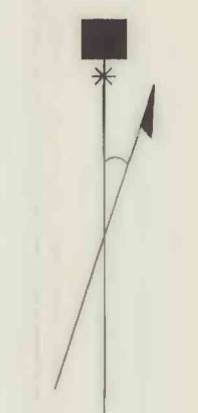


**AEROMAGNETIC MAP OF SANTA ROSA AND VICINITY
ON PARTS OF THE SANTA ROSA AND SAN FRANCISCO
1° BY 2° QUADRANGLES, CALIFORNIA**

BY
U. S. GEOLOGICAL SURVEY
1997

EXPLANATION



Square: Grid North
Star: True North
Arrow: Magnetic North

FLIGHT PATH

Inflight navigation and positioning were provided by PicoDAS PNAV-466 system and the Novatel GPS Card. Final flight path determinations were made using post flight differential corrections. The sampling rate was 1 reading/second.

Traverse lines were flown at an azimuth of E-W with an average line spacing of 540 m (1760 ft). The lines were flown at an azimuth of N-S with an average line spacing of 16000 m (6.3 mi).

Lines have an average aircraft terrain clearance of 305 m (1000 ft). Terrain clearance was monitored by radar and barometric altimeters.

Flight line identification numbers are shown along west edge of survey area. The line identification numbers are shown along the north edge of the survey area.

Magnetic field calculated at 123°W and 38°15'N for epoch of 1987.0 is 58227.8 nT with inclination 61°45' and Declination 19°51'.

TOTAL FIELD MAGNETIC DATA

Total field magnetic intensity data were measured by a Scintrex MAC-3 cesium vapour magnetometer with a sampling rate of 10 readings per second (1 reading/0.3 ft.).

Data have been corrected for diurnal variations using tie lines.

Residual magnetic data shown by contours represent corrected total field magnetic intensity minus the International Geomagnetic Reference Field (IGRF) for epoch of 1987.0.

Gridding interval is 180 m X 180 m.

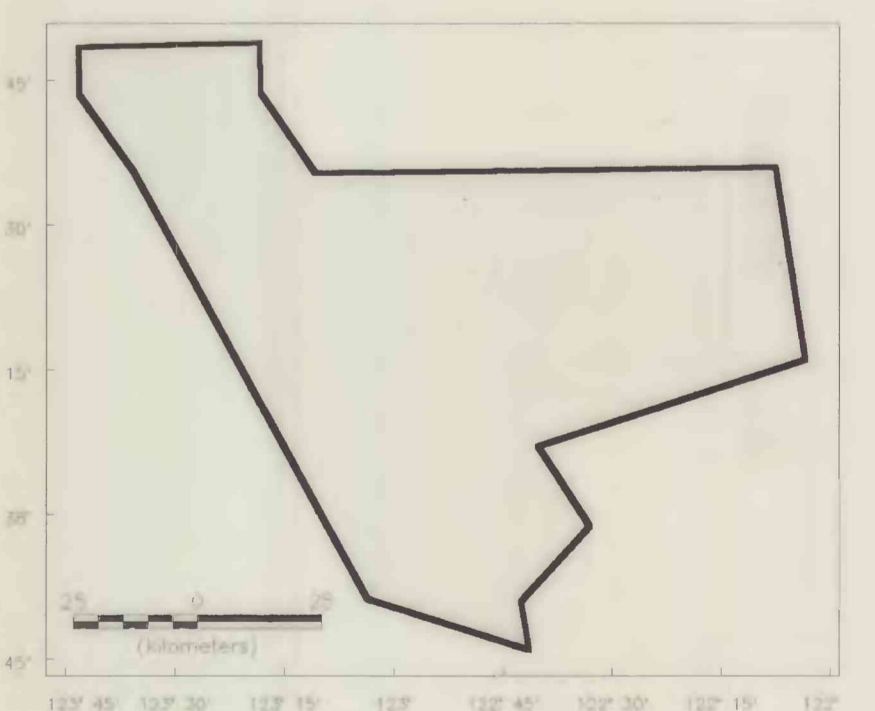
Map contour interval is 10 nanoTeslas (nT).

H, Magnetic high

L, Magnetic low

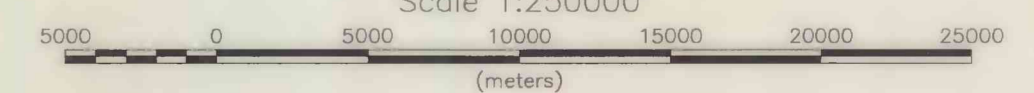
CONTOUR INTERVALS

10 nT	10 nT
50 nT	50 nT
250 nT	250 nT



SURVEY LOCATION

Scale 1:250000



Projection: UTM Clarke 1866 spheroid

Central meridian: 123° West

Survey flown: Dec. 2 to Jan. 12, 1997

Flown and compiled by Scintrex Ltd.

Concord, Ontario

This map is preliminary and has not been reviewed for conformity with U. S. Geological Survey editorial standards. Any use of trade, firm or product names is for descriptive purposes only and does not imply endorsement by the U. S. Government.

