

12.1.93

## CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: POGO PRODUCING Co. Well: PROXIMITY "31" FEDERAL 116.4

Contact: RICHARD L. WRIGHT Title: ENG.? Phone: 915.682.6822

DATE IN 11.23.93 RELEASE DATE 12.7.93 DATE OUT \_\_\_\_\_

Proposed Injection Application is for: ☐ WATERFLOOD ☐ Expansion ☐ Initial

Original Order: R- \_\_\_\_\_ ☐ Secondary Recovery ☐ Pressure Maintenance

SENSITIVE AREAS

☒ SALT WATER DISPOSAL

☐ WIPP ☐ Capitan Reef ☐ Commercial Operation

Data is complete for proposed well(s)? ☐ Additional Data \_\_\_\_\_

### AREA of REVIEW WELLS

0 Total # of AOR N/A # of Plugged Wells

N/A Tabulation Complete N/A Schematics of P & A's

N/A Cement Tops Adequate ☐ AOR Repair Required

### INJECTION INFORMATION

Injection Formation(s) SALT & CHERRY CANYONS

Source of Water LOWER DELAWARE & BONE SPRING Compatible YES

### PROOF OF NOTICE

YES Copy of Legal Notice YES Information Printed Correctly

YES Correct Operators ☐ Copies of Certified Mail Receipts

☐ Objection Received ☐ Set to Hearing \_\_\_\_\_ Date

NOTES: \_\_\_\_\_

### APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL ☐

#### COMMUNICATION WITH CONTACT PERSON:

|   |                                 |                      |   |
|---|---------------------------------|----------------------|---|
| 1st Contact: <input checked="" type="checkbox"/> Telephoned | <input type="checkbox"/> Letter | <u>12.17.93</u> Date | Nature of Discussion <u>OUT OF OFFICE - NEED CERT. MAIL REPT CRIES.</u> |
| 2nd Contact: <input type="checkbox"/> Telephoned            | <input type="checkbox"/> Letter | _____ Date           | Nature of Discussion _____  |
| 3rd Contact: <input type="checkbox"/> Telephoned            | <input type="checkbox"/> Letter | _____ Date           | Nature of Discussion _____  |

## APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☐ Secondary Recovery ☐ Pressure Maintenance ☒ Disposal ☐ Storage  
Application qualifies for administrative approval? ☒ yes ☐ no
- II. Operator: POGO PRODUCING COMPANY  
Address: P. O. Box 10340, Midland, Texas 79702  
Contact party: Richard L. Wright Phone: 915/682-6822
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☐ yes ☒ no  
If yes, give the Division order number authorizing the project \_\_\_\_\_.
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- VIII. Attach appropriate geological data on the injection zone including appropriate lithologic detail, geological name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such source known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division they need not be resubmitted.)
- XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Bill F. Halapeska

Title Agent (P. E.)

Signature: Bill Halapeska

Date: 09/17/93

If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

## III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; location by Section, Township, and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and name of the next higher and next lower oil or gas zone in the area of the well, if any.

## XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) the intended purpose of the injection well; with the exact location of single wells or the section, township, and range location of multiple wells;
- (3) the formation name and depth with expected maximum injection rates and pressures; and
- (4) a notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, P. O. Box 2088, Santa Fe, New Mexico 87501 within 15 days.

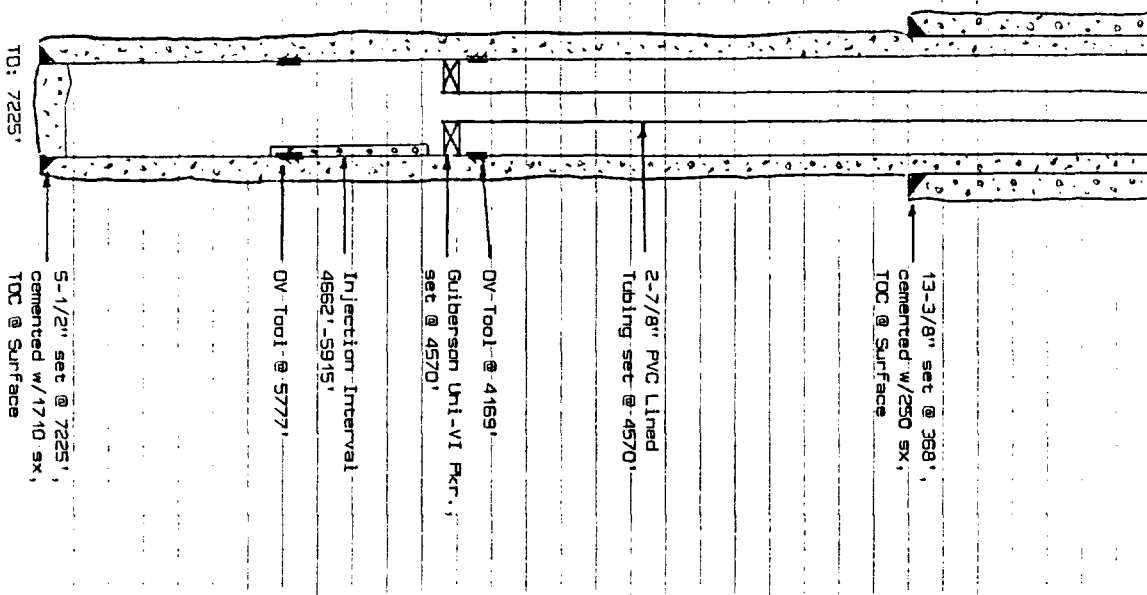
NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

