

## MERRION OIL &amp; GAS CORPORATION

610 REILLY AVE. • P. O. Box 840

FARMINGTON, NEW MEXICO 87499

February 13, 1990

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

Attn: Mr. David Catanach

RE: Produced Water Disposal  
Little Blue Federal #1  
Federal 15-2H #2  
Papers Wash Field  
McKinley County, New Mexico

**RECEIVED**  
FEB 14 1990  
OIL CON. DIV  
DIST. 3

Dear Mr. Catanach:

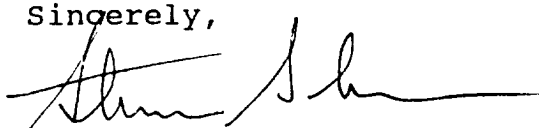
We have recently drilled two new wells in the Papers Wash Field and are planning to inject their produced water into the Navajo 15-6 disposal well (Section 15, T19N, R5W). Disposal into the Gallup in that well has been approved per State Order #SWD-183.

The Little Blue Federal #1 (Section 15, T19N, R5W) is producing  $\pm$  150 BWPD from the Mesaverde formation (analysis attached). We plan to commingle the Mesaverde water with the water currently being produced from the Entrada Formation (analysis also attached). According to these analyses, the Mesaverde water is actually fresher than the Entrada water, and there should be no compatibility problems commingling the two.

The Federal 15-2H is a horizontal well that was recently drilled into the Entrada Formation. We are currently completing that well, and anticipate an initial water production rate of  $\pm$  500 BPD.

Please contact George Sharpe at (505) 327-9801 if you have problems with our proposal or if you need additional information.

Sincerely,

  
Steven S. Dunn  
Operations Manager

GFS/eg

CC: ✓ Frank Chavez-NMOCD-Aztec, NM  
Ron VanWick-EPA-Dallas, Texas  
Navajo 15-6 Well File  
Federal 15-2H-Well File  
Little Blue Federal #1-Well File

MV COAL

Unichem International

707 North Leech

P.O.Box 1499

Hobbs, New Mexico 88240

Company : MERRION OIL & GAS

Date : 01-09-1990

Location: Little Blue Fed #1 (on 12-22-89)

Specific Gravity:

Total Dissolved Solids:

pH:

IONIC STRENGTH:

Sample 1

1.005

7245

9.10

0.121

CATIONS:

		<u>me/liter</u>	<u>mg/liter</u>
Calcium	(Ca <sup>+2</sup> )	0.400	8.00
Magnesium	(Mg <sup>+2</sup> )	2.48	30.1
Sodium	(Na <sup>+1</sup> )	111	2550
Iron (total)	(Fe <sup>+2</sup> )	0.705	19.7
Barium	(Ba <sup>+2</sup> )	0.016	1.10
Manganese	(Mn <sup>+2</sup> )	0.019	0.510

ANIONS:

Bicarbonate	(HCO <sub>3</sub> <sup>-1</sup> )	19.2	1170
Carbonate	(CO <sub>3</sub> <sup>-2</sup> )	0	0
Hydroxide	(OH <sup>-1</sup> )	0	0
Sulfate	(SO <sub>4</sub> <sup>-2</sup> )	10.1	483
Chloride	(Cl <sup>-1</sup> )	84.6	3000

SCALING INDEX (positive value indicates scale)

<u>Temperature</u>		<u>Calcium</u>	<u>Calcium</u>
		<u>Carbonate</u>	<u>Sulfate</u>
86°F	30°C	1.2	-27
120°F	49°C	2.1	-27

Comments:

This water to be mixed with Media - Entrada #6