

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

*SUBMIT IN TRIPLICATE*

5. Lease Designation and Serial No.  
NM-13621

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.  
Amoco QT #2

9. API Well No.  
30-015-25367

10. Field and Pool, or Exploratory Area  
Antelope Sink Upper Penn

11. County or Parish, State  
Eddy, New Mexico

1. Type of Well

Oil Well  Gas Well  Other

2. Name of Operator

YATES PETROLEUM CORPORATION ✓

3. Address and Telephone No.

105 S. 4th Street, Artesia, NM 88210 (505) 748-1471

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

660' FSL & 660' FEL, Sec. 29-19S-24E

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.)

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.)\*

Yates Petroleum Corporation is submitting application for produced water from the above well pursuant to NTL-2B, Section II, and requests your approval. The well produces approximately 5 bbls of water per month from the Canyon formation. The water is stored in a 210 barrel stock tank and transported by O.K. Hot Oil, or Jim's Water Service to the Yates' State "Co" SWD Gathering System which consists of 9 disposal wells (see attachment 1).

A water analysis is attached.

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

Signed Amy Laman

Title Production Clerk

Date 11-19-92

(This space for Federal or State office use)

Approved by \_\_\_\_\_

Title \_\_\_\_\_

Date 11/24/92

Conditions of approval, if any:

- SEE ATTACHED -

Title 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

BUREAU OF LAND MANAGEMENT  
CARLSBAD RESOURCE AREA

Disposal of Produced Water From Federal Wells

Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency be notified of any change in your method or location of disposal.
2. Compliance with all provisions of NTL-2B.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All aboveground structures on the lease shall be painted sandstone brown, Federal Std. 595-20318, or 30318, within 90 days if you have not already done so.
6. Any on lease open top storage tanks shall be covered with a wire screen to prevent entry by birds and other wildlife.
7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
8. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.

ATTACHMENT #1

YATES PETROLEUM CORPORATION - STATE "CO" SWD DISPOSAL SYSTEM

The Yates State "CO" SWD water gathering system consists of nine (9) salt water injection wells approved for disposal of produced water. The nine (9) wells are listed below:

STATE "CO" #1, NE 1/4 SW 1/4, Section 36-T19S-R24E, Eddy County, NM  
INJECTION INTERVAL: 10038 -11311' Devonian  
APPROVED BY NMOCD ORDER NO. SWD-285

COTTON "MX" FEDERAL #1, NE 1/4 NW 1/4 Section 14-T19S-R25E, Eddy County, NM  
INJECTION INTERVAL: 7686-7710' Canyon  
APPROVED BY NMOCD ORDER NO. SWD-370

DONAHUE FEDERAL #1, SW 1/4 NW 1/4, Section 10-T20S-R24E, Eddy County, NM  
INJECTION INTERVAL: 4296-4596' Abo  
APPROVED BY NMOCD ORDER NO. SWD-377

STATE "D" #1, SE 1/4 SW 1/4, Section 16-T20S-R24E, Eddy County, NM  
INJECTION INTERVAL: 9723-11052' Devonian - Bliss  
APPROVED BY NMOCD ORDER NO. SWD-395

ROY AET #3, SE 1/4 SE 1/4, Section 7-T19S-R25E, Eddy County, NM  
INJECTION INTERVAL: 9766-11110' Devonian and Ellenburger  
APPROVED BY NMOCD ORDER NO. SWD-437

ROUTH NU #2, NW 1/4 NE 1/4, Section 14-T19S-R24E, Eddy County, NM  
INJECTION INTERVAL: 8810-8878' Morrow  
APPROVED BY NMOCD ORDER NO. SWD-399

MIMOSA AHS FEDERAL #1, NE 1/4 SE 1/4, Section 4-T20S-R24E, Eddy County, NM  
INJECTION INTERVAL: 9515-11011' Mississippian, Devonian, Ellenburger  
APPROVED BY NMOCD ORDER NO. SWD-408

MIMOSA AHS FEDERAL #4, SE 1/4 SW 1/4, Section 4-T20S-R24E, Eddy County, NM  
INJECTION INTERVAL: 9860-11159' Devonian, Ellenburger and Bliss Sand  
APPROVED BY NMOCD ORDER NO. SWD-476

HUMBLE SWD #1, SE 1/4 SE 1/4, Section 24-T20S-R24E, Eddy County, NM  
INJECTION INTERVAL: 9600-11580' Ellenburger and Devonian (Open Hole)  
APPROVED BY NMOCD ORDER NO. SWD-434

# TRETOLITE®

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 : YAETES PETROLEUM Date : 11/16/92  
Address : ARTESIA, NEW MEXICO Date Sampled : 11/12/92  
Lease : AMOCO "CQ" Analysis No. : 230  
Well : #2  
Sample Pt. :

ANALYSIS		mg/L		* meq/L
-----		----		-----
1. pH		6.3		
2. H2S		3 PPM		
3. Specific Gravity		1.075		
4. Total Dissolved Solids		114539.1		
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	207.0	HCO3	3.4
12. Chloride	Cl	70716.0	Cl	1994.8
13. Sulfate	SO4	50.0	SO4	1.0
14. Calcium	Ca	6400.0	Ca	319.4
15. Magnesium	Mg	1631.6	Mg	134.2
16. Sodium (calculated)	Na	35534.5	Na	1545.7
17. Iron	Fe	NR		
18. Barium	Ba	NR		
19. Strontium	Sr	NR		
20. Total Hardness (CaCO3)		22700.0		

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter		Compound	Equiv wt	X meq/L	= mg/L
-----					-----
319	*Ca <----- *HCO3	Ca (HCO3) 2	81.0	3.4	275
-----	/----->	CaSO4	68.1	1.0	71
134	*Mg -----> *SO4	CaCl2	55.5	314.9	17475
-----	<-----/	Mg (HCO3) 2	73.2		
1546	*Na -----> *Cl	MgSO4	60.2		
-----		MgCl2	47.6	134.2	6390
Saturation Values Dist. Water 20 C		NaHCO3	84.0		
CaCO3	13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O	2090 mg/L	NaCl	58.4	1545.7	90328
BaSO4	2.4 mg/L				

### REMARKS:

----- L. MALLETT / FILE

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
STEVE TIGERT



SCALE TENDENCY REPORT

Company : YAETES PETROLEUM Date : 11/16/92
Address : ARTESIA, NEW MEXICO Date Sampled : 11/12/92
Lease : AMOCO "CQ" Analysis No. : 230
Well : #2 Analyst : STEVE TIGERT
Sample Pt. :

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

S.I. = 0.2 at 80 deg. F or 27 deg. C
S.I. = 0.2 at 100 deg. F or 38 deg. C
S.I. = 0.3 at 120 deg. F or 49 deg. C
S.I. = 0.4 at 140 deg. F or 60 deg. C
S.I. = 0.5 at 160 deg. F or 71 deg. C

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

S = 2279 at 80 deg. F or 27 deg C
S = 2416 at 100 deg. F or 38 deg C
S = 2482 at 120 deg. F or 49 deg C
S = 2530 at 140 deg. F or 60 deg C
S = 2503 at 160 deg. F or 71 deg C

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Respectfully submitted,
STEVE TIGERT