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June 25, 2001

### Hand Delivered

Michael E. Stogner Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Case No. 12512 (Exxon Mobil Corporation)

Dear Mr. Stogner:

Enclosed (hard copy and on disk) is a proposed order in the above matter.

This proposed order is six months late. I apologize for the delay in providing you this material.

Very truly yours,

James Brace

Attorney for Exxon Mobil Corporation

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

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

> CASE NO. 12512 Order No. R-\_\_\_\_

APPLICATION OF EXXON MOBIL CORPORATION FOR CERTIFICATION OF A POSITIVE PRODUCTION RESPONSE, 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 \_\_\_\_\_ day of July, 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 the Rules and Procedures for Qualification of Enhanced Oil Recovery Projects and Certification for the Recovered Oil Tax Rate, as promulgated by Division Order No. R-9708, of a positive production response within its Avalon (Delaware) Unit Waterflood Project, Eddy County, New Mexico.
- (3) By Order No. R-10460-B, dated March 12, 1996, the Oil Conservation Commission authorized Exxon Corporation (now Exxon Mobil Corporation) to institute a waterflood project within its Avalon (Delaware) Unit, which covers the area described below:

### AVALON (DELAWARE) UNIT

Township 20 South, Range 27 East, NMPM

Section 25: E½E½ Section 26: E½E½

Township 20 South, Range 28 East, NMPM

Section 29: SW\(\frac{1}{2}\)SW\(\frac{1}{2}\)

Section 30: Lots 1-4, SW¼NE¼, E½W½, and SE¼ Section 31: Lots 1-4, E½W½, and E½ Section 32: SW¼NE¼, W½, and W½SE¼

Township 21 South, Range 27 East, NMPM

Section 4: Lot 4

Section 5: Lots 1 and 2 Section 6: Lots 1 and 2

The order also qualified the Avalon (Delaware) Unit Waterflood Project as an enhanced oil recovery project pursuant to the "New Mexico Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5). The project area is described below:

### AVALON (DELAWARE) UNIT WATERFLOOD PROJECT AREA

Township 20 South, Range 28 East, NMPM

Section 30: Lots 1-4, SE¼NW¼, E½SW¼, and W½SE¼

Section 31: Lots 1-3, NE¼, E½NW¼, NE¼SW¼, N½SE¼, and

SE¼SE¼

Section 32: W½NW¼, N½SW¼, and SW¼SW¼

Order No. R-10460-B affirmed Order No. R-10460, entered by the Division on September 18, 1995

- (4) The Division certified that the 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.
  - (5) The evidence presented in this case shows that:
  - (a) the Avalon-Delaware Pool was created by Division Order No. R-6368, as amended, on July 1, 1980. The pool is governed by statewide rules, except that the gas:oil ratio is 4000: 1 pursuant to Division Order No. R-6368-B;
  - (b) thirty-eight wells were drilled and completed in the pool through 1985. In 1990 one additional well was drilled and completed in the pool to gather information useful for unitizing the pool; and
  - Exxon Mobil Corporation applied for and was granted Division approval to institute a waterflood project within the Avalon-Delaware Pool for the purpose of increasing ultimate oil recovery from the pool. The Avalon (Delaware) Unit became effective on October 1, 1995.
  - (6) The evidence presented in this case further shows that:
  - (a) Water injection commenced within the project are 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 in the unit. There will be 28 producing wells when the three producing wells described in paragraph (b) above are converted to injection. (A listing of wells within the Avalon (Delaware) Unit, and their current status, is attached hereto as Exhibit A.)
- (d) as of August 31, 2000, the applicant was injecting approximately 4640 barrels of water per day, and has injected a cumulative 6,307,000 barrels of water. Throughout the life of the unit 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 4000:1 in October 1995 to approximately 1600:1 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 than January 1999. Oil production continues to increase with increasing water injection; and
- (g) the entire project are is benefitting from enhanced recovery operations.
- (7) The applicant requested that December 31, 1998 be established as the date a positive production response occurred within the Avalon (Delaware) Unit Waterflood Project.
- (8) Although certain wells within the project area show an <u>earlier</u> 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 described in Division Order No. R-9708.
- (9) The producing wells described in Exhibit A attached hereto should be eligible for the reduced tax rate.
  - (10) 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; and
- (c) of changes in operations within the unit which may affect the certification and resulting reduced tax rate granted herein.
- (11) Pursuant to the provisions of Division Order No. R-9708, the Division Director should notify the Secretary of the New Mexico Taxation and Revenue Department of the certification granted herein.

