State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
Santa Fe, New Mexico 87505

OIL CONSERVATION DIVISON

February 2, 1995

Greenhill Petroleum Corporation
11490 Westheimer Road, Suite 200
Houston, Texas 77077-6841

Attn: David M. Tilley

RE: Injection Pressure Increase
Lovington San Andres Unit Waterflood Project
Lea County, New Mexico

Dear Mr. Tilley:

Reference is made to your request dated December 27, 1994, to increase the surface injection pressure on seven wells within the Lovington San Andres Unit Waterflood Project. This request is based on step rate tests conducted on these wells December 12 - 15, 1994. The results of the tests have been reviewed by my staff and we feel an increase in injection pressure on six of these wells is justified at this time.

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

Well and Location	Maximum Injection Surface Pressure
LSAU No. 8 Unit F, Section 31, Township 16 South, Range 37 East	1970 PSIG
LSAU No. 9 Unit H, Section 36, Township 16 South, Range 36 East	1930 PSIG
LSAU No. 10 Unit G, Section 36, Township 16 South, Range 36 East	2000 PSIG
LSAU No. 11 Unit F, Section 36, Township 16 South, Range 36 East	1740 PSIG

VILLAGRA BUILDING - 408 Galisteo
Forestry and Resources Conservation Division
P.O. Box 1948 87504-1948
827-5830
Park and Recreation Division
P.O. Box 1147 87504-1147
827-7465

2040 South Pacheco
Office of the Secretary
827-5950
Administrative Services
827-5925
Energy Conservation & Management
827-5900
Mining and Minerals
827-5970
Oil Conservation

Well and Location	Maximum Injection Surface Pressure
LSAU No. 15 Unit K, Section 31, Township 16 South, Range 37 East	1740 PSIG
LSAU No. 58 Unit E, Section 31, Township 16 South, Range 37 East	1940 PSIG
wells located in Lea County, New Mexico.	

It was noted that the step rate test conducted on the LSAU No. 21 was initiated at a surface pressure of 1641 psi. This pressure is considerably higher than the current maximum injection pressure authorized for this well (914 psi). The Division generally requires that the starting pressure for these tests be lower than the currently authorized pressure. Please re-run this test according to this procedure and re-submit for approval.

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. LeMay
Director

WJL/DC/kv

cc: Oil Conservation Division - Hobbs
R. Brown
D. Catanach
File: WFX-615
WFX-632
Case File 10154