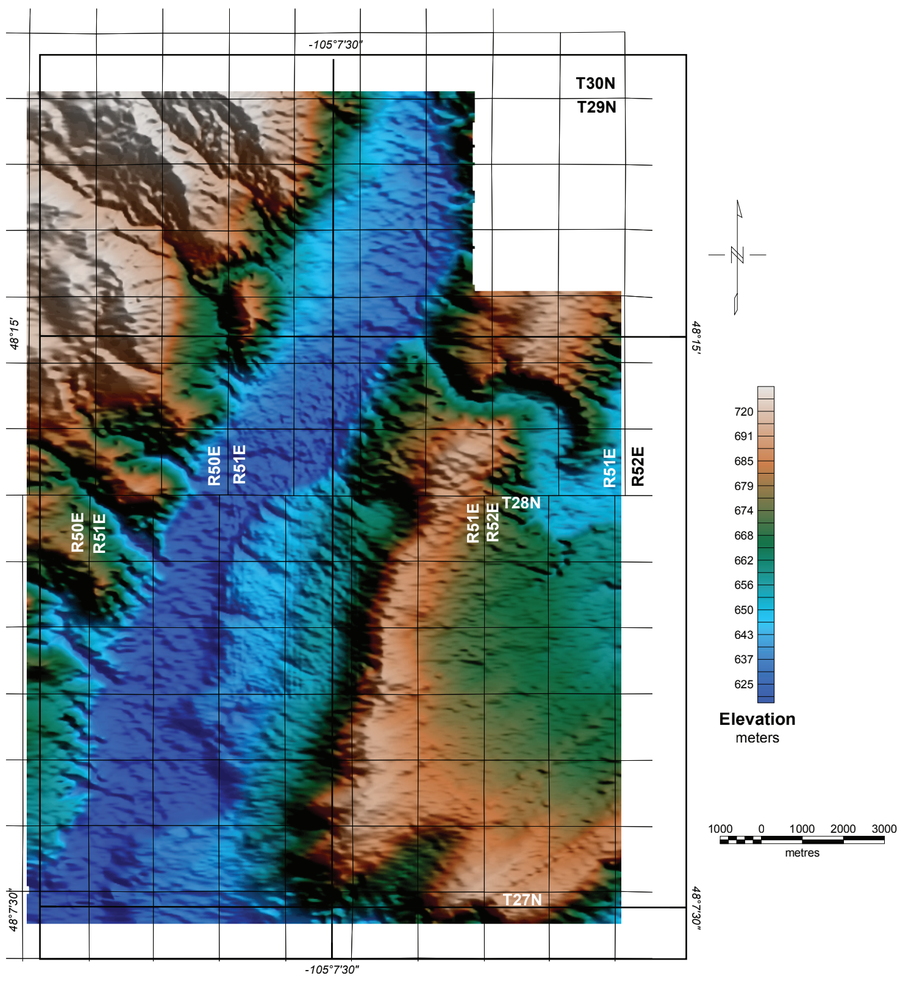
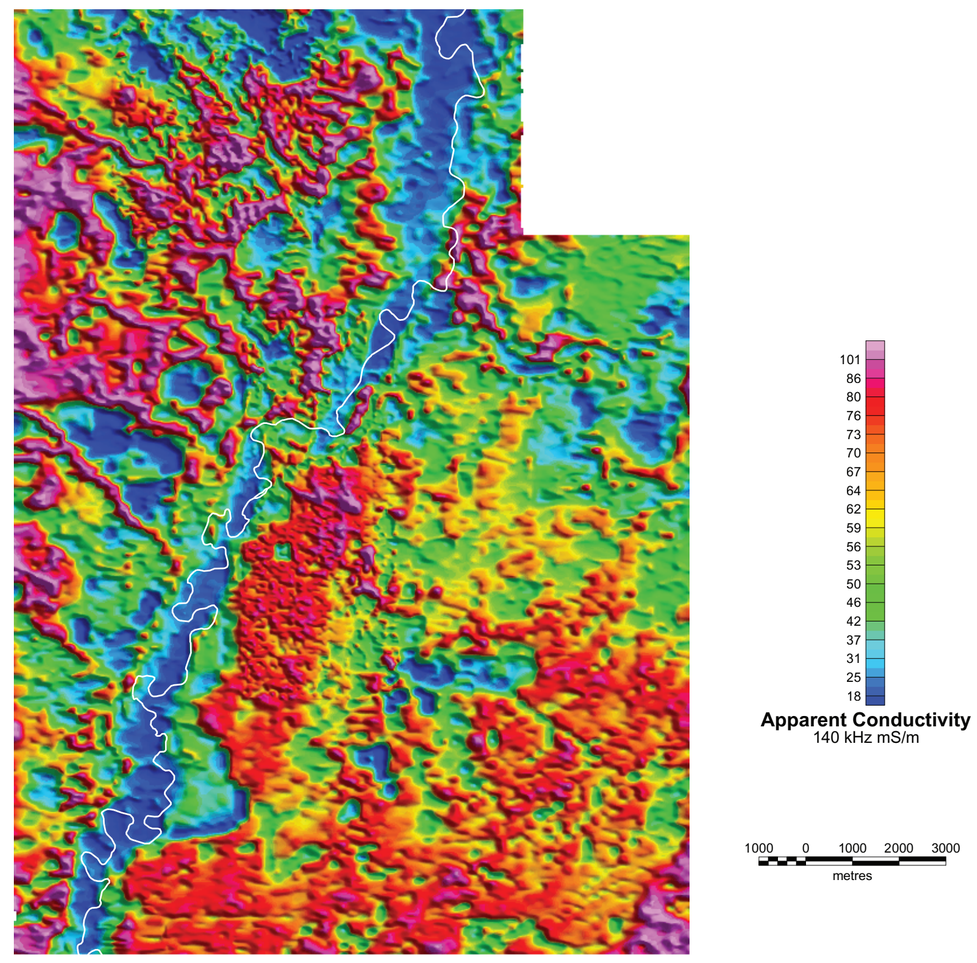
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

