

Sheets 7 and 8

The depth to basement probably increases again to the southeast in the northeastern corner of sheet 7.

Although masked by a north-south regional, two magnetic highs, anomalies 8.1 and 8.3 separated by a large weak low, anomaly 8.2, occur at the top of Sheet 8. Anomaly 8.1 has the form of a long narrow east-northeast trending high of about 80 gammas.

Anomaly 8.3 is not fully defined, but has a magnitude of at least 100 gammas. Anomaly 8.1 indicates a magnetic basement depth of the order of 3000 feet. The depth of basement increases to the south.

Anomaly 8.1 is not reflected in the aeromagnetic map and may correspond to a number of small separate magnetic highs in the northeastern corner of this sheet. Anomaly 8.2 is reflected by a broad magnetic low.

Anomalies 8.3, 8.4 and 8.5 can be correlated more or less with the anomalies of the same number on the aeromagnetic map. Since none of these anomalies is completely defined by the present survey, it is not possible to compare them with those recorded by the aeromagnetic survey.

Sheet 9

Only the extreme southwestern corner of this sheet is covered by the present survey. A single broad low occurs as on the aeromagnetic map. No accurate depth to basement determination is possible, but this depth is at least 10,000 feet.

Sheets 11 and 12

The surveyed portions of these sheets consist of a featureless north-south regional gradient of approximately 8 gammas/mile, increasing southward. Only on line ER-25 is there an increase in magnetic intensity approaching the coast where basalts are recorded on the aeromagnetic map.

Sheet 13

The strike of the regional gradient changes at the western edge of this sheet from east-west to roughly northwest-southeast. This possibly corresponds to a lateral east-west change in the nature of the basement rock.

A number of intense narrow anomalies were recorded on line ER-37. A similar area of intense magnetic disturbance was recorded by the aeromagnetic survey at latitude 38°28' longitude 149° and both are probably due to basalts at a very shallow depth, possibly on the sea floor. The extent of these basalts appears fairly limited.

Anomaly 13.2 may well correspond to the aeromagnetic anomaly of the same number. The source of this anomaly (a magnetic low) probably lies within the sedimentary sequence at a depth of 1000 to 1500 feet. The small magnetic high at S.P. 6420 on line ER-44 to the east is probably also due to an intrusive high in the sedimentary sequence.

Sheet 20W (West of sheet 20)

Only the extreme northeastern corner of this sheet was surveyed. A single broad low of about 20 gammas (anomaly 20W.1) was recorded. No reliable depth estimate can be made, but it is probably of the order of 10,000 feet. There is no aeromagnetic coverage.

Sheet 14

In the surveyed area the outstanding feature is the abrupt change from areas that are undisturbed to areas that are magnetically highly disturbed.