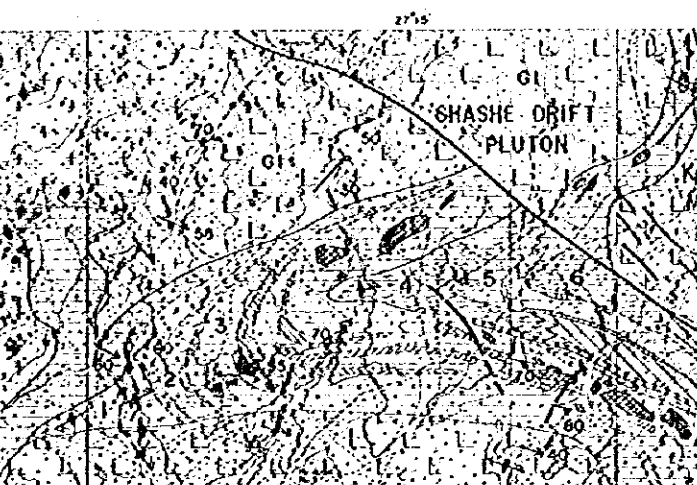
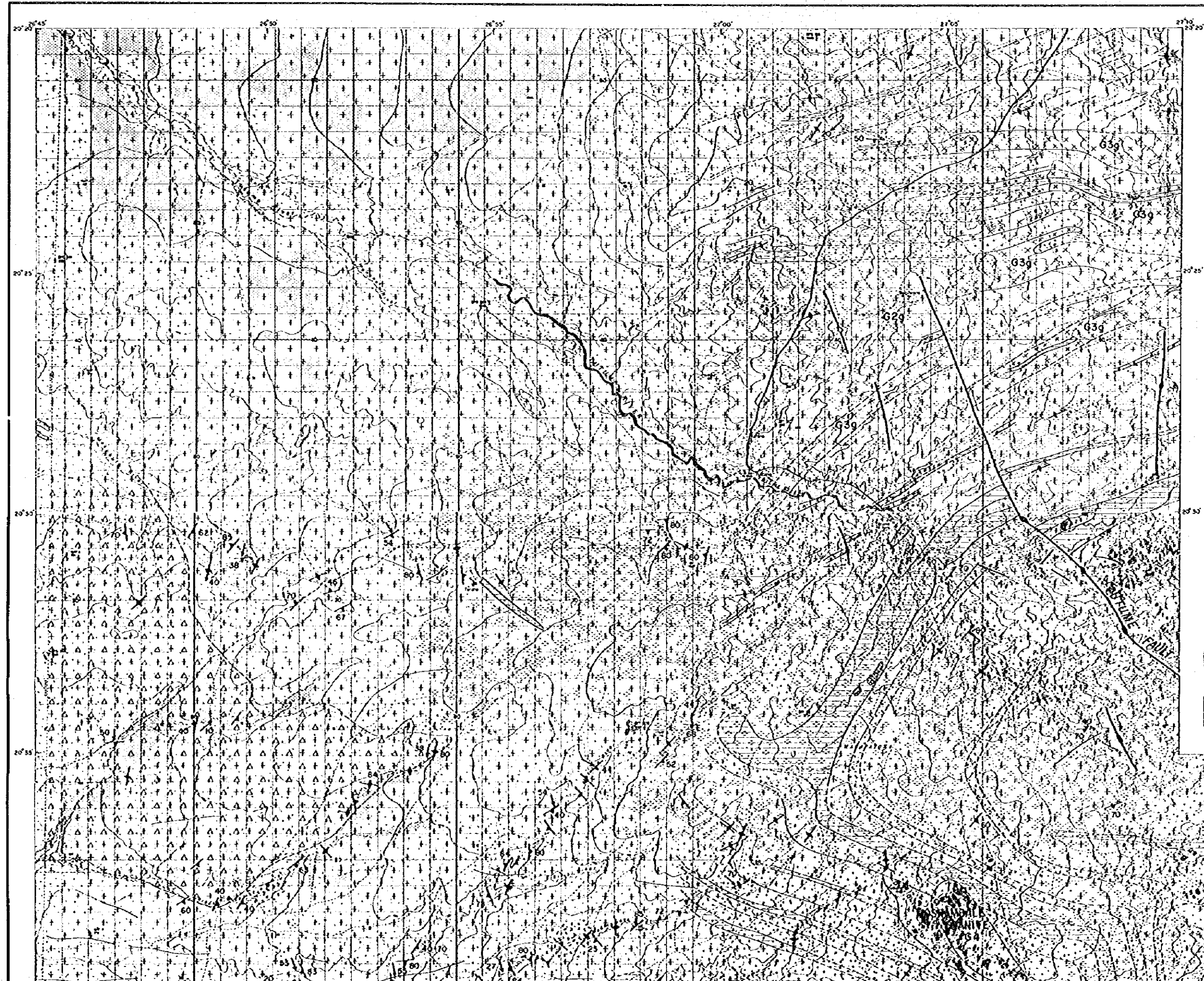


