

# Ray Westall

July 14, 1981

## APPLICATION FOR DRILLING

Ray Westall  
ARCO #1 & #2  
Arco #1 Location 660 FSL 1980 FEL, Sec 1 T17S R31E  
Arco #2 Location 1980 FNL 1980 FEL, Sec 1 T17S R31E  
Eddy County, New Mexico

In conjunction with the form 9-331C, application for permit to drill subject wells, Ray Westall submits the following ten items of pertinent information in accordance with USGS requirements:

1. The Geological surface formation is quaternary.
2. The estimated tops of geologic markers are as follows:

Yates	2050
7 Rivers	2500
Queen	3050
Grayburg	3500
San Andres	3850
3. The estimated depths at which anticipated water, oil and gas formations are expected to be encountered:

Water	180
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Oil and gas zones listed above in #2.
4. Proposed Casing Program: See for 9-331C
5. Pressure Control Equipment: See for 9-331C and Exhibit E
6. Mud Program: Mud up 100 to 150' before TD and circulate 2 hours after TD and pull out laying down and run casing.
7. Auxiliary Equipment: N/A
8. Testing, Logging and Coring Program: Logging casing Compensated Neutron and Gamma Ray, Collar Log, Cement Bond Log.
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated Starting Date: As soon as possible.