

1965/31
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COMMONWEALTH OF AUSTRALIA

DEPARTMENT OF NATIONAL DEVELOPMENT

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

RECORD No. 1965/31

060351⁺

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MAPS SHOWING THE
RESULTS OF AN AIRBORNE MAGNETIC
AND RADIOMETRIC SURVEY
OF THE KALGOORLIE 1:250,000 AREA,
W A 1957

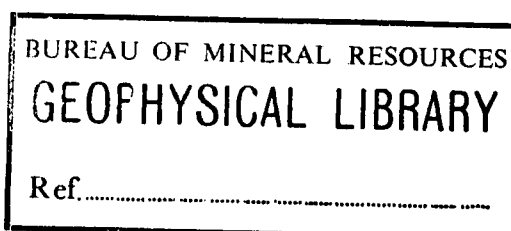


Map Nos. G 247-22
 G 247-23
 G 247-24
 G 247-25

Scale 1:126,720

The information contained in this report has been obtained by the Department of National Development as part of the policy of the Commonwealth Government to assist in the exploration and development of mineral resources. It may not be published in any form or used in a company prospectus or statement without the permission in writing of the Director, Bureau of Mineral Resources, Geology and Geophysics.

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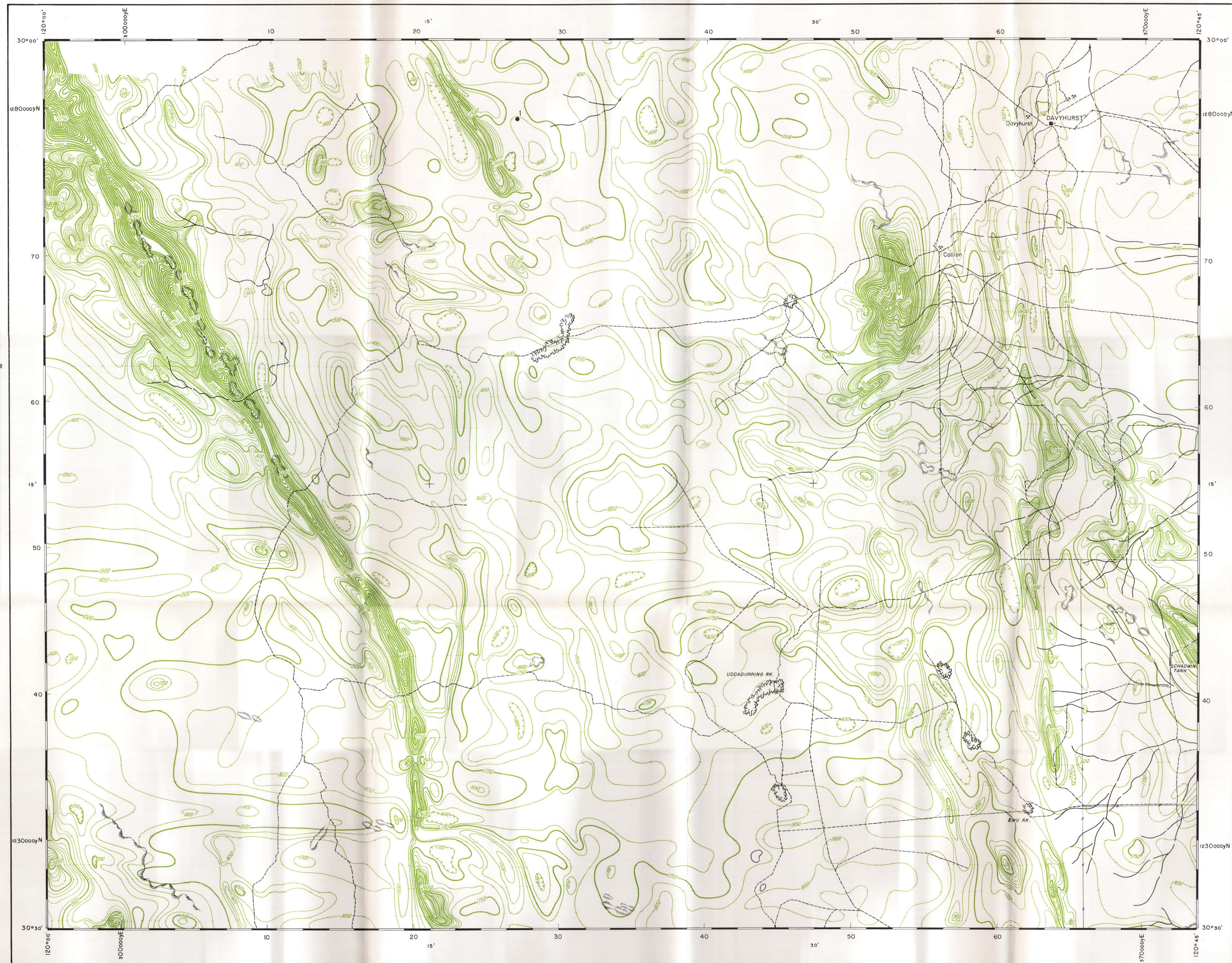


