

PROPOSED TOMCAT FEDERAL UNIT

Sections: E $\frac{1}{2}$ 8, 15, 16, E $\frac{1}{2}$ 17, E $\frac{1}{2}$ 20, 21, 22, N $\frac{1}{2}$ 28
T23S, R32E
Lea County, New Mexico

SANTA FE ENERGY RESOURCES, INC.
Tomcat Unit #1
NW $\frac{1}{4}$ Section 21, T23S, R32E

Geology:

The proposed unit covers six sections that are located in Southwest Lea County, New Mexico. The objective formation is the Atoka Limestone Bank at a depth of approximately 14,300' with the base of the Atoka at approximately 14,700'. Total depth at the proposed location is 15,950' which is deep enough to test the secondary objective Morrow Formation.

The Atoka Limestone Bank is a Phylloid Algal Bank Complex deposited on the Atoka Shelf. Productive porosity is mostly secondary in the form of vugs and micro-fractures. The porosity and permeability are enhanced by structural nosing. The productive area generally encloses 50' or more of net clean carbonate (Isopach Map) in conjunction with the proximity of structural nose (Structure Map). Cross-section A-A' ties the proposed unit to a commercial well in the Sand Dunes field located approximately five miles to the west. The proposed unit boundary is defined by the 50' Isopach Contour with thickness increasing toward the center of the unit.

In conclusion, the location proposed in Section 21, T-23-S, R-32-E is considered to be exploratory in nature. However, by using nearby analogs and subsurface control, it can be determined that the objective formation is a viable and commercial objective for the proposed unit, and if successful, the test will prove-up substantial development drilling throughout the life of the unit.

**NEW MEXICO
OIL CONSERVATION DIVISION**

EXHIBIT 7

CASE NO. 11460

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