



Appendix 8 Microphotographs
(Polished Thin Section and Polished Section)

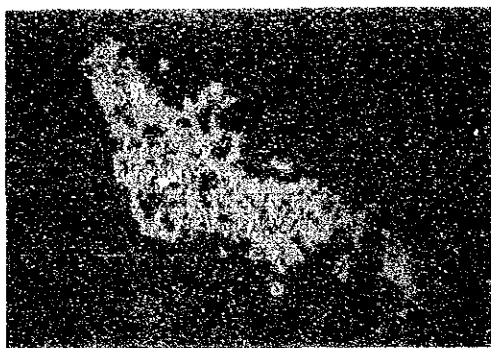
[Abbreviations]

Aeg	- - - -	aegirine
Ap	- - - -	apatite
Bi	- - - -	biotite
Br	- - - -	brucite
Cal	- - - -	calcite
Carb	- - - -	carbonate mineral
Fe	- - - -	Fe-oxide(hydro-oxide)
Goe	- - - -	goethite
Hem	- - - -	hematite
Il	- - - -	ilmenite
Kf	- - - -	alkali feldspar
Mag	- - - -	magnetite
Mz	- - - -	monazite
Opq	- - - -	opaque minerals
Py	- - - -	pyrite
Qz	- - - -	quartz
Rt	- - - -	rutile
Sp	- - - -	sphalerite
St	- - - -	strontianite
Zr	- - - -	zircon

[Legend]

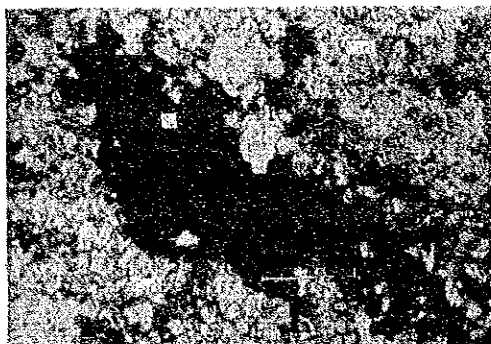
	- - - -	area of characteristic X-ray images by EPMA
	- - - -	point of qualitative and quantitative analysis by EPMA

Sample No : 6H010R
Rock Name : Sövite
Sector : Chilwa Island



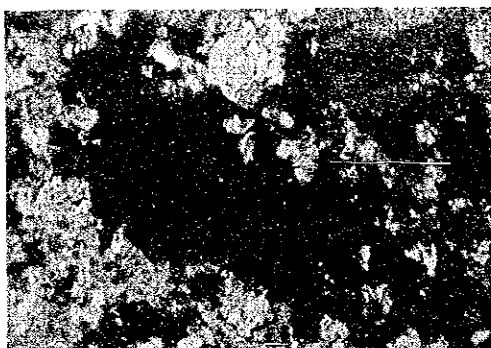
0 0.5mm

(reflected light)



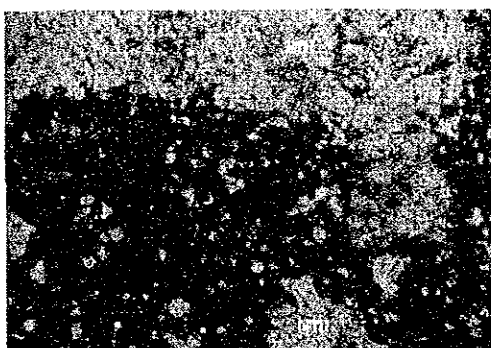
0 0.1mm

(transmitted light, open nicol)



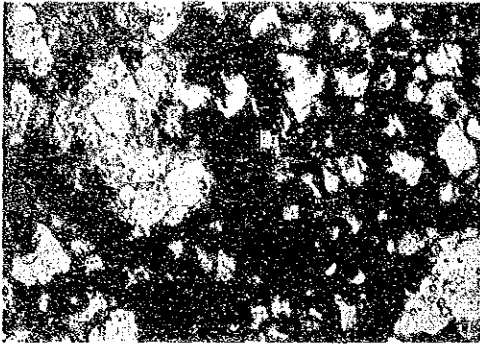
0 0.1mm

(transmitted light, crossed nicols)



