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Plate I. - Unoriented shard-like fragments of chert (white) in a matrix of ferruginous chert (grey); Main Marker, Ouplaas (S2), Danielskuil Area. Compare with Plate V.



Plate II. - Subrounded, disc-like fragments of chert (pale-grey) are contained in a ground-mass of ferruginous chert (grey) on top of the Main Marker, Eldoret (H1), Kuruman District.



Plate III. - Different forms of septarian nodules from beds in the upper portion of the Jasper Substage, Northern Region.

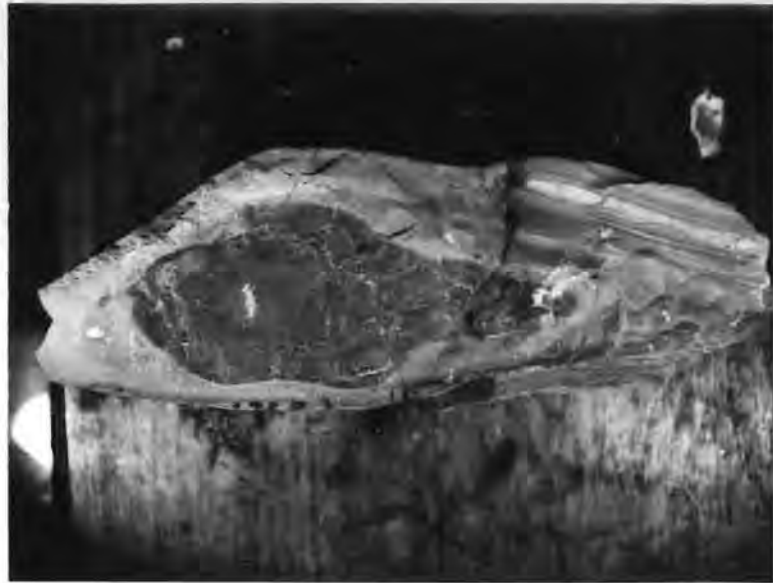


Plate IV. - Pear-shaped body of mass-fibre riebeckite embedded in yellow-brown jasper, Ettrick, Kuruman District. The bedding in the jasper converges to the right, conforming to the outline of the riebeckite body. Irregular fractures in the riebeckite are filled with quartz (white).



Plate V. - Potsherd Marker on Koretsi (Lower Kuruman Native Reserve), Kuruman Area. Unoriented flat fragments of chert (white) are set in a matrix of ferruginous chert (grey).

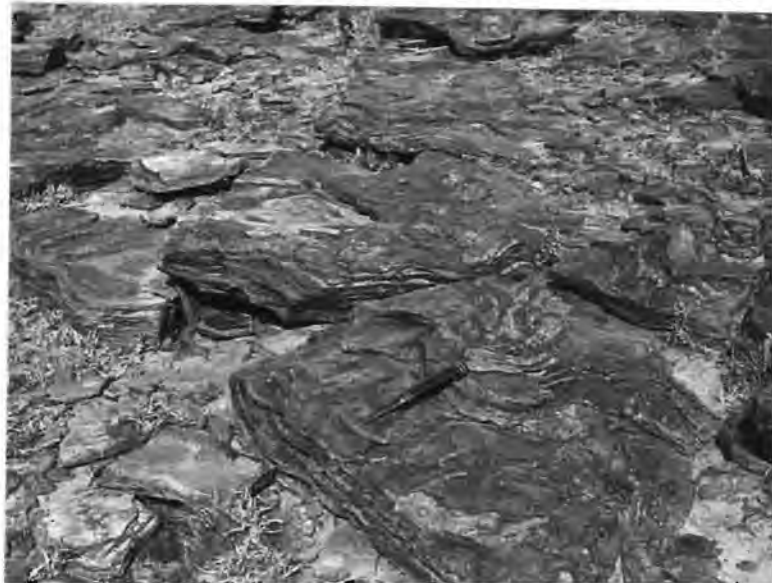


Plate VI. - Warped bedding-planes of Contorted Marker, Hove (C2), Vryburg District. Beds dip with a low angle to the west.



Plate VII. - Microfolds and faults in the Controted Marker, Heunar (D2), Vryburg District. White and pale-grey streaks are occupied by silicified crocidolite. (Sp. HH 91).



Plate VIII. - "Zebra-rock" from the Pomfret No. 2 Mine, Pomfret (B4), Vryburg District. Magnetite laminae (black), are separated by layers of pale-green chert (grey). (Sp. HH 107).