SCHEMATIC



TABULAR DATA

(1). LEASE: Proximity 31 Federal WELL # 4  
LOCATION: Sec. 31 TWP 22-S Range 32-E  
County Lea  
Footage 660' F.N. S. 2085' FEL

(2). CASING STRINGS:

Surface Casing

Size 8-5/8" Depth 368' Cemented w/ 250 SX.  
TOC Surf. Determined by Circulated  
Hole size 12-1/4"

Intermediate Casing

Size Depth Cemented w/ SX.  
TOC Determined by  
Hole size

Long String

Size 5-1/2" Depth 7225' Cemented w/ 1710 SX.  
TOC Surf. Determined by Circulated 300 SX  
Hole size 7-7/8"  
Injection interval, from 4662' to 5915' ft.

(3). INJECTION TUBING STRING:

Size 2-7/8 in., sealed/lined with PVC  
Setting depth 4570 ft.

(4) INJECTION PACKER:

Size 5-1/2 in.; Make/Model Guberson Uni-VI  
Setting depth 4570 ft.

ITEM 111-B

INJECTION WELL DATA

- (1). Injection Formation: Bell Canyon and Up. Cherry Canyon  
Field/Pool: South East Livingston Ridge Delaware
- (2). Injection interval; from 4662 ft. to 5915 ft.  
Perforated XX Open Hole
- (3). Original purpose well drilled -- Test Lower Delaware
- (4). Other perforated intervals;            Yes XX No  
Squeezed with            sx., or isolated by
- (5). Oil or gas productive zone(s):  
Next higher:           None            
Next lower:           Lower Delaware (Brushy Canyon) @ +/- 7000'



