

LEGEND



Isomagnetic Lines (total field)
500 gammas
100 gammas
Magnetic depression
Flight altitude 1000 feet above ground-level

Boundary between magnetic zones
A, B and C
Individual or groups of positive or
negative magnetic anomalies

This is a composite aeromagnetic map compiled from sixteen aeromagnetic maps previously published by the Geological Survey on a scale of one inch equals one mile. On this map, flight line traces are eliminated and base-map detail is generalized and reduced to a minimum.

No correction has been made for regional variation which, according to Dominion Observatory Map, "F-isodynamic chart Canada 1955.0" increases at the rate of 2.0 gammas per mile in the direction S 30° E.

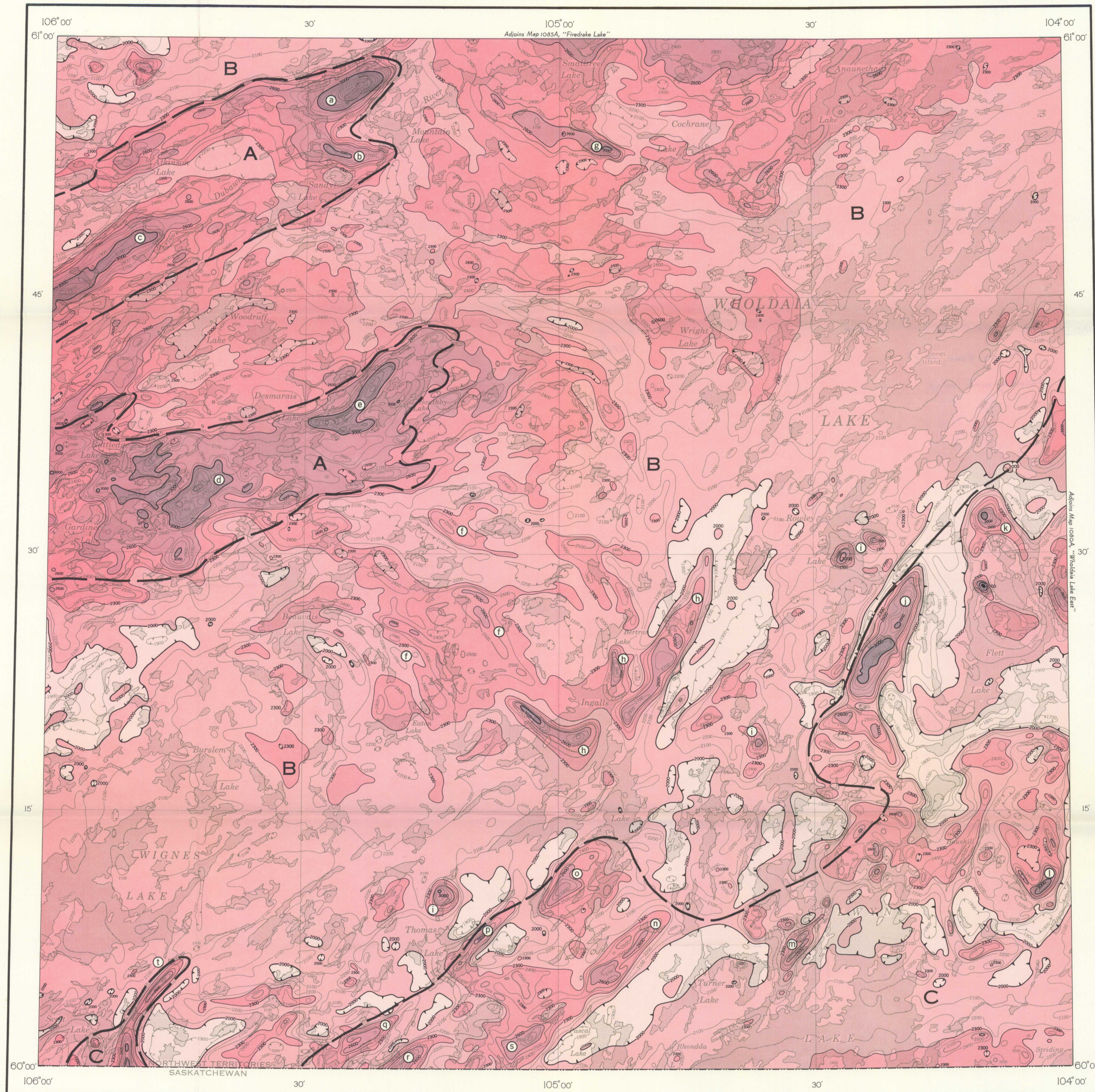
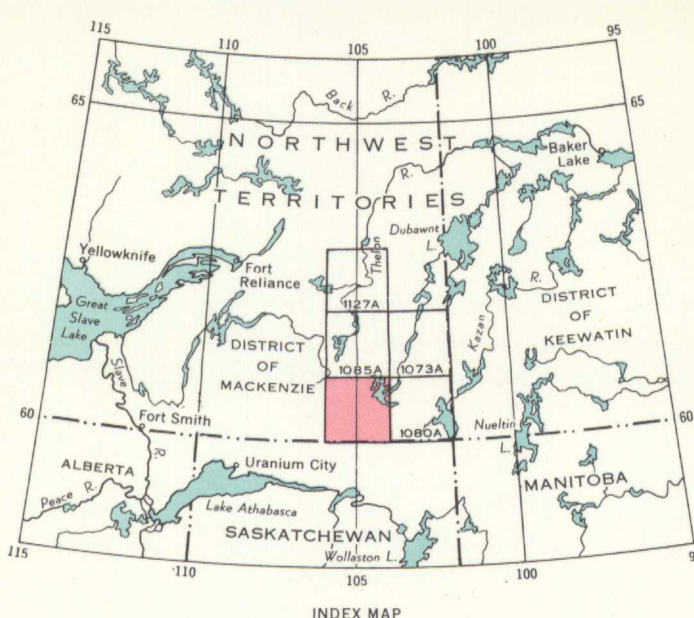
58,800 gammas should be added to each contour value to tie into the absolute value of the earth's field. This is not necessary for interpretation purposes but would assist in the standardization of magnetic data.

