

Since 1982, the BMR has recorded 3200kms, Figure B, of seismic in the the Bass Basin as part of a study designed to understand the early basin evolution.

Figure C shows the location of six BMR geoseismic traverses, in a northeast-southwest direction, across the Bass Basin. Line drawings based on these traverses are shown in Figure D. Portions of lines 16, 17, and 18 lie in Permit T-19-P. The sections are colored to reflect the two phase evolution characteristic of aborted rifts. Figure C is also a plan view of the major Pre-Tertiary rift faults developed in the Bass Basin. The rift faults are offset by a series of north northeast trending, dextral transverse faults which allowed different directions of tilt blocks to develop and permitted variations in stretch of the brittle lithosphere. The Mornington - King Island fault which trends north northeast through T-19-P may have initially developed as one of these transverse faults.