# 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. 12512 ORDER NO. R-10460-C

# APPLICATION OF EXXON MOBIL CORPORATION TO CERTIFY A WATERFLOOD PROJECT FOR A POSITIVE PRODUCTION RESPONSE PURSUANT TO THE NEW MEXICO ENHANCED OIL RECOVERY ACT, EDDY COUNTY, NEW MEXICO.

### **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on October 19, 2000 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>30th</u> day of October, 2001, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

#### FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) The applicant, Exxon Mobil Corporation, seeks certification pursuant to Division Rule 30.E (2) of a positive production response within its Avalon (Delaware) Unit Waterflood Project Area, Eddy County, New Mexico.

(3) By Order No. R-10460-B issued in Case No. 11298 on March 12, 1996, the New Mexico Oil Conservation Commission ("Commission"), upon application of Exxon Corporation, approved Statutory Unitization for the Avalon (Delaware) Unit Area comprising the following-described 2118.78 acres, more or less, of state, federal, and fee lands in Eddy County, New Mexico:

<b>TOWNSHIP 20 SC</b>	DUTH, RANGE 27 EAST, NMPM
Section 25:	E/2 E/2
Section 36:	E/2 E/2

TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM						
Section 29:	SW/4 SW/4					
Section 30:	Lots 1, 2, 3, and 4, SW/4 NE/4, E/2 W/2, SE/4					
Section 31:	on 31: All					
Section 32:	SW/4 NE/4, W/2, and W/2 SE/4					
TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM						
Section 4:	Lot 4					
Section 5:	Lots 1 and 2					
Section 6:	Lots 1 and 2.					

(4) By Order No. R-10460-B issued in Case No. 11297, the Commission: (i) authorized Exxon Corporation to institute a waterflood project into the designated and Undesignated Avalon-Delaware Pool within the aforementioned Avalon (Delaware) Unit Area; (ii) limited the extent of the initial waterflood project area, therein designated the Avalon (Delaware) Unit Waterflood Project Area, for allowable and tax credit purposes to the following described 1088.50 acres; and (iii) qualified the Avalon (Delaware) Unit Waterflood Project Area as an "Enhanced Oil Recovery ("EOR") Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5):

EDDY COUNTY, NEW MEXICO				
TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM				
Section 30:	Lots 1, 2, 3, and 4, SE/4 NW/4, E/2 SW/4, S/2 SE/4			
Section 31:	Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, N/2			
	SE/4, and SE/4 SE/4			
Section 32:	W/2 NW/4, N/2 SW/4, and SW/4 SW/4.			

(5) The Division certified that the above-described Avalon (Delaware) Unit Waterflood Project was approved as a qualified secondary recovery project to the New Mexico Taxation and Revenue Department on October 15, 1995.

(6) The evidence presented by the applicant in this case shows that:

(a) the operator commenced water injection within the project area in late October, 1995;

(b) there are currently 16 water injection wells in the project area, with three producing wells to be converted to injection at a later date;

(c) there are currently 31 producing wells within the Avalon (Delaware) Unit; however, there will be 28 producing wells when the three wells described in sub-paragraph (b) above are converted to injection wells [Attached to this order as Exhibit "A" is a listing of eligible wells within the Avalon (Delaware) Unit Waterflood Project that qualify for the recovered oil tax rate.];

(d) as of August 31, 2000, the applicant was injecting approximately 4,640 barrels of water per day, and has injected a cumulative 6,307,000 barrels of water. Throughout the life of the unit area the applicant has continuously increased the injection: withdrawal ratio;

(e) the gas/oil ratio for the producing wells in the Avalon (Delaware) Unit Waterflood Project began decreasing in early 1996, and has decreased from 4000 to 1 in October 1995 to approximately 1600 to 1 in August 2000. The gas/oil ratio continues to decrease with increasing water injection;

(f) oil production from the Avalon (Delaware) Unit Waterflood Project began increasing by January, 1999;

(g) oil production continues to increase with increasing water injection; and

(h) the entire project area is benefiting from these enhanced recovery operations.

(7) At the time of the hearing, the applicant requested that December 31, 1998 be established as the date a positive production response occurred within the Avalon (Delaware) Unit Waterflood Project. Even though certain wells within the project area show an earlier positive production response, all wells in the project area showed a response by December 31, 1998. Thus, the applicant's request is reasonable and should be granted.

(8) The positive production response has occurred within the five-year time limit provided by Division Rule 30.E(2)(c)(i).

(9) The producing wells described in Exhibit "A" attached hereto should be eligible

for the reduced tax rate.

(10) Subsequent to the issuance of this order, the applicant should notify the Division:

(a) of the change in status of any of the producing wells shown in Exhibit "A";

(b) in the event new producing wells are drilled within the Avalon (Delaware) Unit Waterflood Project Area; and

(c) of changes in operations within the Avalon (Delaware) Unit Project Area that may affect the certification and resulting reduced tax rate granted herein.

(11) Pursuant to the provisions of Division Rule 30.E(2)(c), the Division Director should notify the Secretary of the New Mexico Taxation and Revenue Department of the certification of positive production response.

## **IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the Division Rule 30.E (2), the application of Exxon Mobil Corporation for certification of a positive production response within its Avalon (Delaware) Unit Waterflood Project is hereby approved effective December 31, 1998.