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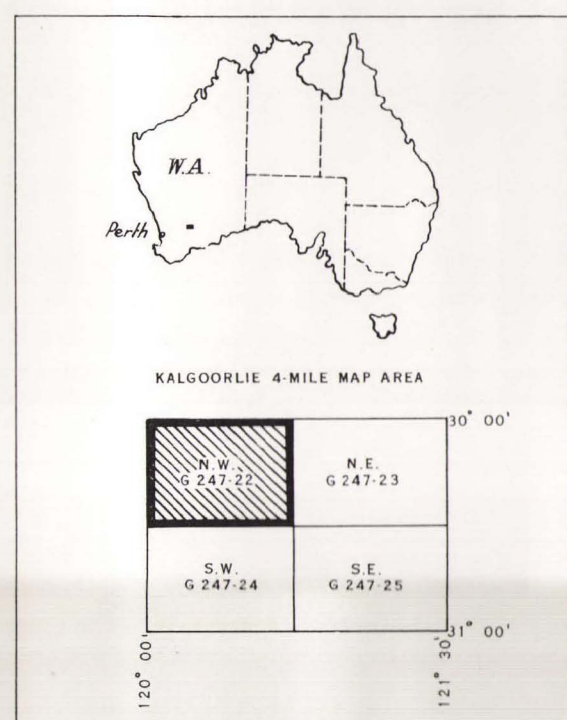
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LOCATION DIAGRAM



COMPILED AND DRAWN BY GEOPHYSICAL BRANCH,
BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS,
DEPARTMENT OF NATIONAL DEVELOPMENT, MELBOURNE.

MAP DATA

PROJECTION: Transverse Mercator Australian Series.
CONTROL & DETAIL: Planimetric detail was compiled from Royal Australian Survey Corps photo mosaics delineated by Bureau of Mineral Resources.
RELIABILITY: Planimetric detail: Reliable
Geophysical data: Reliability of plotted position of aircraft, within ± 75 yards.

MAP SHOWING

TOTAL MAGNETIC INTENSITY

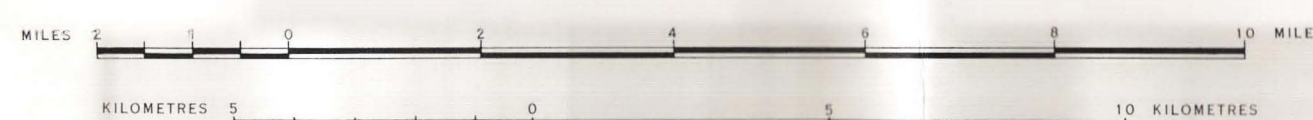
MEASURED BY AIRBORNE MAGNETOMETER

AND

RADIOACTIVE ANOMALIES

DETECTED BY AIRBORNE SCINTILLOGRAPH

SCALE



MAGNETIC CONTOUR INTERVAL 50 GAMMAS

LEGEND

- TOPOGRAPHICAL DATA**
- River or Creek
 - Highway
 - Road or Track
 - Railway
 - Fence
 - Telegraph Line
 - Named place
 - Homestead
 - Mine
 - ✕ Aerodrome or Landing Ground
 - ✕ Rock outcrop
 - Hill feature
- MAGNETIC DATA**
- Magnetic Contours
 - Magnetic Low
 - Contour/Flight line intersections
- SCINTILLOGRAPH DATA**
- Anomaly

