

N. M. OIL & GAS COMMISSION

P. O. BOX 1800

ROSWELL, NEW MEXICO 88240

YATES DRILLING COMPANY

YATES BUILDING - 207 SOUTH 4TH ST. - (505) 746-3558

ARTESIA, NEW MEXICO - 88210

February 2, 1987



PEYTON YATES.
PRESIDENT

S. P. YATES.
VICE PRESIDENT

B. W. HARPER.
SEC. TREAS.

JACK W. MCCAW.
ASST. SEC. TREAS.

Bureau of Land Management
P.O. Drawer 1857
Roswell, New Mexico 88201

Re: Fredia Federal #1
Section 3-13S-31E
Chaves County, New Mexico
NM-28179

Gentlemen:

In accordance with NTL-2B, Yates Drilling Company hereby requests approval of an unlined disposal pit.

The captioned well produces from the Queen formation approximately 1/2 barrel of water per day. The produced water is stored in a pit which is 15' X 15' X 3'.

The region is semi-arid and the soil is rocky. The Ogollala water aquifer is located at approximately 300'.

Enclosed you will find a copy of the water analysis on the produced water.

If you need anything further, please advise.

APPROVED
PETER W. CHESTER

FEB 27 1987

BUREAU OF LAND MANAGEMENT
ROSWELL RESOURCE AREA

Sincerely,

YATES DRILLING COMPANY

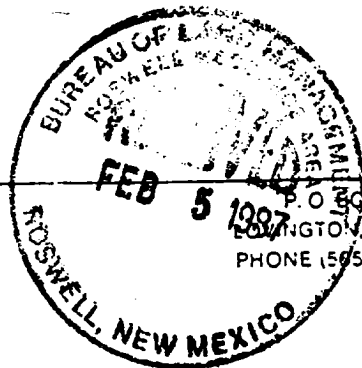
Karen J. Leishman
Karen J. Leishman
Production Clerk

*Fence pit
to protect
livestock
PWC*

enclosure

PERMIAN

Treating Chemicals, Inc.



WATER ANALYSIS REPORT

Company Yates Drilling Date Sampled 1-30-87
Field Caprock County Chaves
Lease Fredia Battery State New Mexico
Well _____ Formation Queens
Type of Water Produced Water, B/D _____
Sampling Point Treater Sampled By Gale Blackwell

DISSOLVED SOLIDS

CATIONS

	mg/l		meq/l
Sodium, Na+(Calc)	<u>96,500</u>	÷ 23	<u>4196</u>
Calcium, Ca++	<u>3,950</u>	÷ 20	<u>198</u>
Magnesium, Mg++	<u>13,280</u>	÷ 12.2	<u>1089</u>
Barium, Ba++	<u>Neg</u>	÷ 68.7	<u>Neg</u>
Iron, Fe (Total)	<u>26</u>		

ANIONS

Chloride, Cl-	<u>198,000</u>	÷ 35.5	<u>5577</u>
Sulfate, So ₄ =	<u>1,100</u>	÷ 48	<u>23</u>
Carbonate, Co ₃ =	<u>0</u>	÷ 30	<u>0</u>
Bicarbonate, HCo ₃ -	<u>140</u>	÷ 61	<u>23</u>

OTHER PROPERTIES

pH 5.8
Specific Gravity 1,200
H₂S Neg.
Total Dissolved Solids 316,000
Total Hardness 66,000

Remarks and Recommendations _____