FORM C-108

ITEM V

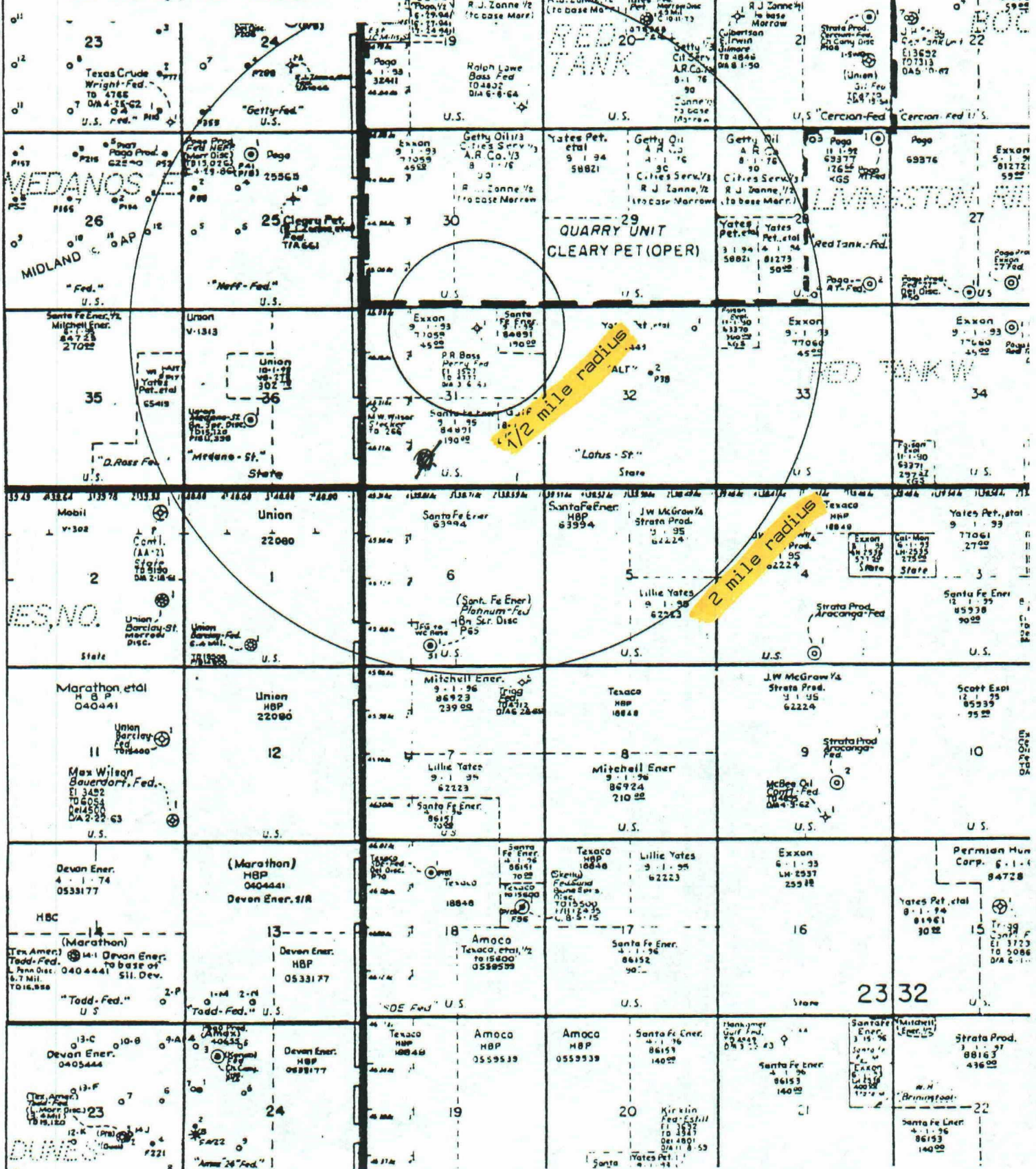
## IDENTIFICATION MAP

POGO PRODUCING COMPANY

Proximity "31" Federal #4

Section 31, TWP 22-S, R 32-E

Lea County, New Mexico



ITEM VI

WELL DATA - AREA OF REVIEW

(1). Location: NONE WITHIN 1/2 MILE RADIUS  
Operator: \_\_\_\_\_ Lease: \_\_\_\_\_ Well # \_\_\_\_\_  
Well type: Oil \_\_\_\_\_ Gas \_\_\_\_\_ OSA \_\_\_\_\_ Total depth \_\_\_\_\_ ft.  
Date drilled: \_\_\_\_\_  
Completion Data: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Plugged \_\_\_\_\_ Date: \_\_\_\_\_ (Schematic attached)

(2). Location: \_\_\_\_\_  
Operator: \_\_\_\_\_ Lease: \_\_\_\_\_ Well # \_\_\_\_\_  
Well Type: Oil \_\_\_\_\_ Gas \_\_\_\_\_ OSA \_\_\_\_\_ Total Depth: \_\_\_\_\_ ft.  
Date Drilled: \_\_\_\_\_  
Completion Data: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Plugged \_\_\_\_\_ Date \_\_\_\_\_ (Schematic attached)

(3). Location: \_\_\_\_\_  
Operator: \_\_\_\_\_ Lease: \_\_\_\_\_ Well # \_\_\_\_\_  
Well Type ; Oil \_\_\_\_\_ Gas \_\_\_\_\_ OSA \_\_\_\_\_ Total Depth: \_\_\_\_\_ ft.  
Date Drilled: \_\_\_\_\_  
Completion Data: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Plugged \_\_\_\_\_ Date \_\_\_\_\_ (Schematic attached)

ITEM VII

OPERATIONAL DATA

(1). Average expected injection rate: 1000 SWPD; maximum anticipated rate: 3000 SWPD

(2). Closed system

(3). Estimated average injection pressure: 650 psi.

Estimated maximum pressure: 932 psi.