MOSETSE - MATSITAMA

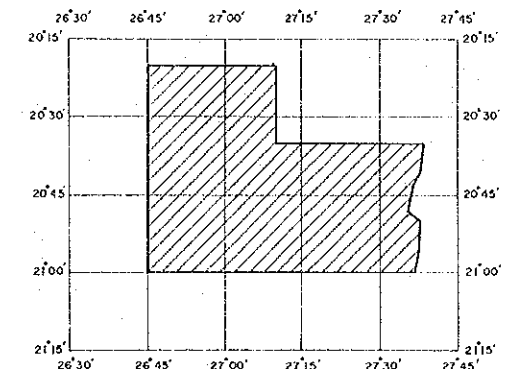
AGE	STRATIGRAPHIC UNIT	LITHO
GROUP	FORMATION	
PRECAMBRIAN	Palameia Sedimentary	Undifferentiated micaceous quartz Undifferentiated meta arkose w/ ferruginous varic limestone, amph
	Leposa - Mnikiguru Greenschist and Metasedimentary	Undifferentiated and greenschist, mica schist, n
PRECAMBRIAN	MOSETSE RIVER GNEISS	Fairly foliated Porphyroblastic Amphibole zone Amphibole Limestone Undifferentiated quartz feldspar - mica schist Quartz feldspar - mica schist Migmatitic and minor greenschist
		Diabase, post Foliation Foliation vertical Minor fold axis Lineation Fault, inferred Cu Copper occurs Cr Chrome occurs



GEOLOGICAL SURVEY
OF
THE NORTHEAST AREA, NORTHEASTERN BOTSWANA
PHASE I

GEOLOGICAL MAP
(REGIONAL SURVEY AREA)

