LAW OFFICES

LOSEE, CARSON, HAAS & CARROLL, P. A.

MARY LYNN BOGLE ERNEST L. CARROLL JOEL M. CARSON DEAN B. CROSS JAMES E. HAAS A. J. LOSEE BARRY D. GEWEKE

MARY LYNN BOGLE 300 YATES PETROLEUM BUILDING ERNEST L. CARROLL 201 10 0 0 0 0. BOX 1720 JOEL M. CARSON 201 ARTESIA, NEW MEXICO 88211-1720

TELEPHONE (505) 746-3505 TELECOPY (505) 746-6316

September 22, 1995

VIA FACSIMILE AND FIRST CLASS MAIL

Mr. Michael Stogner, Hearing Examiner New Mexico Oil Conservation Division 2040 S. Pacheco P. O. Box 6429 Santa Fe, New Mexico 87505-5472

> Re: In the Mater of the Application of Nearburg Exploration Company/Nearburg Producing Company to Terminate Injection Operations into Two Certain Disposal Wells by Rescinding Division Administrative Order SWD-336 and Division Order No. R-7637, Eddy County, New Mexico, Case No. 11358

Dear Mr. Stogner:

Enclosed please find for filing the proposed Order of the Division of Anadarko Petroleum Corporation and Yates Petroleum Corporation for the above-captioned case.

Very truly yours,

LOSEE, CARSON, HAAS & CARROLL, P.A.

Grant Canoel

Ernest L. Carroll

ELC:kth Encl.

xc w/encl: Mr. Jim Bruce Mr. Randy Turner Mr. Randy Patterson

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

IN THE MATTER OF THE APPLICATION OF : NEARBURG EXPLORATION COMPANY/NEARBURG : CASE NO. 11358 PRODUCING COMPANY TO TERMINATE : INJECTION OPERATIONS INTO TWO CERTAIN : DISPOSAL WELLS BY RESCINDING DIVISION : ADMINISTRATIVE ORDER SWD-336 AND : DIVISION ORDER NO. R-7637, EDDY COUNTY, : NEW MEXICO :

ORDER OF THE DIVISION PROPOSED BY ANADARKO PETROLEUM CORPORATION AND YATES PETROLEUM CORPORATION

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 _____ day of ______, 1995, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises, FINDS THAT:

1. By Order NO. R-7637, Anadarko Petroleum Corporation was authorized to dispose of produced salt water into the Cisco Canyon formation in the perforated interval from approximately 7800 feet to 8040 feet in its Dagger Draw SWD Well No. 1, located at an unorthodox location 1495 feet from the North line and 225 feet from the West line of Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico. Said order was issued over the protest of Chama Petroleum Company, the predecessor of Nearburg Exploration Company and Nearburg Producing Company. 2. Chama Petroleum Company subsequently filed an application to rescind Order No. R-7637, which was denied by Order No. R-8139

3. The Oil Conservation Commission found in Order Nos. R-7637 and R-8139 that Anadarko was injecting into the lower Cisco Canyon reservoir, which was not capable of commercial oil or gas production in the area of the Dagger Draw SWD Well No. 1. The Commission further found that the lower Cisco Canyon is separated from the upper Cisco Canyon by impermeable non-porous dolomites and shales.

4. Nearburg presented evidence at the hearing that the upper Cisco Canyon may be productive in the area of the Dagger Draw SWD Well No. 1. However, Nearburg's geologist admitted that the lower Cisco Canyon is not capable of commercial production of oil and gas in the subject area.

5. Anadarko's and Yates' witnesses testified that the lower Cisco Canyon is separated from the upper Cisco Canyon by impermeable zones.

6. Anadarko further presented evidence that the water saturations in the upper Cisco Canyon in the subject area have not changed significantly in the past ten years despite the injection of approximately 10,000,000 barrels of salt water into the Anadarko and Yates injection wells.

7. The producing capability of Nearburg's Ross Ranch 22 Well No. 2 is not affected by the injection operations of Anadarko's Dagger Draw SWD Well No. 1.

8. The continued use of the Dagger Draw SWD Well No. 1 is in accordance with Order Nos. R-7637 and R-8139, and will not constitute waste or impair correlative rights.

9. Anadarko has acted as a prudent operator in its drilling, completion and operation of its disposal well.

10. Order Nos. R-7637 and R-8139 should remain in full force and effect, and the application of Nearburg should therefore be <u>denied</u>.

11. By New Mexico Oil Conservation Division Administrative Order SWD-336, dated March 3, 1988, Yates Petroleum Corporation was authorized to dispose of produced salt water into the Cisco/Canyon formation in its Osage Well No. 1, located 1980 feet from the North line and 1980' from the East line of Section 21, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico.

12. Nearburg's representatives testified that they felt their Ross Ranch 22 No. 2 should be commercial because it is structurally flat or high to subsequently completed commercial producers.

Nearburg's representatives claimed that the Ross Ranch 22
No. 2 was watered out by offset injection.

14. Yates presented evidence that the producing wells' WOR's are not correlative with structural position.

15. Nearburg's representatives presented no evidence that vertical fluid migration is occurring.

16. Nearburg's representatives testified that they feel the Ross Ranch 22 No. 2 should have a lower WOR.

17. Yates presented evidence showing that the Ross Ranch 22 No. 2 was drilled at a location between its Osage Well No. 1 with a WOR of 49 to 1 and the B&B Well No. 1 with a WOR of 117 to 1.

18. Yates presented statistical evidence that wells with WOR's in excess of 40 to 1, such as the Ross Ranch 22 No. 2, should be expected in Township 19 South, Range 25 East.

19. Anadarko presented evidence that water saturations calculated in the Ross Ranch 22 No. 2 Well from 1994 logs were similar to values calculated from the Anadarko Dagger Draw SWD Well No. 1 in 1984.

