e ja. Oli Was. Division

Form 3160-5 (June 1990)

UNITED STATES

BUREAU OF LAND		Expires: March 31, 1993
	5. Lease Designation and Serial No.	
SUNDRY NOTICES AND R	NM- 69369 6. If Indian, Allottee or Tribe Name	
Do not use this form for proposals to drill or to Use "APPLICATION FOR PERM	deepen or reentry to a different reservoir. IIT—" for such proposals	
SUBMIT IN TRI	IPLICATE	7. If Unit or CA, Agreement Designation
I. Type of Well Cy Oil Gas Ga	300 70 1367	
Well Well Other		8. Well Name and No.
2. Name of Operator Pogo Producing Company		Sundance 1 Federal No. 3
3. Address and Telephone No.		9. API Weil No.
P. O. Box 10340, Midland, TX 7970	10 7240 (015) 600 500	30-015-28120
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	02-7340 (915)682-6822	10. Field and Pool, or Exploratory Area
Description)	•	Mesa Verde Delaware
2310' FNL & 330' FEL, Section 1, T2	DAS D31E	11. County or Parish, State
2000 112 0 000 122, 30001011 1, 12	143, K31L	Eddy County, NM
CHECK APPROPRIATE BOX(s) TO IN	NDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	Change of Plans
_	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
_	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
·	Other	XX Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form)
3. Describe Proposed or Completed Operations (Clearly state all pertinent det	tails, 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 respectfully request permissi	ion to dispose of off loss	
the above well via 2" note line in	ion to dispuse of off-fease prod	uced water from

the above well via 3" poly line into the Calmon #5 SWD located SW/4, NE/4, Section 35, T23S, R31E, Eddy County. The Calmon #5 SWD is an approved disposal well per Administrative Order SWD-516 (Attached).

SEE ATTACHED FOR CONDITIONS OF APPROVAL

				VED A II: II
	Title _	Senior Operations Engineer	Date	5/21/97
(This space for Federal or State office use) (ORIG. SGD.) ALEXIS C. SWOBODA Approved by Conditions of approval. if any:	Title _	PETROLEUM ENGINEER	_ Date _	MAY 3 0 1997



BRUCE KING

GOVERNOR

ANITA LOCKWOOD

CABINET SECRETARY

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

RECEIVED



MAY 2 1 1993

MIDLAND.

POST OFFICE 80X 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

ADMINISTRATIVE ORDER SWD-516

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 May 3, 1993, for permission to complete for salt water disposal its Cal-Mon Well No. 5 located 1980 feet from the North line and 1980 feet from the East line (Unit G) of Section 35, Township 23 South, Range 31 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, Pogo Producing Company is hereby authorized to complete its Cal-Mon Well No. 5 located 1980 feet from the North line and 1980 feet from the East line (Unit G) of Section 35, Township 23 South, Range 31 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 4484 feet to 5780 through 2 7/8-inch plastic-lined tubing set in a packer located at approximately 4400 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 897 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 filure 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-516 Pogo Producing Company May 18, 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 18th day of May, 1993.

WILLIAM J. LEMAY, Director

WJL/BES/amg

xc:

Oil Conservation Division - Artesia

US Bureau of Land Management - Carlsbad



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carisbad Resource Area Headquarters
P. O. Box 1778
Carisbad, New Mexico 88220

May	21,	1997	

OPERATOR: Pogo Produc	ing Company	Lease No. <u>NM-</u> 69369
WELL NO. & NAME Sund	dance 1 Federal No. 3	
LOCATION: SE 3 NE	i, Sec. 1 , T. 24S S., R.	31 E., Eddy County, N.M.
The check list below in Salt Water Disposal me	ndicates the information nee thod can be approved:	ded before your Waste or
Delaware	Name(s) of formation(s) pro	ducing water on the lease.
80	Amount of water produced froper day.	om each formation in barrels
Attached	A water analysis of produce in at least the total disso concentrations of chlorides	
500 BBL F.G. Tank	How water is stored on the	lease.
3" Poly Line	How water is moved to dispos	sal facility.
Pogo Producing Co. Calmon #5 SWD SW/4, NE/4, Sec 35 T23S, R31E, Eddy County, NM	Operator's name, well name a township and range, of the disposal facility is an approperator's name and the name should suffice.	roved disposal system, the

Supervisory Petroleum Engineer Technician

Nutro Products Corporation P.O. Box 21187 Houston, Texas 77225 Phone (713) 675-3421 * Fax (713) 675-7646

WATER ANALYSIS

Date 03/29/95	Nutro Rep	TERRY	SOLANSKY	Code	W-1840)
Sampling Point	WELL HEAD			State	TEXAS	
Company POGO PR	RODUCING			County	EDDY	N M

Field Lease SUNDANCE 1 FEDERAL Well 3

DISSOLVED SOLIDS

CATIONS	mg/1	me/1
Sodium, Na ⁺ (Calc.)	91,402	3,974
Total Hardness as Ca**	14,640	0
Calcium, Ca**	10,560	528
Magnesium, Mg**	2,488	207
Barium, Ba ^{**}	7	0
Iron (Total) Fe****	38	2
ANIONS	:	
Chlorides, COl-	167,000	4,704
Sulfate, SO4*	170	4
Carbonate, CO3	0	0
Bicarbonate, HCO₃⁻	171	3
Sulfide, S**	0	0
Total Dissolved Solids (Calc.)	271,836	
OTHER PROPERTIES		
pH*	5.800	
Specific Gravity, 60°/60 F	1.169	
TURBIDITY	365	

Remarks SAMPLE TAKEN ON 03/23/95

SCALING INDICIES

TEMP, F	CA CO3	CASO4*2H2O	CA SO4	BA SO4
80	0.6544	-0.6636	-1.0145	0.4877
120	1.1819	-0.6775	-0.8479	0.3448
160	1.9807	-0.6980	-0.6958	0.1345