

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

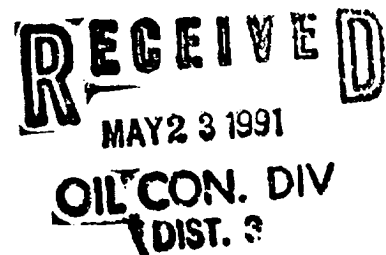
Attached are water analyses from the Dakota, Gallup, and the Entrada injection water for your review. If additional information is required, please contact me at 505-327-9801.

Sincerely,



George F. Sharpe
Engineer

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



ANALYSIS NO. 51-14-91

FIELD RECEIPT NO. _____

API FORM 45-1

API WATER ANALYSIS REPORT FORM

1-28-91

Company <u>Merrion Oil & Gas</u>		Sample No.	Date Sampled
Field	Legal Description <u>520 T2N R8W</u>	County or Parish <u>San Juan</u>	State <u>NM</u>
Lease or Unit <u>Snake Eyes</u>	Well <u>#2</u>	Depth <u>4580'-84'</u>	Formation <u>Dakota Perfs.</u>
Type of Water (Produced, Supply, etc.) <u>Produced</u>		Sampling Point	Sampled By

DISSOLVED SOLIDS

CATIONS	mg/l	mg/l
Sodium, Na (calc.)	<u>3801</u>	<u>165.28</u>
Calcium, Ca	<u>52</u>	<u>2.60</u>
Magnesium, Mg	<u>10</u>	<u>.80</u>
Barium, Ba	<u>—</u>	<u>—</u>
Potassium, K ⁺	<u>11</u>	<u>.28</u>

ANIONS	mg/l	mg/l
Chloride, Cl	<u>587</u>	<u>16.57</u>
Sulfate, SO ₄	<u>6161</u>	<u>128.27</u>
Carbonate, CO ₃	<u>24</u>	<u>.80</u>
Bicarbonate, HCO ₃	<u>1423</u>	<u>23.32</u>
OH	<u>0</u>	<u>0</u>

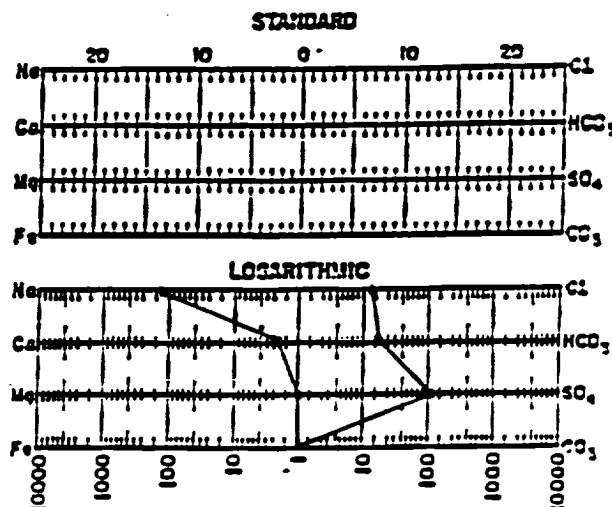
Total Dissolved Solids (calc.) 12,069
 Iron, Fe (total) #, ## 0.0 ppm
 Sulfide as H₂S neg

REMARKS & RECOMMENDATIONS:

OTHER PROPERTIES

pH	<u>8.32</u>
Specific Gravity, 60/60 F.	<u>1.005</u>
Resistivity (ohm-meters) <u>70</u> F.	<u>1.6</u>
Total hardness	<u>170</u>

WATER PATTERNS — me/l



ANALYST: _____

 THE WESTERN COMPANY OF
 NORTH AMERICA, FARMINGTON, NM
 (505) 327-6222
Please refer any questions to: BRIAN ADLT, District Engineer