

Western Natural Gas Company
211 $\frac{1}{2}$ West Main
Farmington, New Mexico
December 18, 1959

New Mexico Oil Conservation Commission
1000 Rio Brazos Road
Aztec, New Mexico

Attn: Mr. Emery Arnold

Dear Mr Arnold:

Enclosed please find geological horizon tops as determined from ES Induction log on the Keeling-Federal #1 well. The below listed tops were not included on USGS 9-330 forms that have been submitted.

Kirtland	1348
Pictured Cliffs	1952
Lewis shale	2052
Mesa Verde	2803
Cliff House	3553
Point Lookout	4320
Mancos	4500
Gallup (Niobrara)	5434
Gallup (Skelly)	5552
Gallup (Sullivan)	5612
Gallup (Nelson)	5710
Sanastee	5942
Carlisle	6044
Greenhorn	6272
Graneros shale	6324
Graneros sandstone	6344
1st Dakota	6428
2nd Dakota	6508
3rd Dakota	6576
4th Dakota	6634
Estimated Morrison	6690

Best regards,

Calvin

Calvin M. Rayes

20-25-8
CMR/ab