EXPLANATORY NOTES

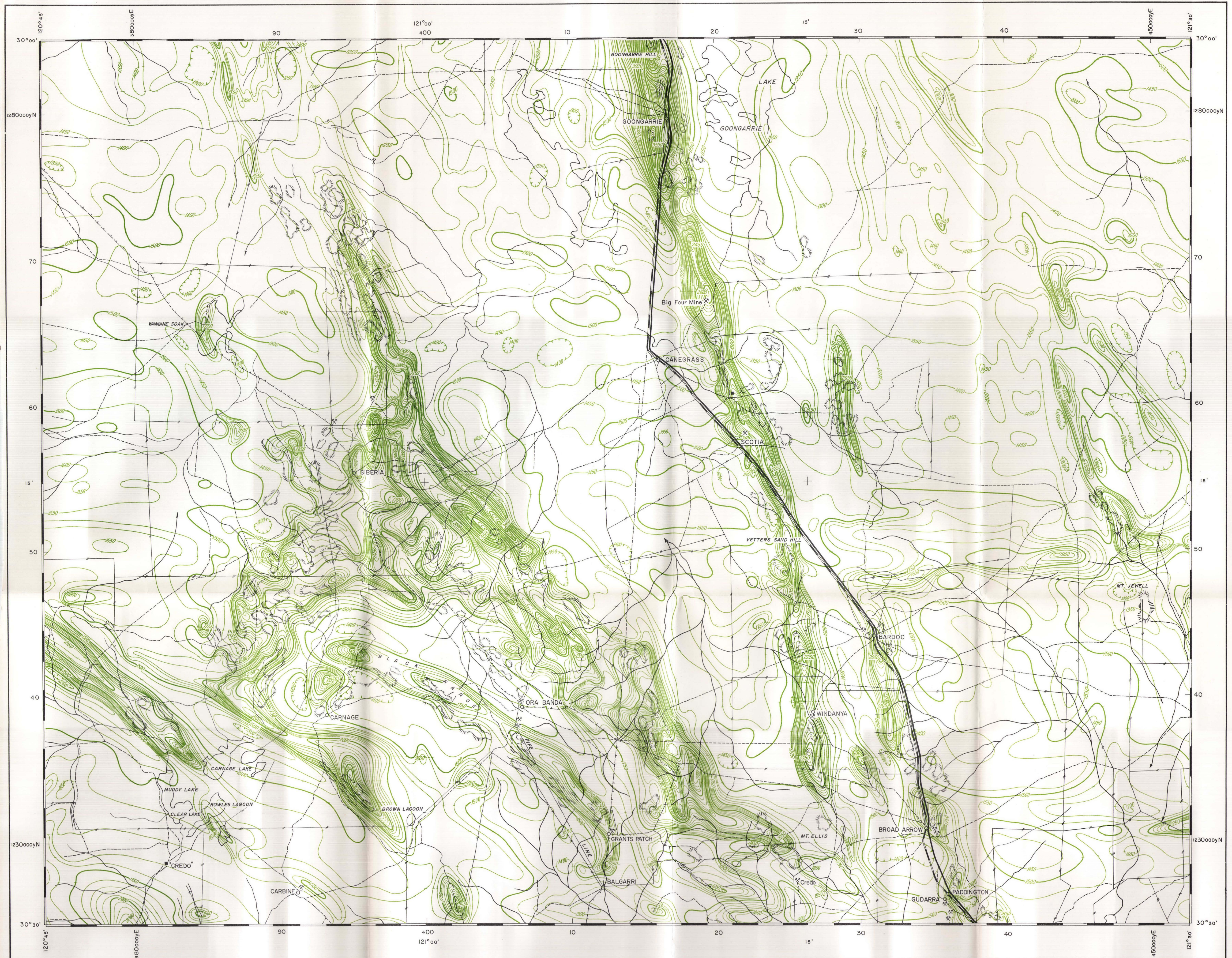
This map was compiled from an airborne survey of the Kalgoolie 4-mile area conducted by Bureau of Mineral Resources between April and July 1957. The objects of the survey were (a) to delineate magnetic anomalies which might be associated with mineral deposits or reveal structural trends in the geology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

