

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
1625 N. French
Hobbs, NM 88240

FORM APPROVED
OMB No. 1004-0135
Expires November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
MARALO, LLC

3a. Address
P. O. BOX 832, MIDLAND, TX 79702

3b. Phone No. (include area code)
915.684-7441

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**660' FSL & 660' FML, UNIT M
SECTION 10, T22S, R32E**

5. Lease Serial No.
NM-86147

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
2:45

8. Well Name and No.
EMERALD FEDERAL #1

9. API Well No.
30-025-31976

10. Field and Pool, or Exploratory Area
LIVINGSTON RIDGE; DELAWARE, E.

11. County or Parish, State
LEA, NEW MEXICO

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	WATER PRODUCTION
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	DISPOSAL - NTL-2B

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

The Emerald Federal #1 produces approximately 159 barrels of water per day from the Delaware formation. Water is stored in a 500 bbl. fiberglass tank and moved from location by pipeline to the Maralo, LLC water disposal facility known as the Prohibition Federal #2 SWD located in Unit Letter K, Section 11, Township 22S, Range 32E, Lea County, New Mexico.

See attached copies of permit authority (OCD Administrative Order SWD-569) and current water analysis.

(Faint stamp: COPIES DESTROYED)

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)
DOROTHEA LOGAN

Title
REGULATORY ANALYST

Signature *Dorothea Logan*

Date
NOVEMBER 7, 2000

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) **ALEXIS C. SWOBODA**

Title **PETROLEUM ENGINEER** Date **NOV 15 2000**

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

2 GWW

DRAFT

To: *Mr. Phillip Smith*

Laboratory No.

Sample Received *11-2-00*

Results Reported

Emerald Fed. #1

COMPANY *Maralo, LLC*

Lease:

FIELD

Livingston Ridge, E. / Bilbrey, South

SEC 10

BLK

SURVEY T-22S&R-32E

County:

Lea, NM

No. 1

Produced water - taken from Emerald Fed. #1. 11-1-00

No. 2

No. 3

No. 4

REMARKS:

Brushy Canyon

Specific Gravity @ 60°F.

1.1925

pH When Sampled

pH When Received

5.29

Bicarbonate, as HC03

27

Supersaturation, as CaC03

Undersaturation, as CaC03

Total Hardness, as CaC03

89,000

Calcium, as Ca

28,800

Magnesium, as Mg

4,131

Sodium and/or Potassium

81,644

Sulfate, as SO4

166

Chloride, as Cl

188,860

Iron, as Fe

23.2

Barium, as Ba

0

Turbidity

Color, as Pt

Total Solids, Calc.

303,628

Temperature, °F.

Carbon Dioxide, Calc.

Dissolved Oxygen

Hydrogen Sulfide

0.0

Resistivity, ohms/m @ 77°F.

0.046

Suspended Oil

Filtrable Solids, mg/l

Volume Filtered, ml

Results Reported As Milligrams Per Liter

Additional Determinations & Remarks

In comparing this water with our records in this area, we find it correlates

reasonably well with what would be expected from a natural water from the Brushy Canyon.



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ADMINISTRATIVE ORDER SWD-569

APPLICATION OF MARALO, INC. FOR SALT WATER DISPOSAL, ^{LEA} ~~EDDY~~ COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Maralo, Inc. made application to the New Mexico Oil Conservation Division on August 29, 1994, for permission to complete for salt water disposal its Prohibition Federal Well No. 2 located 1980 feet from the South line and 2080 feet from the West line (Unit K) of Section 11, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Maralo, Inc. is hereby authorized to complete its Prohibition Federal Well No. 2 located 1980 feet from the South line and 2080 feet from the West line (Unit K) of Section 11, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Delaware formation at approximately 5220 feet to 8706 feet through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 5150 feet.

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 well, 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 well to no more than 1044 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Delaware formation. 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 disposal equipment and of the mechanical integrity test 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 well and shall take such steps as may be timely and necessary to correct such failure or leakage.

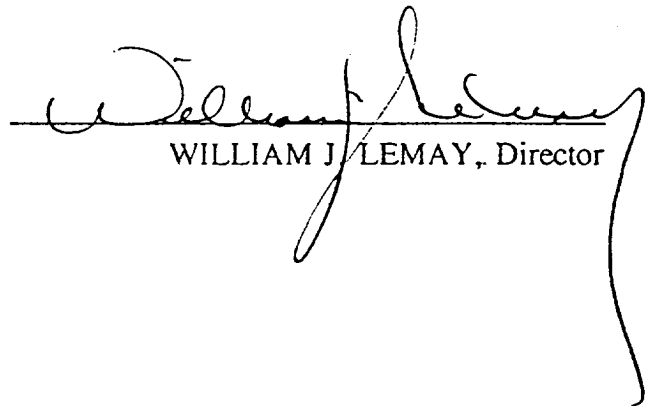
PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner 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 operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

Administrative Order SWD-569
Maralo, Inc.
September 20, 1994
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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 well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 20th day of September, 1994.


WILLIAM J. LEMAY, Director

WJL/BES/amg

xc: Oil Conservation Division - Hobbs
US Bureau of Land Management - Carlsbad