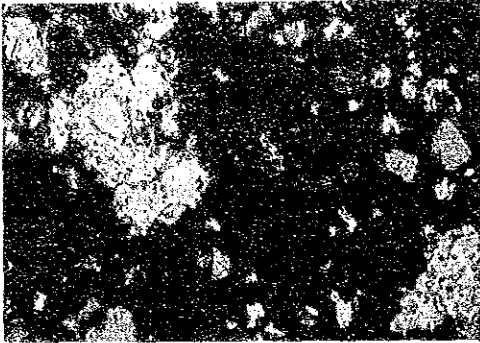
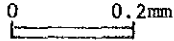
0 0.2mm

(transmitted light, open nicol)

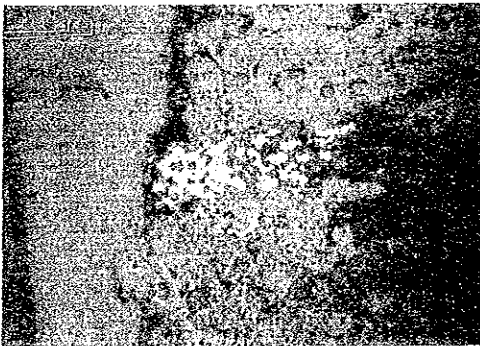
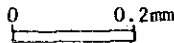


Sample No : 6H010R
Rock Name : Sövite
Sector : Chilwa Island

(transmitted light, open nicol)

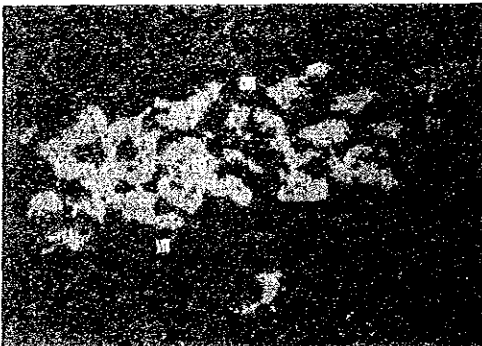
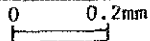


(transmitted light, crossed nicols)

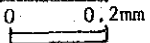


Sample No : 6M004R
Rock Name : Apatite feldspathic rock
Sector : Tundulu

(reflected light)



(reflected light)

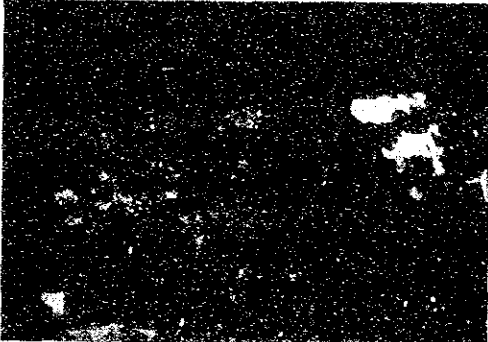


Sample No : 6M004R
Rock Name : Apatite feldspathic rock
Sector : Tundulu



0 0.4mm

(transmitted light,
plain polarized light)



0 0.15mm

(transmitted light,
crossed polarized light)



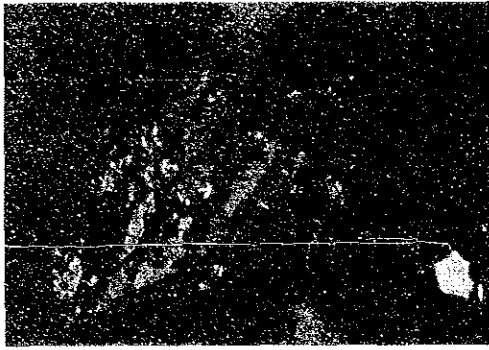
0 0.5mm

(reflected light)