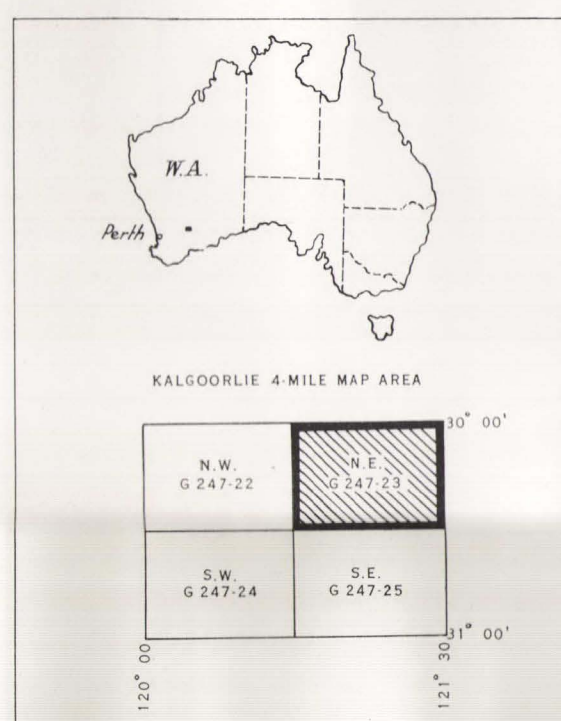
The total magnetic intensity was continuously recorded by an airborne magnetometer installed in a D.C. 3 aircraft. The data remain uncorrected for a regional gradient in total magnetic field of 7.5 gammas per mile in a direction 5.5° E.

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.



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MAP SHOWING

TOTAL MAGNETIC INTENSITY

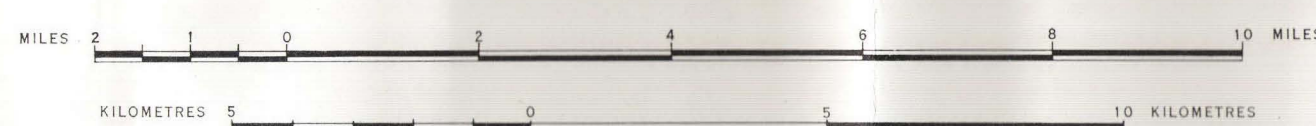
MEASURED BY AIRBORNE MAGNETOMETER

AND

RADIOACTIVE ANOMALIES

DETECTED BY AIRBORNE SCINTILLOGRAPH

SCALE



MAGNETIC CONTOUR INTERVAL 50 GAMMAS

LEGEND

TOPOGRAPHICAL DATA

- River or Creek
- Highway
- Road or Track
- Railway
- Fence
- Telegraph Line
- Named place
- Homestead
- Mine
- ✈ Aerodrome or Landing Ground
- ✈ Rack outcrop
- ▲ Hill feature

