

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

L CONSERVATION DIV  
611 S. 1st ST.  
ARTESIA, NM 88210  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

c15F

**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**

1. Type of Well <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> <input type="checkbox"/> Well <input type="checkbox"/> Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. NM 78215
2. Name of Operator <b>YATES PETROLEUM CORPORATION</b> ✓	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. 105 S. 4th Street, Artesia, NM 88210 (505) 748-1471	7. If Unit or CA. Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Unit F, 1650' FNL & 1650' FWL, Sec. 17-T22S-R24E	8. Well Name and No. Hickory ALV Federal #1
	9. API Well No. 30-015-10566
	10. Field and Pool, or Exploratory Area E. Indian Basin U/Penn Assoc.
	11. County or Parish, State Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Other	<input checked="" type="checkbox"/> 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 Order #7 and requests your approval. The well at present produces 46.48 Bbls. of water per day from the East Indian Basin U/Penn Assoc.. The water is stored in two 500 Bbl. fiberglass tank and piped to the Dagger Draw State CO Water Gathering System (see attached).

A water analysis is attached.

14. I hereby certify that the foregoing is true and correct		
Signed <u>Pamela A. Evans</u>	Title <u>Production Clerk</u>	Date <u>04/17/96</u>
(This space for Federal or State office use)		
Approved by _____	Title _____	Date <u>[Signature]</u>
Conditions of approval, if any:		

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

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 NMCCD 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 NMCCD 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 NMCCD 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 NMCCD ORDER NO. SWD-395

ROY AET #3, SE 1/4 SE 1/4, Section 7-T19S-R25E, Eddy County, NM  
INJECTION INTERVAL: 9756-11110' Devonian and Ellenburger  
APPROVED BY NMCCD 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 NMCCD 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 NMCCD 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 NMCCD 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 NMCCD ORDER NO. SWD-434

# TRETOLITE DIVISON

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

Reply to:  
P.O. Box 1140  
Artesia, NM  
88211-7531

## WATER ANALYSIS REPORT

Company : YATES PETROLEUM Date : 4/15/95  
Address : ARTESIA, NM Date Sampled : 4/15/96  
Lease : HICKORY "ALV" Analysis No. : 00264  
Well : #1  
Sample Pt. : WELLHEAD

ANALYSIS		mg/L	* meq/L	
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1.	pH	7.3		
2.	H2S	120		
3.	Specific Gravity	1.005		
4.	Total Dissolved Solids	8097.7		
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 704.0	HCO3	11.5
12.	Chloride	Cl 2330.0	Cl	65.7
13.	Sulfate	SO4 2500.0	SO4	52.1
14.	Calcium	Ca 940.0	Ca	46.9
15.	Magnesium	Mg 304.2	Mg	25.0
16.	Sodium (calculated)	Na 1319.4	Na	57.4
17.	Iron	Fe NR		
18.	Barium	Ba NR		
19.	Strontium	Sr NR		
20.	Total Hardness (CaCO3)	3600.0		

## PROBABLE MINERAL COMPOSITION

*milli equivalents per Liter				Compound	Equiv wt	X meq/L	= mg/L
+-----+				+-----+			
47	*Ca <-----	*HCO3	12	Ca(HCO3)2	81.0	11.5	935
	/----->			CaSO4	68.1	35.4	2407
25	*Mg ----->	*SO4	52	CaCl2	55.5		
	<-----/			Mg(HCO3)2	73.2		
57	*Na ----->	*Cl	66	MgSO4	60.2	16.7	1005
				MgCl2	47.6	8.3	397
Saturation Values Dist. Water 20 C				NaHCO3	84.0		
	CaCO3	13 mg/L		Na2SO4	71.0		
	CaSO4 * 2H2O	2090 mg/L		NaCl	58.4	57.4	3354
	BaSO4	2.4 mg/L					

## REMARKS:

Petrolite Oilfield Chemicals Group

Respectfully submitted,  
A. MILLER

SCALE TENDENCY REPORT  
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Company	: YATES PETROLEUM	Date	: 4/15/95
Address	: ARTESIA, NM	Date Sampled	: 4/15/96
Lease	: HICKORY "ALV"	Analysis No.	: 00264
Well	: #1	Analyst	: A. MILLER
Sample Pt.	: WELLHEAD		

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

S.I. =	1.1	at	60 deg. F	or	16 deg. C
S.I. =	1.1	at	80 deg. F	or	27 deg. C
S.I. =	1.2	at	100 deg. F	or	38 deg. C
S.I. =	1.2	at	120 deg. F	or	49 deg. C
S.I. =	1.3	at	140 deg. F	or	60 deg. C

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

S =	2526	at	60 deg. F	or	16 deg C
S =	2628	at	80 deg. F	or	27 deg C
S =	2670	at	100 deg. F	or	38 deg C
S =	2668	at	120 deg. F	or	49 deg C
S =	2657	at	140 deg. F	or	60 deg C

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Respectfully submitted,  
A. MILLER

PETROLITE