

# USE OF THE SEISMIC METHOD IN THE WILLISTON BASIN

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## ABSTRACT

Not the least of the factors discouraging some operators from the Williston Basin are the over-emphasized seismic problems. Because a variety of geologic conditions are present, practically all seismic techniques have a place. Most of the disappointments can be traced to the failure to state the geologic conditions expected in parameters suited to the method, and the failure of the seismologist to recognize limitations fixed by the field practices. The generally excellent appearing recordings may result in toleration of slipshod field techniques and insufficient attention to the less obvious reflections. The data on the maps of many supposed failures faithfully record the relief and such data can be made useful by the historical approach and pictorial contouring. Isopachs are especially useful not only for stratigraphic trap studies, but also for dating movements, evaluating computations, etc. Isopachs of closely spaced reflectors are highly significant and deserve rigorous treatment. The seismograph does furnish data on many geologic conditions often dismissed as "not suited." Such data can be made useful by diligent, intelligent collaboration of the seismologist and geologist.