MAGNETIC DATA

- Magnetic Contours
- Magnetic Low
- Contour/Flight line intersections

SCINTILLOGRAPH DATA

- 5 Anomaly

EXPLANATORY NOTES

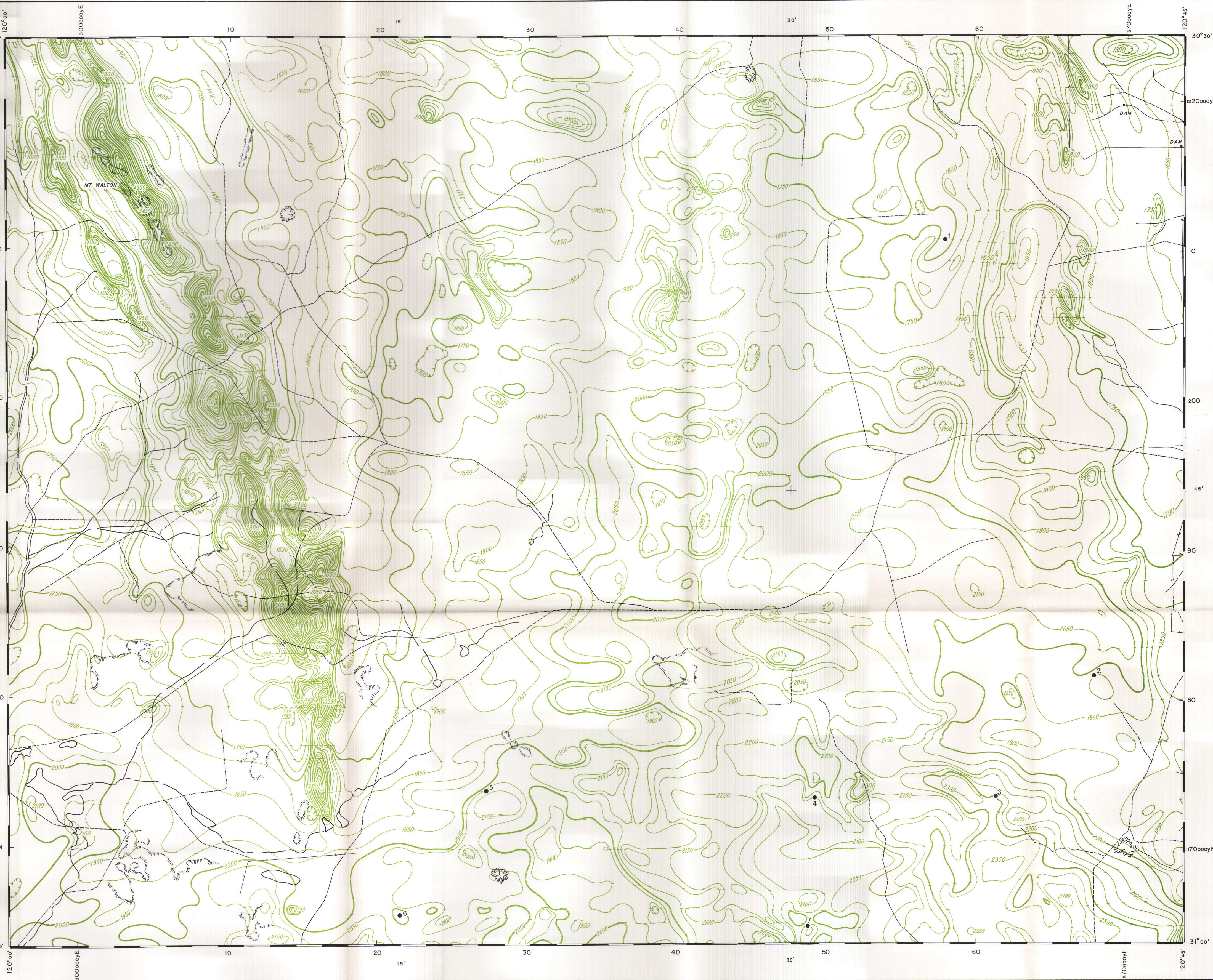
This map was compiled from an airborne survey of the Kalgoolie-N.E. area conducted by Bureau of Mineral Resources between April and July 1957. The objects of the survey were (a) to delineate magnetic anomalies which might be associated with mineral deposits or reveal structural trends in the geology 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.

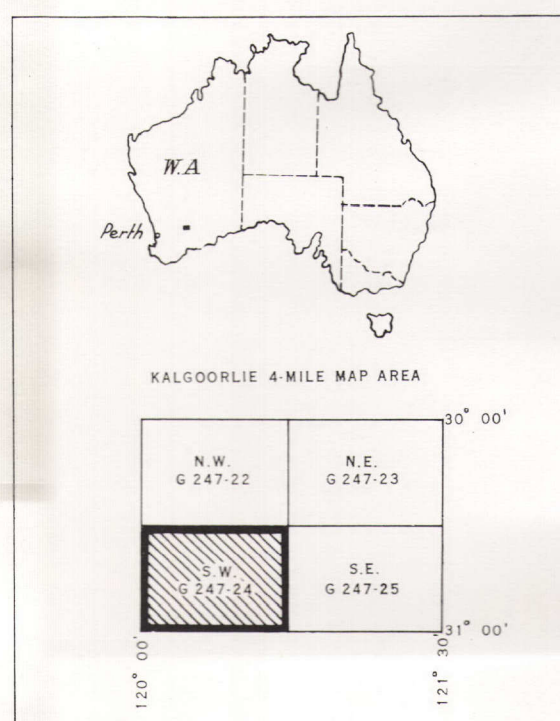
The total magnetic intensity was continuously recorded by an airborne magnetometer installed in a D.C. 3 aircraft. The data remain uncorrected for a regional gradient in total magnetic field of 7.5 gammas per mile in a direction S.5° E.

