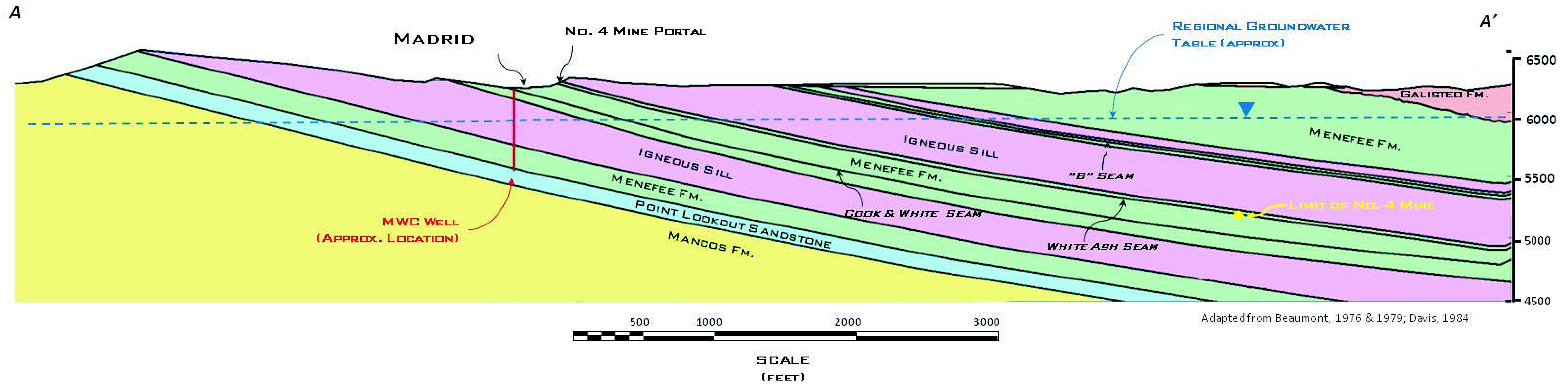
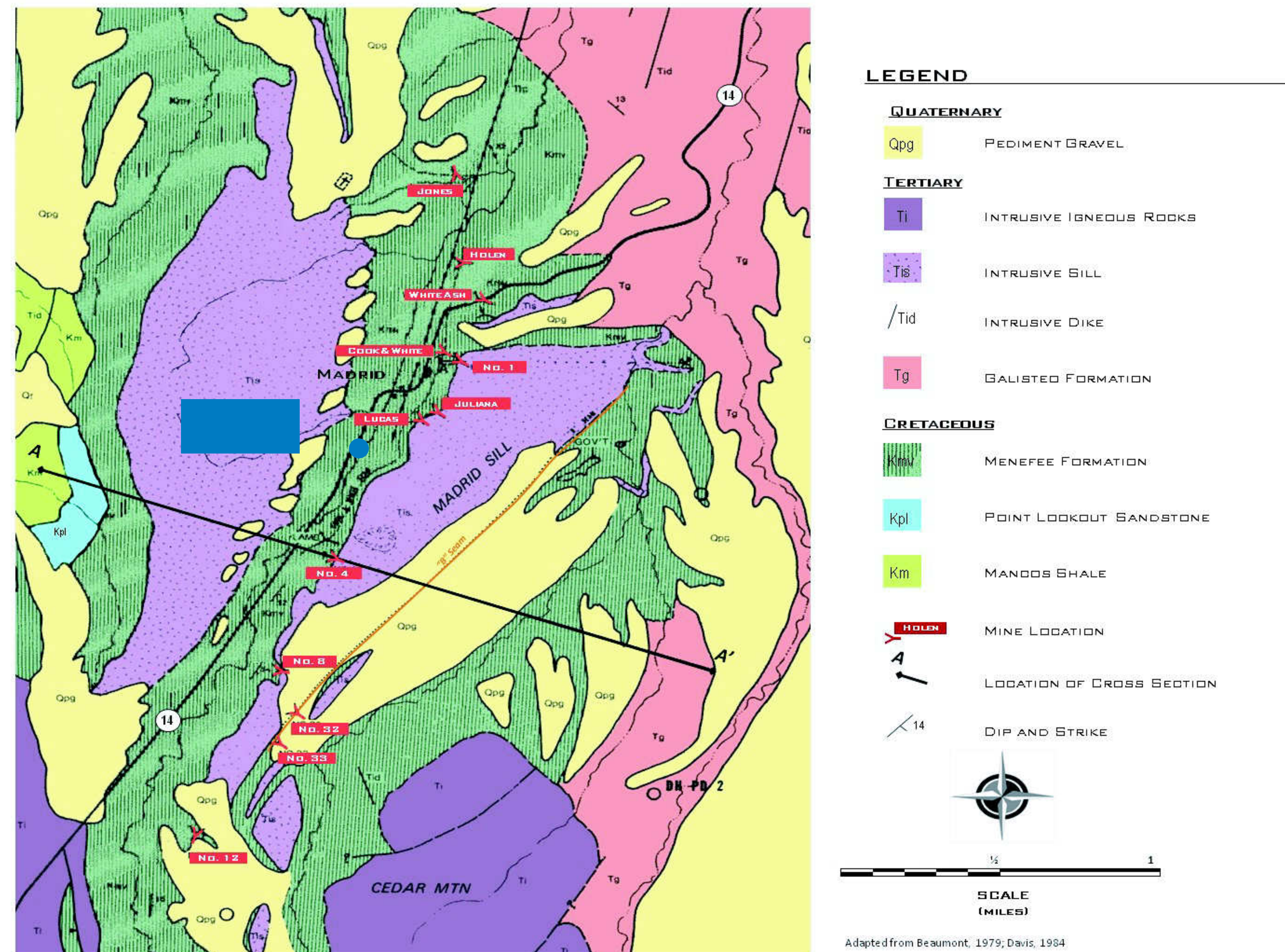