(2) All producing wells within the Avalon (Delaware) Unit that are located within the initial waterflood project area, hereinafter referred to as the Avalon (Delaware) Unit Waterflood Project, as described below, shall be eligible for the recovered oil tax rate. [Attached to this order as Exhibit "A" is a listing of eligible wells within the Avalon (Delaware) Unit that qualify.]:

EDDY COUNTY, NEW MEXICO				
TOWNSHIP 20 SOUTH, RANGE 28 EAST, NMPM				
Section 30:	Lots 1, 2, 3, and 4, SE/4 NW/4, E/2 SW/4, S/2 SE/4			
Section 31:	Lots 1, 2, and 3, NE/4, E/2 NW/4, NE/4 SW/4, N/2			
	SE/4, and SE/4 SE/4			
Section 32:	W/2 NW/4, N/2 SW/4, and SW/4 SW/4.			

(3) Pursuant to the provisions of Division Rule 30.E (2) (c), the Division Director shall notify the Secretary of the New Mexico Taxation and Revenue Department of the

certification of positive production response granted herein.

## **IT IS FURTHER ORDERED THAT:**

(4) The applicant shall notify the Division of:

(a) the change in status of any of the producing wells shown in Exhibit "A";

(b) new producing wells that are drilled within the Avalon (Delaware) Unit Waterflood Project Area; and

(c) changes in operations within the Avalon (Delaware) Unit Waterflood that may affect the certification and resulting reduced tax rate granted herein.

(5) Jurisdiction of this case is 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

Toji Wrotenberr LORI WROTENBERY

LORI WROTENBERY Director

## Exhibit "A" Case No. 12512 - Order No. R-10460-C

Exxon Mobil Corporation Producing Wells Avalon (Delaware) Unit Waterflood Project Area - Avalon-Delaware Pool - Lea County, New Mexico.

Avalon Delaware Unit Well Number	API Number	Footage Location	Section - Township - Range	Unit	Completion Date
210	30-015-24653	990' FN & WL	30-T20S-R28E	D (Lot 1)	January, 1984
226	30-015-24636	2310' FNL & 990' FWL	30-T20S-R28E	E (Lot 2)	January, 1984
227	30-015-24710	2310' FNL & 1980' FWL	30-T20S-R28E	F	April, 1984
242	30-015-24637	1650' FSL & 990' FWL	30-T20S-R28E	L (Lot 3)	December, 1983
243	30-015-24574	1650' FSL & 1980' FWL	30-T20S-R28E	K	November, 1983
246	30-015-24623	1650' FSL & 1980' FEL	30-T20S-R28E	J	December, 1983
258	30-015-24546	330' FSL & 990' FWL	30-T20S-R28E	M (Lot 4)	October, 1983
259	30-015-24487	330' FSL & 1980' FWL	30-T20S-R28E	N	July, 1983
262	30-015-24414	560' FSL & 1980' FEL	30-T20S-R28E	0	June, 1983
401	30-015-24794	330' FN & EL	36-T20S-R27E	А	August, 1984
433	30-015-23443	2180' FSL & 660' FEL	36-T20S-R27E	Ι	December, 1980
501	30-015-24331	660' FN & EL	31-T20S-R28E	A	January, 1983
509	30-015-24332	660' FN & WL	31-T20S-R28E	D (Lot 1)	May, 1983
511	30-015-24524	760' FNL & 1980' FWL	31-T20S-R28E	С	August, 1983
514	30-015-24194	660' FNL & 1980' FEL	31-T20S-R28E	В	October, 1982
515	30-015-26370	1305' FN & EL	31-T20S-R28E	А	December, 1990
516	30-015-28665	1310' FNL & 97' FEL	31-T20S-R28E	А	June, 1996
517	30-015-24337	1980' FNL & 560' FEL	31-T20S-R28E	Н	May, 1983
522	30-015-02434	1980' FN & WL	31-T20S-R28E	F	February, 1983
525	30-015-24336	2180' FNL & 660' FWL	31-T20S-R28E	E (Lot 2)	December, 1982
530	30-015-24335	1980' FN & EL	31-T20S-R28E	G	January, 1983
536	30-015-24525	2310' FS & EL	31-T20S-R28E	J	October, 1983
539	30-015-28682	2600' FSL & 1322' FWL	31-T20S-R28E	L (Lot 3)	May, 1996
540	30-015-24386	1980' FSL & 660' FWL	31-T20S-R28E	L (Lot 3)	August, 1983
543	30-015-24376	1980' FS & WL	31-T20S-R28E	К	July, 1983
548	30-015-24373	1980' FSL & 660' FEL	31-T20S-R28E	I	August, 1983
609	30-015-24388	660' FN & WL	32-T20S-R28E	D	February, 1983
624	30-015-24410	1980' FNL & 330' FWL	32-T20S-R28E	E	March, 1983
641	30-015-24409	1980' FSL & 610' FWL	32-T20S-R28E	L	May, 1983
643	30-015-24495	1980' FSL & 1650' FWL	32-T20S-R28E	К	July, 1983
657	30-015-24473	660' FSL & 330' FWL	32-T20S-R28E	M	June, 1983