

June 19, 1958
GEOLOGICAL MEMORANDUM

Concerning

Proposed Martin Ranch Unit
Townships 3 and 4-S, Ranges 22 and 23-E
Chaves and DeBaca Counties, New Mexico

BORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Pan Am EXHIBIT NO. 5
CASE NO. 1650

The proposed Martin Ranch Unit located approximately 45 miles northeast of the city of Roswell is outlined in red on "Exhibit No. 1", embracing parts of T-3-S, R-22-E, T-3-S, R-23-E, in DeBaca County, New Mexico; parts of T-4-S, R-22-E, and T-4-S, R-23-E, Chaves County, New Mexico. A high percentage of lands within this outline are Federal and hence we believe it would be in the public interest to join them in a unit agreement before drilling a test well for oil or gas. It is recommended that the unitized substances include all horizons from Surface to Basement Complex.

The attached structural contour map on Top of Basement Complex, "Exhibit No. 1", which is based on aeromagnetic depth determinations and well data, shows an east-west trending basement ridge with the proposed Unit located on the south flank thereof. Regionally, the area is located on the extreme northwestern flank of the Northwestern Shelf of the Permian Basin. The basement ridge is apparently a peninsula of the ancestral Pedernal Land Mass.

This area is thought favorable for the occurrence of stratigraphic type traps in Pennsylvanian sands analogous to the gas and distillate reservoir of the Newmill Pennsylvanian Pool located approximately 14 miles southeast. Cross-section A-A', "Exhibit No. 2", shows stratigraphic correlations between the Newmill Pool and the recently drilled Eugene Talbert No. 1 Andree, traversing the proposed unit in a southeasterly direction.

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The following is a tabulation of the geologic formations anticipated in the area as interpolated from "Exhibit No. 2":

<u>Age</u>	<u>Formation</u>	<u>Approximate Depth</u>
Permian	Whitehorse Group	Surface
	San Andres	100'
	Glorieta	800'
	Yeso	1100'
	Drinkard	2500'
	Abo	3000'
	Wolfcamp	3600'
Pennsylvanian	Series Undifferentiated	4300'
Pre-Cambrian	Basement Complex	5500'

Possible pay zones include the San Andres, Wolfcamp, and Pennsylvanian. A test well is recommended at a location in SE/4 SE/4 Section 24, T-3-S, R-22-E. This test should be drilled to Basement Complex which is estimated at a depth of approximately 5500'.

Center of the proposed Unit is about 13 miles northeast of El Paso Natural Gas Company's 30 inch San Juan Loop. This will provide a market outlet as soon as sufficient reserves are proven.

It is requested that the information contained herein, and the Exhibits attached hereto, be kept in strict confidence.

PAN AMERICAN PETROLEUM CORPORATION

By W. T. Smith
Wm. T. Smith, Division Geologist

DOCKET: EXAMINER HEARING APRIL 22, 1959

Oil Conservation Commission, Mabry Hall, State Capitol, 9 a.m., Santa Fe

The following cases will be heard before DANIEL S. NUTTER, Examiner:

- CASE 728: Application of Hamilton Dome Oil Company, Ltd., for an exception to Order R-586-E. Applicant, in the above-styled cause, seeks an order excepting its Westates Carlson Federal "A" Well No. 1 located in the NW/4 SE/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico, from the requirement in Order R-586-E that wells not within the defined vertical limits of the Justis Gas Pool, as established in said order, be plugged back so as to be open only within the said vertical limits.
- CASE 1641: Application of W. R. Weaver for the promulgation of special rules and regulations governing the Angels Peak-Gallup Oil Pool. Applicant, in the above-styled cause, seeks an order promulgating special rules and regulations governing the drilling, spacing, and production of oil and gas wells in the Angels Peak-Gallup Oil Pool in San Juan County, New Mexico.
- CASE 1642: Application of Delhi-Taylor Oil Corporation for an amendment to Orders R-60, R-1169, and R-1170. Applicant, in the above-styled cause, seeks an order amending Orders R-60, R-1169, and R-1170 to change the dedicated acreage in three non-standard gas proration units in Sections 30 and 31, Township 29 North, Range 8 West, San Juan County, New Mexico, based on a resurvey; two of said units are in the Aztec-Pictured Cliffs Pool and one is in the Blanco Mesaverde Pool.
- CASE 1643: Application of El Paso Natural Gas Company for an unorthodox oil well location. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox oil well location in the Angels Peak-Gallup Oil Pool for its Huerfano Unit Well No. 107 located 1460 feet from the North line and 1180 feet from the West line of Section 35, Township 27 North, Range 10 West, San Juan County, New Mexico.
- CASE 1644: Application of J. E. Bedingfield for an exception to Rule 104 (c) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an exception to Rule 104 (c) so that he may re-enter a well located 1980 feet from the South and East lines of Section 32, Township 17 South, Range 28 East, Eddy County, New Mexico, said well being located closer than 660 feet to a producing well.
- CASE 1645: Application of Sinclair Oil & Gas Company for permission to commingle the production from three separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Monument-McKee Gas Pool, the Eunice-Monument Pool, and the Monument-Blinbry Pool on its J. R. Phillips "A" Lease consisting of the SW/4 of Section 31, Township 19 South, Range 37 East, Lea County, New Mexico.

- CASE 1646: Application of Amerada Petroleum Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimberley Well No. 9 located 1650 feet from the North line and 990 feet from the West line of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry formation adjacent to the Justis-Blinebry Oil Pool and the production of oil from the Justis-Drinkard Pool through parallel strings of 2-3/8 inch tubing.
- CASE 1647: Application of Olsen Oils, Inc., for a non-standard gas proration unit and an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order establishing an 80-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the W/2 NW/4 of Section 28, Township 26 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to applicant's Gregory "B" Well No. 1 located 2310 feet from the North line and 990 feet from the West line of said Section 28. Applicant further seeks approval for the unorthodox location of said gas well.
- CASE 1648: Application of W. R. Weaver for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Angels Peak-Dakota Gas Pool and the Angels Peak-Gallup Oil Pool on its McAdams Lease comprising Section 34, Township 27 North, Range 10 West, San Juan County, New Mexico.
- CASE 1649: Application of Amerada Petroleum Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its L. W. Ward Well No. 2 located 1983 feet from the South line and 520 feet from the East line of Section 11, Township 13 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from an undesignated Mississippian pool and the production of oil from the Bronco-Devonian Pool through parallel strings of 2-1/16 inch tubing.
- CASE 1650: Application of Pan American Petroleum Corporation for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its Martin Ranch Unit Agreement embracing approximately 35,193 acres of federal, state, and patented acreage in Townships 3 and 4 South, Ranges 22 and 23 East, Chaves and DeBaca Counties, New Mexico.