



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Resource Area Headquarters

P. O. Box 1778

Carlsbad, New Mexico 88220

IN REPLY REFER TO

3162

July 11, 1996

OPERATOR: Pogo Producing Company

Lease No. NM- 81272

WELL NO. & NAME Prize Federal #2 Battery

LOCATION: SE 1/4 SE 1/4, Sec. 27, T. 22 S., R. 32 E., Eddy County, N.M.
Lea

The check list below indicates the information needed before your Waste or Salt Water Disposal method can be approved:

<u>Delaware</u>	Name(s) of formation(s) producing water on the lease.
<u>705</u>	Amount of water produced from each formation in barrels per day.
<u>Typical (Attached)</u>	A water analysis of produced water from each zone shown in at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates.
<u>500 bbl FG Tank</u>	How water is stored on the lease.
<u>3" Poly Line</u>	How water is moved to disposal facility.
<u>Red Tank 28 #3 SWD</u> <u>NW/4, NE/4, 28/22S/32E</u>	Operator's name, well name and location, by 1/4, section, township and range, of the disposal facility. If the disposal facility is an approved disposal system, the operator's name and the name of the disposal system should suffice.
<u>Red Tank 35 #3 SWD</u> <u>NW/4, SW/4, 35/22S/32E</u>	
<u>Lea County, NM</u>	

Supervisory Petroleum Engineer Technician

Nutro Products Corporation

P.O. Box 21187 Houston, Texas 77226
Phone (713) 675-3421 * Fax (713) 675-7646

WATER ANALYSIS

Date 04/11/95 Nutro Rep TERRY SOLANSKY

Code W-1989

Sampling Point

State TEXAS

Company POGO PRODUCING

County EDDY N.M.

Field

Lease PRIZE FEDERAL

Well 2

DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na ⁺ (Calc.)	92,851	4,037
Total Hardness as Ca ⁺⁺	15,680	0
Calcium, Ca ⁺⁺	14,880	744
Magnesium, Mg ⁺⁺	488	41
Barium, Ba ⁺⁺	2	0
Iron (Total) Fe ⁺⁺⁺	55	3

ANIONS

Chlorides, Cl ⁻	171,000	4,817
Sulfate, SO ₄ ⁻	295	6
Carbonate, CO ₃ ⁻	0	0
Bicarbonate, HCO ₃ ⁻	122	2
Sulfide, S ⁻	0	0
Total Dissolved Solids (Calc.)	279,693	

OTHER PROPERTIES

pH [*]	5.600
Specific Gravity, 60°/60 F	1.168
TURBIDITY	>500

Remarks SAMPLE TAKEN ON 04/06/95

SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO₃</u>	<u>CASO₄*2H₂O</u>	<u>CA SO₄</u>	<u>BA SO₄</u>
80	0.5412	-0.2536	-0.6128	0.1730
120	1.0826	-0.2654	-0.4441	0.0342
160	1.9017	-0.2814	-0.2875	-0.1842



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

RECEIVED**JUL 29 1993****MIDLAND,**

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

CORRECTED ADMINISTRATIVE ORDER SWD-526

***APPLICATION OF POGO PRODUCING COMPANY FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.***

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Pogo Producing Company made application to the New Mexico Oil Conservation Division on June 21, 1993, for permission to complete for salt water disposal its Red Tank "28" Federal Well No. 3 located 330 feet from the North line and 2310 feet from the East line (Unit B) of Section 28, 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, Pogo Producing Company is hereby authorized to complete its Red Tank "28" Federal Well No. 3 located 330 feet from the North line and 2310 feet from the East line (Unit B) of Section 28, 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 Bell Canyon and Upper Cherry Canyon formations at approximately 4690 feet to 5800 through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 4600 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 938 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 Bell Canyon and Upper Cherry Canyon 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.

Corrected Administrative Order SWD-526

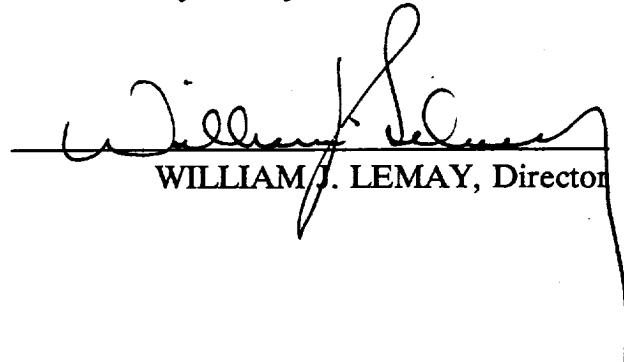
Pogo Producing Company

July 22, 1993

Page 3

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 13th day of July, 1993.


WILLIAM J. LEMAY, Director

WJL/BES/amg

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

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MIDLAND

ADMINISTRATIVE ORDER SWD-616

**APPLICATION OF POGO PRODUCING COMPANY FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.**

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Pogo Producing Company made application to the New Mexico Oil Conservation Division on November 28, 1995, for permission to complete for salt water disposal its Red Tank '35' Federal Well No.3 located 2310 feet from the South line and 990 feet from the West line (Unit L) of Section 35, 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, is hereby authorized to complete its Red Tank '35' Federal Well No.3 located 2310 feet from the South line and 990 feet from the East line (Unit L) of Section 35, 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 Bell Canyon and Upper Cherry Canyon formations at approximately 4950 feet to 6252 feet through 2-7/8 inch plastic lined tubing set in a packer located at approximately 4850 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 990 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 Bell Canyon and Upper Cherry Canyon 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 disposal equipment and of the mechanical integrity test so that the same may be inspected and witnessed.

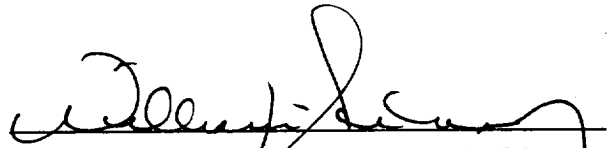
The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

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.

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 27th day of December, 1995.


WILLIAM J. LEMAY, Director

S E A L

WJL/BES

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