## **HUMBLE OIL & REFINING COMPANY**

EXPLORATION DEPARTMENT
P. O. BOX 1287

ROSWELL, NEW MEXICO

March 1, 1956

OIL CONSTRUCTION GOATTICSION SANTA FE, NEW MEXICO EXHIBIT NO.

New Mexico Oil Conservation Commission Commissioner of Public Lands Santa Fe, New Mexico

Gentlemen:

Humble Oil & Refining Company proposes to form a wildcat unit to be known as the "South Saunders Unit" in Township 16 South, Ranges 33 and 34 East, Lea County, New Mexico. "Exhibit "B" shows the location of the proposed unit and its relationship to nearby fields and deep wildcats. This unit will cover a geologic structure delineated by reflection seismograph and subsurface geologic mapping. This structure, as mapped on the top of the Devonian by seismograph (Exhibit "C"), has a minimum of 150 feet of closure. The Shell No. 1 Williams Unit, a recently abandoned wildcat on a State of New Mexico Unit, provided additional structural evidence which supports the interpretation of a Devonian anticline under the proposed South Saunders Unit.

It is the intention of Humble Oil & Refining Company, as Unit Operator, to drill a wildcat well to be located near the center of Lot 9, Section 1, Township 16 South, Range 33 East, of sufficient depth to test the Devonian formation. This well will be approximately 14,000 feet deep and should encounter the following formations at these approximate depths: San Andres, 4290 feet; Abo, 7721 feet; Wolfcamp, 9380 feet; Mississippian, 12,840 feet; and the Devonian at 13,640 feet.

All minerals within the unit area are owned by the State of New Mexico, and exhibit "A" shows the shape and size of the proposed "South Saunders Unit" and the lease holders within it. This unit will be five miles east of the Anderson Ranch Wolfcamp and Devonian field, and four miles south of the Saunders Wolfcamp field. The nearest deep well is the Shell No. 1 Williams Unit, two and one-half miles southeast of the proposed location. This well was drilled on a 1280-acre State of New Mexico Unit, and was abandoned late in 1955 at a total depth of 14,099 feet in Devonian dolomite. Other nearby State Units have been the Texas Pacific Coal and Oil "Lane Mill," and Continental's "Anderson Ranch" and "Williams Ranch."

The best chances for production in the proposed wildcat are believed to be from the Permian Wolfcamp, the Pennsylvanian Bend and the Devonian (Hunton) formations. Frequently, Wolfcamp production in a field will ultimately be of greater areal extent than Devonian production, and

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it would be reasonable to assume that the same condition might ultimately exist in the South Saunders Unit area.

The approval of the formation of the requested unit will be in the interest of conservation and of scientific and orderly development of the oil field should one be found on this structure.

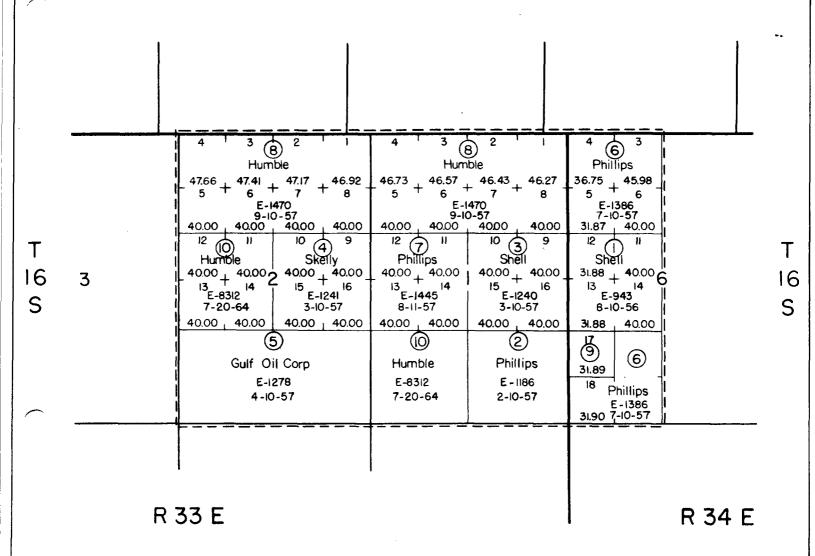
Respectfully submitted,

A. A. Phillips

Geologist

AAP:bc

Attachments



## SOUTH SAUNDERS UNIT AREA LEA COUNTY, NEW MEXICO

LEGEND

Unit Outline
Tract Numbers
Total 2,417.31 Acres
All owned by the
State of New Mexico