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.



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DEPARTMENT OF NATIONAL DEVELOPMENT, MELBOURNE

MAP DATA

PROJECTION: Transverse Mercator, Australian Series.

CONTROL & DETAIL:

Planimetric detail was compiled from Royal Australian Survey Corps
photo mosaics delineated by Bureau of Mineral Resources.

RELIABILITY: Planimetric detail: Reliable.

Geophysical data: Reliability of plotted position of aircraft,
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MAP SHOWING

TOTAL MAGNETIC INTENSITY

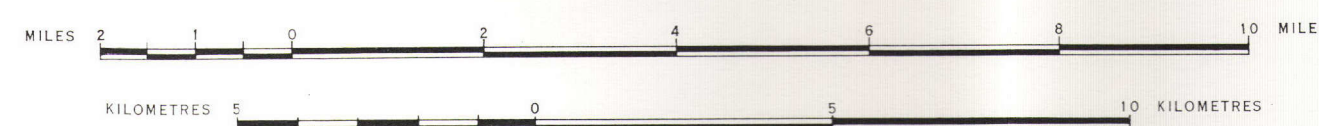
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DETECTED BY AIRBORNE SCINTILLOGRAPH

SCALE



MAGNETIC CONTOUR INTERVAL 50 GAMMAS

LEGEND

TOPOGRAPHICAL DATA

- River or Creek
- Highway
- Road or Track
- Railway
- Fence
- Telegraph Line
- Named place
- Homestead
- Mine
- Aerodrome or Landing Ground
- Rock outcrop
- Hill feature

MAGNETIC DATA

- Magnetic Contours
- Magnetic Low
- Contour Flight line intersections

SCINTILLOGRAPH DATA

- Anomaly

EXPLANATORY NOTES

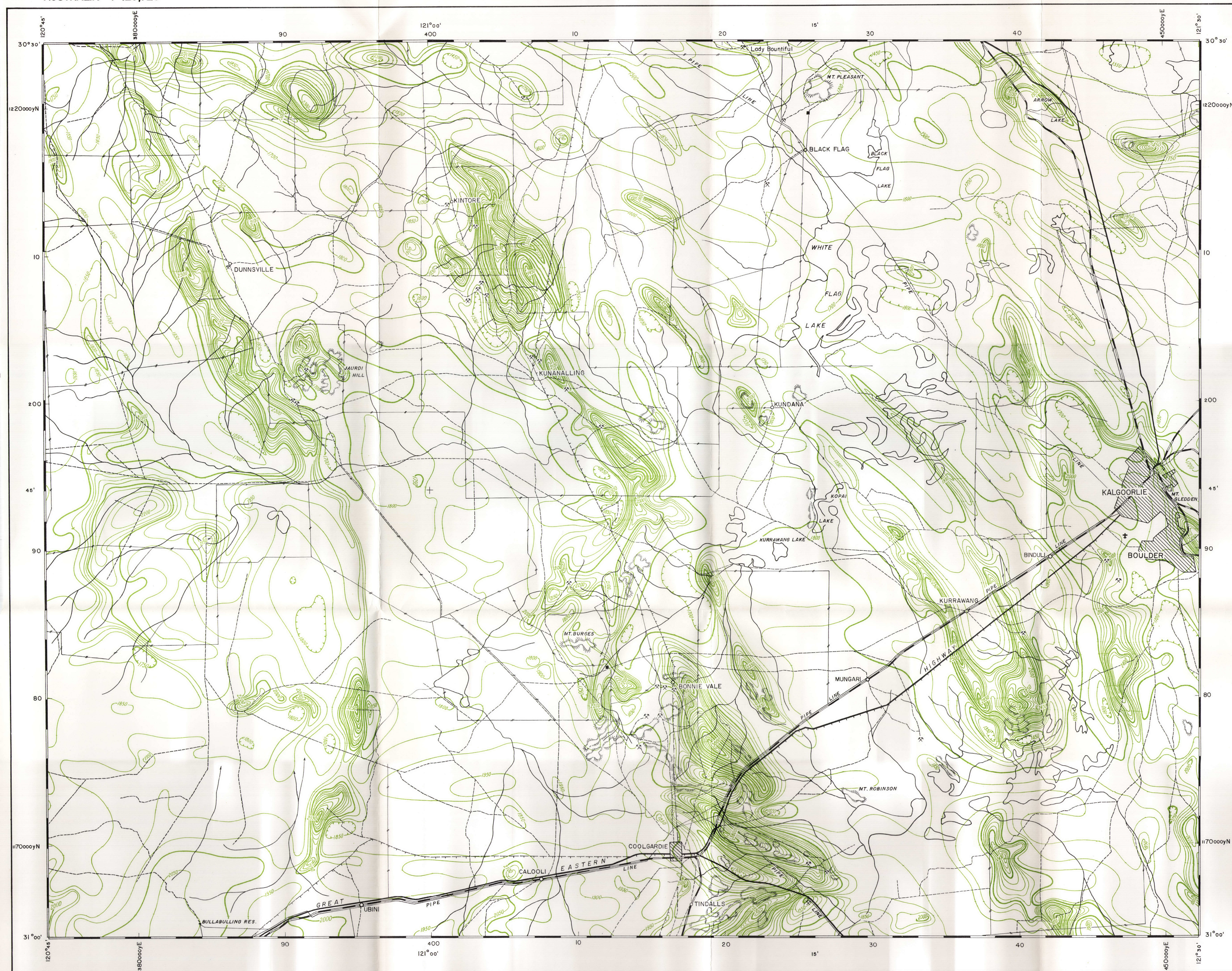
This map was compiled from an airborne survey of the Kalgoorlie 4-mile area conducted by Bureau of Mineral Resources between April and July 1957. The objects of the survey were (a) to delineate magnetic anomalies which might be associated with mineral deposits or reveal structural trends in the geology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

