

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
N.M. Oil Cons. Division
1625 N. French Dr.
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)
**660' FNL & 1980' FWL sec. 8
UNIT C, 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 #2

9. API Well No.
30-025-30581

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

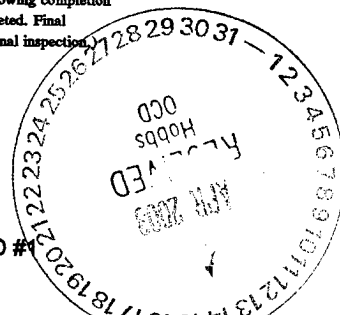
- ☐ Acidize ☐ Deepen ☐ Production (start/resume) ☐ Water Shut-Off
☐ Alter Casing ☐ Fracture Treat ☐ Reclamation ☐ Well Integrity
☐ Casing Repair ☐ New Construction ☐ Recomplete ☐ Other
☐ Change Plans ☐ Plug & Abandon ☐ Temporarily Abandon
☐ Convert to Injection ☐ Plug Back ☒ Water Disposal

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 HLM/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



ACCEPTED FOR RECORD

APR 10 2003

GARY GOURLEY
PETROLEUM ENGINEER

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

Name (Printed/Typed)
Sen Atkinson

Title
Prod. Analyst

Signature
Sen 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 7 0 2000

Permian Treating WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Harvey E. Yates
Lease : ~~XXXXXXXXXX~~
Well No. : ~~2117~~
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. CaCO₃ 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

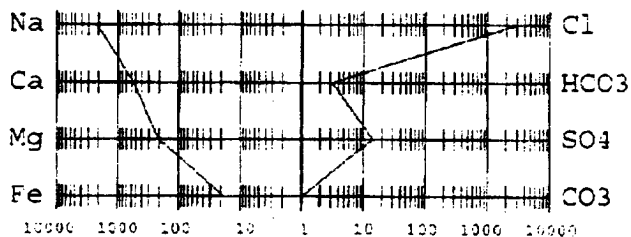
Cations

- | | | | | |
|---|----------------|---|--------|----------|
| 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 | | | |

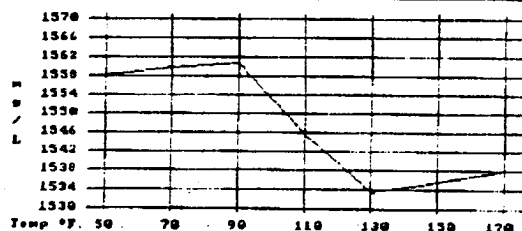
Anions

- | | | | | |
|--|------------|---|--------|----------|
| 11. Hydroxyl (OH ⁻) | 0 | / | 17.0 = | 0.00 |
| 12. Carbonate (CO ₃ ⁼) | 0 | / | 30.0 = | 0.00 |
| 13. Bicarbonate (HCO ₃ ⁻) | 181 | / | 61.1 = | 2.96 |
| 14. Sulfate (SO ₄ ⁼) | 650 | / | 48.8 = | 13.32 |
| 15. Chloride (Cl ⁻) | 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 ₃ | 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 ₃) ₂	81.04	2.96	240
CaSO ₄	68.07	13.32	907
CaCl ₂	55.50	497.10	27,589
Mg (HCO ₃) ₂	73.17	0.00	0
MgSO ₄	60.19	0.00	0
MgCl ₂	47.62	200.33	9,540
NaHCO ₃	84.00	0.00	0
NaSO ₄	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.