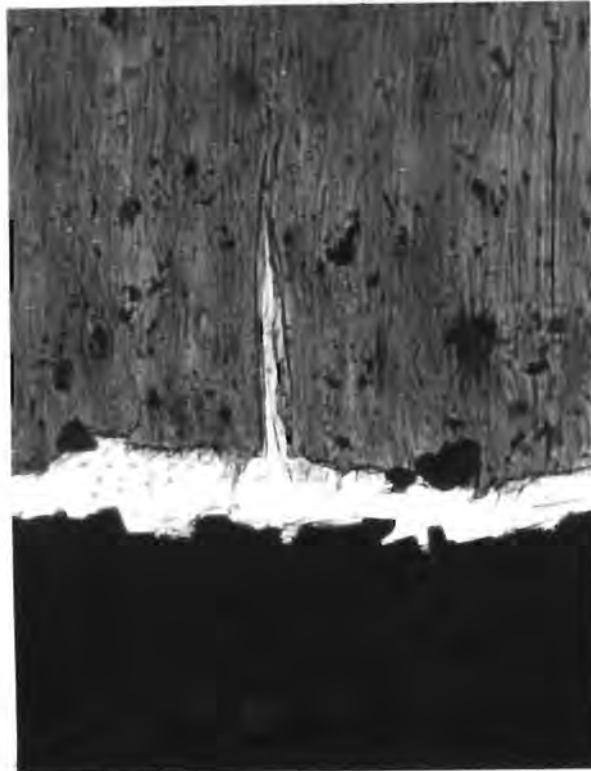


Plate IX. - Cross-fibre crocidolite (grey) separated from magnetite lamina (black) by thin lamina of microcrystalline quartz (white). The direction of growth of the crocidolite and the acicular quartz is away from the magnetite lamina. Numerous granules and crystals of magnetite are present amongst the crocidolite fibres. Ordinary light. X480. (Slide HH 301).



Plate X. - Acicular crystals of minnesotaite projecting at right angles across the boundary between laminae of minnesotaite and chert. The minnesotaite crystals penetrate the chert lamina. Crossed Nicols. X480. (Slide HH 324).

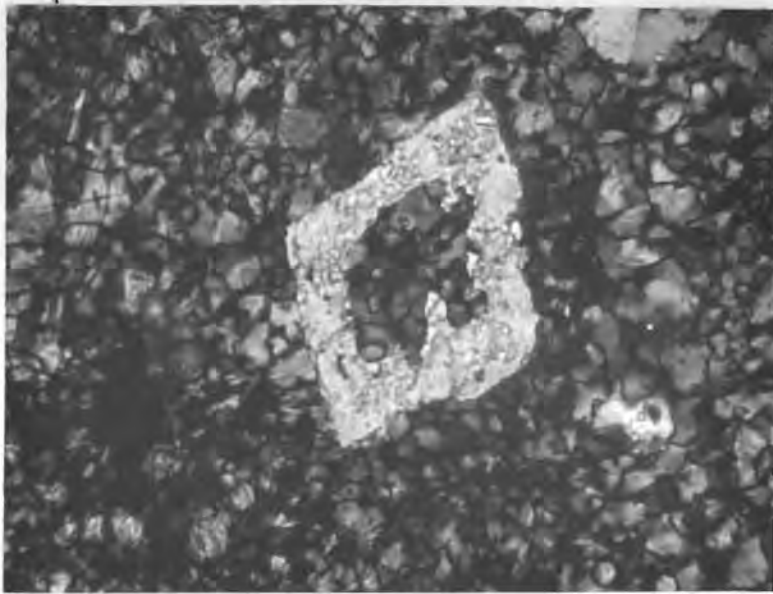


Plate XI. - Partially developed rhomb of carbonate replacing microcrystalline quartz. The core of closely interlocking grains of quartz (dark-grey) is completely surrounded by carbonate (pale-grey). Crossed Nicols. X1080 (Slide HH 272).



Plate XII. - Idioblastic rhomb of carbonate including magnetite (black) poikiloblastically. Crossed Nicols. X1080 (Slide HH 272).

