

Central Division-Permian Basin District 7200 I-40 West Amarillo, Texas 79106 806/359-2000 TWX 910-898-4111

August 11, 1983

Re: Geologic Exhibits

Mr. Richard L. Stamets Technical Support Chief Oil Conservation Division Energy and Minerals Department State of New Mexico P. O. Box 2088 Santa Fe, New Mexico 87501

Dear Sir:

Santa Fe Energy, Exploration Department, is proposing an unorthodox location (990' FEL, 990' FNL) in Section 28, T22S, R27E, Eddy County, New Mexico. Reasons for this location are as follows:

- Isopaching of clean Morrow Sands indicates the trend of sand reservoirs trends in a northwestsoutheast direction.
- (2) A cumulative gas production map of the Morrow sands indicates best production is oriented in a northwestsoutheast direction. This information supports the Morrow sand isopach (Map 1).
- (3) The Morris Antweil #1 Randall (1980' FNL and 1980' FSL) Section 21, T22S, R27E is a poor well. It was plugged in 1976 after producing 49,612,000 CFG. Santa Fe Energy's proposed location would be 3700' southeast and 3000' south of the productive Santa Fe #1 Walker.
- (4) The Santa Fe #1 Walker (990' FEL, 1980' FSL Section 21) encountered an excellent Morrow reservoir. The well potentialed for 8.4 million cubic feet of gas per day, CAOF).

The location Santa Fe Energy Company has proposed is the most logical one based upon knowledge of sand trends, good reservoir conditions, and production data in extending gas production to the southeast in the South Carlsbad Field.

Yours truly,

Bìll A. Schaefer, Jr. Exploration Manager