0 0.5mm

(transmitted light open nicol)



0 0.2mm

Sample No : 6M004R
Rock Name : Apatite feldspathic rock
Sector : Tundulu

(transmitted light, crossed nicols)



0 0.2mm

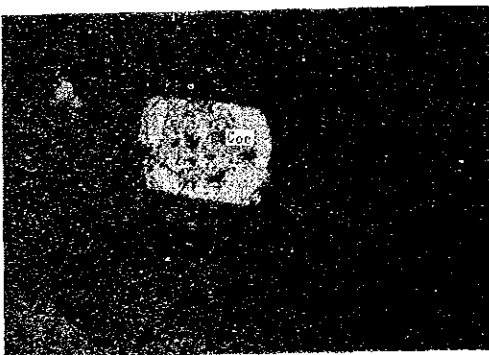
Sample No : 6M044R
Rock Name : Monzonite bearing Carbonatite
Sector : Kangankunde

(transmitted light,
plain polarized light)



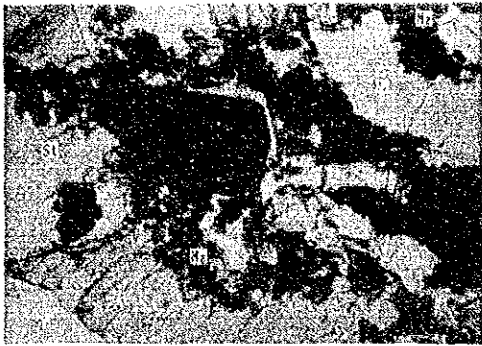
0 0.2mm

(transmitted light,
crossed polarized light)



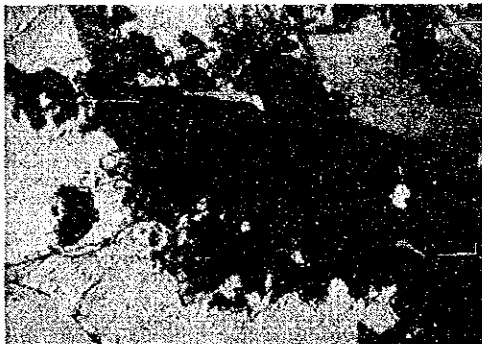
0 0.5mm

(reflected light)

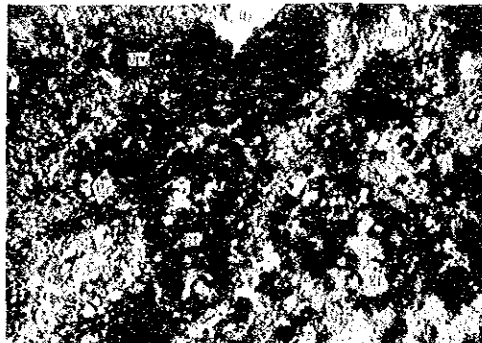


Sample No : 6M044R
Rock Name : Monzonite bearing Carbonatite
Sector : Tundulu

(transmitted light, open nicol)

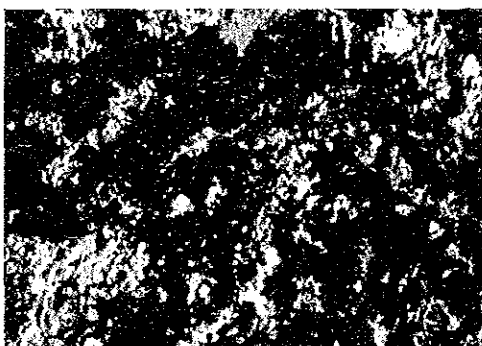


(transmitted light, crossed nicols)



