NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

SWD 567 PDEV0020900567

January 2, 1996

Bass Enterprises Production Company P.O. Box 2760 Midland, Texas 79702-2760

Attn: Mr. John R. Smitherman

### RE: Injection Pressure Increase, Salt Water Disposal, Poker Lake Well No.43, Eddy County, New Mexico

Dear Mr. Smitherman:

Reference is made to your request dated November 18 1995 to increase the surface injection pressure on the above referenced well. This request is based on a step rate test conducted on November 1, 1995. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on this well is justified at this time.

You are therefore authorized to increase the surface injection pressure on the following well:

Well and Location	Maximum Injection Surface Pressure
Poker Lake Well No.43, Unit Letter M	1140 PSIG
Located in Section 21, Township 24 South, Range 31 East, Eddy County, New Mexico.	

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected water is not being confined to the injection zone or is endangering any fresh water aquifers.

Sincerely,

William J. vlav

Director

WJL/BES

cc: Oil Conservation Division - Hobbs File: SWD-567; PSI-X 3rd QTR 96

> OFFICE OF THE SECRETARY - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5950 ADMINISTRATIVE SERVICES DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5925 ENERCY CONSERVATION AND MANAGEMENT DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5930 FORESTRY AND RESOURCES CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5830 MINING AND MINERALS DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5830 OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-5830 OIL CONSERVATION DIVISION - P. O. BOX 6429 - SANTA FE, NM 87505-6429 - (505) 827-7831 PARK AND RECREATION DIVISION - P. O. BOX 1147 - SANTA FE, NM 87504-1147 - (505) 827-7465

# MEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

September 26, 1995

Mr. John R. Smitherman Bass Enterprises Production Company P.O. Box 2760 Midland, Texas 79702-2760

### **Re: Recent Application for Injection Pressure Increase**

Dear Mr. Smitherman:

Reference is made to your recent application for an increase in injection pressure on your Poker Lake Well No.43. Please submit the original data obtained to generate the chart which was submitted with your request. As soon as I receive this information, I will expedite the continued processing of your application.

Very truly yours,

Benjamin E. Stone Petroleum Engineering Specialist

/BES

OFFICE OF THE SECRETARY - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-5950 ADMINISTRATIVE SERVICES DIVISION - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-5925 ENERCY CONSERVATION AND MANAGEMENT DIVISION - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-5900 FORESTRY AND RESOURCES CONSERVATION DIVISION - P. O. 80X 6429 - SANTA FE, NM 87504-1948 - (505) 827-5830 MINING AND MINERALS DIVISION - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-5970 OIL CONSERVATION DIVISION - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-5970 OIL CONSERVATION DIVISION - P. O. 80X 6429 - SANTA FE, NM 87505-6429 - (505) 827-7371 PARK AND RECREATION DIVISION - P. O. 80X 1147 - SANTA FE, NM 87504-1147 - (505) 827-7465 RECE VED

'95 SFP 25 BM 8 52

OIL CONSERVATION DEASSOENTERPRISES PRODUCTION CO. 6 DESTA DRIVE, SUITE 3700 P.O. BOX 2760 MIDLAND, TEXAS 79702

FAX (915) 687-0329

August 31, 1995

(915) 683-2277

**RE: STEP RATE TEST DATA** POKER LAKE #43 POKER LAKE (DELAWARE) FIELD 660' FSL & 660' FWL, UNIT LETTER M **SECTION 21, T24S, R31E** EDDY COUNTY, NEW MEXICO FILE: 400-WF: STEPRATE

New Mexico Oil Conservation Division 811 S. 1st Street Artesia. New Mexico 88210

Attn: Mr. Tim Gumm

Dear Mr. Gumm,

SEP 1 5 1995 OIL CON. DIV.

DIST. 2

RECEIVED

Our injection pressure on the Poker Lake #43 is in excess of the maximum allowed by NMOCD Administrative Order SWD-567 (maximum - 880 psi; actual 1150 psi). The injection pressure is higher than expected due to higher reservoir pressures than anticipated plus larger disposal volumes than expected. 计分析 机合理 电磁力电磁

