

# RICE Engineering Corporation

122 WEST TAYLOR TELEPHONE (505) 393-9174

HOBBS, NEW MEXICO 88240

August 3, 1993

OIL CONSERVATION DIVISION  
RECEIVED

1993 AUG 5 AM 9 53

Attn: Mr. Benjamin E. Stone  
Oil Conservation Division  
Energy, Minerals and Natural Resources  
Department  
PO Box 2088  
Santa Fe, NM 87504

Re: Western Reserves  
Injection Application


Dear Mr. Stone;

Enclosed are copies of water sample analyses in the area of Western Reserves proposed Salt Water Disposal. As you can see the one sample was from the producing well on the lease and is the same analysis I referred to in the application. The fresh water sample was taken today from a water well belonging to the rancher and located in the NW/4 SW/4 of Section 26, Township 10 South, Range 33 East. The analysis was performed at Halliburton Services Hobbs Laboratory.

If there are any additional needed items, please contact us. Western reserves requests that the permit application be processed as soon as possible as their lease production is hindered awaiting this permit approval.

Yours very truly,

RICE ENGINEERING CORPORATION

  
Jerry D. Hillard  
Division Manager

JDH/lr

Enclosures

562.93

# HALLIBURTON SERVICES

HOBBS, NEW MEXICO

To Rice Engineering

Sample Number 265

\*Milligrams per liter

Submitted by \_\_\_\_\_ Date Received 8-3-93

Well No. N 11 1/4 / S 21 1/4 / Sec 26 T 10S R 3E Depth \_\_\_\_\_ Formation \_\_\_\_\_

County \_\_\_\_\_ Field \_\_\_\_\_ Source WATER WELL

Resistivity..... 8.97 @ 74°F

Specific Gr..... 1.005

pH..... 6.8

Calcium\*..... 400

Ca

Magnesium\*..... NVL

Mg

Chlorides\*..... 325

Cl

Sulfates\*..... 112

SO<sub>4</sub>

Bicarbonates\*..... 232

HCO<sub>3</sub>

Soluble Iron\*..... NVL

Fe

**ILLEGIBLE**

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S

Laboratory Services  
1331 Tasker Drive  
Hobbs, New Mexico 88240  
(505) 397-3713

WATER ANALYSIS

COMPANY ENVIRO-CHEM  
Attention: Mr. Rick Allen

SAMPLE Western Reserves Oil Co.  
SL "26" Well #3

DATE \_\_\_\_\_  
SAMPLED BY ENVIRO-CHEM  
Remarks \_\_\_\_\_

Total Dissolved Solids	41.000
Hydrogen Sulfide	
Sodium	
Specific Gravity @ 60 F.	1.047
Ph Taken At Lab	6.99
Barium as Ba	5.0
Carbonate alkalinity PPM	0
Bicarbonate alkalinity PPM	464
Calcium as CA	3.612
Magnesium as Mg	4.988
Total Hardness as CaCO <sub>3</sub>	8.600
Chlorides as CL	27.534
Sulfate as SO <sub>4</sub>	1.425
Iron as Fe	4.95
Resistivity - Ohms	0.1216 @ 22.5 C
Carbonate as CO <sub>3</sub> GL	11.75
Nitrate	24.2
Potassium	9.0

Results reported as Parts Per Million Unless Stated

Langelier Saturation Index + 0.79

Analysis By: Roland Perry  
Date: October 25, 1992

**RICE Engineering Corporation**

122 WEST TAYLOR

TELEPHONE (505) 393-9174

HOBBS, NEW MEXICO 88240

August 4, 1993

OIL CONSERVATION DIVISION  
RECEIVED

'93 AUG 4 AM 9 07

Attn: Mr. Benjamin E. Stone  
Oil Conservation Division  
Energy, Minerals and Natural Resources  
Department  
PO Box 2088  
Santa Fe NM 87504

Re: Western Reserves  
Injection Application

Dear Mr. Stone:

Enclosed is a copy of the analysis of the water sample caught yesterday. The copy sent before was lacking the Sodium and TDS numbers as well as not being signed by the lab chemist.

Yours very truly,

**RICE ENGINEERING CORPORATION**

  
Jerry D. Hillard  
Division Manager

JDH/lr

Enclosure

563.93

**HALLIBURTON SERVICES**  
**HOBBS, NEW MEXICO**

To Rice Engineering Corporation  
122 West Taylor  
Hobbs, New Mexico 88240

Sample Number 265

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Submitted by Rice Engineering Corporation Date Received August, 3 1993

Well No. NW ¼/ SW ¼/ Sec 26 Twn 10S Depth                      Formation                       
R. 33E

County                      Field                      Source Water Well

Resistivity..... 8.97 @ 74 F

Specific Gr..... 1.005

pH..... 6.8

Calcium\*..... 400

Ca

Magnesium\*..... nil

Mg

Chlorides\*..... 325

Cl

Sulfates\*..... 112

SO<sub>4</sub>

Bicarbonates\*..... 232

HCO<sub>3</sub>

Soluble Iron\*..... nil

Fe

Sodium Na nil

TDS 1069

Remarks:

\*Milligrams per liter

Respectfully submitted,

Analyst: *ALBANK*

HALLIBURTON COMPANY

By \_\_\_\_\_

CHEMIST

**NOTICE**

THIS REPORT IS LIMITED TO THE DESCRIBED SAMPLE TESTED. ANY USER OF THIS REPORT AGREES THAT HALLIBURTON SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, WHETHER IT BE TO ACT OR OMISSION, RESULTING FROM SUCH REPORT OR ITS USE.