

7 - (4) CB
FAX 505-326-5900

well files

PH. 505-327-9801

MERRION OIL & GAS CORPORATION

610 REILLY AVE. • P. O. Box 840
FARMINGTON, NEW MEXICO 87499

May 21, 1991

Mr. David Catanach
New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Order No. R-7308
Salt Water Disposal Permit
Santa Fe 20-2
2150' FNL, 1980' FWL
Sec. 20, T21N, R8W
San Juan County, NM

Dear Mr. Catanach:

Merrion Oil & Gas is currently disposing of produced Entrada water into the subject well. We have recently made discoveries in the Gallup and Dakota formations in the area. We request administrative approval to also inject the water produced from those two formations into the Santa Fe 20-2.

The new production wells are listed below:

<u>Well</u>	<u>Location</u>	<u>Lease</u>	<u>Formation</u>	<u>Water Rate BPD</u>
Santa Fe 20-4	Sec 20, 21N, 8W	Fee	Dakota	1000
Santa Fe 20-5	Sec 20, 21N, 8W	Fee	Dakota	500
Santa Fe 20-5	Sec 20, 21N, 8W	Fee	Gallup	100

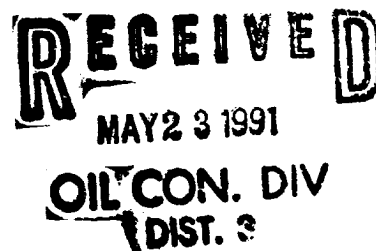
Attached are water analyses from the Dakota, Gallup, and the Entrada injection water for your review. If additional information is required, please contact me at 505-327-9801.

Sincerely,

George F. Sharpe

George F. Sharpe
Engineer

cc: J. Greg Merrion
Steven S. Dunn
Well Files
NMOCD - Aztec



ANALYSIS NO. 52-50-91

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

Company <u>Merrion Oil + Gas</u>		Sample No.		Date Sampled <u>05-17-91</u>					
Field		Legal Description		County or Parish		State			
Lease or Unit <u>Santa Fe</u>		Well <u>20-5</u>		Depth		Formation		Water, B/D	
Type of Water (Produced, Supply, etc.)				Sampling Point				Sampled By	

DISSOLVED SOLIDS

CATIONS

	mg/l	me/l
Sodium, Na (calc.)	<u>9877</u>	<u>429.45</u>
Calcium, Ca	<u>261</u>	<u>13.00</u>
Magnesium, Mg	<u>97</u>	<u>8.00</u>
Barium, Ba	<u>—</u>	<u>—</u>
Potassium, K	<u>130</u>	<u>3.32</u>

ANIONS

Chloride, Cl	<u>14984</u>	<u>422.69</u>
Sulfate, SO ₄	<u>212</u>	<u>4.41</u>
Carbonate, CO ₃	<u>0</u>	<u>0</u>
Bicarbonate, HCO ₃	<u>1627</u>	<u>26.67</u>
Hydroxide, OH	<u>0</u>	<u>0</u>

Total Dissolved Solids (calc.) 27188Iron, Fe (total) 11 ppm
Sulfide, as H₂S neg

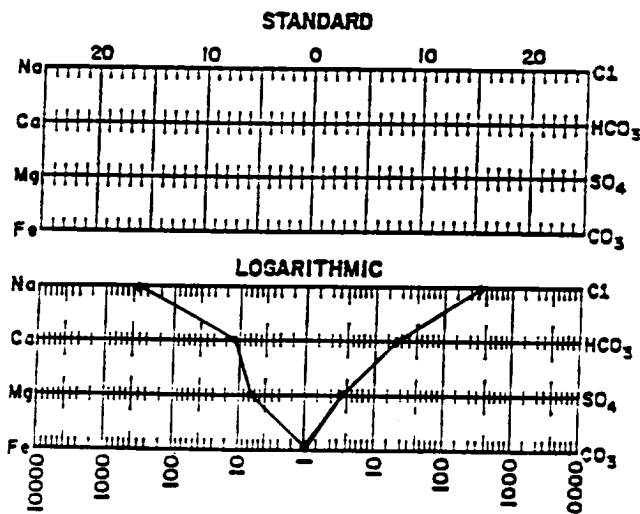
REMARKS & RECOMMENDATIONS:

API oil in water sample:
36° API @ 60°F

OTHER PROPERTIES

pH	<u>7.43</u>
Specific Gravity, 60/60 F.	<u>1.017</u>
Resistivity (ohm-meters) <u>74 F.</u>	<u>.26</u>
Total Hardness	<u>1050</u>

WATER PATTERNS — me/l

ANALYST: Lee

PLEASE REFER ANY QUESTIONS TO:

THE WESTERN CO. OF NORTH AMERICA
FARMINGTON, N.M.
BRIAN AULT-District Engineer
1(505) 327-6222