



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

ADMINISTRATIVE ORDER NO. WFX-698

**APPLICATION OF THE WISER OIL COMPANY TO EXPAND ITS WATERFLOOD
PROJECT IN THE MALJAMAR GRAYBURG-SAN ANDRES POOL IN LEA COUNTY,
NEW MEXICO.**

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-10094, The Wiser Oil Company has made application to the Division on November 1, 1996 for permission to expand its Caprock Maljamar Unit Waterflood Project in the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The proposed expansion is part of an approved Enhanced Oil Recovery waterflood project pursuant to the "New Mexico Oil Recovery Act".
- (7) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, The Wiser Oil Company, be and the same is hereby authorized to inject water into the Grayburg and San Andres formations at approximately 4194 feet to approximately 4393 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the wells described on Exhibit "A" attached hereto, for purposes of secondary recovery.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the wells, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than .2 psi per foot of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Grayburg or San Andres formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

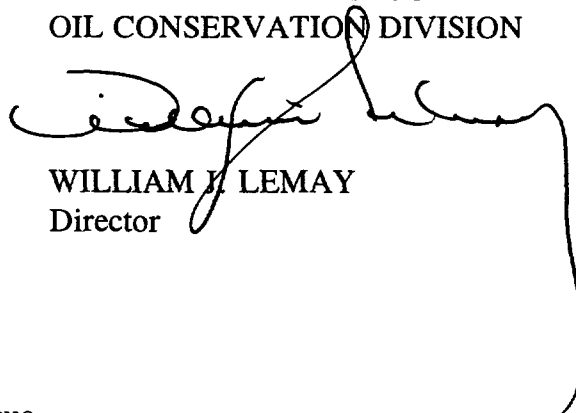
The subject wells shall be governed by all provisions of Division Order No. R-10094, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 6th day of December, 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
Mr. John Chavez, Secretary, Taxation & Revenue
Ms. Bonnie Jones, J.O. Easley, Inc.
Files: Case No. 10931 & 32; EOR-18

EXHIBIT "A"
DIVISION ORDER NO. WFX-698
Caprock Majamar UNIT
APPROVED INJECTION WELLS

Well Name	Well No.	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Pressure
Caprock Majamar Unit	83	660' FSL & 1980' FEL	O	20-T17S-R33E	4194' - 4393'	4094'	2 3/8"	839 PSIG
Caprock Majamar Unit	96	1650' FSL & 990' FEL	I	28-T17S-R33E	4222' - 4392'	4122'	2 3/8"	844 PSIG
Caprock Majamar Unit	262*	1880' FSL & 694' FWL	L	18-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	263*	430' FSL & 930' FWL	M	20-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	264*	660' FNL & 762' FWL	D	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	265*	660' FNL & 2080' FWL	C	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	266*	1928' FNL & 769' FWL	E	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	267*	1956' FNL & 2003' FWL	F	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	268*	1993' FSL & 1875' FWL	K	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft
Caprock Majamar Unit	269*	730' FSL & 2045' FEL	O	24-T17S-R33E	To Be Determined	TBD	2 3/8"	.2 psi/ft

All wells located in Lea County, New Mexico

* New Drills

Note: Some wells to be re-completed may have perforated intervals other than shown as long as packer setting and maximum pressure are determined as outlined in body of order.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

ADMINISTRATIVE ORDER NO. WFX-694

***APPLICATION OF THE WISER OIL COMPANY TO EXPAND ITS WATERFLOOD
PROJECT IN THE MALJAMAR GRAYBURG-SAN ANDRES POOL IN LEA COUNTY,
NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Division Order No. R-10094, The Wiser Oil Company has made application to the Division on September 18, 1996 for permission to expand its Caprock Maljamar Unit Waterflood Project in the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.
- (6) The proposed expansion is part of an approved Enhanced Oil Recovery waterflood project pursuant to the "New Mexico Oil Recovery Act".
- (7) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, The Wiser Oil Company, be and the same is hereby authorized to inject water into the Grayburg and San Andres formations at approximately 3764 feet to approximately 4515 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the wells described on Exhibit "A" attached hereto, for purposes of secondary recovery.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the wells, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than .2 psi per foot of depth to the uppermost injection perforation.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Grayburg or San Andres formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-10094, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