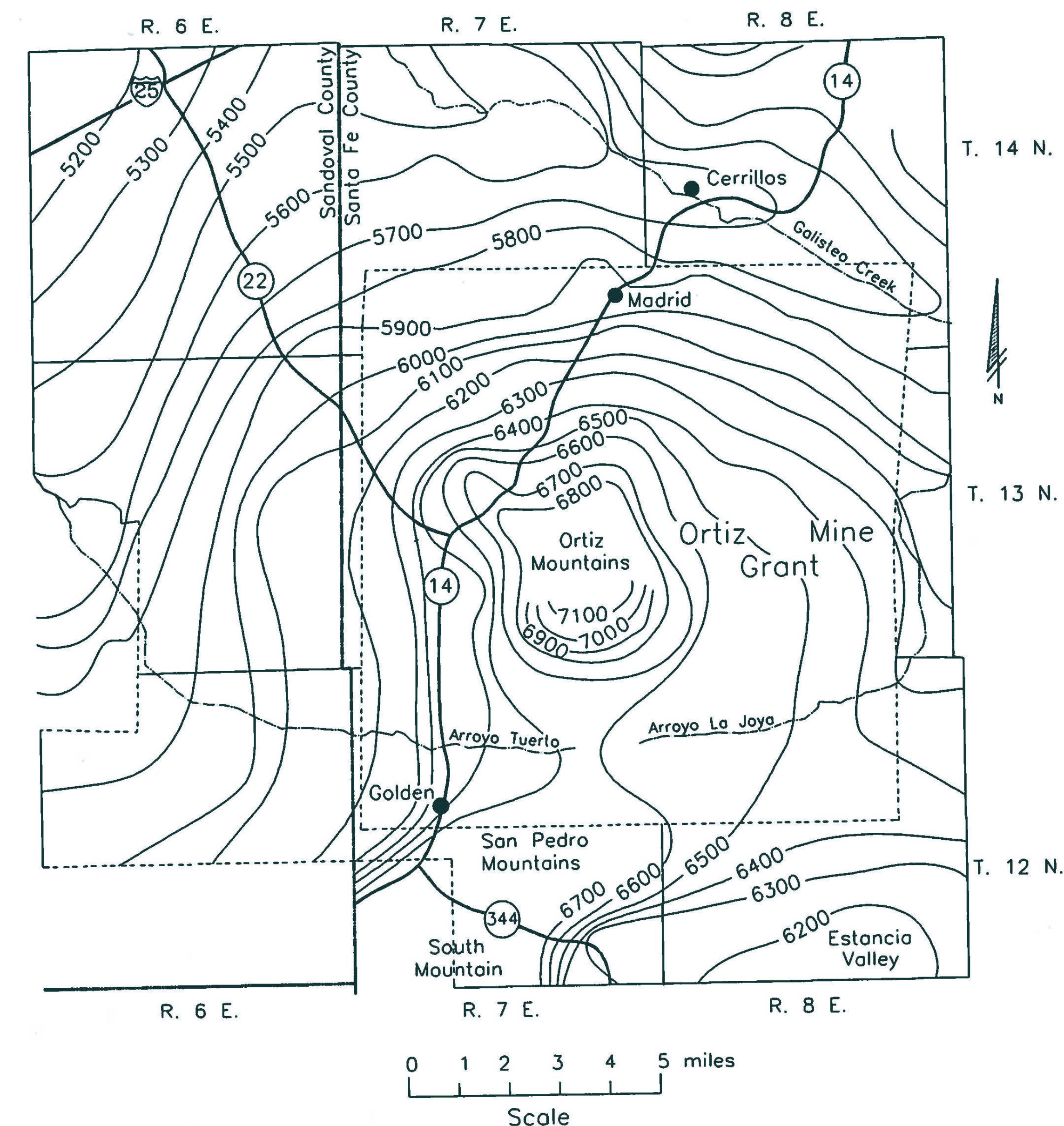
Geological Cross Section



Surface Geology



Regional Groundwater



Findings to Date

Madrid's current well draws primarily from the Menefee Formation which is dominated by dense fine-grained shales and discontinuous sandstones and coal seams and has been intruded by igneous rocks.

The water-bearing potential of the Menefee Formation is considered low.

The carbonaceous Menefee Formation, like other marine shales, would naturally yield poor quality water. No baseline water quality data available.

There are no comprehensive studies that describe hydrogeological conditions in the Madrid area.

No technical studies have specifically examined the relationship between the historic Madrid mining operations and water quantity/quality.

The Point Lookout Sandstone below the Menefee may produce a modest amount of water

Regional groundwater maps indicate that Madrid's water supply well is downgradient of the historic mine workings. The gradient and topography of the local water table has not been mapped.

The historic mine operations dewatered the mines at an average rate of 50,000 gallons per day.



HYDROGEOLOGY

Madrid's Mining Landscape / Madrid, NM / Community Meeting #1 5.13.2010

