

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OIL CONSERVATION DIV  
811 S. 1st ST.  
ARTESIA, NM 88210-2834

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. <b>NM-85893</b>
2. Name of Operator <b>Pogo Producing Company</b>	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. <b>P. O. Box 10340, Midland, TX 79702-7340 (915)862-6822</b>	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>660' FNL &amp; 330' FEL, Section 21, T24S, R29E</b>	8. Well Name and No. <b>Cedar Canyon 21 Federal #1</b>
	9. API Well No. <b>30-015-28354</b>
	10. Field and Pool, or Exploratory Area <b>Cedar Canyon Delaware</b>
	11. County or Parish, State <b>Eddy County, New Mexico</b>

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Other
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Pogo Producing Company respectfully request permission to dispose of off-lease produced water from the above well via 6" poly line into the River Bend Federal #8 SWD located NE/4, NW/4, Sec. 23, T24S, R29E, Eddy County, NM. The River Bend Federal #8 SWD is an approved disposal well per Administrative Order SWD-619 (Attached).

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

Signed [Signature] Title Senior Operations Engineer Date 4/29/96

(This space for Federal or State office use)

Approved by (ORIG. SCD.) JOE G. LARA Title PETROLEUM ENGINEER Date 6/18/96  
Conditions of approval, if any: See attached.

Title 18 U.S.C. Section 1001, makes 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.



# 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

April 29, 1996

OPERATOR: Pogo Producing Company Lease No. NM-81586

WELL NO. & NAME Cedar Canyon 21 Federal No. 1

LOCATION: NW 1 NE 1, Sec. 21, T. 24 S., R. 29 E., Eddy County, N.M.

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

<u>Brushy Canyon</u>	Name(s) of formation(s) producing water on the lease.
<u>30</u>	Amount of water produced from each formation in barrels per day.
<u>Attached</u>	A water analysis of produced water from each zone shown 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>6" poly line</u>	How water is moved to disposal facility.
<u>Pogo Producing Co.</u> <u>River Bend Fed. #8</u> <u>SWD</u>	Operator's name, well name and location, by <u>1/4</u> , 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.

Supervisory Petroleum Engineer Technician

# Endura Products Corp.

P.O. Box 3394 Midland, Texas 79706  
Phone (915) 684-4233 \* Fax (915) 684-4277

## WATER ANALYSIS

Date 11/27/95 Endura Rep TERRY SOLANSKY Code W-0390  
Sampling Point/Date HEATER DUMP State NEW MEXICO  
Company POGO PRODUCING County EDDY  
Field Lease CEDAR CANYON "21" Well FEDERAL #1

### DISSOLVED SOLIDS

<u>CATIONS</u>	mg/l	me/l
Sodium, Na <sup>+</sup> (Calc.)	123,257	5,359
Total Hardness as Ca <sup>++</sup>	48,800	0
Calcium, Ca <sup>++</sup>	44,800	2,240
Magnesium, Mg <sup>++</sup>	2,439	203
Barium, Ba <sup>++</sup>	100	1
Iron (Total) Fe <sup>+++</sup>	25	1

### ANIONS

Chlorides, Cl <sup>-</sup>	277,000	7,803
Sulfate, SO <sub>4</sub> <sup>-</sup>	0	0
Carbonate, CO <sub>3</sub> <sup>-</sup>	0	0
Bicarbonate, HCO <sub>3</sub> <sup>-</sup>	73	1
Sulfide, S <sup>-</sup>	0	0
Total Dissolved Solids (Calc.)	447,694	

### OTHER PROPERTIES

pH <sup>-</sup>	5.190
Specific Gravity, 60°/60 F	1.206
TURBIDITY	>500

### SCALING INDICIES

<u>TEMP, F</u>	<u>CA CO<sub>3</sub></u>	<u>CASO<sub>4</sub>*2H<sub>2</sub>O</u>	<u>CA SO<sub>4</sub></u>	<u>BA SO<sub>4</sub></u>
80	3.0555	-33.4810	-34.1230	-29.7264
120	4.1038	-33.4625	-33.9241	-29.7401
160	5.6800	-33.3203	-33.6093	-29.8843

OIL CONSERVATION DIVISION

RECEIVED

FEB 14 1996

MIDLAND

ADMINISTRATIVE ORDER SWD-619

**APPLICATION OF POGO PRODUCING COMPANY FOR SALT WATER DISPOSAL, EDDY 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 January 17, 1996, for permission to complete for salt water disposal its Riverbend Federal Well No.8 located 460 feet from the North line and 330 feet from the West line (Unit D) of Section 23, Township 24 South, Range 29 East, NMPM, Eddy 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 Riverbend Federal Well No.8 located 460 feet from the North line and 330 feet from the West line (Unit D) of Section 23, Township 24 South, Range 29 East, NMPM, Eddy 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 3070 feet to 4470 feet through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 2970 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 614 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 Artesia 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 Artesia 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.

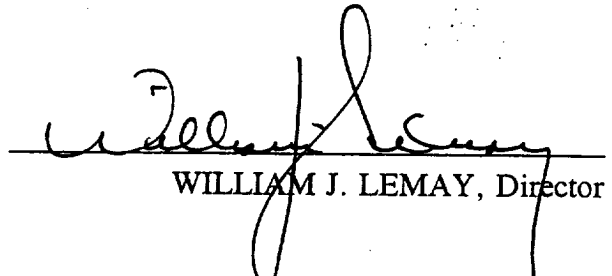
The operator shall submit monthly reports of the disposal operations in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

*Administrative Order SWD-619*  
*Pogo Producing Company*  
*February 9, 1996*  
*Page 3*

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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 9th day of February, 1996.

  
WILLIAM J. LEMAY, Director

S E A L

WJL/BES

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

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FEB 14 1996  
BUREAU OF LAND MANAGEMENT  
CARLSBAD, NEW MEXICO

**BUREAU OF LAND MANAGEMENT**  
**CARLSBAD RESOURCE AREA**

**Disposal of Produced Water From Federal Wells**

**Conditions of Approval**

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency be notified of any change in your method or location of disposal.
2. Compliance with all provisions of Onshore Oil and Gas Order No. 7.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All aboveground structures on the lease shall be painted sandstone brown, Federal Std. 595-20318, or 30318, within 90 days if you have not already done so.
6. Any on lease open top storage tanks or pits shall be covered with a wire screen or plastic/nylon netting to prevent entry by birds and other wildlife.
7. This approval does not constitute right-of-way approval for any off lease activities. If water is transported via a pipeline that extends beyond the lease boundary, you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.