

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

1997 MAY 29

RECEIVED

5. Lease Designation and Serial No.
NM-33437

6. If Indian, Allottee or Tribe Name

9:27

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Harvey E. Yates Company

3. Address and Telephone No.

P.O. Box 1993, Roswell, NM 88202 1-505-623-6601

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

G, 1880' FNL & 1980' FEL
SEC. 8, T-18S, R-31E

8. Well Name and No.

PMS 8 FEDERAL # 4

9. API Well No.

30-015-26218

10. Field and Pool, or Exploratory Area

SHUGART, YATES, 7-RVRS, Q, GRAYBURG

11. County or Parish, State

EDDY COUNTY, NM

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

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change in 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.)

1. FORMATION: GRAYBURG
2. BWPD: 14
3. WTR ANALYSIS: SEE ATTACHED
4. LEASE STORAGE: IN FIBERGLASS TANK
5. WATER TRANSPORTED: BY TRUCK TO DISPOSAL
6. OPERATOR: RAY WESTALL
TENNESSEE FEDERAL WELL # 1
UNIT 1, SEC. 21, T-19S, R-31E
EDDY COUNTY, NM
R-8173

OR LOCO HILLS WATER DISPOSAL COMPANY
SEC. 16, T-17S, R-30E
EDDY COUNTY, NM
R-6811-B
OR I&W INC.
WALTER SOLT STATE # 1
L, SEC. 5, T-18S, 28E, EDDY CO., NM
SWD-318

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

Signed

RAY F. NOKES

Title

PROD. MGR./ ENG.

Date 5/22/97

(This space for Federal or State office use)

Approved (ORIG. SGD.) ALEXIS C. SWOBODA

PETROLEUM ENGINEER

Title

Date

JUN 04 1997

Conditions of approval, if any:

This 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 the Reverse Side

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Permian Treating Chemicals

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Harvey E. Yates
Lease : PMS 8
Well No. : # 4
Salesman :

Sample Loc. :
Date Analyzed: 02-November-1996
Date Sampled :

ANALYSIS

1. pH 7.250
2. Specific Gravity 60/60 F. 1.083
3. CaCO₃ Saturation Index @ 80 F. +1.415
@ 140 F. +2.295

Dissolved Gasses

MG/L EQ. WT. *MEQ/L

4. Hydrogen Sulfide Present
5. Carbon Dioxide Not Determined
6. Dissolved Oxygen Not Determined

Cations

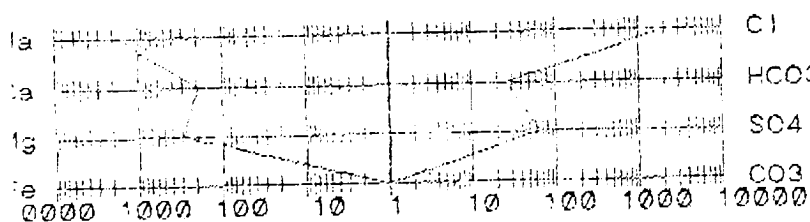
7. Calcium (Ca++) 3,808 / 20.1 = 189.45
8. Magnesium (Mg++) 3,404 / 12.2 = 279.02
9. Sodium (Na+) (Calculated) 37,871 / 23.0 = 1,645.57
10. Barium (Ba++) Not Determined

Anions

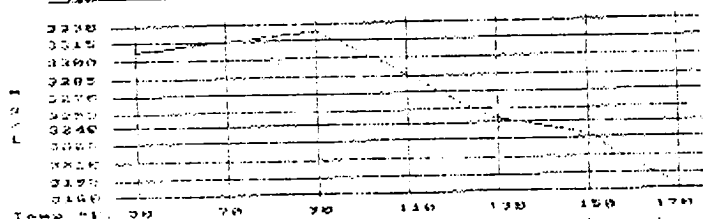
11. Hydroxyl (OH-) 0 / 17.0 = 0.00
12. Carbonate (CO₃==) 0 / 30.0 = 0.00
13. Bicarbonate (HCO₃-) 1,494 / 61.1 = 24.45
14. Sulfate (SO₄==) 3,000 / 48.8 = 61.48
15. Chloride (Cl-) 71,984 / 35.5 = 2,027.72
16. Total Dissolved Solids 121,581
17. Total Iron (Fe) 10 / 18.2 = 0.52
18. Total Hardness As CaCO₃ 23,521
19. Resistivity @ 75 F. (Calculated) 0.065 /cm.

LOGARITHMIC WATER PATTERN

*meq/L.



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION				
COMPOUND	EQ. WT. X	*meq/L =	mg/L.	
Cl	Ca(HCO ₃) ₂	81.04	24.45	1.922
HCO ₃	CaSO ₄	68.07	61.48	4.195
SO ₄	CaCl ₂	55.50	103.53	5.745
CO ₃	Mg(HCO ₃) ₂	73.17	0.00	0
	MgSO ₄	60.19	0.00	0
	MgCl ₂	47.62	279.02	13.287
	NaHCO ₃	84.00	0.00	0
	NaSO ₄	71.00	0.00	0
	NaCl	58.46	1,645.18	96.177

*Milli Equivalents per Liter

This water is mildly corrosive due to the pH observed on analysis.
The corrosivity is increased by the content of mineral salts, and the presence of H₂S in solution.