

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

NM- 69376

6. If Indian, Allotment or Tribe Name

7. If Unit or Agreement Designation

8. Well Name and No.

Federal #3

9. API Well No.

30-025-31618

10. Field and Pool, or Exploratory Area

W. Red Tank Delaware

11. County or Parish, State

Lea County, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Pogo Producing Company

3. Address and Telephone No.
P. O. Box 10340, Midland, TX 79702-7340 (915)682-6822

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
330' FSL & 2310' FWL, Section 27, T22S, R32E

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

☒ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☒ 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 respectfully request permission to dispose of off-lease produced water from the above well via 6" poly line into the Red Tank 28 Federal #3 SWD located NW/4, NE/4, Section 28, T22S, R32E, Lea County. The Red Tank 28 Federal #3 SWD is an approved disposal well per Administrative Order SWD-526 (Attached).

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

Signed

Title Senior Operations Engineer

Date April 7, 1994

(This space for Federal or State office use)

Approved by Orig. Signed by Shannon J. Shaw

Title Petroleum Engineer

Date 5/12/94

Conditions of approval, if any:



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Carlsbad Resource Area Headquarters

P. O. Box 1778

Carlsbad, New Mexico 88220

April 7, 1994

OPERATOR: Pogo Producing Company Lease No. NM-69376WELL NO. & NAME Federal 27 #1LOCATION: SE 1/4 SW 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:

Brushy Canyon/Bone Spring Name(s) of formation(s) producing water on the lease.

135 Total BBLS Amount of water produced from each formation in barrels per day.

Attached 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.

500 BBL F.G. Tank How water is stored on the lease.

6" Poly Line How water is moved to disposal facility.

Pogo Producing Co. 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.

Red Tank 28 Fed. #3 SWD

Supervisory Petroleum Engineer Technician

TRETOLITE DIVISION

 (505) 746-3588
 Fax (505) 746-3580

 Reply to:
 P.O. Box FF
 Artesia, NM
 88211-7531

WATER ANALYSIS REPORT

 Company : POGO PRODUCING
 Address : MIDLAND, TX
 Lease : RT 27
 Well : #1
 Sample Pt. : WELLHEAD

 Date : 3/17/94
 Date Sampled : 3/16/94
 Analysis No. : 623

ANALYSIS	mg/L	* meq/L
1. pH	5.9	
2. H ₂ S	NEG	
3. Specific Gravity	1.190	
4. Total Dissolved Solids	279738.2	
5. Suspended Solids	NR	
6. Dissolved Oxygen	NR	
7. Dissolved CO ₂	NR	
8. Oil In Water	NR	
9. Phenolphthalein Alkalinity (CaCO ₃)		
10. Methyl Orange Alkalinity (CaCO ₃)		
11. Bicarbonate	HCO ₃ 134.0	HCO ₃ 2.2
12. Chloride	Cl 171891.0	Cl 4848.8
13. Sulfate	SO ₄ 50.0	SO ₄ 1.0
14. Calcium	Ca 13840.0	Ca 690.6
15. Magnesium	Mg 2073.7	Mg 170.6
16. Sodium (calculated)	Na 91749.5	Na 3990.8
17. Iron	Fe NR	
18. Barium	Ba NR	
19. Strontium	Sr NR	
20. Total Hardness (CaCO ₃)	43100.0	

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/L
691 *Ca <----- *HCO ₃	Ca(HCO ₃) ₂	81.0	2.2	178
/----->	CaSO ₄	68.1	1.0	71
171 *Mg -----> *SO ₄	CaCl ₂	55.5	687.4	38143
<-----/	Mg(HCO ₃) ₂	73.2		
3991 *Na -----> *Cl	MgSO ₄	60.2		
	MgCl ₂	47.6	170.6	8122
	NaHCO ₃	84.0		
	Na ₂ SO ₄	71.0		
	NaCl	58.4	3990.8	233225

Saturation Values Dist. Water 20 C

CaCO ₃	13 mg/L
CaSO ₄ * 2H ₂ O	2090 mg/L
BaSO ₄	2.4 mg/L

REMARKS:

Petrolite Oilfield Chemicals Group

 Respectfully submitted,
 A. MILLER

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SCALE TENDENCY REPORT

Company	: POGO PRODUCING	Date	: 3/17/94
Address	: MIDLAND, TX	Date Sampled	: 3/16/94
Lease	: RT 27	Analysis No.	: 623
Well	: #1	Analyst	: A. MILLER
Sample Pt.	: WELLHEAD		

STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO₃ Scaling Tendency

S.I. =	0.2	at	60 deg.	F or	16 deg.	C
S.I. =	0.1	at	80 deg.	F or	27 deg.	C
S.I. =	0.1	at	100 deg.	F or	38 deg.	C
S.I. =	0.2	at	120 deg.	F or	49 deg.	C
S.I. =	0.2	at	140 deg.	F or	60 deg.	C

CALCIUM SULFATE SCALING TENDENCY CALCULATIONS (Skillman-McDonald-Stiff Method) Calcium Sulfate

S =	953	at	60 deg.	F or	16 deg	C
S =	1059	at	80 deg.	F or	27 deg	C
S =	1125	at	100 deg.	F or	38 deg	C
S =	1154	at	120 deg.	F or	49 deg	C
S =	1173	at	140 deg.	F or	60 deg	C

Petrolite Oilfield Chemicals Group

Respectfully submitted,
A. MILLER

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MAY 16 1994

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