(4). Source of injection water: From Lower Delaware and Bone Spring  
zones in nearby POGO wells

Analysis of waters attached. Exhibits 1 and 2

(5). Analysis of injection zone-water attached. Exhibit 3

Data source: Corbin Delaware; 31-17-33, from Roswell

Geological Society Symposium



ITEM VIII

GEOLOGICAL DATA

## INJECTION ZONE

Lithological description: sandstone, lt. gray, fine to v fine  
grained, poorly consolidated, silty, poor calc cem

Geological name: Ball Canyon (Delaware) and Up. Cherry Canyon

Zone thickness: 1250 ft.; Depth: 5660 ft.

## FRESH WATER SOURCES

Geological name: Santa Rosa

Depth to bottom of zone: +/-650 ft.

ITEM IX

STIMULATION PROGRAM (Proposed)

## ACIDIZE:

Volume: 3000 gal Type acid: 15% HCl/Pentol 100

Rate: 5 BPM; Misc. Ball Sealers

## FRACTURE:

Fluid volume: 30,000 gal.; Type: Gelled Water

Prop type: 20/40 sand Volume (#): 15,000

Rate: 18 BPM; Conductor: 2-7/8 in.

Misc. Stage w/ Ball Sealers

## LOGGING PROGRAM

Copy of CND log included in attachments

### FRESH WATER ANALYSIS

Date sampled:

## HYDROLOGY

COMMERCIAL INTENTION

Initially, only water from Pogo operated wells will be disposed of in subject well (system). Eventually, Pogo could take water from other leases in the area operated by someone else, but in which Pogo has a working interest. Only piped water will be taken into the system.

ANALYSIS - BRUSHY CANYON  
PRODUCED WATER

16010 Barker's Point Lane • Houston, Texas 77079  
713 558-5200 • Telex: 4620346 • FAX: 713 589-4737

POGO PRODUCING COMPANY  
Proximity "31" Federal #4  
Section 31, TWP 22-S, R 32-E  
Lea County, New Mexico

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

# WATER ANALYSIS REPORT

Company : POGO PRODUCING  
Address : MIDLAND, TEXAS  
Lease : RED TANK FED. 28  
Well : #1 *Brushy Canyon (DeA)*  
Sample Pt. : WELLHEAD

Date : 01/08/93  
Date Sampled : 01/04/93  
Analysis No. : 005

| ANALYSIS                              |       | mg/L     |      | * meq/L |
|---------------------------------------|-------|----------|------|---------|
| -----                                 |       | ----     |      | -----   |
| 1. pH                                 | 6.2   |          |      |         |
| 2. H2S                                | 3 PPM |          |      |         |
| 3. Specific Gravity                   | 1.160 |          |      |         |
| 4. Total Dissolved Solids             |       | 279018.4 |      |         |
| 5. Suspended Solids                   |       | NR       |      |         |
| 6. Dissolved Oxygen                   |       | NR       |      |         |
| 7. Dissolved CO2                      |       | 80 PPM   |      |         |
| 8. Oil In Water                       |       | NR       |      |         |
| 9. Phenolphthalein Alkalinity (CaCO3) |       |          |      |         |
| 10. Methyl Orange Alkalinity (CaCO3)  |       | 60.0     |      |         |
| 11. Bicarbonate                       | HCO3  | 73.2     | HCO3 | 1.2     |
| 12. Chloride                          | Cl    | 170409.6 | Cl   | 4807.0  |
| 13. sulfate                           | SO4   | 1000.0   | SO4  | 20.8    |
| 14. Calcium                           | Ca    | 16881.7  | Ca   | 842.4   |
| 15. Magnesium                         | Mg    | 1186.3   | Mg   | 97.6    |
| 16. Sodium (calculated)               | Na    | 89409.6  | Na   | 3889.1  |
| 17. Iron                              | Fe    | 58.0     |      |         |
| 18. Barium                            | Ba    | NR       |      |         |
| 19. Strontium                         | Sr    | NR       |      |         |
| 20. Total Hardness (CaCO3)            |       | 47042.3  |      |         |

## PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter       |                  | Compound  | Equiv wt | X meq/L | = mg/L |
|------------------------------------|------------------|-----------|----------|---------|--------|
| -----                              |                  |           |          |         | -----  |
| 842                                | *Ca <----- *HCO3 | Ca(HCO3)2 | 81.0     | 1.2     | 97     |
| -----                              | /----->          | CaSO4     | 68.1     | 20.8    | 1417   |
| 98                                 | *Mg -----> *SO4  | CaCl2     | 55.5     | 820.4   | 45523  |
| -----                              | <-----/          | Mg(HCO3)2 | 73.2     |         |        |
| 3889                               | *Na -----> *Cl   | MgSO4     | 60.2     |         |        |
| -----                              |                  | MgCl2     | 47.6     | 97.6    | 4646   |
| Saturation Values Dist. Water 20 C |                  | NaHCO3    | 84.0     |         |        |
| CaCO3                              | 13 mg/L          | Na2SO4    | 71.0     |         |        |
| CaSO4 * 2H2O                       | 2090 mg/L        | NaCl      | 58.4     | 3889.1  | 227277 |
| BaSO4                              | 2.4 mg/L         |           |          |         |        |