Scale 1:100,000



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY

FEBRUARY 1983

LEGEND

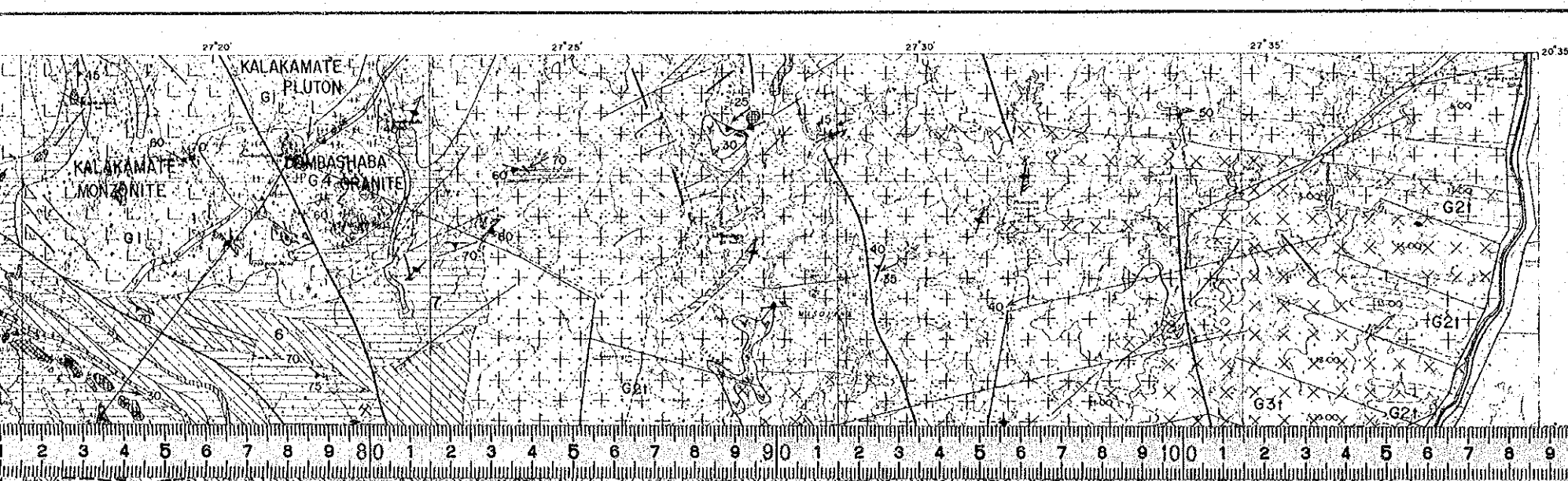
METASEDIMETARY AND METAVOLCANIC ROCKS		SEBINA - TSHESEBE	
LITHOLOGY	AGE	STRATIGRAPHIC UNIT	LITHOLOGY
	SUPPER GROUP	FORMATION/RELATIONSHIP	
Undifferentiated limestone, feldspathic and micaceous quartzite, mica schist, minor amphibolite		Upper Vumba Mafic 7	Amphibolite
Undifferentiated feldspathic quartzite and meta arkose with schistose, micaceous and ferrous variations, mica schist, minor limestone, amphibolite, greenschist		Upper Vumba Felsic 6	Felsic metavolcanics, minor amphibolite Aluminous schists, meta-tuffs, minor felsic metavolcanics and amphibolite
Undifferentiated amphibolite, greenschist and greystone, limestone, grey phyllite and mica schist, impure quartzite		Lower Vumba Mafic 5	Calc-silicate Amphibolite Felsic metavolcanics (agglomerate)
		Lower Vumba Felsic 4	Marble, calc-silicate, ironstone (i) hematite schist Felsic metavolcanics, minor amphibolite
Poorly foliated granitic gneiss (predominant)			Aluminous schist etc., Aluminous quartzite
Porphyroblastic gneiss (predominant)			Peridotite Ultramafic schist Aluminous quartzite
Amphibolite zone			Metaproxenite sill
Amphibolite			Felsic metavolcanics
Limestone			Metaproxenite sill
Undifferentiated quartz-feldspar gneiss, quartz-feldspar-biotite gneiss, quartz-feldspar-hornblende gneiss, porphyroblastic, migmatitic and granitoid gneiss, amphibolite, minor greenschist, limestone			Felsic metavolcanics
Dolerite, post karroo system			Marble
Foliation			Main Serpentinite sill Feldspar porphyry
Foliation vertical			Aluminous schist
Minor fold axis			Felsic metavolcanics
Lineation			Igneimbrite, tuff-lava (Kopje pyroclastics) Amphibolite
Fault, inferred			Meta-Arkose Ultramafic schist and amphibolite
Copper occurrence			Meta-Arkose with minor gneiss, quartz schist and amphibolite
Chrome occurrence			Amphibolite Ultramafic schist

GRANITOID ROCKS	
G4 (intrusions)	Granite (generally adamellite)
G3 (anatectites, post-F2, pre-F3)	Tonalite G3f Granite G3g (adamellite)
G2 (replacement granitoids, post-F1, pre-F2)	Tonalite gneiss G2f (granitised Volcanic Group) Granitic gneiss G2g Mafic gneiss K-feldspar porphyroblastic gneiss
G1 (intrusions, post-F1, pre-G2)	Tonalitic orthogneiss Monzonitic orthogneiss

