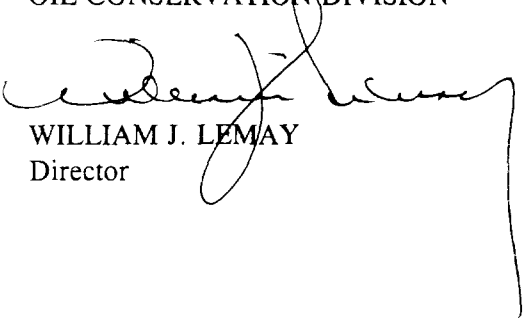
(3) That portion of the immediate application by Nearburg to rescind Division Administrative Order SWD-336, dated March 3, 1988, which order authorized Yates Petroleum Corporation ("Yates") to convert the existing Osage Well No. 1 (API No. 30-015-20890), located 1980 feet from the North and East lines (Unit G) of Section 21, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico, from a producing oil well location in the North Dagger Draw-Upper Pennsylvanian Pool, with perforations from 7,672 feet to 7,680 feet and from 7,694 feet to 7,704 feet, to a salt water disposal well with injection through said perforations and into an additional perforated interval from 7,708 feet to 7,863 feet, is hereby approved. Therefore, said Division Administrative Order SWD-336 is hereby rescinded effective immediately.

(4) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove  
designated



STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director