### REMARKS:

----- L. MALLETT / FILE

ANALYSIS - BONE SPRING  
PRODUCED WATER

POGO PRODUCING COMPANY  
Proximity "31" Federal #4  
Section 31, TWP 22-S, R 32-E  
Lea County, New Mexico

TER ANALYSIS REPORT

Lease : RED TANK FED.  
Well : 23-1 Bone Spring  
Sample Pt. : WELL

Date : 1-23-93  
Date Sampled : 1-22-93  
Analysis No. : 006

| ANALYSIS                              |      | mg/L     |      | * meq/L |
|---------------------------------------|------|----------|------|---------|
| -----                                 |      | ----     |      | -----   |
| 1. pH                                 |      | 5.9      |      |         |
| 2. H2S                                |      | 0        |      |         |
| 3. Specific Gravity                   |      | 1.155    |      |         |
| 4. Total Dissolved Solids             |      | 243572.9 |      |         |
| 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 | 48.8     | HCO3 | 0.8     |
| 12. Chloride                          | Cl   | 151230.0 | Cl   | 4266.0  |
| 13. Sulfate                           | SO4  | 250.0    | SO4  | 5.2     |
| 14. Calcium                           | Ca   | 16840.0  | Ca   | 840.3   |
| 15. Magnesium                         | Mg   | 4140.2   | Mg   | 340.6   |
| 16. Sodium (calculated)               | Na   | 71063.9  | Na   | 3091.1  |
| 17. Iron                              | Fe   | 0.0      |      |         |
| 18. Barium                            | Ba   | 0.0      |      |         |
| 19. Strontium                         | Sr   | 0.0      |      |         |
| 20. Total Hardness (CaCO3)            |      | 59100.0  |      |         |

PROBABLE MINERAL COMPOSITION

| *milli equivalents per Liter       |       | Compound  | Equiv wt X meq/L | =      | mg/L   |
|------------------------------------|-------|-----------|------------------|--------|--------|
| -----                              |       |           |                  |        | -----  |
| 840 *Ca <----- *HCO3               | 1     | Ca(HCO3)2 | 81.0             | 0.8    | 65     |
| ----- /----->                      | ----- | CaSO4     | 68.1             | 5.2    | 354    |
| 341 *Mg -----> *SO4                | 5     | CaCl2     | 55.5             | 834.3  | 46296  |
| ----- <----- /                     | ----- | Mg(HCO3)2 | 73.2             |        |        |
| 3091 *Na -----> *Cl                | 4266  | MgSO4     | 60.2             |        |        |
| -----                              | ----- | MgCl2     | 47.6             | 340.6  | 16215  |
| Saturation Values Dist. Water 20 C |       | NaHCO3    | 84.0             |        |        |
| CaCO3 13 mg/L                      |       | Na2SO4    | 71.0             |        |        |
| CaSO4 * 2H2O 2090 mg/L             |       | NaCl      | 58.4             | 3091.1 | 180643 |
| BaSO4 2.4 mg/L                     |       |           |                  |        |        |

REMARKS: L. MALLET -FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
L. MALLET

FORM C-108  
ITEM VII(5)

EXHIBIT 3 d Name: Corbin Delaware

Location: NE $\frac{1}{4}$  Sec. 31, T.17 S., R. 33 E.

County & State: Lea Co., N. Mex.

