

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
Snake Eyes #2	Sec 20, 21N, 8W	Fee	Dakota	500
Santa Fe 20-5	Sec 20, 21N, 8W	Fee	Gallup	100

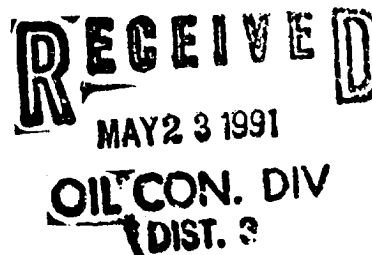
Attached are water analyses from the Dakota, Gallup, and the Entrada injection water for your review. If additional information is required, please contact me at 505-327-9801.

Sincerely,



George F. Sharpe
Engineer

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



API WATER ANALYSIS REPORT FORM

Company <u>Morrison Oil & Gas</u>		Sample No. _____		Date Sampled <u>08-30-90</u>	
Field _____		Legal Description _____		County or Parish _____	
Lease or Unit _____		Well <u>Santa Fe 20-4</u>		Depth _____	
Type of Water (Produced, Supply, etc.) _____		Formation <u>Dakota</u>		Water S/D _____	
Sampling Point _____		Sampled By _____			

DISSOLVED SOLIDS

IONS	mg/l	meq/l
Sodium, Na (calc.)	<u>1351</u>	<u>58.75</u>
Calcium, Ca	<u>9</u>	<u>.44</u>
Magnesium, Mg	<u>3</u>	<u>.26</u>
Barium, Ba	_____	_____
Potassium, K ⁺	<u>6</u>	<u>.15</u>

IONS	mg/l	meq/l
Chloride, Cl	<u>964</u>	<u>27.20</u>
Sulfate, SO ₄	<u>0</u>	<u>0</u>
Carbonate, CO ₃	<u>24</u>	<u>.80</u>
Bicarbonate, HCO ₃	<u>1928</u>	<u>31.60</u>
OH	<u>0</u>	<u>0</u>

Total Dissolved Solids (calc.) 4285Iron, Fe (total) #, ## 0.0 ppm
Sulfide as H₂S neg

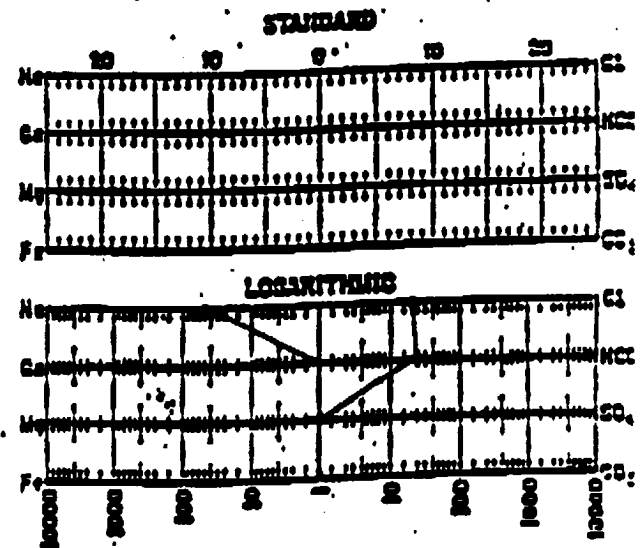
COMMENTS & RECOMMENDATIONS:

Rick Dean

OTHER PROPERTIES

pH	<u>8.22</u>
Specific Gravity, 60/60 F.	<u>1.002</u>
Resistivity (ohm-centimeters) <u>77 F.</u>	<u>2.2</u>
Total hardness	<u>35</u>

WATER PATTERNS — meq/l

ANALYST: Llo

THE WESTERN COMPANY OF
NORTH AMERICA, FARMINGTON, N.
(505) 327-6222

To refer any questions to: BRIAN AULT

District Engineer