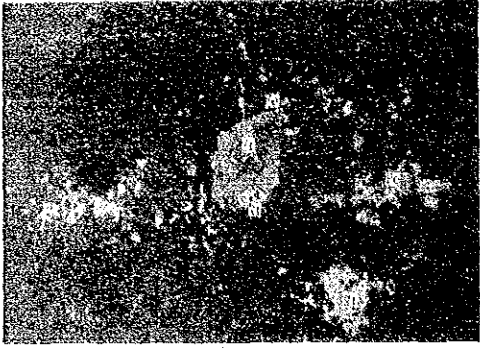
Sample No : 6M045R
Rock Name : Carbonatized feldspathic rock
Sector : Kangankunde

(transmitted light,
plain polarized light)



(transmitted light,
crossed polarized light)

Sample No : 6M045R
Rock Name : Carbonitized feldspathic rock
Sector : Kangankunde



0 0.2mm

(reflected light)



0 0.2mm

(transmitted light, open nicol)



0 0.2mm

(transmitted light, crossed nicols)



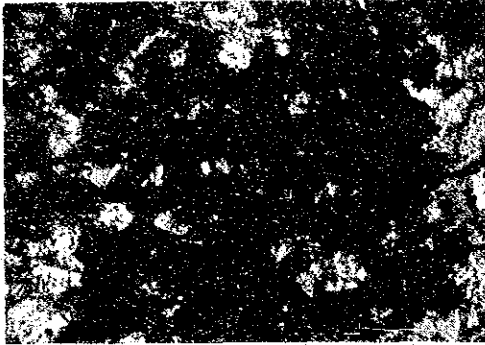
0 0.2mm

(reflected light)

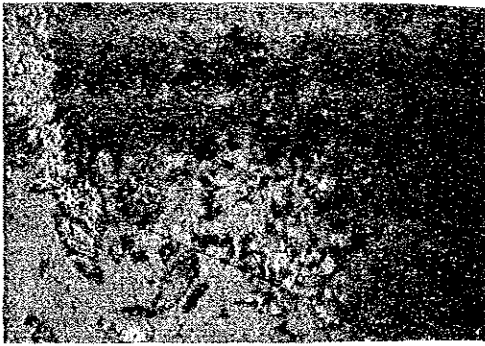


Sample No : 6M045R
Rock Name : Carbonitized feldspathic rock
Sector : Kangankunde

(transmitted light, open nicol)

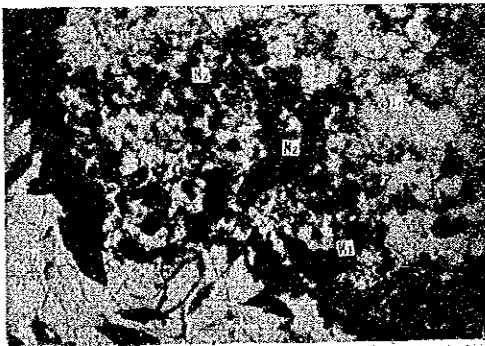


(transmitted light, crossed nicols)



Sample No : 6M053R
Rock Name : Quartz druse rock
Sector : Kangankunde

(reflected light)



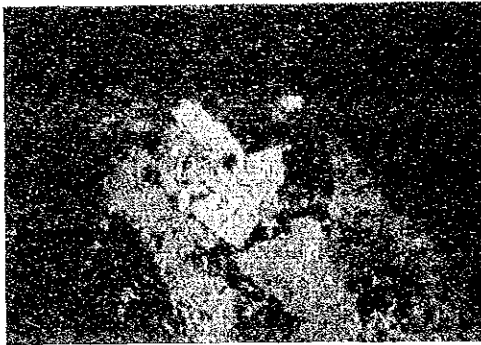
(transmitted light, open nicol)