### IT IS THEREFORE ORDERED THAT:

- (1) Pursuant to the Rules and Procedures for Qualification of Enhanced Oil Recovery Projects and Certification for the Recovered Oil Tax Rate, as promulgated by Division Order No. R-9708, 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 Avalon (Delaware) Unit producing wells within the following described area, as shown in Exhibit A attached hereto, shall be eligible for the recovered oil tax rate:

### AVALON (DELAWARE) UNIT WATERFLOOD PROJECT AREA

## Township 20 South, Range 28 East, NMPM

Section 30: Lots 1-4, SE¼NW¼, E½SW¼, and W½SE¼

Section 31: Lots 1-3, NE¼, E½NW¼, NE¼SW¼, N½SE¼, and

SE¼SE¼

Section 32: W½NW¼, N½SW¼, and SW¼SW¼

- (3) Pursuant to the provisions of Division Order No. R-9708, the Division Director shall notify the Secretary of the New Mexico Taxation and Revenue Department of the certification granted herein.
  - (4) The applicant shall 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; and

- (c) of changes in operations within the unit which may affect the certification and resulting reduced tax rate granted herein.
- (5) 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

SEAL

LORI WROTENBERY Director

Avalon Delaware Unit				!	
Well List			İ		
Well Name	API No.	S-T-R	Location	Well Type	Completion Date
AVALON_UT_0210	300152465300	30-20S-28E	990 FNL, 990 FWL	P	100.04
AVALON_UT 0222W	300152865800	30-20S-28E	1665 FNL, 1452 FWL	WIW	Jan-84 May-96
AVALON_UT 0226	300152865800	30-20S-28E	2310 FNL, 990 FWL	P	Jan-84
AVALON_UT_0227	300152471000	30-20S-28E	2310 FNL,1980 FWL	P	Apr-84
AVALON UT 0238W	300152865900	30-20S-28E		ww.	Jun-96
AVALON_UT_0242	300152463700	30-20S-28E	1650 FSL, 990 FWL	P	Dec-83
AVALON_UT 0243			1650 FSL, 1980 FWL		Nov-83
AVALON_UT_0246			1650 FSL, 1980 FEL	P	Dec-83
AVALON UT 0253W			# 1046 FSL, 2667 FWL	WIW	Jun-96
AVALON_UT_0254W			1152 FSL, 1489 FWL		Jun-96
AVALON UT 0258			330 FSL, 990 FWL	Р	Oct-83
AVALON UT 0259				P	Jul-83
AVALON_UT_0262				P	Jun-83
AVALON_UT_0263			450 FSL, 990 FEL	TA	Dec-83
AVALON_UT_0364			660 FSL, 333 FEL	SI	Jul-84
AVALON_UT_0401		36-20S-27E		Р	Aug-84
AVALON_UT_0433		36-20S-27E		P P	Dec-80
AVALON_UT_0464		36-20S-27E		TA	Sep-84
AVALON_UT_0501				Р	Jan-83
AVALON_UT_0503				₩ WIW	Aug-96
AVALON_UT_0505W	300152867700	31-20S-28E	123 FNL, 2673 FEL	. WIW	May-96
AVALON_UT_0507W	300152867800	31-20S-28E		<b>WIW</b>	Aug-96
