TWIN MOUNDS MESAVERDE
(Gas)
T. 29 N., R. 14 W., NMPM
San Juan County, New Mexico

GEOLGY
Regional Setting: Northwestern shelf San Juan Basin
Surface Formations: Cretaceous, Kirtland Shale
Exploration Method Leading to Discovery: Seismic and subsurface geology
Type of Trap: Combination, permeability pinchout across structural nose
Producing Formation: Cretaceous, Point Lookout Sandstone
Gross Thickness and Lithology of Reservoir Rocks: About 15 feet, light brown, medium gray sandstone
Geometry of Reservoir Rock: Northwest trending coastal sandstone
Other Significant Shows: Cretaceous, Pictured Cliffs and Dakota Sandstones (gas)
Oldest Stratigraphic Horizon Penetrated: Jurassic, Morrison Formation

DISCOVERY WELL
Name: Pueblo Development, Inc. No. 1 Russell Federal
Location: SE SW (330' FSL and 2383' FWL) sec. 4, T. 29 N., R. 14 W., NMPM
Elevation (KB): 5,447 feet
Date of Completion: January 27, 1954
Total Depth: 5,760 feet (Jurassic, Morrison Formation)
Production Casing: 7" at 3,436 feet with 75 sacks of cement
Perforations: 3,348 to 3,358 feet with 60 shots
Stimulation: None (natural flow)
Initial Potential: 2,416 MCFGD (3 hour test)
Bottom Hole Pressure: 1,345 psia

DRILLING AND COMPLETION PRACTICES
This was a one-well field and no further development is planned. After the Dakota was determined to be dry, well was plugged back to 3,620 feet and completed in the Point Lookout Sandstone. Well was abandoned in 1955.

RESERVOIR DATA
Productive Area:
Proved (as determined geologically): Approximately 200 acres
Unproved: 0 acres
Approved Spacing: Optional (160 acres)
No. of Producing Wells: 0
No. of Abandoned Wells: 1
No. of Dry Holes: 6, defining the field limits
Average Net Pay: Only productive well had approximately 10 feet of pay
Porosity: 25 percent (core analysis)
Permeability: 6 millidarcies (core analysis)
Water Saturation: 56 percent (core analysis)
Initial Field Pressure: 1,345 psia
Type of Drive: Volumetric with possible partly active water drive
Gas Characteristics and Analysis: H2S nil; Btu 1,153; specific gravity 0.67
Oil Characteristics and Analysis: Not available
Associated Water Characteristics and Analysis: Total chlorides 66,000 ppm, resistivity 0.07 ohm at 120°F
Original Gas, Oil, and Water Contact Datums: Gas-water contact approximately +2,080 feet
Estimated Primary Recovery: 654,884 MCFG
Type of Secondary Recovery: None
Estimated Ultimate Recovery: Same as primary
Present Daily Average Production: Last production in May, 1955
Market Outlets: Gas gatherer was El Paso Natural Gas Co.

REFERENCES
Mesa Petroleum Co., geologic and well files.

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Four Corners Area, Volumes I-II, 1978