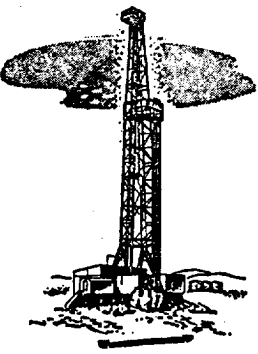


L & M DRILLING, INC. — Oil Well Drilling Contractors

P. O. BOX 470 / ARTESIA, NEW MEXICO 88210



October 15, 1993

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762


RE: Leah Federal Well No. 1
1980' FSL & 330' FEL
Sec. 31, T23S, R31E
Eddy County, New Mexico

Gentlemen:

The following is a Deviation Survey for the above captioned well.

DEPTH	DEVIATION
495'	1 1/2°
705'	1 1/2°
1196'	1/2°
1698'	3/4°
2247'	1/2°
2720'	2°
3240'	2°
3795'	2°
4110'	2°
4622'	1 3/4°
5006'	1 1/2°
5496'	3/4°
5999'	1°
6515'	1°
7043'	1°
7541'	1°
8070'	1 1/2°

Very truly yours,


C. E. LaRue
Vice President

STATE OF NEW MEXICO §
COUNTY OF EDDY §

The foregoing was acknowledged before me this 15th day of October, 1993.


REGINA L. GARNER
NOTARY PUBLIC