ANALYSIS - INJECTION ZONE  
PRODUCED WATER

COMPLETION DATE: March 31, 1960

POGO PRODUCING COMPANY  
Proximity "31" Federal #4  
Section 31, TWP 22-S, R 32-E  
Lea County, New Mexico

TYPICAL CORE ANALYSIS OF A PAY INTERVAL IN THIS FIELD: No cores taken

| Perm. in millidarcys |          | % Porosity | Liquid Saturation (% of pore space) |     |
|----------------------|----------|------------|-------------------------------------|-----|
| Horizontal           | Vertical |            | Water                               | Oil |
|                      |          |            |                                     |     |

OTHER SHOWS ENCOUNTERED IN THIS FIELD: None

TRAP TYPE: Stratigraphic, sand pinchout

NATURE OF OIL: 37.8° gravity, sweet

NATURE OF GAS: sweet

NATURE OF PRODUCING ZONE WATER: Salt

Resistivity:

ohm-meters @

°F.

|     | Total Solids | Na+K   | Ca   | Mg   | Fe  | SO <sub>4</sub> | Cl     | CO <sub>2</sub> | HCO <sub>3</sub> | OH | H <sub>2</sub> S |
|-----|--------------|--------|------|------|-----|-----------------|--------|-----------------|------------------|----|------------------|
| ppm |              | 47,700 | 6160 | 2060 | 100 | 1500            | 89,400 |                 | 160              |    | neg              |

INITIAL FIELD PRESSURE: Unknown

TYPE OF DRIVE: Unknown

NORMAL COMPLETION PRACTICES: Set through, perforate & sand frac.

PRODUCTION DATA:

| Year  | Type | No. of wells @ yr. end |                     | Production<br>Oil in barrels<br>Gas in MMCF |            |
|-------|------|------------------------|---------------------|---|------------|
|       |      | Producing              | Shut in<br>or Abnd. | Annual                                      | Cumulative |
|       |      |                        |                     |   |            |
| 1956  | oil  |                        |                     |   |            |
|       | gas  |                        |                     |   |            |
| 1957  | oil  |                        |                     |   |            |
|       | gas  |                        |                     |   |            |
| 1958  | oil  |                        |                     |   |            |
|       | gas  |                        |                     |   |            |
| 1959  | oil  |                        |                     |   |            |
|       | gas  |                        |                     |   |            |
| 1960* | oil  | 0                      | 1 **                | 631.5                                       | 631.5      |
|       | gas  |                        |                     |   |            |

\* 1960 Figure is production to July 1, 1960.

\*\* well shut in on April 19, 1960.

## ANALYSIS - SANTA ROSA WATER

POGO PRODUCING COMPANY

EXHIBIT 4

Proximity "31" Federal #4

Section 31, TWP 22-S, R 32-E

Lea County, New Mexico

## Chemical and radiochemical analyses of water from test hole H-5

Water produced from the Santa Rosa Sandstone, sample taken 5/24/78

|   |      |
|---|------|
| Alkalinity Field (mg/l as HCO <sub>3</sub> )                      | 200  |
| Bicarbonate FET-FLD (mg/l as HCO <sub>3</sub> )                   | 240  |
| Nitrogen, NO <sub>2</sub> + NO <sub>3</sub> Dissolved (mg/l as N) | 0.36 |
| Hardness (mg/l as CaCO <sub>3</sub> )                             | 150  |
| Hardness, noncarbonate(mg/l as CaCO <sub>3</sub> )                | 150  |
| Calcium Dissolved (mg/l as Ca)                                    | 56   |
| Magnesium, Dissolved (mg/l as Mg)                                 | 51   |
| Sodium, Dissolved (mg/l as Na)                                    | 280  |
| Potassium, Dissolved (mg/l as K)                                  | 25   |
| Chloride, Dissolved (mg/s as Cl)                                  | 120  |
| Sulfate, Dissolved (mg/l as SO <sub>4</sub> )                     | 530  |
| Fluoride, Dissolved (mg/l as F)                                   | 1.2  |
| Silica, Dissolved (mg/l as SiO <sub>2</sub> )                     | 11.0 |
| Boron, Dissolved (ug/l as B)                                      | 890  |
| Solids Residue at 105 Deg C, Dissolved (mg/l)                     | 1200 |



# Affidavit of Publication

STATE OF NEW MEXICO           )  
  ) ss.  
COUNTY OF LEA                )

**Joyce Clemens** being first duly sworn on oath deposes and says that he is **Adv. Director** of THE LOVINGTON DAILY LEADER, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

## Public Notice

XXXXXXXXXXXX and XXXXX

XXXXXXXXXXXX

XXXXXXXXXXXX, was published in a regular and entire issue of THE LOVINGTON DAILY LEADER and not in any supplement thereof, XXXXXXXX

