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MAY 05 '94

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

O. C. P.
ARTESIA, OFFICE

5. Lease Designation and Serial No.
NM-43744

6. If Indian, Allottee or Tribe Name

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

7. If Unit or CA, Agreement Designation

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

8. Well Name and No.
Sand Dunes 34 Federal No. 3

2. Name of Operator
Pogo Producing Company

9. API Well No.
30-015-27240

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

10. Field and Pool, or Exploratory Area
Undes Ingle Wells Delaware

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
330' FSL & 330' FEL
Section 34, T23S, R31E

11. County or Parish, State
Eddy County, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

- ☐ 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.

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AREA
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I hereby certify that the foregoing is true and correct

Signed Shannon J. Shaw Title Senior Operations Engineer Date February 7, 1994

(This space for Federal or State office use)

Approved by Orig Signed by Shannon J. Shaw Title PETROLEUM ENGINEER Date 4/28/94

Conditions of approval, if any:

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OLD HOBBS
OFFICE

TRETOLITE

Chemicals and Services

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620348 • FAX: 713 589-4717Reply to: P.O. Box FF
Arlasia, 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. : TANKDate : 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	112.6
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
213	/-----> *SO ₄	CaSO ₄	68.1	7.8	531
	*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
		NaHCO ₃	84.0		
		Na ₂ SO ₄	71.0		
		NaCl	58.4	3011.7	176003
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:

A. MILLER / FILE

RED TANK 23 SWD

Petrolite, Oilfield Chemicals Group

Respectfully submitted,
STEVE TIGERT

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Chemicals and Services

PETROLITE

16010 Barker's Point Lane • Houston, Texas 77079
713 558-5200 • Telex: 4620346 • 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 : 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	1	Ca(HCO3)2	81.0	1.0		81
	/----->			CaSO4	68.1	1.0		71
275	*Mg ----->	*SO4	1	CaCl2	55.5	816.3		45298
	<----->			Mg(HCO3)2	73.2			
3475	*Na ----->	*Cl	4566	MgSO4	60.2			
+-----+				-----				
Saturation Values Dist. Water 20 C				MgCl2	47.6	274.7		13075
CaCO3		13 mg/L		NaHCO3	84.0			
CaSO4 * 2H2O		2090 mg/L		Na2SO4	71.0			
BaSO4		2.4 mg/L		NaCl	58.4	3475.5		203106

REMARKS:

----- A. MILLER / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,
STEVE TIGERT

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MAY 12 1994

WILLIAMS
OFFICE