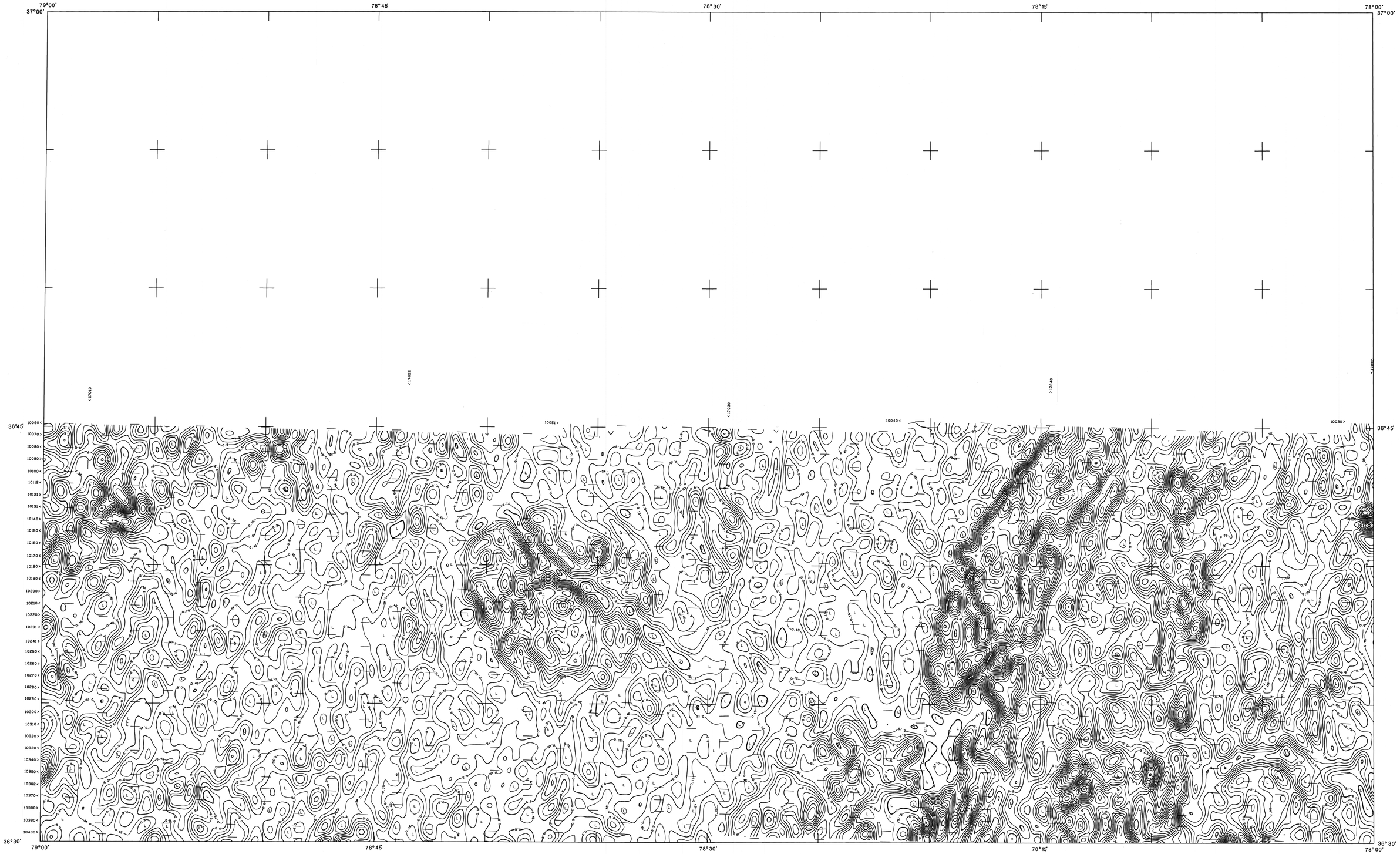
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

OPEN FILE REPORT
94-253
SHEET 5 OF 8



%POTASSIUM

SURVEY SPECIFICATIONS

AIRCRAFT
N448SL CESSNA TITAN 404
MAGNETOMETER
SPLIT BEAM CESIUM SCINTREX H8
RESOLUTION 0.001 nanoTesla
CYCLE RATE 0.10 second
SAMPLE INTERVAL 8 metres (average)
SPECTROMETER
256 CHANNEL ENMDS 1000
VOLUME 50.34 litres
CYCLE RATE 1.00 second
SAMPLE INTERVAL 80 metres (average)
DATA ACQUISITION
PICODAS PDAS-1000 ACQUISITION SYSTEM
11 CHANNEL RMS GR33R
FLIGHT LINE SPACING
TRAVERSE LINES 805 metres
TIE LINES 21500 metres
FLIGHT LINE DIRECTION
TRAVERSE LINES 090-270 degrees
TIE LINES 000-180 degrees
SURVEY HEIGHT
122 metres + mean terrain clearance
NAVIGATION
GPS navigation system
FLIGHT PATH RECOVERY
GPS located
with doppler positioning between located fiducials

DATA PROCESSING

GRID CELL SIZE	400 metres.
CONTOUR INTERVAL	.15 X Potassium.
PARALLAX CORRECTION	0.50 fiducial. The data has been corrected for compton scattering and adjusted to a height of 122 metres agl. It was then converted to ground concentration units.

Flown and compiled by:
BGM AIRBORNE SURVEYS, INC.

Scale 1:100 000

2 0 2 3 5 6 miles
2 0 2 4 6 8 10 km

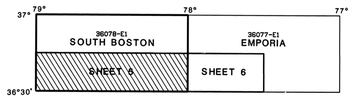
NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION, CENTRAL MERIDIAN -81°

AERORADIOMETRIC MAPS OF PARTS OF THE SOUTH BOSTON AND EMPORIA 30' X 60' QUADRANGLES, VIRGINIA AND NORTH CAROLINA

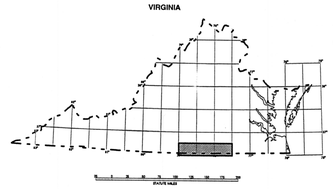
BY
U.S. GEOLOGICAL SURVEY
1994

North point relationships are shown for the centre of the map.
Magnetic north is true for 1994.2

GRID/MAGNETIC ANGLE -6°45'24"
GRID CONVERGENCE -1°29'47.15"
SECULAR VIRRIATION 0°3'36" west per year



SHEET INDEX
FOR POTASSIUM



LOCATION OF THIS STUDY AREA

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