Sample No : 6M053R
Rock Name : Quartz druse rock
Sector : Kangankunde



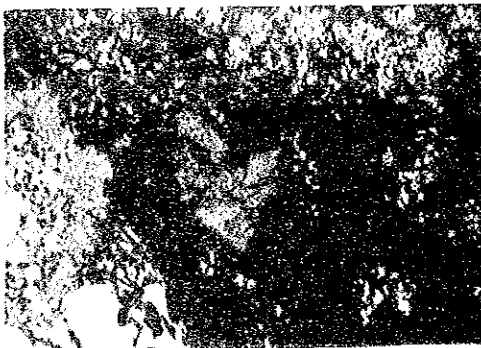
0 0.2mm

(transmitted light, crossed nicols)



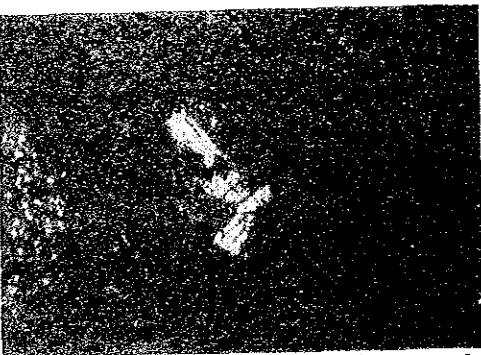
0 0.2mm

(reflected light)



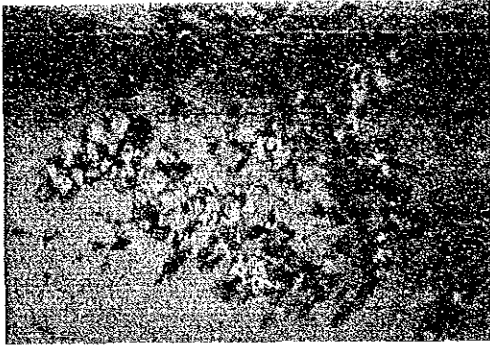
0 0.2mm

(transmitted light, open nicol)



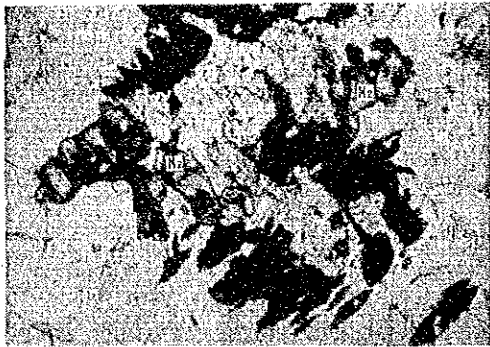
0 0.2mm

(transmitted light, crossed nicols)

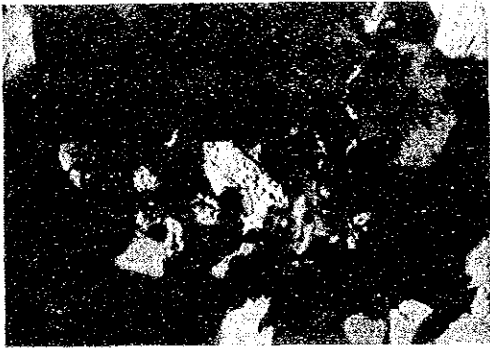


Sample No : 6M053R
Rock Name : Quartz druse rock
Sector : Kangankunde

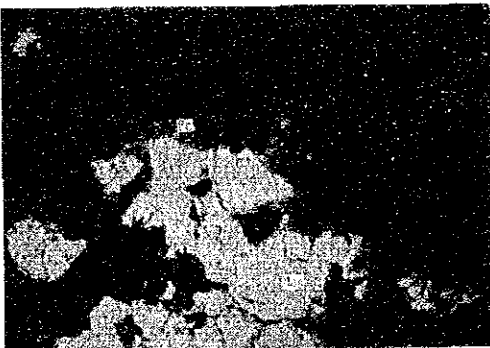
(reflected light)



(transmitted light, open nicol)



(transmitted light, crossed nicols)