XXXXXXXXXXXX, for one (1) day

XXXXXXXXXXXX consecutive weeks, beginning with the issue of

October 27, 19 93

and ending with the issue of

October 27, 19 93

And that the cost of publishing said notice is the sum of \$ **16.43**

which sum has been (Paid) (Assessed) as Court Costs

*Joyce Clemens*  
Subscribed and sworn to before me this 17th

day of November, 19 93

*Mrs. Jean Sevier*  
Notary Public, Lea County, New Mexico

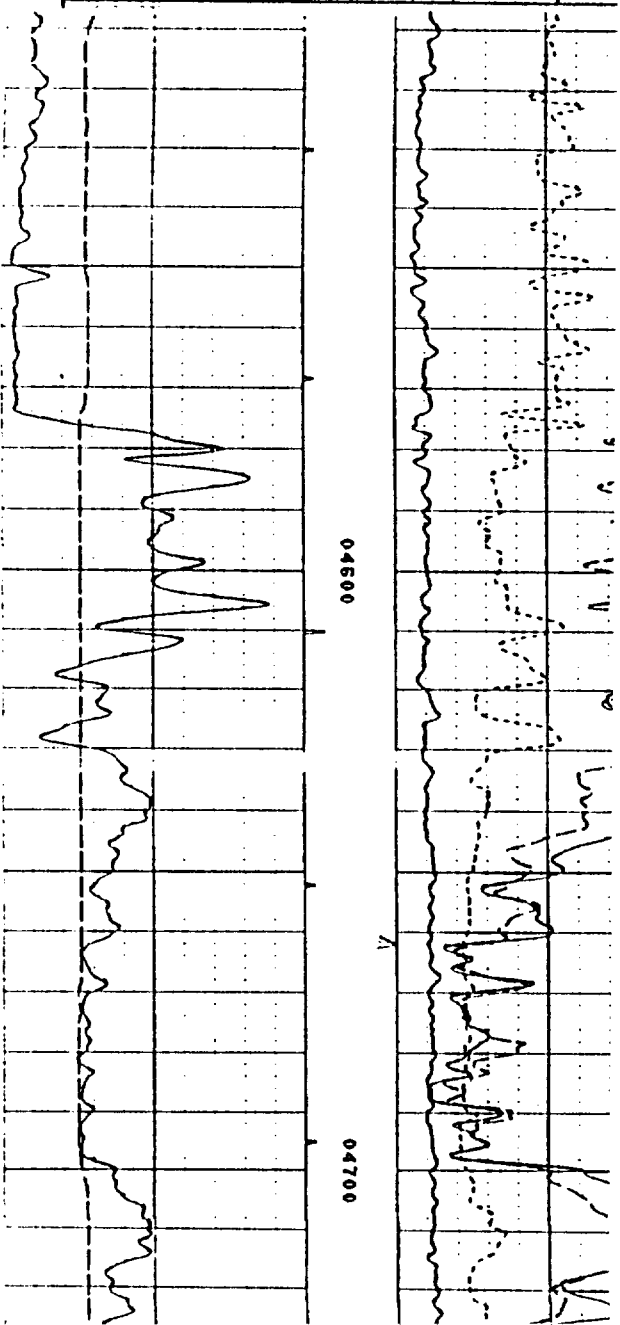
My Commission Expires Sept. 28, 19 94

## LEGAL NOTICE PUBLIC NOTICE APPLICATION FOR AUTHORIZATION TO INJECT SALT WATER

Pogo Producing Company,  
P.O. Box 18948, Midland,  
Texas 79702-0948 Contact:  
Richard L. Wright at  
915/662-6622 has applied to  
the New Mexico Oil Conserva-  
tion Division for Adminis-  
trative Approval for Authori-  
zation to inject saltwater into  
its Proximity "31" Federal No.  
4 Well, located 880' FNL and  
2085' FEL of Section 31,  
T-22-S, R-32-E, N.M.P.M.,  
Lea County, New Mexico. The  
purpose of such well will be to  
dispose of saltwater produced  
from Pogo's nearby wells. The  
injection interval will be in the  
Bell Canyon and Upper Cherry  
Canyon formations between  
4,662'-5,915' beneath the sur-  
face, with an expected maxi-  
mum injection rate of approxi-  
mately 3,850 BOPD with an  
expected maximum injection  
pressure of approximately 932  
psi. Any interested parties  
must file objections or re-  
quests for a hearing with the  
New Mexico Oil Conserva-  
tion Division, P.O. Box 2088,  
Santa Fe, New Mexico 87504-  
1088 within fifteen (15) days  
from the date of Pogo's Appli-  
cation.  
Published in the Lovington  
Daily Leader October 27,  
1993.