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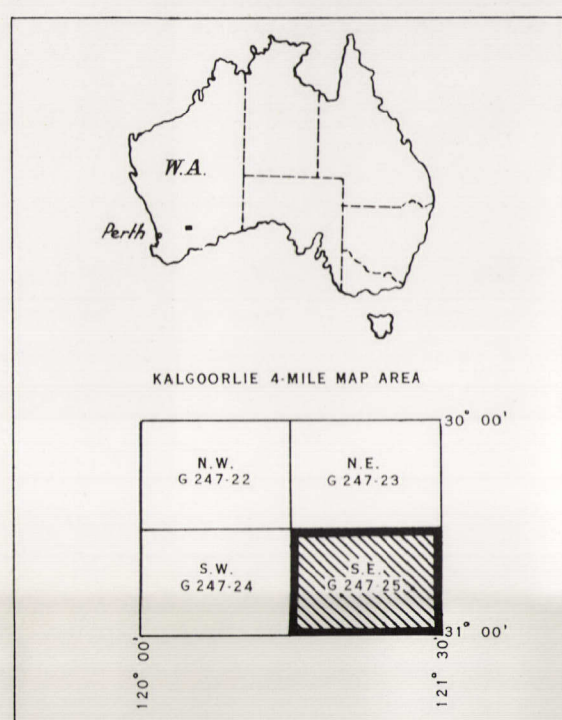
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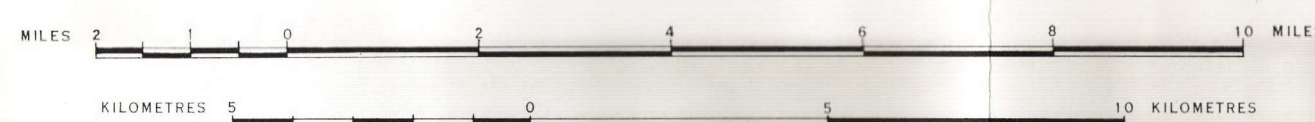
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The survey was made at an altitude of 300 feet above ground level along lines spaced one mile apart. The height of the aircraft was controlled through a radio altimeter. Photo mosaic assemblies were used as a visual aid to navigation and the actual 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 5.5° E.

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