#### COMMONWEALTH OF AUSTRALIA

### DEPARTMENT OF NATIONAL DEVELOPMENT

### BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

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RECORD No. 1965/29

060365

## MAPS SHOWING THE RESULTS OF AN AIRBORNE MAGNETIC AND RADIOMETRIC SURVEY OF THE JACKSON 1: 250,000 AREA,

W A 1957



Map Nos. G 247-18

**Q 247-19** 

G 247-20

G 247-21

Scale 1:126,720

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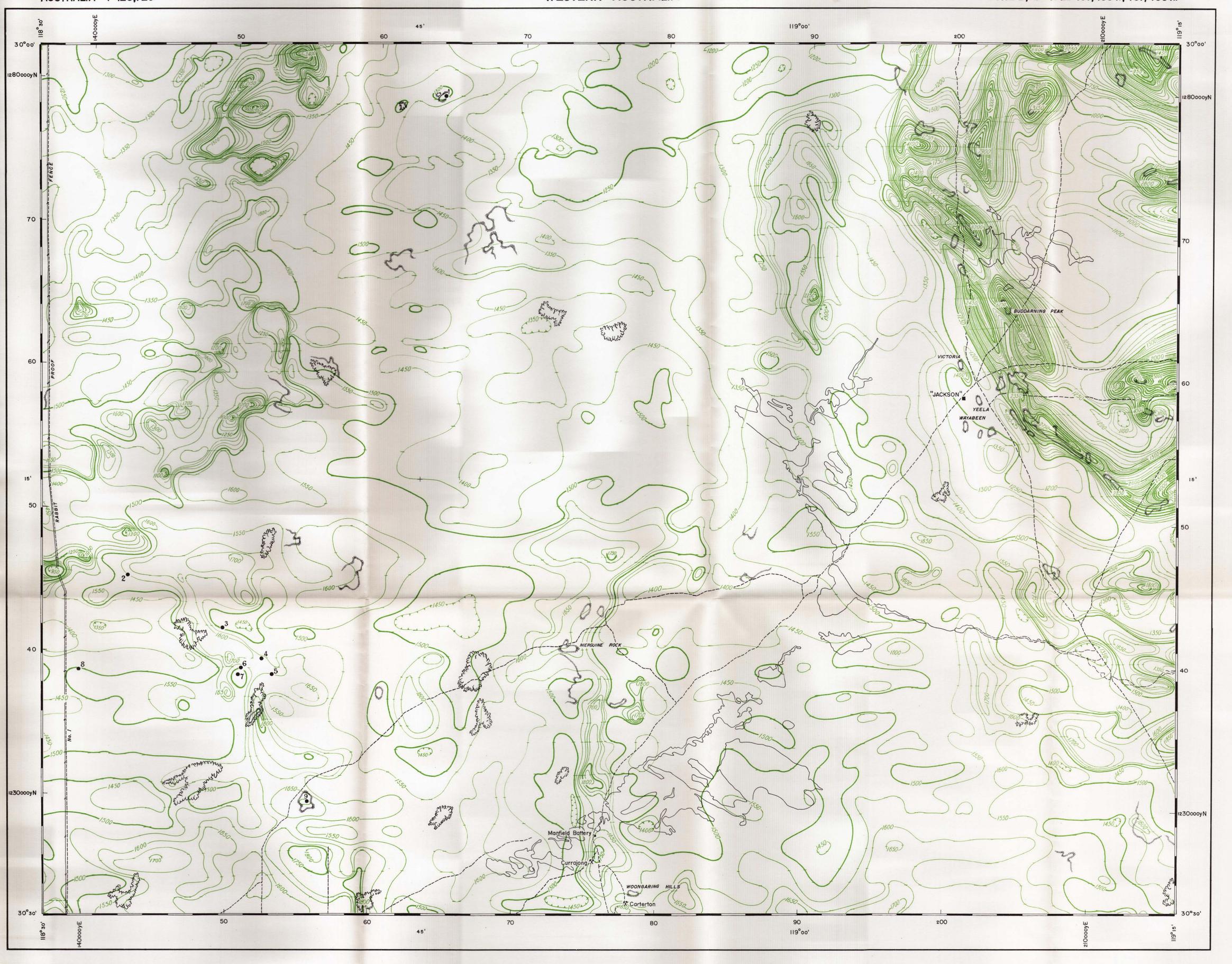
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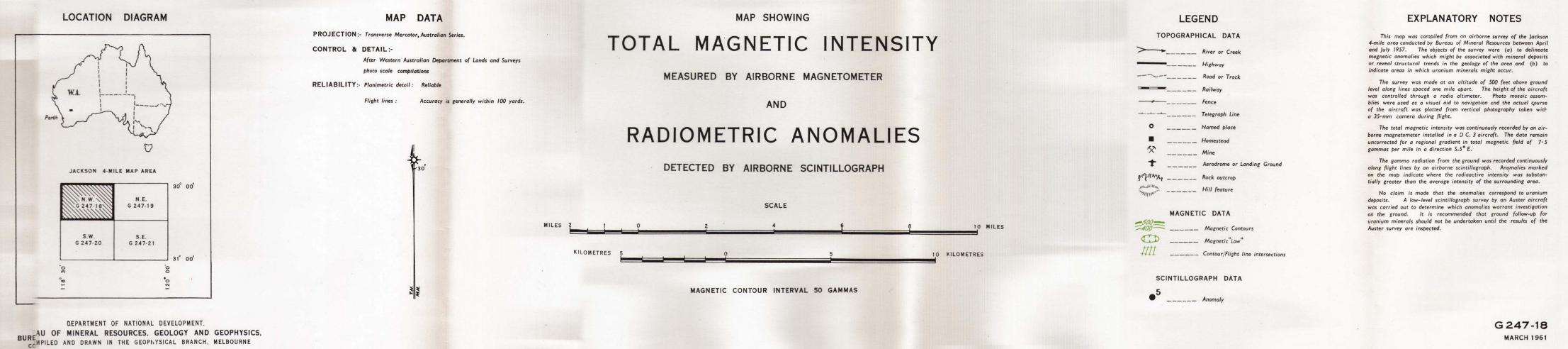
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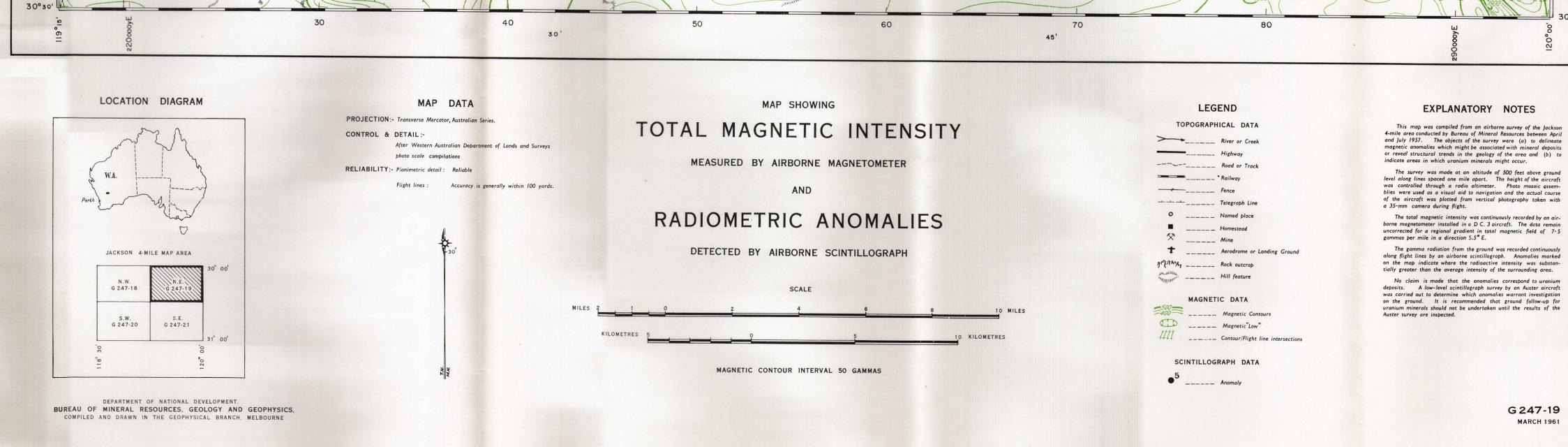