Administrative Order WFX-694

The Wiser Oil Company

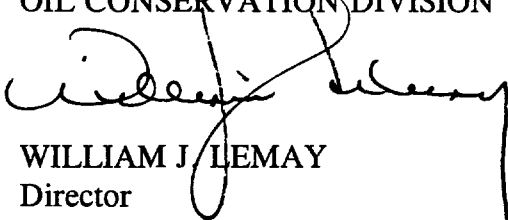
October 17, 1996

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The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 17th day of October, 1996.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
Mr. John Chavez, Secretary, Taxation & Revenue
Ms. Bonnie Jones, J.O. Easley, Inc.
Files: Case No. 10931&32; EOR-18

EXHIBIT "A"
DIVISION ORDER NO. WFX-694
CAPROCK MALJAMAR UNIT
APPROVED INJECTION WELLS

Well Name	Well No.	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Pressure
Caprock Maljamar Unit	58	1980' FNL & 660' FWL	E	21-T17S-R33E	4238' - 4450' *	4138'	2 3/8"	848 PSIG
Caprock Maljamar Unit	60	1980' FSL & 620' FWL	L	24-T17S-R33E	4070' - 4155'	3970'	2 3/8"	814 PSIG
Caprock Maljamar Unit	63	1980' FSL & 66' FEL	I	24-T17S-R33E	4200' - 4218'	4100'	2 3/8"	840 PSIG
Caprock Maljamar Unit	65	2310' FSL & 2379' FWL	K	19-T17S-R33E	4120' - 4330'	4020'	2 3/8"	824 PSIG
Caprock Maljamar Unit	72	1980' FSL & 660' FWL	L	21-T17S-R33E	4236' - 4444'	4216'	2 3/8"	847 PSIG
Caprock Maljamar Unit	73	660' FSL & 660' FWL	M	24-T17S-R33E	3770' - 4300' *	3750'	2 3/8"	754 PSIG
Caprock Maljamar Unit	76	330' FSL & 990' FEL	P	24-T17S-R33E	4180' - 4296'	4071'	2 3/8"	836 PSIG
Caprock Maljamar Unit	79	990' FSL & 2310' FEL	O	19-T17S-R33E	4078' - 4340'	3978'	2 3/8"	816 PSIG
Caprock Maljamar Unit	82	330' FSL & 2310' FWL	N	20-T17S-R33E	4105' - 4202'	4005'	2 3/8"	821 PSIG
Caprock Maljamar Unit	84	660' FSL & 660' FEL	P	20-T17S-R33E	4234' - 4409' *	4220'	2 3/8"	847 PSIG
Caprock Maljamar Unit	85	660' FSL & 660' FWL	M	21-T17S-R33E	4254' - 4443' *	4154'	2 3/8"	851 PSIG
Caprock Maljamar Unit	89	990' FNL & 1650' FWL	C	28-T17S-R33E	4287' - 4472'	4187'	2 3/8"	857 PSIG
Caprock Maljamar Unit	92	1980' FNL & 1980' FEL	G	28-T17S-R33E	4260' - 4480' *	4160'	2 3/8"	852 PSIG
Caprock Maljamar Unit	93	1980' FSL & 660' FWL	L	28-T17S-R33E	4200' - 4352'	4100'	2 3/8"	840 PSIG
Caprock Maljamar Unit	94	1980' FSL & 1980' FWL	K	28-T17S-R33E	4194' - 4384'	4094'	2 3/8"	839 PSIG
Caprock Maljamar Unit	100	330' FSL & 2310' FEL	O	28-T17S-R33E	4228' - 4480' *	4128'	2 3/8"	846 PSIG
Caprock Maljamar Unit	104	1980' FNL & 660' FEL	H	33-T17S-R33E	3764' - 4503'	3664'	2 3/8"	753 PSIG
Caprock Maljamar Unit	205	1650' FSL & 1059' FWL	L	19-T17S-R33E	4044' - 4291'	3398'	2 3/8"	809 PSIG
Caprock Maljamar Unit	260	1780' FNL & 660' FEL	H	18-T17S-R33E	4150' - 4512'	4050'	2 3/8"	830 PSIG
Caprock Maljamar Unit	261	760' FSL & 2080' FEL	O	18-T17S-R33E	4202' - 4515'	4102'	2 3/8"	840 PSIG

* Open-Hole Completions

All wells located in Lea County, New Mexico