## ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT



OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 927-5800

April 14, 1992

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

Attention: Michael J. Newport

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

Dear Mr. Newport:

Reference is made to your request dated March 27, 1992, to increase the surface injection pressure on 22 wells in the Lovington Paddock Unit Waterflood Project. This request is based on a step rate test conducted on these wells between the dates February 22 and March 11, 1992. The results of the test have been reviewed by my staff and we feel an increase in injection pressure on 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
LPU No. 5 660' FSL & 1980' FWL "N" 25-16S-36E	1600 PSIG
LPU No. 7 330' FSL & 330' FEL "P" 25-16S-36E	2000 PSIG

Greenhill Petroleum Corporation April 15, 1992 Page 2

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
LPU No. 12 781' FNL & 660' FWL "D" 31-16S-37E	2000 PSIG
LPU No. 14 940' FNL & 1741' FEL "B" 36-16S-36E	1800 PSIG
LPU No. 16 660' FNL & 660' FWL "D" 36-16S-36E	2000 PSIG
LPU No. 18 2310' FNL & 330' FEL "H" 35-16S-36E	2000 PSIG
LPU No. 20 1830' FNL & 2130' FWL "F" 36-16S-36E	2000 PSIG
LPU No. 22 2080' FNL & 660' FEL "H' 36-16S-36E	2000 PSIG
LPU No. 24 2310' FNL & 1968' FWL "F" 31-16S-37E	2000 PSIG
LPU No. 28 2108' FSL & 624' FWL "L" 31-16S-37E	2000 PSIG
LPU No. 31 1650' FSL & 890' FWL "L" 36-16S-36E	1800 PSIG

Greenhill Petroleum Corporation April 15, 1992 Page 3

WELL AND LOCATION	MAXIMUM INJECTION SURFACE PRESSURE
LPU No. 37 330' FSL & 2290' FWL "N" 31-16S-37E	2000 PSIG
LPU No. 39 810' FSL & 660' FEL "P" 36-16S-36E	2000 PSIG
LPU No. 41 810' FSL & 2130' FWL "N" 36-16S-36E	2000 PSIG
LPU No. 46 660' FNL & 990' FWL "D" 1-17S-36E	2000 PSIG
LPU No. 48 660' FNL & 2080' FEL "B" 1-17S-36E	2000 PSIG
LPU No. 50 660' FNL & 902' FWL "D" 6-17S-37E	2000 PSIG
LPU No. 52 510' FNL & 2190' FEL "B" 6-17S-37E	2000 PSIG
LPU No. 56 1650' FNL & 1733' FWL "F" 6-17S-37E	2000 PSIG
LPU No. 58 1980' FNL & 560' FEL "H" 1-17S-36E	2000 PSIG

Greenhill Petroleum Corporation April 15, 1992 Page 4

## WELL AND LOCATION

## MAXIMUM INJECTION SURFACE PRESSURE

LPU No. 60 1980' FNL & 2310' FWL "F" 1-17S-36E

LPU No. 71 660' FSL & 660' FEL "P" 1-17S-36E 2000 PSIG

1790 PSIG

All in Lea 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. LeMay Director WJL/DC/jc

cc: Oil Conservation Division - Hobbs File: WFX-605 WFX-607 D. Catanach R. Brown