Aeromagnetic-Geologic Correlation by A. S. MacLaren

Cartography by the Geological Survey of Canada, 1961

Air photographs covering this map-area may be obtained through the National Air Photographic Library, Topographical Survey, Ottawa, Ontario.

Mean magnetic declination 22° 51' East, decreasing 4.0 annually. Readings vary from 20° 54' E in the S E corner to 24° 02' E in the N W corner of the map-area.



DESCRIPTIVE NOTES

Previous geological work in this area was done by Taylor (Wholdaia Lake West; Geol. Surv., Canada, Map 9-1959, 1959).

MAIN MAGNETIC FEATURES

Without reference to geology, the area may be divided into three zones—A, B, and C—each with a distinct magnetic pattern or character. Each zone may consist of one or more parts. Zones A are chiefly higher than 2,500 gammas in magnetic intensity. They contain small to medium-sized anomalies ranging in intensity from 100 to 1,800 gammas higher than that over adjacent areas. Interspersed among these positive anomalies are small negative areas of low intensity. Lineation of the magnetic data in the two A-zones is northeast. Rocks in these two areas are chiefly basic gneisses and granitic gneisses. Zone B has a general magnetic intensity of less than 2,500 gammas. Areas lettered f, g, h, i, and t protrude through the low-intensity background and their intensity ranges from 100 to 1,000 gammas higher. Trends of anomalies are in northeasterly, northwesterly, and easterly directions. A prominent feature in this zone is the extensive area of low intensity surrounding the larger area (h) southwest of Rowley Lake. This area is attributed to non-ferromagnetic granite and metasedimentary rocks. Zone C comprises several positive anomalies of large extent oriented in a northeasterly direction in a background of smaller negative and positive anomalies of divergent orientation. The magnetic intensity of the larger anomalies is 300 to 1,000 gammas higher than that of adjacent areas. This zone corresponds chiefly to areas of paragneiss with minor gabbro, quartzite, and gneiss and massive granite and granodiorite.

MINOR MAGNETIC FEATURES

ANOMALY	INTENSITY ABOVE BACKGROUND (GAMMAS)	ROCK TYPE INTERPRETED
a	600 to 1,000	basic phase of granite
b	600 to 1,000	basic phase of granite
c	500 to 800	basic paragneiss
d	500 to 600	basic paragneiss or paragneiss inclusion in granite and granodiorite
e	400	basic paragneiss
f	200	basic phase of gneiss
g	500	small basic plug
h	500 to 1,000	hornblende-biotite-plagioclase gneiss
i	300 to 800	intermediate to basic intrusive rocks
j and k	1,000 to 1,200	basic intrusive rocks
l	300 to 600	hornblende gneiss in massive granite and granodiorite
m	500 to 900	hornblende-biotite gneisses
n, o, p, q, r and s	300 to 600	biotite and hornblende-biotite gneisses; may in part be orthogneiss
t	900 to 1,000	basic paragneiss

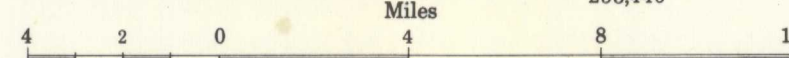
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MAP 1126A
AEROMAGNETIC MAP
WHOLDAIA LAKE WEST
DISTRICT OF MACKENZIE
NORTHWEST TERRITORIES

Scale: One Inch to Four Miles = $\frac{1}{253,440}$



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