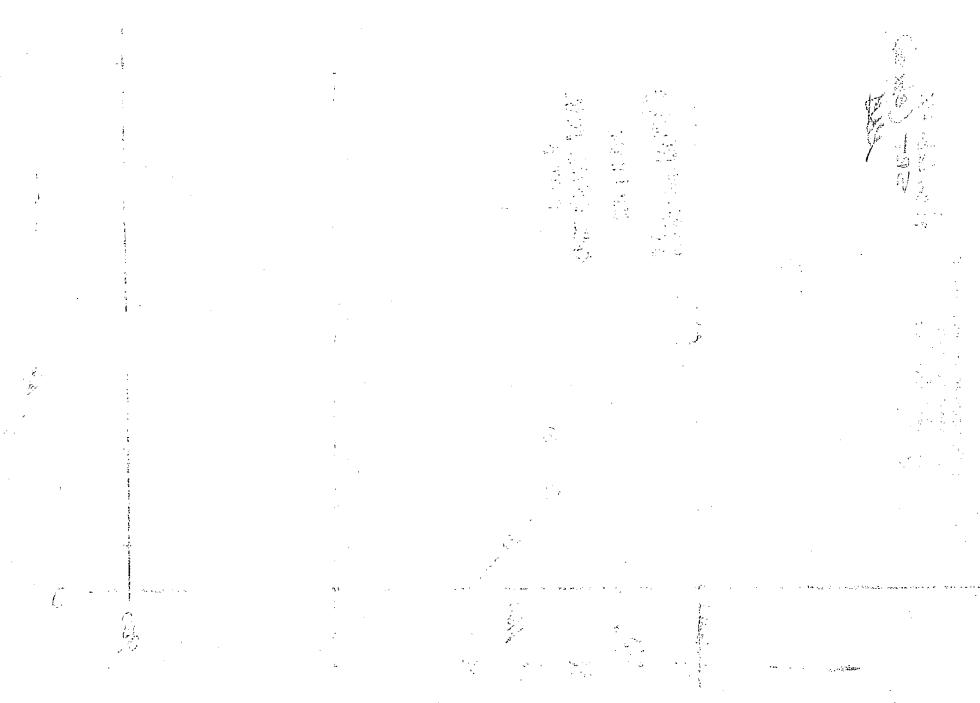
On August 24, 1995, a step rate test was run to determine the surface fracture pressure. A maximum surface pressure of 1190 psi @ 1800 BWPD was reached before fracing the well. (See Attachment).

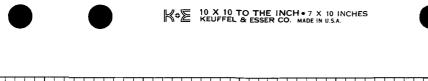
We believe this SRT suggests that injection at 1180 psi surface pressure will not cause fracturing beyond the confines of the Delaware sand completion interval. Therefore, we respectfully request that you authorize a new pressure limitation of 1180 psi for Poker Lake #43.

Sincerely,

John R. Smitherman and a place state is in the Destate Division Production Manager as a process inder Sylichter ind Hanne - 860 ook actual 1 160 milj. The Ayerbon prozenic is auro on the Plater Later Alls will exceed of the modificuit elisated by Waldour

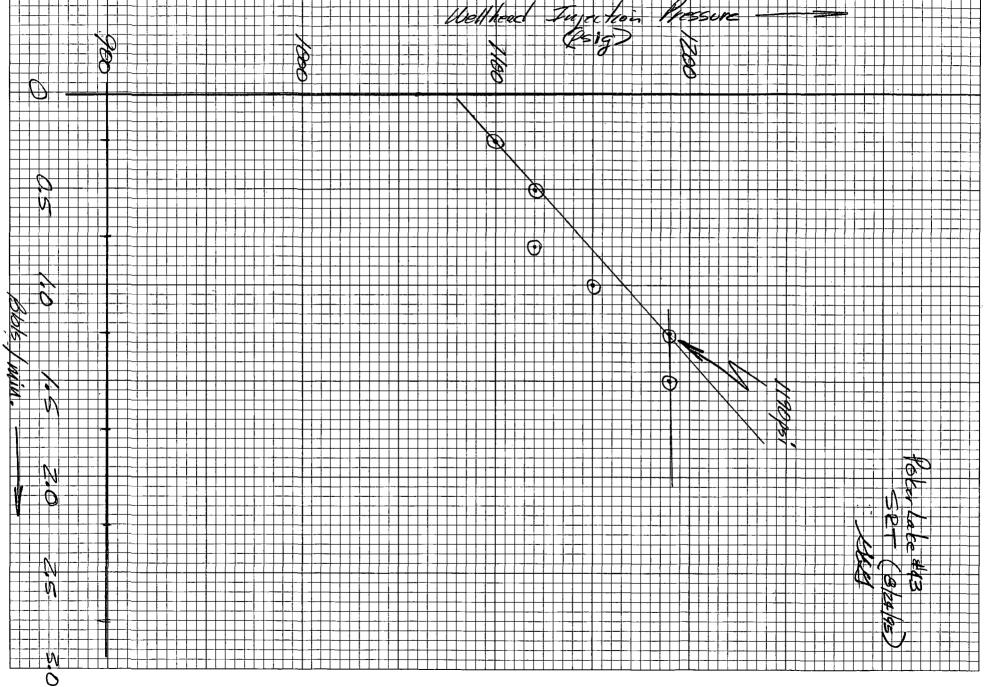
123





46 0700





GIL CONSERVATE . RECEL

BASS ENTERPRISES PRODUCTION CO. 6 DESTA DRIVE, SUITE 3700 P.O. BOX 2760 MIDLAND, TEXAS 79702

# '95 DEC 11 1 18

(915) 683-2277

FAX (915) 687-0329

#### November 18, 1995

RE: POKER LAKE #43 STEP RATE TEST CHARTS FILE: 400-WF: PLU#43.LTR

Mr. Ben Stone New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

Dear Mr. Stone:

Enclosed for your review are the charts recorded while step rate testing Poker Lake #43. We are also enclosing a injection profile log recorded on the Poker Lake #43 which indicates all injection is confined to the approved injection interval 4404' to 4900'.

Based on this data we respectfully request an increase in our allowable injection pressure to 1180 psi.

Sincerely,

John R. Smitherman Division Production Manager

GEG/pgo