Sample No : 6Y003R
Rock Name : Feldspathic rock
Sector : Tundulu

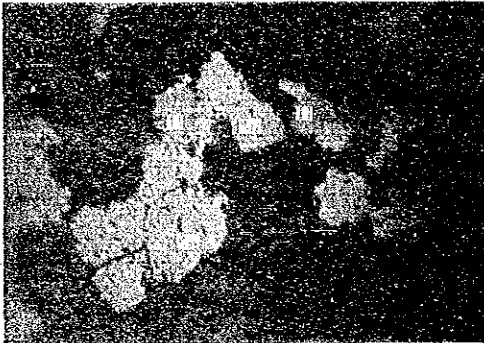
(reflected light)



Sample No : 6Y003R
Rock Name : Feldspathic rock
Sector : Tundulu

(reflected light)

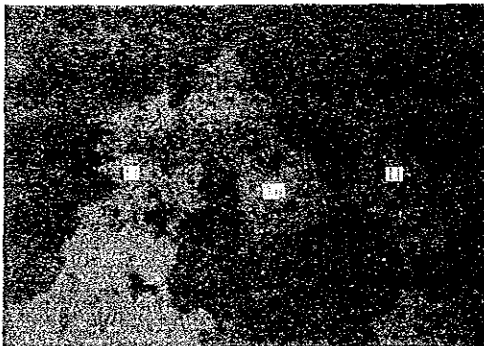
0 0.2mm



Sample No : 6Y005R
Rock Name : Ankeritic carbonatite
Sector : Tundulu

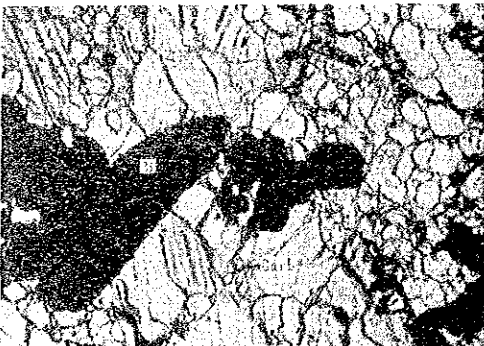
(reflected light)

0 0.5mm



(reflected light)

0 0.2mm



(transmitted light, open nicol)

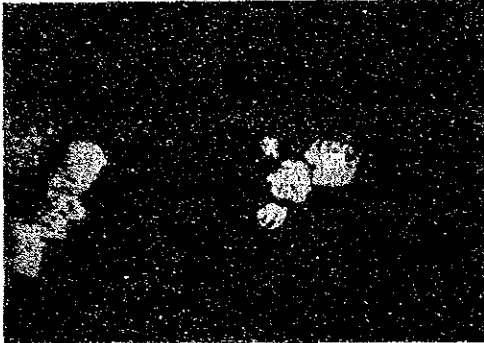
0 0.5mm



Sample No : 6Y005R
Rock Name : Ankeritic carbonatite
Sector : Tundulu

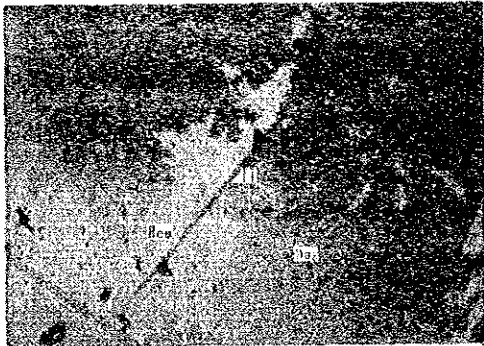
(transmitted light, crossed nicols)

0 0.5mm



(reflected light)

