## GEOLOGICAL DATA (Section VIII, Form C-108)

Disposal is proposed by injection into the San Andres Formation in the open hole interval from 4280 feet to approximately 4297 feet in the Gulf Oil Corporation Maud Saunders Well No. 4, located 1815 feet from the South line and 660 feet from the West line of Section 34, Township 14 South, Range 33 East, NMPM, Lea County, New Mexico.

The San Andres formation in this well, as well as throughout the general area, is a limestone-dolomite section of Middle Permian Age underlying the Grayburg formation and overlying the Glorieta formation. The top of the San Andres formation in the proposed disposal well occurs at 4278 feet, while the base of the formation is found at 5574 feet, for an overall thickness of some 1296 feet. The San Andres formation is productive of oil and gas throughout many areas of Southeast New Mexico, and although porosity and permeability in the subject well are good, the formation is mot productive of oil or gas within a two-mile radius of the proposed injection well.

Fresh water may be found in the Ogallala formation in the vicinity of the proposed injection well. This ground water is usually found at depths of less than 300 feet and all oil wells drilled in the area have surface casing set and cemented to a cepth of at least 295 feet, and in most cases deeper. In addition the Santa Rosa formation in the vicinity of the proposed injection well contains a highly mineralized brackish water which is unfit for domestic, stock, or irrigation use. This water usually occurs at depths of from 900 feet to 1500 feet in the subject area.

There are no other known fresh water sands overlying the proposed disposal zone, and there are no known fresh water sands underlying the disposal zone anywhere in the vicinity.