

UNITED STATES N.M. Oil Cons. Division  
DEPARTMENT OF THE INTERIOR 1625 N. French Dr.  
BUREAU OF LAND MANAGEMENT Hobbs, NM 88240

FORM APPROVED  
OMB No. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE - Other instructions on reverse side**

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

2. Name of Operator  
**Harvey E. Yates Company**

3. Address  
**P.O. Box 1933, Roswell, NM 88202**

3b. Telephone No. (include area code)  
**(505)623-6601**

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
**1980' FNL & 1980' FWL  
UNIT F, SEC 8, T18S, R32E**

5. Lease Serial No.  
**NMNM-18232**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement, Name and/or No.

8. Well Name and No.  
**FEDERAL AM #1**

9. API Well No.  
**30-025-29087**

10. Field and Pool, or Exploratory Area  
**YOUNG BONE SPRINGS NORTH**

11. County or Parish, State  
**LEA COUNTY, NM**

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

**TYPE OF SUBMISSION**

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

**TYPE OF ACTION**

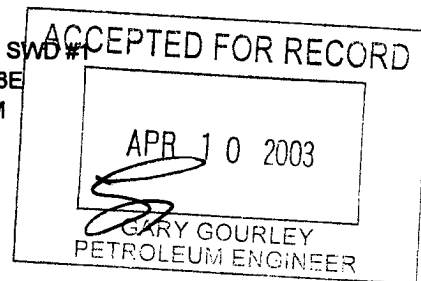
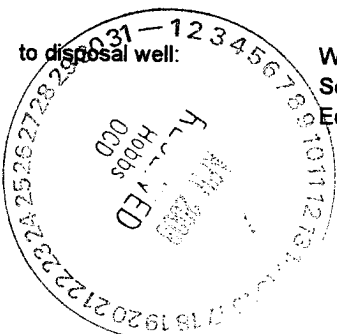
- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (start/resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other _____    |
| <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug & Abandon   | <input type="checkbox"/> Temporarily Abandon       |   |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input checked="" type="checkbox"/> Water Disposal |   |

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

1. Formation: Bone Spring
2. BWPD: 1
3. Water Analysis: See Attached
4. Lease Storage: Stock tanks.
5. Water transported by truck to disposal.
6. Operator: I & W Inc.  
PO Box 98  
Loco Hills, NM 88255

to disposal well:

Walter Solt State SWD #1  
Sec 5, T18S, R28E  
Eddy County, NM



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

Name (Printed/Typed)  
**Jen Atkinson**

Title  
**Prod. Analyst**

Signature  
*Jen Atkinson*

Date  
**10-Mar-03**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, 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.

GWW

JUL 10 2000

# Permian Treating WATER ANALYSIS REPORT

## SAMPLE

Oil Co. : Harvey E. Yates  
Lease : ~~Redham~~  
Well No. : ~~413~~  
Lab No. : G:\ANALYSES\Jul0600.001

Sample Loc. :  
Date Analyzed: 06-July-2000  
Date Sampled : 30-June-2000

## ANALYSIS

1. pH 5.240
2. Specific Gravity 60/60 F. 1.118
3. CaCO<sub>3</sub> Saturation Index @ 80 F. -0.766  
@ 140 F. +0.194

### Dissolved Gasses

4. Hydrogen Sulfide
5. Carbon Dioxide
6. Dissolved Oxygen

MG/L EQ. WT. \*MEQ/L

0  
Not Determined  
Not Determined

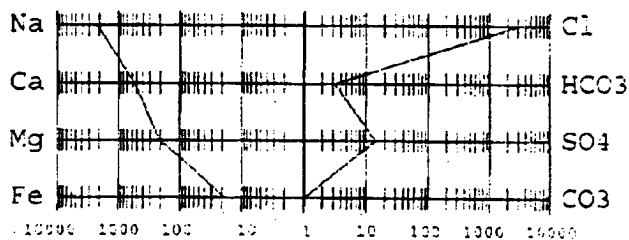
### Cations

7. Calcium (Ca++) 10,319 / 20.1 = 513.38
8. Magnesium (Mg++) 2,444 / 12.2 = 200.33
9. Sodium (Na+) (Calculated) 49,359 / 23.0 = 2,147.78
10. Barium (Ba++) Not Determined

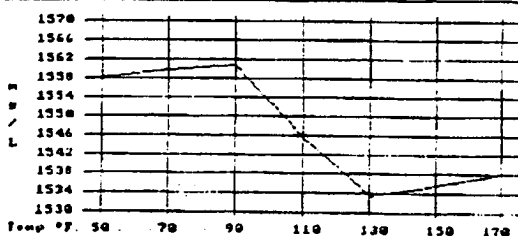
### Anions

11. Hydroxyl (OH-) 0 / 17.0 = 0.00
12. Carbonate (CO<sub>3</sub>=) 0 / 30.0 = 0.00
13. Bicarbonate (HCO<sub>3</sub>-) 181 / 61.1 = 2.96
14. Sulfate (SO<sub>4</sub>=) 650 / 48.8 = 13.32
15. Chloride (Cl<sub>2</sub>) 100,977 / 35.5 = 2,844.42
16. Total Dissolved Solids 163,970
17. Total Iron (Fe) 321 / 18.2 = 17.64
18. Total Hardness As CaCO<sub>3</sub> 35,831
19. Resistivity @ 75 F. (Calculated) 0.025 /cm.

### LOGARITHMIC WATER PATTERN \*meq/L.



### Calcium Sulfate Solubility Profile



### PROBABLE MINERAL COMPOSITION COMPOUND EQ. WT. X \*meq/L = mg/L.

Ca(HCO <sub>3</sub> ) <sub>2</sub>	81.04	2.96	240
CaSO <sub>4</sub>	68.07	13.32	907
CaCl <sub>2</sub>	55.50	497.10	27,589
Mg(HCO <sub>3</sub> ) <sub>2</sub>	73.17	0.00	0
MgSO <sub>4</sub>	60.19	0.00	0
MgCl <sub>2</sub>	47.62	200.33	9,540
NaHCO <sub>3</sub>	84.00	0.00	0
NaSO <sub>4</sub>	71.03	0.00	0
NaCl	58.46	2,146.99	125,513

\*Milli Equivalents per Liter

This water is somewhat corrosive due to the pH observed on analysis.  
The corrosivity is increased by the content of mineral salts in solution.