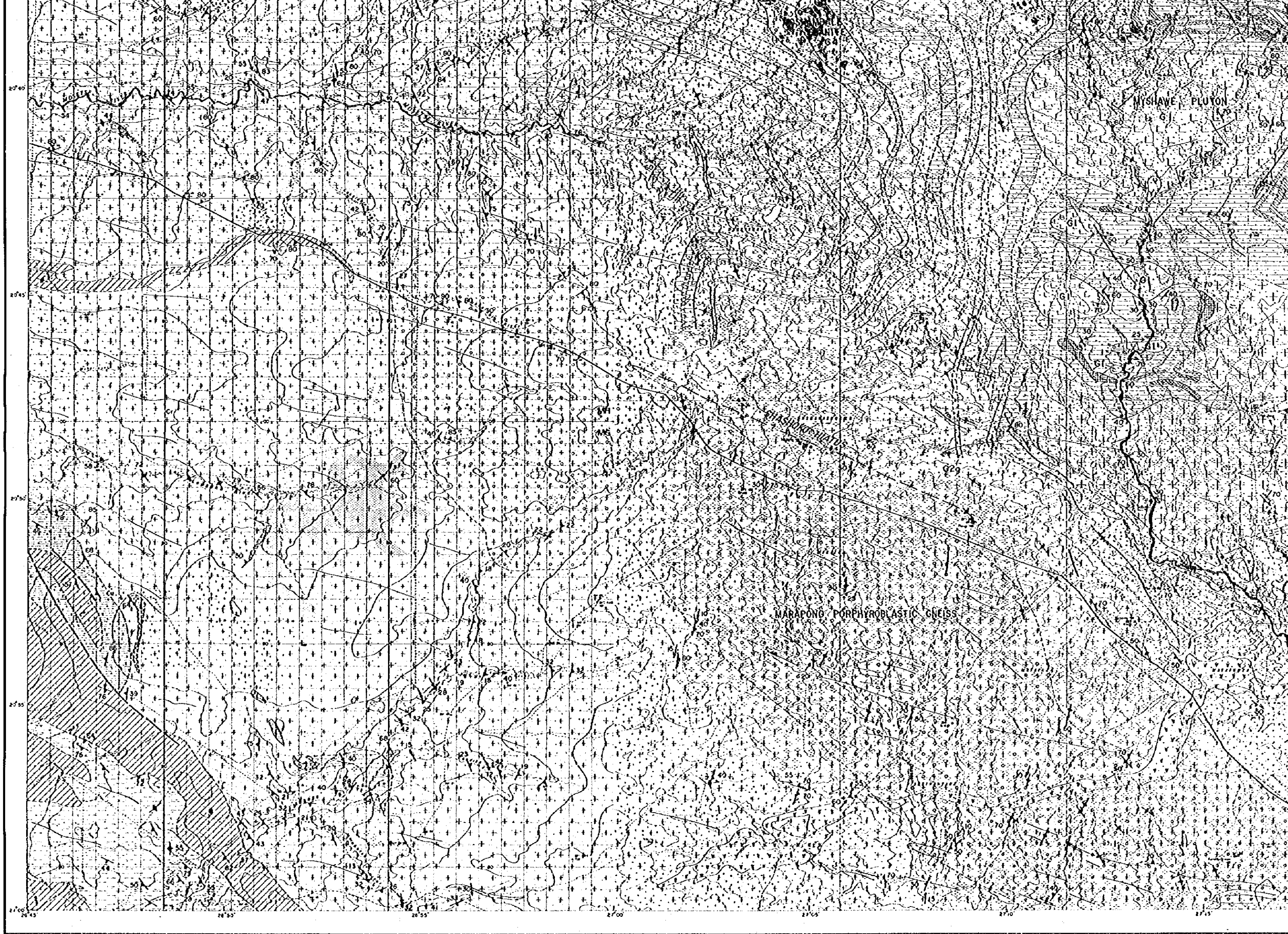
MINOR INTRUSIVE IGNEOUS ROCKS	
(probably syn-G1)	Serpentinite Metaproxenite, metagabbro
(post-G3, pre-F3)	Metadolerite dyke (a) wide (b) narrow Dolerite, gabbro, norite (a) sill (b) wide dyke (c) narrow dyke Granite dyke Granodiorite

