

DISTRIBUTION OF SEDIMENTARY STRUCTURES  
ALONG THE MURRAY FRACTURE ZONE

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## ABSTRACT

The Murray Fracture Zone was surveyed with 40 north-south crossings between longitudes 127° to 139° west. Seismic reflection profiles were obtained along the tracks. The fracture zone in the study area was divided into 3 subzones on the basis of topography and structure. Three reflectors were distinguished in the area. The sediments forming the upper reflector are thought to be of pelagic origin. Those of the intermediate layer are limited in extent and were bottom transported. The origin of the lower reflector is unknown, it forms acoustic basement over most of the study area. The fracture zone ridge and associated troughs were formed before deposition of the sediments of the intermediate reflector. The arch north of the Murray Fault was formed after deposition of the intermediate sediments.