

NM OIL CONS. COMMISSION
DRAWER DD
ARTESIA, NM 88210

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Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
Harvey E. Yates Company

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AUG 27 1993

A.T.E.

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

UNIT N, 660' FSL AND 1980' FWL
SEC. 8, T-18S, R-31E

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.
LC-029393-A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.
ARCO 8 FEDERAL # 4

9. API Well No.
30-015-27185

EDDY CO., NM

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☐ Altering Casing
☐ Other

TYPE OF ACTION

- ☐ 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: 78
3. WTR ANALYSIS: SEE ATTACHED
4. LEASE STORAGE: IN FIBERGLASS TANK
5. WATER TRANSPORTED: BY TRUCK TO DISPOSAL
6. OPERATOR: TENNESSEE WATER DISPOSAL
TENNESSEE FEDERAL WELL # 1
UNIT I, SEC. 21, T-19S, R-31E
EDDY COUNTY, NM

OR LOCO HILLS WATER DISPOSAL COMPANY
SEC. 16, T-17S, R-30E
EDDY COUNTY, NM

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

Signed RAY F. NOKES Title PROD. MGR./ ENG.

Date 7/22/93

(This space for Federal or State office use)

Approved by (ORIG. SCD.) JOE G. LARA Title Palmerton Enclosure

Date AUG 20 1993

Conditions of approval, if any:

This is 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



BAKER PERFORMANCE
CHEMICALS
A Division of Baker Hughes Chemicals Inc.

WATER ANALYSIS
for
HEYCO

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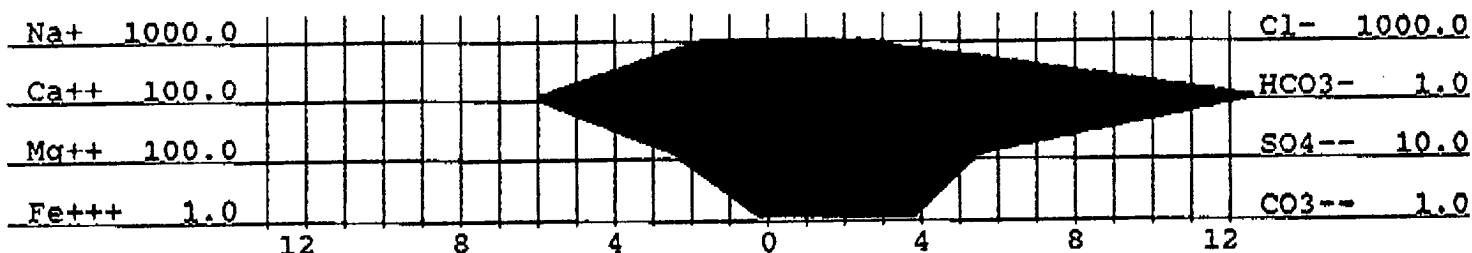
JUL 21 1993
ANL

Date of Analysis: JULY 21, 1993
Company: HEYCO
State: NEW MEXICO
Lease: ARCO 8 FED. # 4
Oil (bbl/day): N/D
Type of Water: PRODUCED
Sample Source: WELL HEAD
Representative: STEVE STROUD

Analysis #: 2332
Company Address: ROSWELL
Field: N/D
Well #: # 4
Water (bbl/day): N/D
Temp., C: 20
Date of Sampling: JULY 21, 1993
Analysis By: SUZANNE WILLIAMS

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



DISSOLVED SOLIDS

CATIONS	me/l	mg/l
Total Hardness	: 860.00	
Calcium, (Ca++)	: 620.00	12429.83
Magnesium, (Mg++)	: 240.00	2916.34
Iron, (Fe+++)	: 0.27	5.00
Barium, (Ba++)	: N/D	N/D
Sodium, Na+(calc)	: 1806.35	41546.01
Manganese, (Mn++)	: 0.00	0.00

ANIONS

Chloride, Cl-	: 2591.54	91996.45
Sulfate, SO4--	: 56.19	2700.00
Carbonate, CO3--	: 4.00	120.01
Bicarbonate, HCO3--	: 13.00	793.17
Hydroxyl, OH-	: 0.00	0.00
Sulfide, S--	: 1.89	30.33
TOTAL SOLIDS (quant.)		152537.10

DISSOLVED GASES

Hydrogen sulfide:	300.00	mg/l
Carbon dioxide	: 0.00	mg/l
Oxygen	: N/D	mg/l

PHYSICAL PROPERTIES

pH	: 7.40
Spec Grav.	: 1.100
TDS (calc.)	: 152405.67

SCALE STABILITIES

Temp., C	CaCO3	CaSO4	BaSO4
20.0	2.01	1828	0
30.0	2.23	1960	0
40.0	2.48	2206	0
Max entity, (calc.)	4009		0
RESIDUAL HYDROCARBONS:			N/D

N/D = not determined

@20'C...CALCIUM SULFATE SCALING IS LIKELY.
@20'C...SEVERE CARBONATE SCALING.