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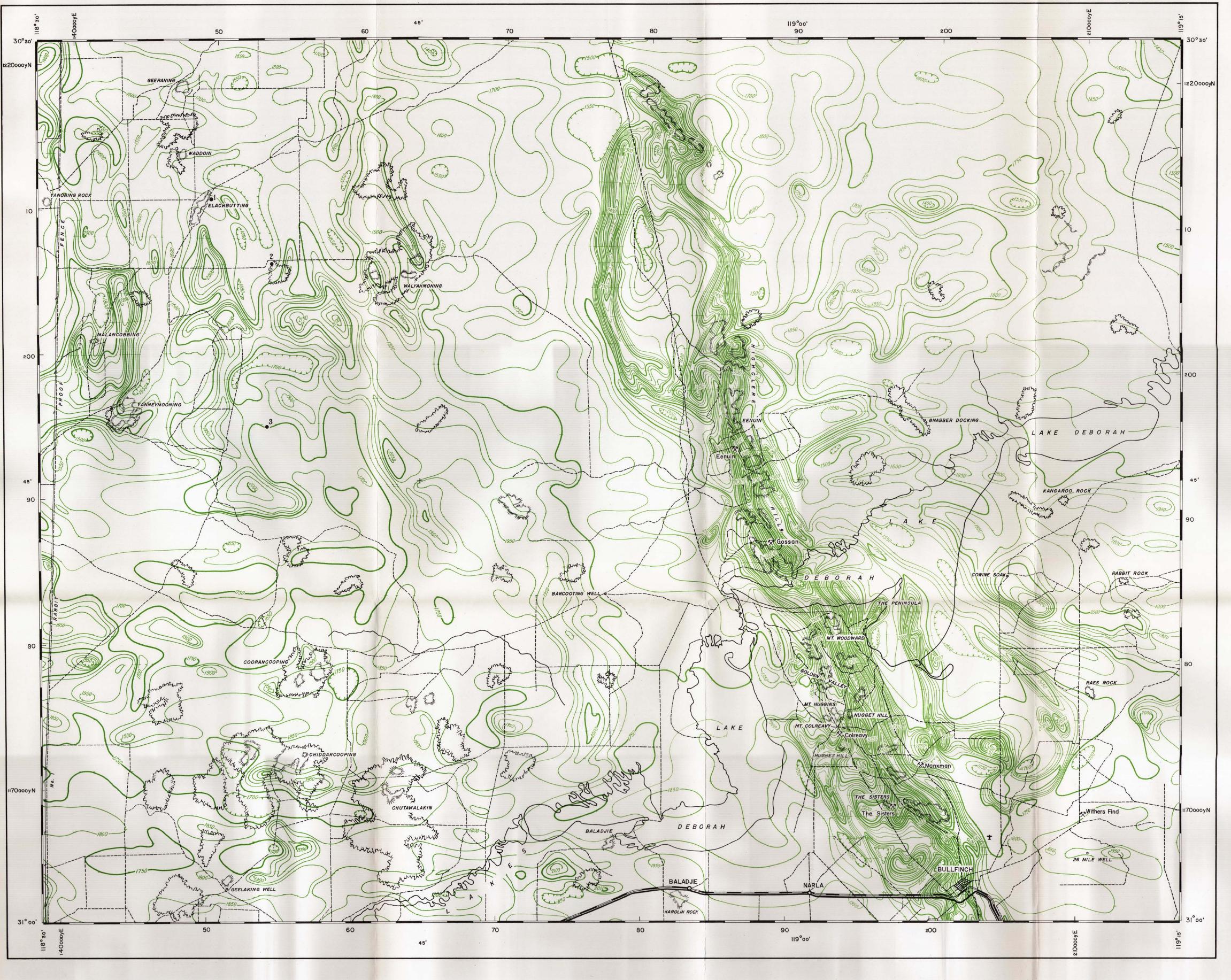
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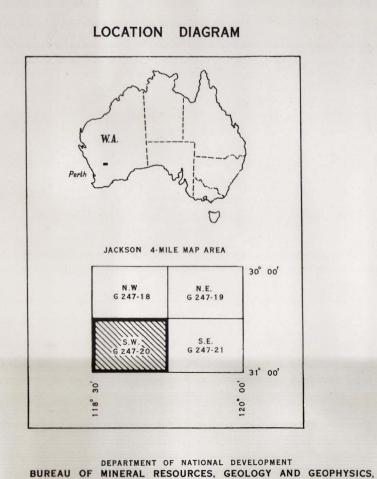
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COMPILED AND DRAWN IN THE GEOPHYSICAL BRANCH, MELBOURNE