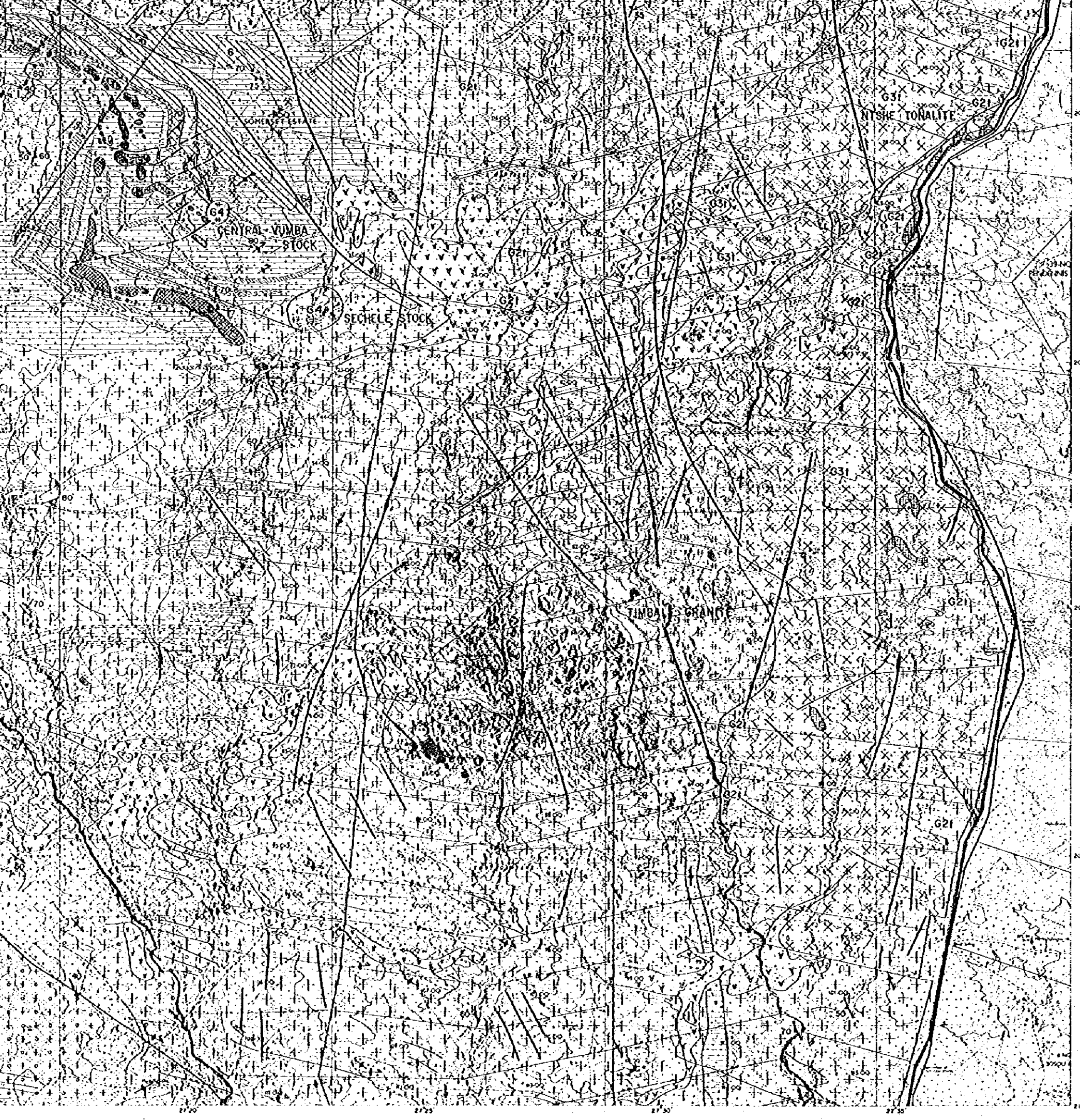
STRUCTURE	
(subvertical) (with dip)	Strike and dip the "bedding schistosity" (Sa/S1)
	Strike and dip of S2
	Strike and dip of S2(a)
	Strike and dip of S3
	Strike and dip of:
	(i) Foliation in Outer Dombashaba Granite
	(ii) Main pegmatite/granite sheeting in the Timbata Aureole
45	Plunge of lineation (L1, L2, L2(a) and L3)
?	F2(a) shear
quartz vein	Fault, shear
horizontal sense of movement	

AGE	
EARLY PRECAMBRIAN	BASEMENT COMPLEX
EARLY PRECAMBRIAN	BASEMENT COMPLEX
LATE / POST-KARROO	AGE UNCERTAIN
LATE / POST-KARROO	