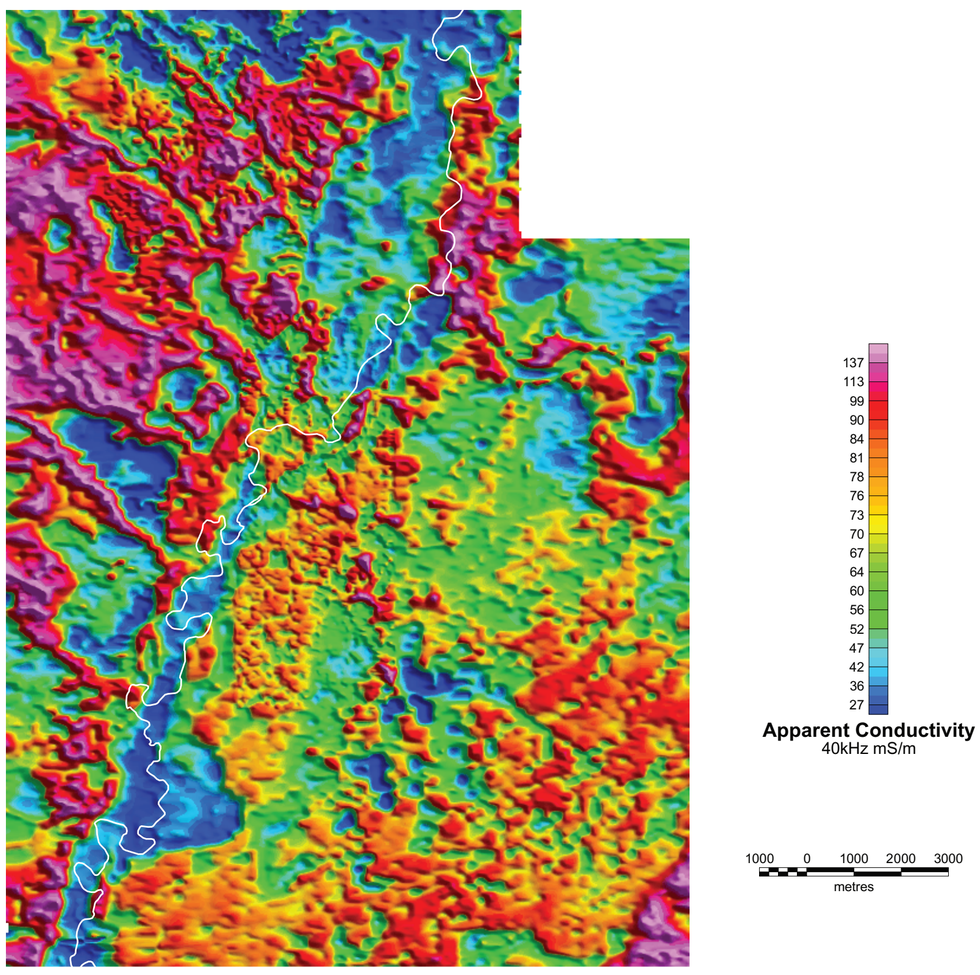
USGS OPEN FILE REPORT 06-1216
Plate 1



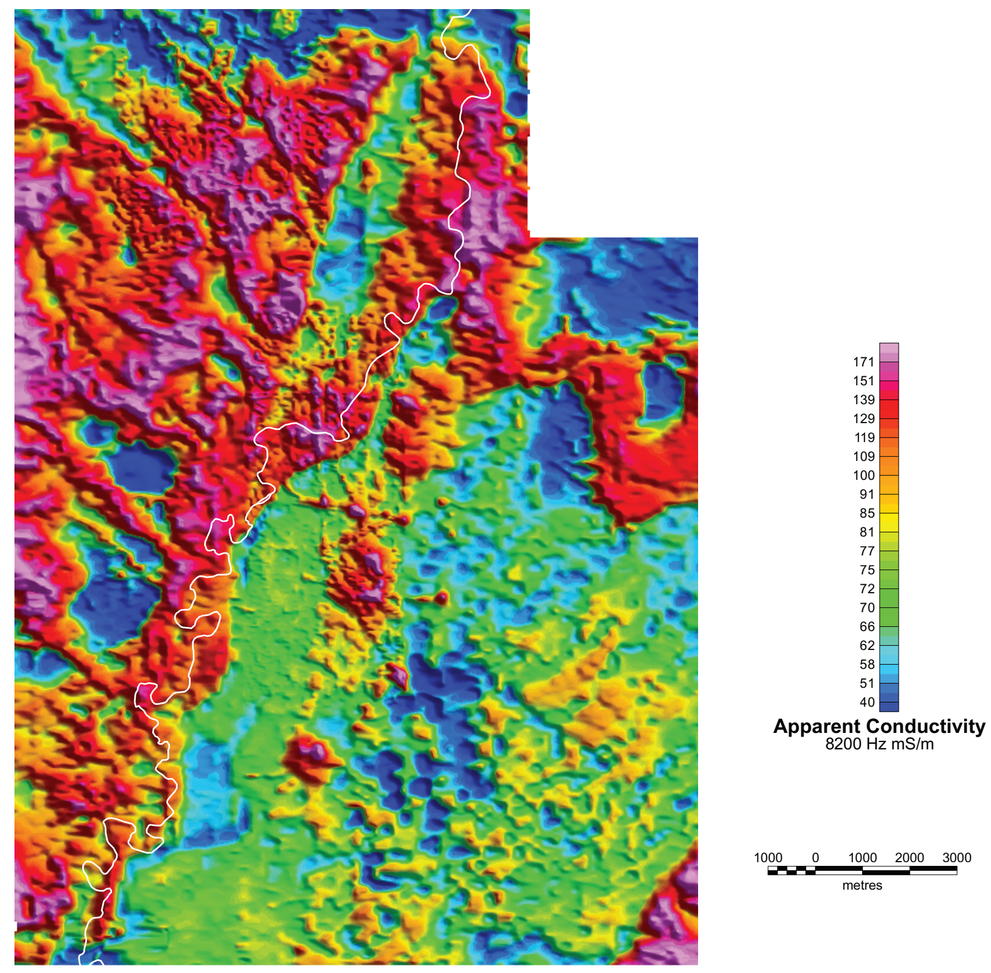
Map A. Location and Digital Elevation



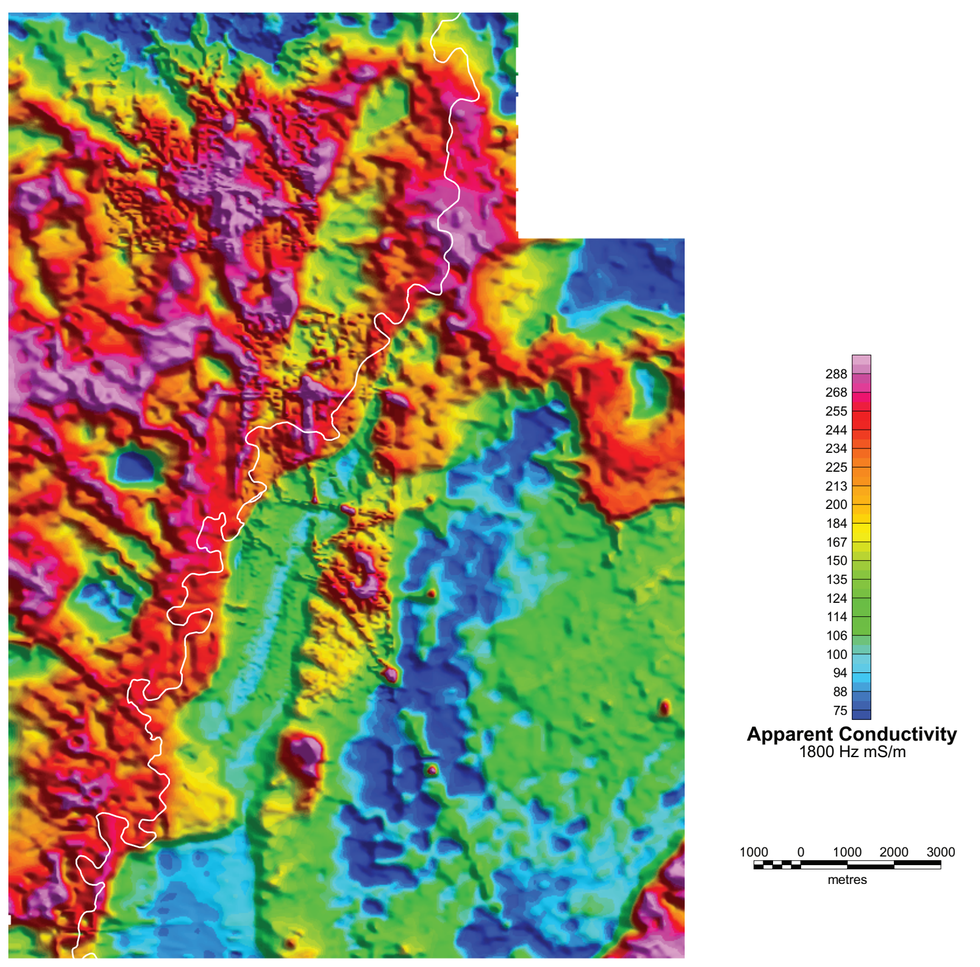
Map B. 140 kHz



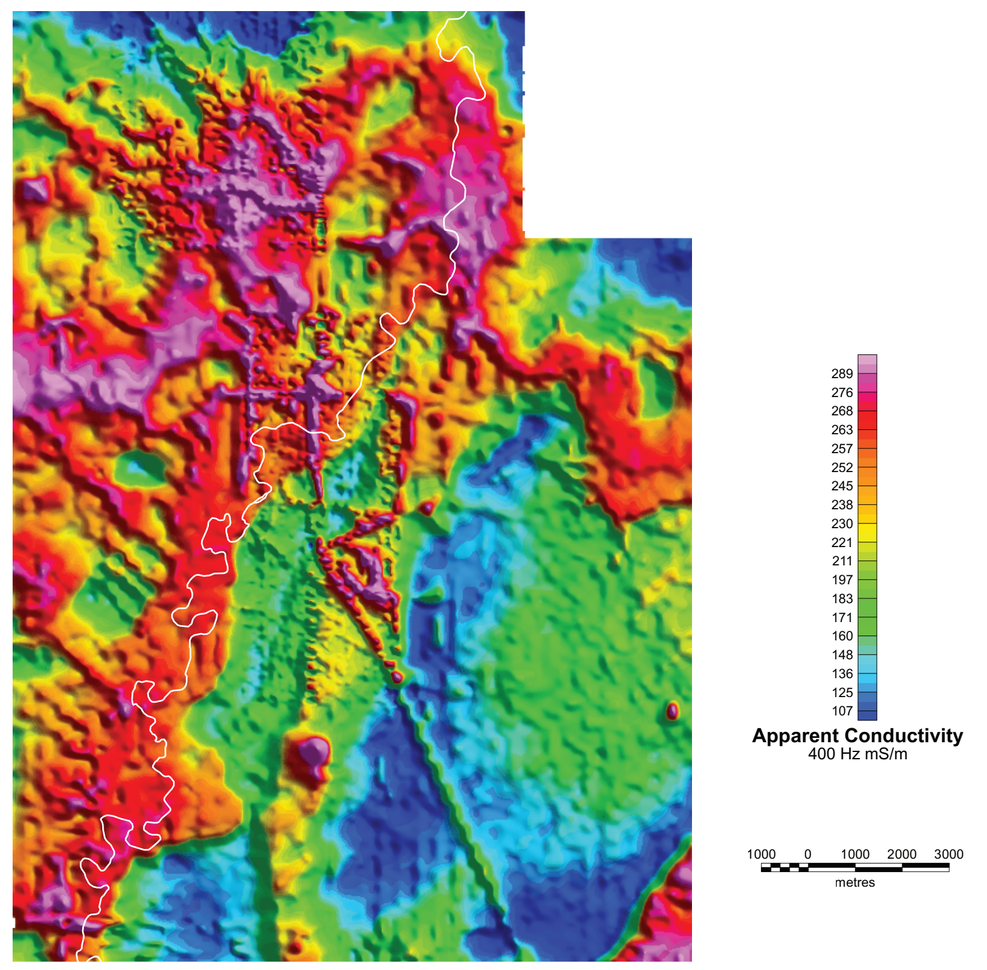
Map C. 40 kHz



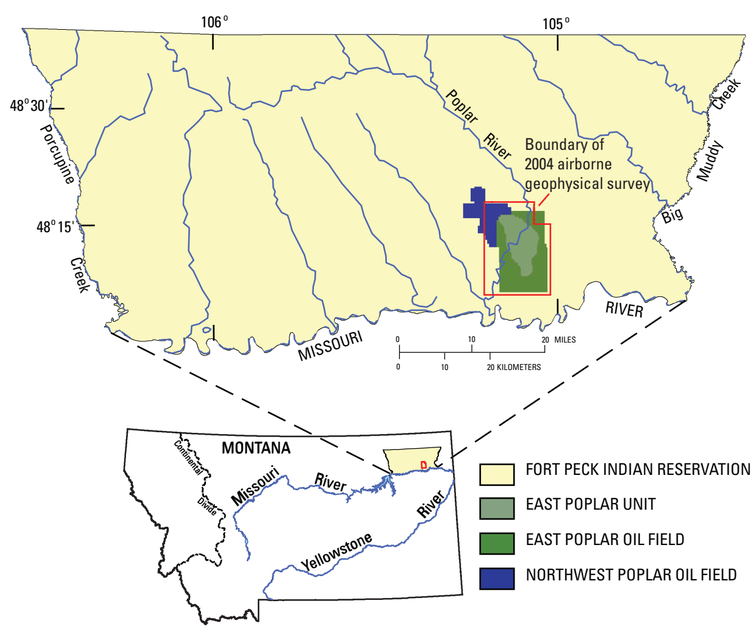
Map D. 8,200 Hz



Map E. 1,800 Hz



Map F. 400 Hz



The digital elevation (map A) has been derived from the global positioning systems on the helicopter and the geophysical sensor towed beneath the helicopter. Apparent conductivity maps (B-F) are shown with color scales that reflect maximum (red) and minimum (blue) values for the indicated frequency. Thus the conductivity ranges for particular color scales are unique to each map. The north-to-south-flowing Poplar River is shown by the wavy white (maps A-F). Lower frequencies probe deeper, with specific depth of investigation depending on the electrical conductivity of the subsurface. At the highest frequency (map B), the exploration depth is only a few meters at most. The maximum exploration depth at the lowest frequency (map F) is on the order of 55 meters in areas of highest resistivity. Pipe lines and power lines generally show as high conductivity linear features at the lower frequencies (maps E-F). Main text gives abbreviations and detailed descriptions of maps.

DIGITAL ELEVATION AND APPARENT CONDUCTIVITY MAPS EAST POPLAR OIL FIELD, MONTANA

by

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