## CONTROL & DETAIL:-After Western Australian Department of Lands and Surveys photo scale compilations. RELIABILITY:- Planimetric detail: Reliable Flight lines: Accuracy is generally within 100 yards.

MAP DATA

PROJECTION: - Transverse Mercator, Australian Series.

### TOTAL MAGNETIC INTENSITY

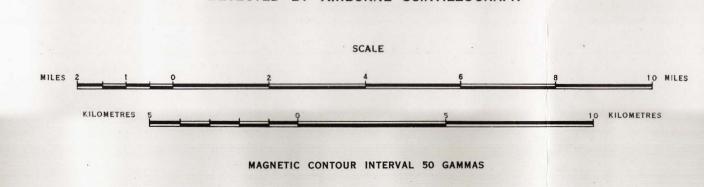
MAP SHOWING

MEASURED BY AIRBORNE MAGNETOMETER

AND

### RADIOMETRIC ANOMALIES

DETECTED BY AIRBORNE SCINTILLOGRAPH



### LEGEND TOPOGRAPHICAL DATA

\_\_\_\_\_ Aerodrome or Landing Ground Many ---- Rock outcrop Hill feature

MAGNETIC DATA

400 \_\_\_\_\_ Magnetic Contours \_\_\_\_\_ Magnetic Low" \_\_\_\_ Contour|Flight line intersections

SCINTILLOGRAPH DATA

### **EXPLANATORY NOTES**

This map was combiled from an airborne survey of the Jackson 4-mile area conducted by Bureau of Mineral Resources between April and July 1957. The objects of the survey were (a) to delineate magnetic anomalies which might be associated with mineral deposits or reveal structural trends in the geology of the area and (b) to indicate areas in which uranium minerals might occur.

The survey was made at an altitude of 500 feet above ground level along lines spaced one mile apart. The height of the aircraft was controlled through a radio altimeter. Photo mosaic assemblies were used as a visual aid to navigation and the actual course of the aircraft was plotted from vertical photography taken with a 35-mm camera during flight.

The total magnetic intensity was continuously recorded by an airborne magnetometer installed in a D C, 3 aircraft. The data remain uncorrected for a regional gradient in total magnetic field of 7.5 gammas per mile in a direction S.5° E.

The gamma radiation from the ground was recorded continuously along flight lines by an airborne scintillograph. Anomalies marked on the map indicate where the radioactive intensity was substantially greater than the average intensity of the surrounding area. No claim is made that the anomalies correspond to uranium deposits. A low-level scintillograph survey by an Auster aircraft was carried out to determine which anomalies warrant investigation on the ground. It is recommended that ground follow-up for uranium minerals should not be undertaken until the results of the Auster survey are inspected.

