to originate from the intrabasement block. These are residual anomalies which may, because of their shape, be assumed to originate from the basement's surface. If that is correct, these are the suprabasement anomalies which may be of direct and local importance for petroleum exploration when the superimposed sediments have related structure.

Figure 4 illustrates a typical suprabasement anomaly by way of an east-west profile. The profile is relatively large in order to show the details of an anomaly. Of interest are the flanking negatives, the sharpness of the positive gradients, and the broad, flat nature of the apex of the anomaly. Of course, if the edges of the plate become even more separated so that the distance between them is considerably great compared to the depth of burial of the plate, the apex of the anomaly can easily degenerate into two apexes, each occuring near the edge of the plate with a lower intensity between them over the centre part of the plate.

Some mention should be made of the preponderance of the occurrence of this type of anomaly in association with obvious intrabasement anomalies. The association may be classified as follows:

(a) Superposition or congruency with an intrabasement anomaly,

(b) occuring adjacent to or as noses from intrabasement anomalies, and

(c) occurrence along an obvious intrabasement trend but not otherwise connected with any assumed intrabasement anomalies.

The reason for introducing these categories may be apparent from their clarification. The first instance attempts to describe the case where large anomalies with amplitudes of hundreds of gamma yield depth estimates which are much too shallow from the point of view of the regional configuration. It then becomes necessary to introduce a residual anomaly, along with the intrabasement anomaly and usually on its crest, in order to use suprabasement coefficients which must, if these assumptions are correct, place the