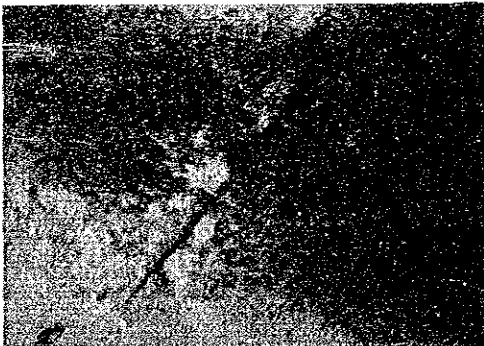
0 0.5mm



Sample No : 6Y007R
Rock Name : Magnetite Ore
Sector : Tundulu

(reflected light)

0 0.1mm



(reflected light, crossed nicols)

0 0.1mm



Sample No : 6Y007R
Rock Name : Magnetite Ore
Sector : Tundulu

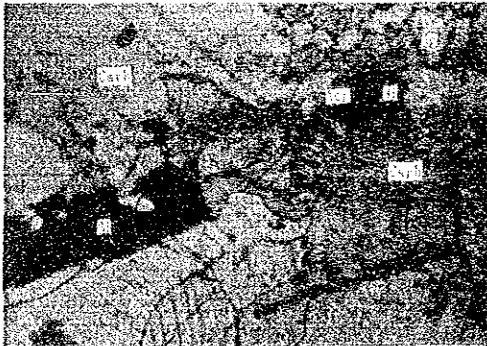
(reflected light)

0 0.04mm



(reflected light)

0 0.04mm



Sample No : 6Y034R
Rock Name : Sövite
Sector : Tundulu

(transmitted light, open nicol)

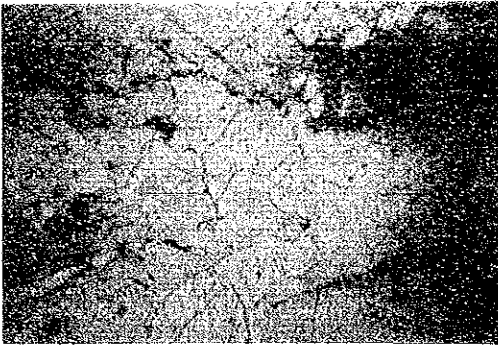
0 0.2mm



(transmitted light, crossed nicols)

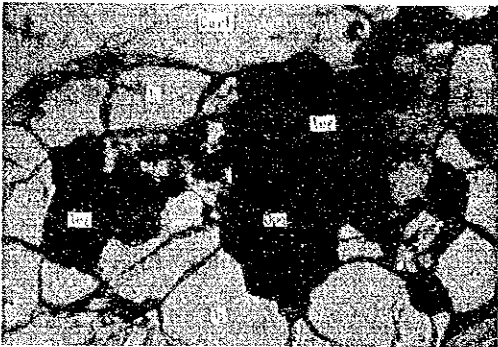
0 0.2mm

Sample No : 6Y034R
Rock Name : Sövite
Sector : Tundulu



0 0.5mm

(Reflected light)



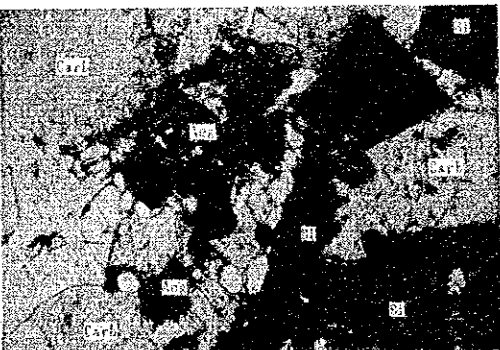
0 0.5mm

(transmitted light,
plain polarized light)



0 0.5mm

(transmitted light,
crossed polarized light)



0 0.5mm

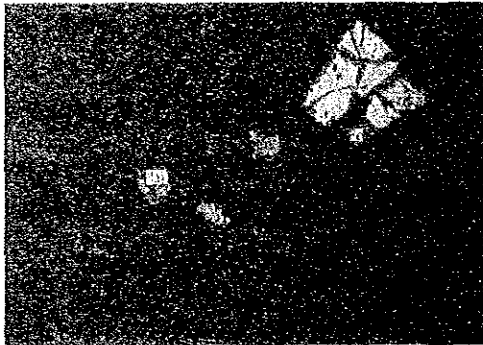
(transmitted light, open nicol)



