

Entered September 26, 1978  
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STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO FOR  
THE PURPOSE OF CONSIDERING:

CASE NO. 6313  
Order No. R-5816

APPLICATION OF MARALO, INC.  
FOR A WATERFLOOD PROJECT,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 11, 1978, at Santa Fe, New Mexico, before the Commission.

NOW, on this 26th day of September, 1978, the Commission, a quorum being present, having considered the testimony, the record, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Maralo, Inc., seeks authority to institute a waterflood project on its Maralo Jalmat Yates Unit, Jalmat Pool, by the injection of water into the Yates formation through 7 injection wells to be drilled at unorthodox locations in Section 12 and 13, Township 25 South, Range 36 East, NMPM, and in Section 18, Township 25 South, Range 37 East, NMPM Lea County, New Mexico.

(3) That after obtaining lease line agreements with offset operators the applicant further seeks authority to inject water into the Yates formation through an additional 10 injection wells to be drilled at unorthodox locations in Sections 12 and 13, Township 25 South, Range 36 East and in Section 18, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

(4) That the majority of the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

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(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the evidence presented indicates that the following wells in Township 25 South, Range 36 East, NMPM, are in close proximity to the 7 injection wells for said project, and may not be adequately plugged and abandoned so as to cause water injected into the Yates formation to be contained in said formation:

<u>OPERATOR</u>	<u>LEASE NAME</u>	<u>WELL NO.</u>	<u>UNIT LETTER</u>	<u>SECTION</u>
Atlantic (Sinclair)	Gloyd	2	J	12
Atlantic (Sinclair)	W F Hanagan	2	K	12
Atlantic (Sinclair)	W F Hanagan	1	N	12
Atlantic (Sinclair)	Gloyd	1	O	12
Atlantic (Sinclair)	Stephens A	2	B	13
Continental	Sholes B-13	3	F	13
Atlantic (Sinclair)	Stephens A	1	G	13
Cities Service (Empire Oil & Gas)	Lindley B	2	K	13

(7) That the wells described in Finding No. (6) above could serve as avenues of water migration from the Yates zone to other zones or to the surface.

(8) That to prevent such migration of water from the Yates zone, the wells described in Finding No. (6) above, should be re-entered and plugged in a manner prescribed by the supervisor of the Hobbs District Office of the Oil Conservation Division of the New Mexico Energy and Minerals Department, hereinafter referred to as the "Division."

(9) That the wells within the project should be equipped to facilitate periodic testing of the annular space between strings of casings.

(10) That the operator should 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 from injection, production, or plugged and abandoned wells.

(11) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

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IT IS THEREFORE ORDERED:

(1) That the applicant, Maralo, Inc., is hereby authorized to institute a waterflood project on its Maralo Jalmat Yates Unit, Jalmat Pool, by the injection of water into the Yates formation through the following-described wells to be drilled at unorthodox locations in Sections 12 and 13, Township 25 South, Range 36 East, NMPM, and in Section 18, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico:

<u>UNIT WELL</u> <u>NO.</u>	<u>LOCATION</u>
4	1575' FSL and 1050' FEL, Sec. 12, T-25-S, R-36-E
9	400' FSL and 1000' FEL, Sec. 12, T-25-S, R-36-E
15	1050' FNL and 1100' FEL, Sec. 13, T-25-S, R-36-E
19	1300' FNL and 1350' FWL, Sec. 18, T-25-S, R-37-E
20	1250' FNL and 70' FWL, Sec. 18, T-25-S, R-37-E
25	2500' FNL and 1550' FWL, Sec. 18, T-25-S, R-37-E
31	1650' FSL and 1700' FWL, Sec. 18, T-25-S, R-37-E

(2) That upon a proper showing that lease line agreements have been obtained with offset operators, the applicant shall be authorized to drill the following 10 injection wells at unorthodox locations:

<u>UNIT WELL</u> <u>NO.</u>	<u>LOCATION</u>
3	1550' FSL and 2500' FEL, Sec. 12, T-25-S, R-36-E
5	1550' FSL and 70' FEL, Sec. 12, T-25-S, R-36-E
8	350' FSL and 2500' FEL, Sec. 12, T-25-S, R-36-E
10	400' FSL and 50' FEL, Sec. 12, T-25-S, R-36-E
11	50' FNL and 1350' FWL, Sec. 18, T-25-S, R-37-E
14	1100' FNL and 2530' FEL, Sec. 13, T-25-S, R-36-E
18	1300' FNL and 2580' FWL, Sec. 18, T-25-S, R-37-E
26	2600' FNL and 50' FWL, Sec. 18, T-25-S, R-37-E
27	2550' FNL and 1100' FEL, Sec. 13, T-25-S, R-36-E
28	2540' FNL and 2530' FEL, Sec. 13, T-25-S, R-36-E

(3) That injection into each of said wells should be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be tested for leaks, be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device, and that the injection wells or system shall be equipped in such a manner as to limit wellhead injection pressure to no more than 600 psi.

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(4) That the Division Director may administratively authorize a pressure limitation in excess of 600 psi upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.

(5) That the wells within the project area shall be equipped with risers or in another acceptable manner such as to facilitate the periodic testing of the bradenhead for pressure or fluid production.

(6) That within 3 months after initiation of injection within the project, the following wells, all in Township 25 South, Range 36 East, NMPM, shall be re-entered and plugged in a manner prescribed by the supervisor of the Division's District Office at Hobbs:

<u>OPERATOR</u>	<u>LEASE NAME</u>	<u>WELL NO.</u>	<u>UNIT LETTER</u>	<u>SECTION</u>
Atlantic (Sinclair)	Gloyd	2	J	12
Atlantic (Sinclair)	W F Hanagan	2	K	12
Atlantic (Sinclair)	W F Hanagan	1	N	12
Atlantic (Sinclair)	Gloyd	1	O	12
Atlantic (Sinclair)	Stephens A	2	B	13
Continental	Sholes B-13	3	F	13
Atlantic (Sinclair)	Stephens A	1	G	13
Cities Service (Empire Oil & Gas)	Lindley B	2	K	13

(7) That the Unit operator shall notify the Division's Hobbs district office of the date and time of operations required by Order No. (6) of this Order so that the Division may at its option witness such operations.

(8) That the operator of the project, or of any affected nearby property, shall immediately notify the supervisor of the Division's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, the leakage of water or oil from any plugged and abandoned well within the project area or any other evidence of fluid migration from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(9) That the subject waterflood project is hereby designated the Maralo Jalmat Yates Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

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(10) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1115 of the Division Rules and Regulations.


(11) That jurisdiction of this cause 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 COMMISSION

PHIL R. LUCERO, Chairman

  
EMERY C. ARNOLD, Member

  
JOE D. RAMEY, Member & Secretary

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