

GEOLOGICAL REPORT
OF
PROPOSED POWER, DEEP UNIT
EDDY COUNTY, NEW MEXICO

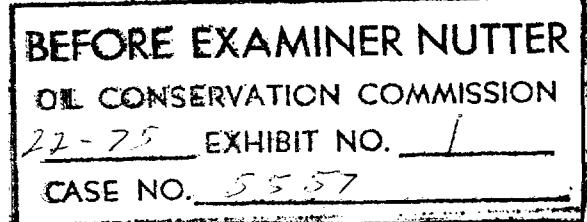


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GEOLOGICAL REPORT

Proposed Power, Deep Unit

The purpose of this report is to present the geological reasons for forming a nine section Federal unit to drill a 12,000' Morrow wildcat in Section 6, T-18-S, R-31-E, Eddy County, New Mexico.

The proposed Power, Deep unit is located 28 miles northeast of Carlsbad, New Mexico, in northeast Eddy County, and contains all of Section 36, T-17-S, R-30-E, all of Sections 31 and 32, T-17-S, R-31-E, all of Sections 1 and 12, T-18-S, R-30-E and all of Sections 5, 6, 7 and 8, T-18-S, R-31-E. The proposed unit will not include shallow rights above the depth of 4550' defined as the base of the San Andres in the Odessa Natural Gasoline #1 El Paso - State well located 660' FNL and 660' FEL of Section 36, T-17-S, R-30-E, Eddy County, New Mexico.

The proposed unit is situated on the northern edge of the Delaware Basin. The proposed test well will penetrate the entire Pennsylvanian and younger sediments and is projected to a total depth of 12,000' in the Mississippian Chester formation.

The primary objective is Lower Pennsylvanian Morrow sands, with secondary potential in Wolfcamp, Strawn and Atoka intervals. The structural trend shown on the map intersects regional Morrow sand depositional trends and forms the basis of the prospect. The Morrow sand has produced within the proposed unit area in the NE/4 of Section 36, T-17-S, R-30-E, but the well is now abandoned. This well also tested 15' of free oil in the Wolfcamp indicating shallower potential in the proposed unit area.

Immediately north of the proposed unit, the Atoka sand produced over 12,000 barrels of oil and is now abandoned. This well is located in the SW/4 of Section 30, T-17-S, R-31-E. The Section 30 well also tested the Morrow sand, flowing 150 MCFGPD, indicating a relatively impermeable updip Morrow section. The presence of the impermeable Morrow sand updip is also indicated by a well in Section 29, T-17-S, R-31-E which did not test the Morrow (indicating no show) and logs show the sands to be low porosity.

The impermeable Morrow indicated just north of the proposed unit separates the Morrow production in Cedar Lake and Fren fields to the north and northeast from the potential production within the proposed unit.

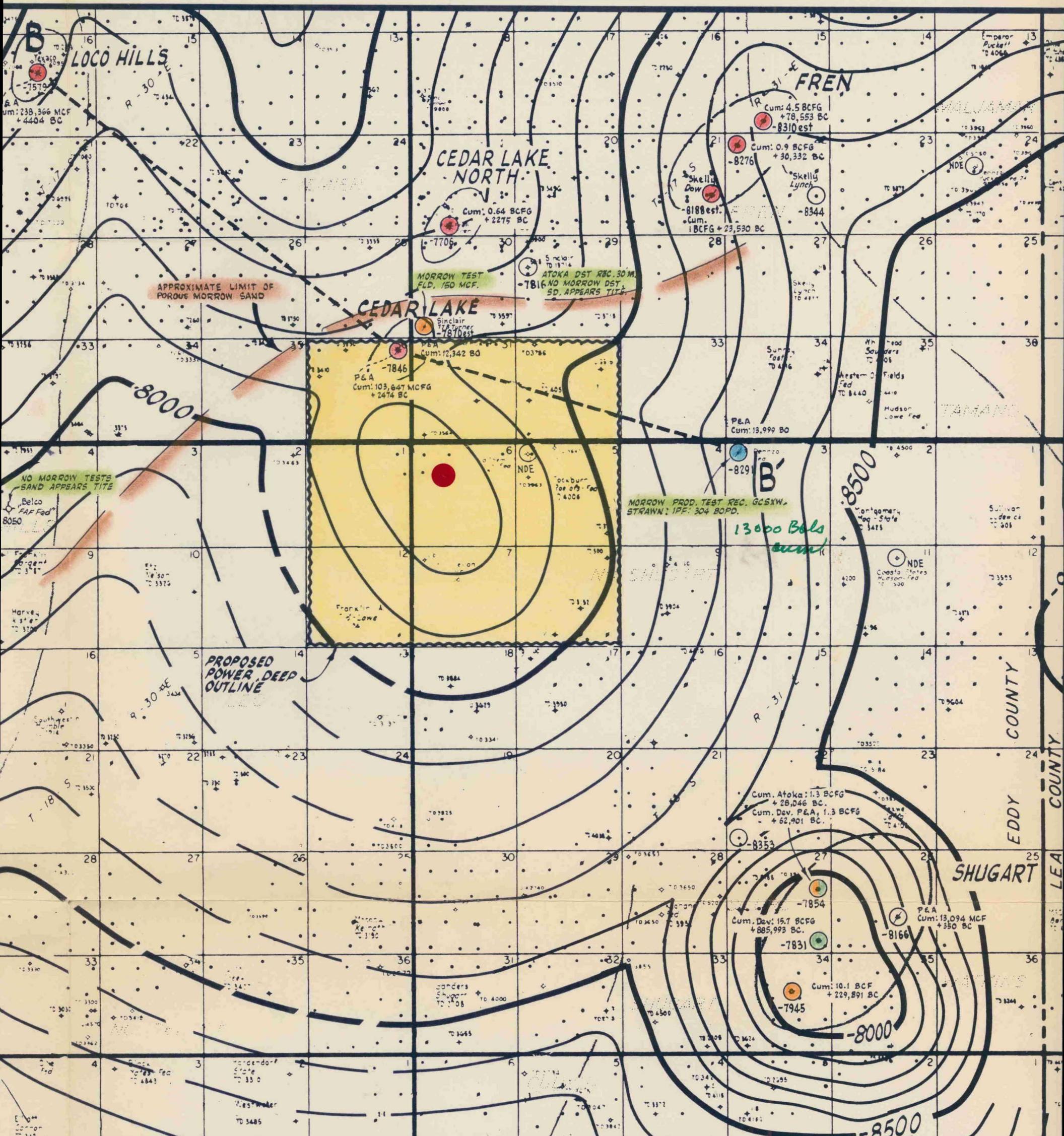
Downdip and east of the proposed unit, a well in Section 3, T-18-S, R-31-E, tested a thick (50') well developed Morrow sand and recovered gas cut salt water. This well produced nearly 14,000 barrels of oil from Strawn Carbonates and had oil and gas shows in three separate tests in the Wolfcamp as shown on Crossection B-B'.

Southeast of the proposed unit and along the same structural trend, the Shugart field produces from Atoka sands and deeper Siluro-Devonian Carbonates showing additional possibilities in the area.

In summary, the proposed Power Deep Unit will test Morrow sand potential on structure as well as shallower Atoka, Strawn and Wolfcamp possibilities.



Donald L. McClurg



BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
22-75 EXHIBIT NO. 2
CASE NO. _____

~ PRODUCTION CODE ~

- Strawn
- Atoka
- Morrow
- Siluro - Devonian



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POWER, DEEP
Eddy County, New Mexico
T/MISSISSIPPIAN UNCONFORM.

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