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| K8 | 3539 | 5 |
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| G1 | 3527 | 5 |

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| 4   | 10H DRILLER        | 7223       |
| 5   | 10H LOGGR          | 7216       |
| 6   | 10H LOGGR INTERVAL | 7214       |
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| 8   | 10G DRILLR         | SUBR DEL   |
| 9   | 10G LOGGR          | R S/R #360 |
| 10  | SIZE               | 38P        |
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| 12  | STTS / VISCOSITY   | KC         |
| 13  | 7 FLUID LOSS       | 18.5 147   |
| 14  | REC'D STOPPED      | 7.5 17     |
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# ILLEGIBLE



**POGO PRODUCING COMPANY**

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 25, 1993

To: Offset Leasehold Operators and  
Surface Owner  
(See Attached List)

Re: S.E. Red Tank Prospect NM-607  
Lea County, New Mexico  
Application for Administrative  
Approval to Inject Saltwater  
into the Proximity "31" Federal  
No. 4 Well, located 660' FNL &  
2085' FEL Section 31, T-22-S, R-32-E

Gentlemen:

Pogo Producing Company has applied to the New Mexico Oil Conservation Division for Administrative Approval to inject saltwater into the captioned well.

A copy of the Form C-108 submitted by Pogo to the Division is enclosed.

If you object to and/or request that a hearing be held pertaining to this Application, you must notify the Division within fifteen (15) days from the date of Pogo's Application.

If you have any questions, please contact the undersigned or Mr. Richard L. Wright.

Very truly yours,

POGO PRODUCING COMPANY



Terry Gant  
Senior Landman

TG:lf/c:SWD131

Enclosure

cc: New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088  
Attention: Mr. David R. Catanach

Attached to Notification Letter dated October 25, 1993  
regarding Pogo's Application for Administrative Approval  
to Inject Saltwater into the Proximity "31" Federal No. 4 Well

Bureau of Land Management  
P. O. Box 1449  
Santa Fe, New Mexico 87504

Yates Petroleum Corporation  
105 South Fourth Street  
Artesia, New Mexico 88210  
Attention: Mr. Randy G. Patterson

Samson Resources Company  
Two West Second Street  
Samson Plaza  
Tulsa, Oklahoma 74103  
Attention: Mr. David Hoffman

Santa Fe Energy Operating Partners, L.P.  
550 West Texas, Suite 1330  
Midland, Texas 79701  
Attention: Mr. Gary V. Green



**POGO PRODUCING COMPANY**

**OVERNIGHT MAIL**

November 22, 1993

New Mexico Oil Conservation Division  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87504  
Attention: Mr. David R. Catanach

Re: S.E. Red Tank Prospect NM-607  
Lea County, New Mexico  
Application for Administrative  
Approval to Inject Saltwater  
into the Proximity "31" Federal #4 Well  
located 660' FNL & 2085' FEL  
Section 31, T-22-S, R-32-E, N.M.P.M.

Gentlemen:

Pogo hereby respectfully submits two (2) original Applications for Authorization to Inject (Form C-108) pertaining to the captioned well and requests that same be given Administrative Approval.

Pursuant thereto, please find enclosed the following:

- (1) Copy of Notification Letter sent to all Offset Leasehold Operators within a one-half (1/2) mile radius of the proposed injection well and to the surface owner upon which such well is located, along with copies of proof of mailing; and
- (2) Proof of Legal Publication.

If you should have any questions regarding the subject Application, please contact the undersigned.

Very truly yours,

POGO PRODUCING COMPANY

  
Terry Cant  
Senior Landman

TG:lf/c:SWD221

Enclosures

cc w/encl.: New Mexico Oil Conservation Division  
District I Office  
P. O. Box 1980  
Hobbs, New Mexico 88240



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
HOBBS DISTRICT OFFICE

RECEIVED  
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12-1-93

BRUCE KING  
GOVERNOR

POST OFFICE BOX 1980  
HOBBS, NEW MEXICO 88241-1980  
(505) 393-6161

OIL CONSERVATION DIVISION  
P. O. BOX 2088  
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC \_\_\_\_\_  
DHC \_\_\_\_\_  
NSL \_\_\_\_\_  
NSP \_\_\_\_\_  
SWD X \_\_\_\_\_  
WFX \_\_\_\_\_  
PMX \_\_\_\_\_

Gentlemen:

I have examined the application for the:

Pogo Producing Co Proximity 31 Federal #4-B 31-22-32  
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Jerry Sexton  
Supervisor, District 1

/ed