

N.M. OIL CONS. COMMISS IN
P.O. BOX 1980
HOBBS, NEW MEXICO 88240

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Designation and Serial No.

NM-69377

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

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' FEL, Section 28, T22S, R32E

8. Well Name and No.

Red Tank 28 Federal No. 4

9. API Well No.

30-025- 31755

10. Field and Pool, or Exploratory Area

E.Liv. Ridge Delaware (Under)

11. County or Parish, State

Lea County, NM

2. 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.)

3. 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 request permission to use produced water to drill Delaware and Bone Springs wells after surface pipe has been set and cemented. Attached are copies of water analysis caught at our Red Tank 28 Federal No. 3 and Calmon No. 5 SWD's which collect and inject waters produced from the Delaware and Bone Springs formations. This analysis shows Pogo's produced waters are extremely high in chlorides and are basically 10# brine water thus will not adversely effect the salt sections.

RECEIVED
FEB 7 11 59 AM '94
CARL
AREAL
FMS

I hereby certify that the foregoing is true and correct

Signed

Title Senior Operations Engineer

Date February 4, 1994

(This space for Federal or State office use)

Approved by Adrian Salameh

Title Petroleum Engineer

Date 2/24/94

Conditions of approval, if any:

the 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.

*See Instruction on Reverse Side

TRETOLITE

Chemicals and Services

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620348 • FAX: 713 589-4737

Reply to: P.O. Box FF
Artesia, New Mexico 88210
(505) 746-3588 Phone
(505) 746-3580 Fax

WATER ANALYSIS REPORT

Company : POGO PRODUCING
Address : MIDLAND, TEXAS
Lease : 28-3
Well : SWD
Sample Pt. : TANK

Date : 10/22/93
Date Sampled : 10/22/93
Analysis No. : 370

ANALYSIS		mg/L		* meq/L
1. pH	5.3			
2. H ₂ S	NR			
3. Specific Gravity	1.140			
4. Total Dissolved Solids		223918.2		
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	97.0	HCO ₃	1.6
12. Chloride	Cl	138024.0	Cl	3393.5
13. Sulfate	SO ₄	375.0	SO ₄	7.8
14. Calcium	Ca	13600.0	Ca	578.6
15. Magnesium	Mg	2583.6	Mg	212.6
16. Sodium (calculated)	Na	69238.6	Na	3011.7
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO ₃)		44600.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter	Compound	Equiv wt	X meq/L	= mg/
679 *Ca <----- *HCO ₃	Ca(HCO ₃) ₂	81.0	1.6	129
----- /----->	CaSO ₄	68.1	7.8	531
213 *Mg -----> *SO ₄	CaCl ₂	55.5	669.2	37136
----- <----- /	Mg(HCO ₃) ₂	73.2		
3012 *Na -----> *Cl	MgSO ₄	60.2		
	MgCl ₂	47.6	212.6	10119
Saturation Values Dist. Water 20 C	NaHCO ₃	84.0		
CaCO ₃ 13 mg/L	Na ₂ SO ₄	71.0		
CaSO ₄ * 2H ₂ O 2090 mg/L	NaCl	58.4	3011.7	176003
BaSO ₄ 2.4 mg/L				

REMARKS:

A. MILLER / FILE

RED TANK 23 SWD

Petrolite, Oilfield Chemicals Group

Respectfully submitted,
STEVE TIGERT

TRETOLITE

Chemicals and Services



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WATER ANALYSIS REPORT

Company : POGO PRODUCING
Address : MIDLAND, TEXAS
Lease : CALMON #5
Well : SWD
Sample Pt. : UNKNOWN

Date : 09/03/93
Date Sampled : 09/02/93
Analysis No. : 330

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH	5.1			
2. H2S	0 PPM			
3. Specific Gravity	1.165			
4. Total Dissolved Solids		261670.1		
5. Suspended Solids		NR		
6. Dissolved Oxygen		NR		
7. Dissolved CO2		NR		
8. Oil In Water		NR		
9. Phenolphthalein Alkalinity (CaCO3)				
10. Methyl Orange Alkalinity (CaCO3)				
11. Bicarbonate	HCO3	61.0	HCO3	1.0
12. Chloride	Cl	161880.0	Cl	4566.4
13. Sulfate	SO4	50.0	SO4	1.0
14. Calcium	Ca	16400.0	Ca	818.4
15. Magnesium	Mg	3338.4	Mg	274.7
16. Sodium (calculated)	Na	79900.7	Na	3475.5
17. Iron	Fe	40.0		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		54700.0		

PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	= mg/L
-----					-----
818	*Ca <----- *HCO3	Ca(HCO3)2	81.0	1.0	81
-----	/----->	CaSO4	68.1	1.0	71
275	*Mg -----> *SO4	CaCl2	55.5	816.3	45298
-----	<-----/	Mg(HCO3)2	73.2		
3475	*Na -----> *Cl	MgSO4	60.2		
-----		MgCl2	47.6	274.7	13075
Saturation Values Dist. Water 20 C		NaHCO3	84.0		
CaCO3	13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O	2090 mg/L	NaCl	58.4	3475.5	203106
BaSO4	2.4 mg/L				

REMARKS:

----- A. MILLER / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
STEVE TIGERT