AVALON_UT_0509	300152433200	31-20S-28E	660 FNL, 660 FWL	P	May-83
AVALON_UT_0511	300152452400	31-20S-28E	760 FNL, 1980 FWL	Р	Aug-83
AVALON_UT_0514	300152419400	31-20S-28E	660 FNL, 1980 FEL	Р	Oct-82
AVALON_UT_0515	300152637000	31-20S-28E	1305 FNL, 1305 FEL	i. P	Dec-90
AVALON_UT_0516	300152866500	31-20S-28E	1310 FNL, 97 FEL	2 P	Jun-96
AVALON_UT_0517	300152433700	31-20S-28E	1980 FNL, 560 FEL	P	May-83
AVALON_UT_0520W	300152866400	31-20S-28E	1388 FNL, 2750 FWL	WIW	Feb-96
AVALON_UT_0522			1980 FNL, 1980 FWL		Feb-83
AVALON_UT_0523	300152891000	31-20S-28E	1336 FNL, 1314 FWL	WIW	Jun-96
AVALON_UT_0525	300152433600	31-20S-28E	2180 FNL, 660 FWL	P	Dec-82
AVALON_UT_0530	300152433500	31-20S-28E	1980 FNL, 1980 FEL	P	Jan-83
AVALON_UT_0533W	300152866700	31-20S-28E	2517 FSL, 78 FEL	WIW I	Jul-96
AVALON_UT_0536	300152452500	31-20S-28E	2310 FSL, 2310 FEL	P	Oct-83
AVALON_UT_0537W	300152868300	31-20S-28E	2610 FWL, 2549 FWL 2600 FSL, 1322 FWL 1980 FSL, 660 FWL	WIW	Jul-96
AVALON_UT_0539	300152868200	31-20S-28E	2600 FSL, 1322 FWL	P	May-96
AVALON_UT_0540	300152438600	31-20S-28E	1980 FSL, 660 FWL	P P	Aug-83
AVALON_UT_0542W			1337 FSL, 1324 FWL		Nov-96
AVALON_UT_0543			1980 FSL, 1980 FWL	AXXXXXX	Jul-83
AVALON_UT_0546W			1980 FSL, 1980 FEL	SWDW	Sep-82
AVALON_UT_0548			1980 FSL, 660 FEL	P	- Aug-83
AVALON_UT_0549					Oct-83
AVALON_UT_0556					Dec-83
AVALON_UT_0562					Jul-83
AVALON_UT_0570W				202220	Dec-95
AVALON_UT_0571W	300152866800	31-20S-28E	1356 FSL, 99 FEL	WIW	Jul-96
AVALON_UT_0609	300152438800	32-20S-28E	660 FNL, 660 FWL	P	Feb-83



Avalon Delaware Unit	1		1	<del></del>						
Well List			* * *		į					
Well Name	*	API No.	ř, a	S-T-R		Location		Well Type		Completion Date
							*			
AVALON_UT_0624		300152441000		32-20S-28E		1980 FNL, 330 FWL		P		Mar-83
AVALON_UT_0626W	0	300152866200		32-20S-28E		2658 FSL, 1127 FWL		WIW		Nov-95
AVALON_UT_0641		300152440900		32-20S-28E	, ,	1980 FSL, 610 FWL		P	n je	May-83
AVALON_UT_0642W		300152866300		32-20S-28E		1333 FSL, 1107 FWL		WIW		Nov-95
AVALON_UT_0643		300152449500		32-20S-28E	: 3	1980 FSL, 1650 FWL				
AVALON_UT_0657		300152447300		32-20S-28E		660 FSL, 330 FWL			4	
AVALON_UT_0816		300152469600		5-21S-27E		6945 FSL, 560 FEL		wsw		Jan-84
AVALON_UT_0914		300152475100	a iga	6-21S-27E		660 FNL, 1980 FEL		TA		
AVALON_UT_0916	173.	300152468700		6-21S-27E		660 FNL, 660 FEL		WSW	υ, ή	Feb-84
YATES C FED 22	100	300152450100				5940 FSL, 660 FWL				