0 0.5mm

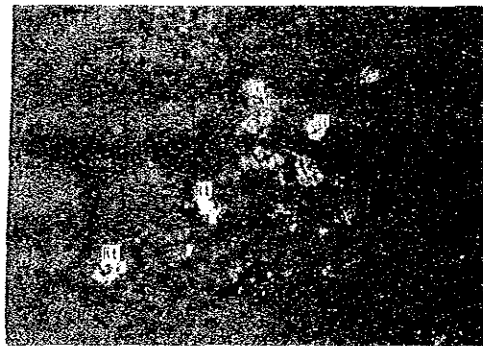
Sample No : 6Y034R
Rock Name : Sövite
Sector : Tundulu

(transmitted light, crossed nicols)



0 0.5mm

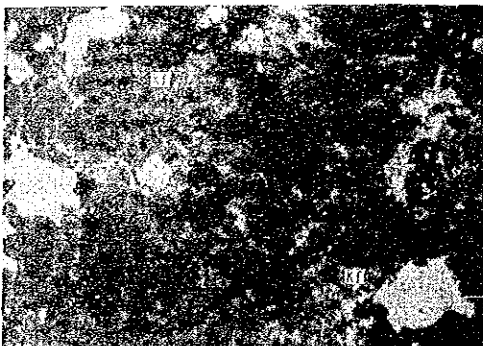
(reflected light)



0 0.5mm

Sample No : 6Y037R
Rock Name : Ankeritic-carbonatite
Sector : Chilwa Island

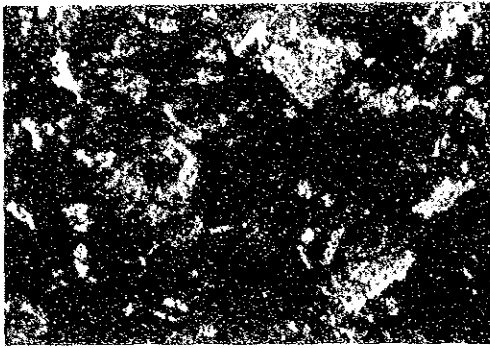
(reflected light)



0 0.5mm

(transmitted light, open nicol)

Sample No : 6Y037R
Rock Name : Ankeritic-carbonatite
Sector : Chilwa Island



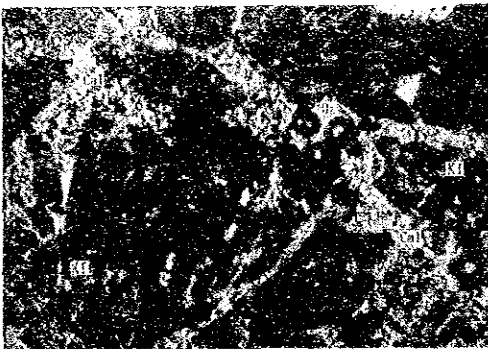
0 0.5mm

(transmitted light, crossed nicols)



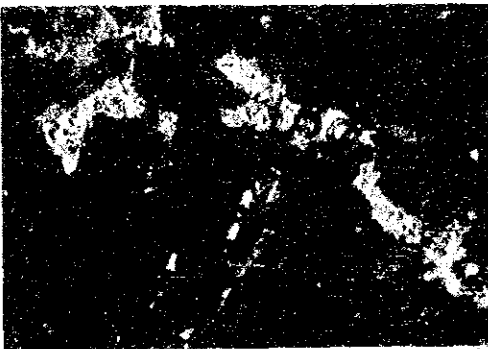
0 0.5mm

(reflected light)



0 0.5mm

(transmitted light, open nicol)



0 0.5mm

(transmitted light, crossed nicols)