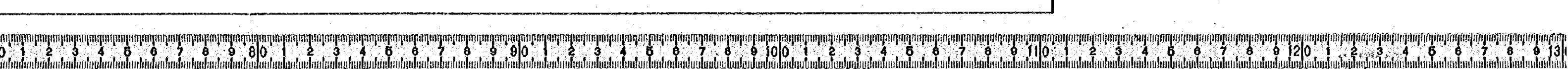


Map based on that of Bennett (1970) and Litherland (1975), slightly modified













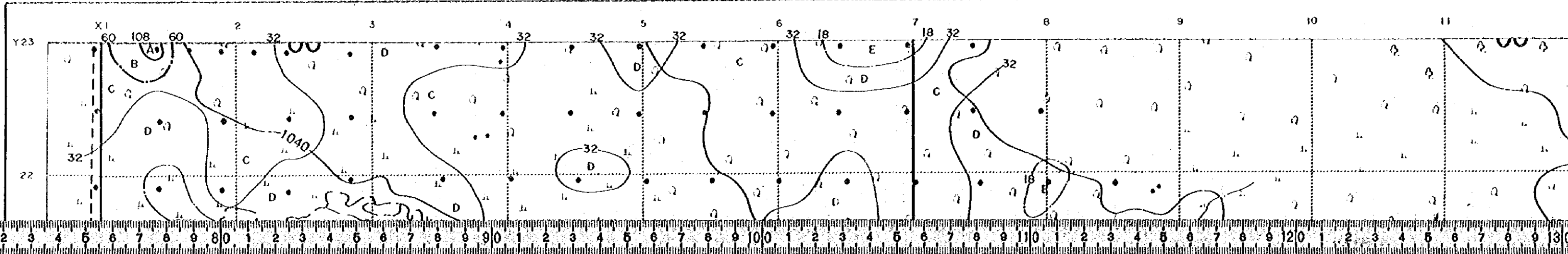
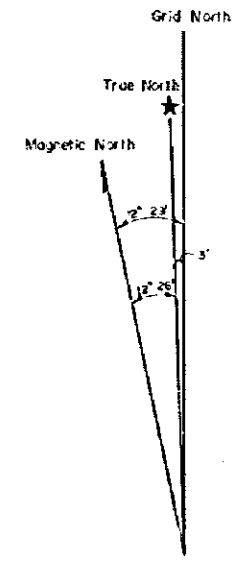
20°40'
20°45'
20°50'
20°55'



Legend

Class	Symbol	Range (ppm)
Anomaly	A 	108 ≤ Cu
	B 	60 ≤ Cu < 108
Background	C 	32 ≤ Cu < 60
	D 	18 ≤ Cu < 32
	E 	Cu < 18

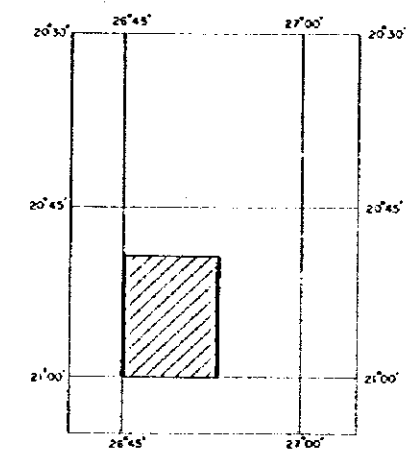
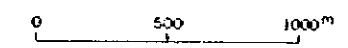
-  Geochemical survey area (phase II)
-  Geological survey area (phase II)
-  Geochemical survey area (phase IV)



GEOLOGICAL SURVEY
OF
THE NORTHEAST AREA, NORTHEASTERN BOTSWANA
PHASE III

Cu CONTENT DISTRIBUTION MAP

Scale 1:20,000

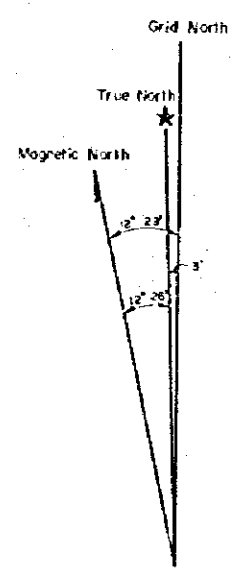


METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY

FEBRUARY 1983

Legend

Class	Symbol	Range (ppm)
Anomaly	A	108 ≧ Cu
	B	60 ≧ Cu < 108
Background	C	32 ≧ Cu < 60
	D	18 ≧ Cu < 32
	E	Cu < 18



- Geochemical survey area (phase II)
- Geological survey area (phase III)
- Geochemical survey area (phase IV)

