PLATE 2
GREAT BASIN REGIONAL TECTONIC MAP

LEGEND

- Dry Hole
- Oil Well
- Dry Hole, Oil Show
- Dry Hole, Gas Show
- Dry Hole, Oil and Gas Show
- Caldearas
- Thrust Fault of Antler Orogeny, Sawteeth on Upper Plate
- Strike-slip Fault
- Metamorphic Core Complexes
- State Boundary
- County Boundary
- Ranges
- Basins

SOURCES
Locations of Oil and Gas Wells obtained from: Arizone Oil and Gas, Nevada Oil and Gas, Utah Oil and Gas, and Idaho Oil and Gas. Information from Nevada Division of Oil, Gas, and Mining.

This Great Basin Tectonic Map Digitized from United States Geologic Survey (USGS) 1:2,500,000 scale maps.

Range and Basin Features digitized from Stewart, 1976, Plate 1-1.

Propagations in Undifferentiated Mesozoic, Zone 11. Coordinates are displayed in meters.

Great Basin regional tectonic map showing major structures that developed prior to Basin and Range extension. These structural anomalies have defined the style of the tectonic features of the region promoting the creation of large basins and domes. See Plate 1.
Neogene-age rocks of Joshua Hole may contain some beds that are potential source rocks in an area northeast of Bare Mountain (Fig. 2, Appendix B). These beds may be buried adequately for hydrocarbon generation in the deepest part of the Crater Flat Basin.

Coles and Cashman (1999) associate an area between zones of opposite structural vergence with Mississippian rocks that have remnant source potential. This area trends through the Neogene-age basin of Crater Flat, but the presence of Mississippian-age source rocks is speculative. Magnetized Elamite Formation that has been identified near Yucca Mountain (Hart and Jader, 1984) is probably incorporated in eastern and southeastern vergent structures associated with the folded Range Thrust Fault.

Location Map

Legend
- Undrilled Location
- Dry Hole
- Dry Hole, Gas Show
- Dry Hole, Oil Show
- Investigation Borehole
- Conodont Sample Location showing CAI value
- U.S. or State Highway
- Seismic Line
- Administrative Boundary

Contraction Belt, arrow points in direction of vergence
Isopach of Cenozoic Rock
contour interval: 1,000 ft
Caldera Boundary
Outcrop of Upper Paleozoic Rocks
Area of Thermal Potential for Oil and Gas

Yucca Mountain area showing tectonic features and conodont alteration index (CAI) distribution for Mississippian-age rocks. The basin of Crater Flat is a potential generation site if Tertiary-age source rocks or Paleozoic-age rocks with remnant potential are present. Most source rocks of Paleozoic age are overmature as indicated by high CAI values.

Plate 4
Yucca Mountain Area
Tectonic Features and Conodont Alteration Index Distribution