20. Yates presented testimony that its Osage Well No. 1 was not a commercial producer when completed in the early 1980's, thereby proving this area to be non-commercial.

21. Nearburg presented testimony implying that the Anadarko Dagger Draw SWD Nc. 1 would have been commercial because some oil was swabbed during completion.

22. Yates presented evidence showing that producing oil cut cannot be correlated to swabbing oil cuts.

23. No credible evidence was adduced at the hearing hereof which would indicate that the Ross Ranch 22 No. 2 would have been a commercially productive well absent the disposal of salt water in either the Anadarko Dagger Draw SWD No. 1 or the Yates Osage Well No. 1.

24. The continued use of the Yates Osage Well No. 1 is in accordance with Order SWD-336 and will not constitute waste or impair correlative rights.

25. Yates Petroleum Corporation has acted as a prudent operator in its recompletion and operation of the Osage Well No. 1 as a disposal well.

26. Administrative Order SWD-336 should remain in full force and effect, and the application of Nearburg should therefore be denied.

IT IS THEREFORE ORDERED THAT:

(1) The application of Nearburg Exploration Company/Nearburg Producing Company to rescind Order NO. R-7637 is hereby <u>denied</u>.

(2) The application of Nearburg Exploration Company/Nearburg Producing Company to rescind Administrative Order No. SWD-336 is hereby <u>denied</u>.

(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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

IN THE MATTER OF THE APPLICATION OF : NEARBURG EXPLORATION COMPANY/NEARBURG : CASE NO. 11358 PRODUCING COMPANY TO TERMINATE : INJECTION OPERATIONS INTO TWO CERTAIN : DISPOSAL WELLS BY RESCINDING DIVISION : ADMINISTRATIVE ORDER SWD-336 AND : DIVISION ORDER NO. R-7637, EDDY COUNTY, : NEW MEXICO :

ORDER OF THE DIVISION PROPOSED BY ANADARKO PETROLEUM CORPORATION AND <u>YATES PETROLEUM CORPORATION</u>

BY THE DIVISION:

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NOW on this _____ day of ______, 1995, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises, FINDS THAT:

1. By Order NO. R-7637, Anadarko Petroleum Corporation was authorized to dispose of produced salt water into the Cisco Canyon formation in the perforated interval from approximately 7800 feet to 8040 feet in its Dagger Draw SWD Well No. 1, located at an unorthodox location 1495 feet from the North line and 225 feet from the West line of Section 22, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico. Said order was issued over the protest of Chama Petroleum Company, the predecessor of Nearburg Exploration Company and Nearburg Producing Company. 2. Chama Petroleum Company subsequently filed an application to rescind Order No. R-7637, which was denied by Order No. R-8139

3. The Oil Conservation Commission found in Order Nos. R-7637 and R-8139 that Anadarko was injecting into the lower Cisco Canyon reservoir, which was not capable of commercial oil or gas production in the area of the Dagger Draw SWD Well No. 1. The Commission further found that the lower Cisco Canyon is separated from the upper Cisco Canyon by impermeable non-porous dolomites and shales.

4. Nearburg presented evidence at the hearing that the upper Cisco Canyon may be productive in the area of the Dagger Draw SWD Well No. 1. However, Nearburg's geologist admitted that the lower Cisco Canyon is not capable of commercial production of oil and gas in the subject area.

5. Anadarko's and Yates' witnesses testified that the lower Cisco Canyon is separated from the upper Cisco Canyon by impermeable zones.

6. Anadarko further presented evidence that the water saturations in the upper Cisco Canyon in the subject area have not changed significantly in the past ten years despite the injection of approximately 10,000,000 barrels of salt water into the Anadarko and Yates injection wells.

7. The producing capability of Nearburg's Ross Ranch 22 Well No. 2 is not affected by the injection operations of Anadarko's Dagger Draw SWD Well No. 1.

8. The continued use of the Dagger Draw SWD Well No. 1 is in accordance with Order Nos. R-7637 and R-8139, and will not constitute waste or impair correlative rights.

9. Anadarko has acted as a prudent operator in its drilling, completion and operation of its disposal well.

10. Order Nos. R-7637 and R-8139 should remain in full force and effect, and the application of Nearburg should therefore be <u>denied</u>.

11. By New Mexico Oil Conservation Division Administrative Order SWD-336, dated March 3, 1988, Yates Petroleum Corporation was authorized to dispose of produced salt water into the Cisco/Canyon formation in its Osage Well No. 1, located 1980 feet from the North line and 1980' from the East line of Section 21, Township 19 South, Range 25 East, NMPM, Eddy County, New Mexico.

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22. Yates presented evidence showing that producing oil cut cannot be correlated to swabbing oil cuts.

23. No credible evidence was adduced at the hearing hereof which would indicate that the Ross Ranch 22 No. 2 would have been a commercially productive well absent the disposal of salt water in either the Anadarko Dagger Draw SWD No. 1 or the Yates Osage Well No. 1.

24. The continued use of the Yates Osage Well No. 1 is in accordance with Order SWD-336 and will not constitute waste or impair correlative rights.

25. Yates Petroleum Corporation has acted as a prudent operator in its recompletion and operation of the Osage Well No. 1 as a disposal well.

26. Administrative Order SWD-336 should remain in full force and effect, and the application of Nearburg should therefore be denied.

IT IS THEREFORE ORDERED THAT:

(1) The application of Nearburg Exploration Company/Nearburg Producing Company to rescind Order NO. R-7637 is hereby <u>denied</u>.

(2) The application of Nearburg Exploration Company/Nearburg Producing Company to rescind Administrative Order No. SWD-336 is hereby <u>denied</u>.

(3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.