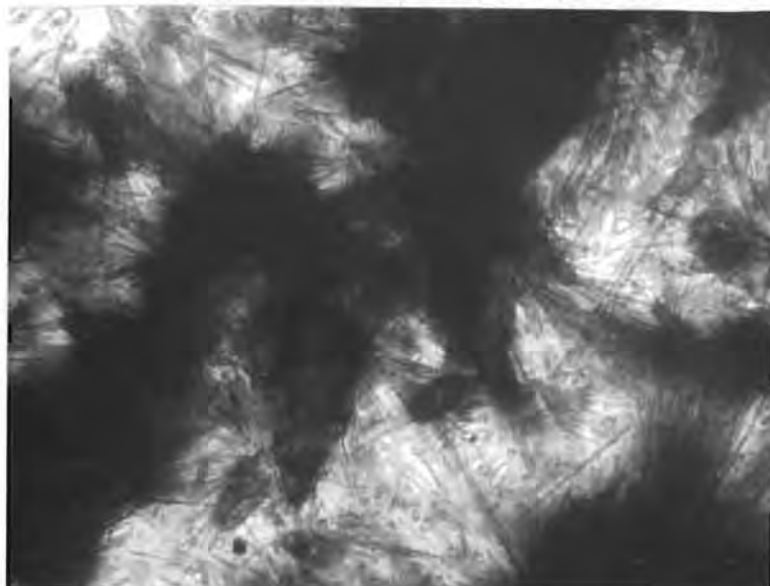


Plate XIII. - Unoriented fibrous growth of mass-fibre riebeckite (black) in matrix of carbonate (grey). Ordinary light X480 (Slide HH 293).

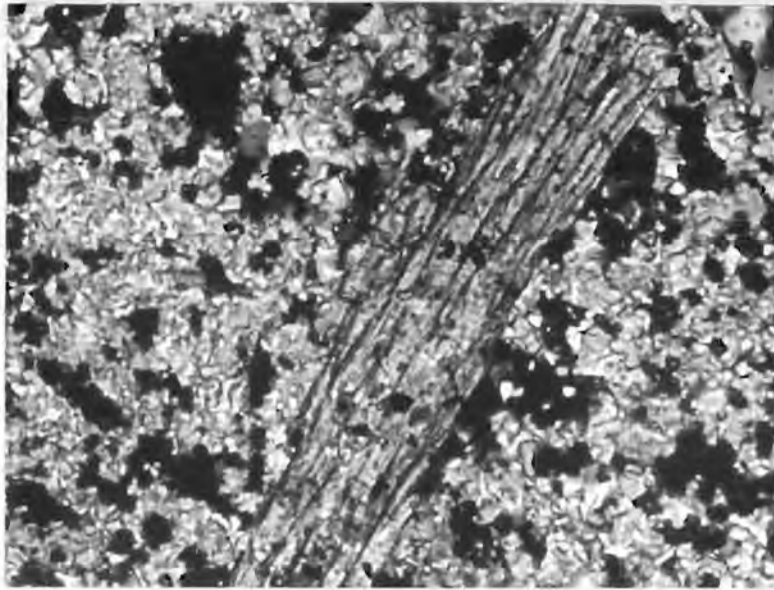


Plate XIV. - Lath-shaped crystal of riebeckite oriented at an angle of 60 degrees to the bedding (parallel to horizontal edge of plate) and occurring in a matrix of chert (grey) and magnetite (black). Riebeckite porphyroblast includes granules of magnetite (black) poikiloblastically. The riebeckite displays prismatic cleavage. Ordinary light. X480. (Slide HH 295).

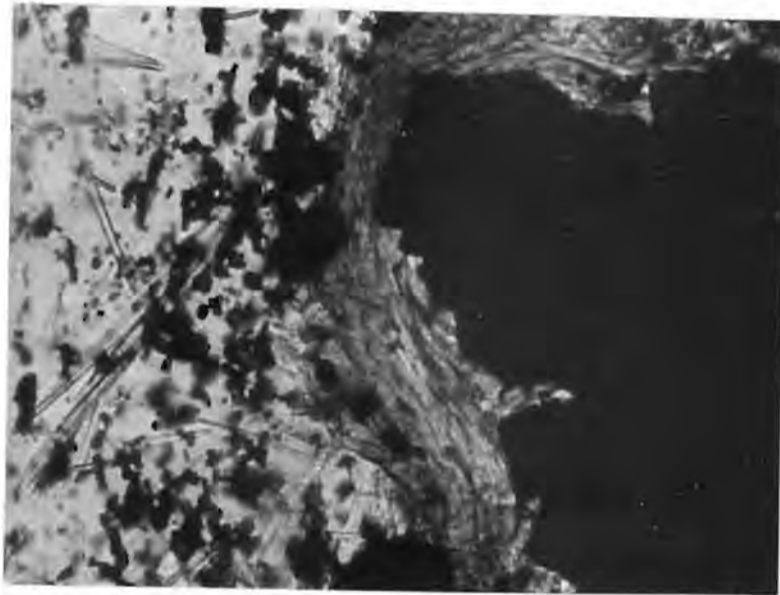


Plate XV. - Acicular crystals of riebeckite (dark-grey) curved around crystal aggregates of magnetite (black) apparently indicating that the magnetite crystallized simultaneous with or after the riebeckite. Ordinary light. X480. (Slide HH 304).



Plate XVI. - Shard structures in pyroclastic band (tuff) intercalated with banded ironstone. Characteristic Y-structures and the axiolithic growth of fibrous stilpnomelane in the large shard are present near bottom of photograph. Ordinary light. X370. (Slide HH 148).

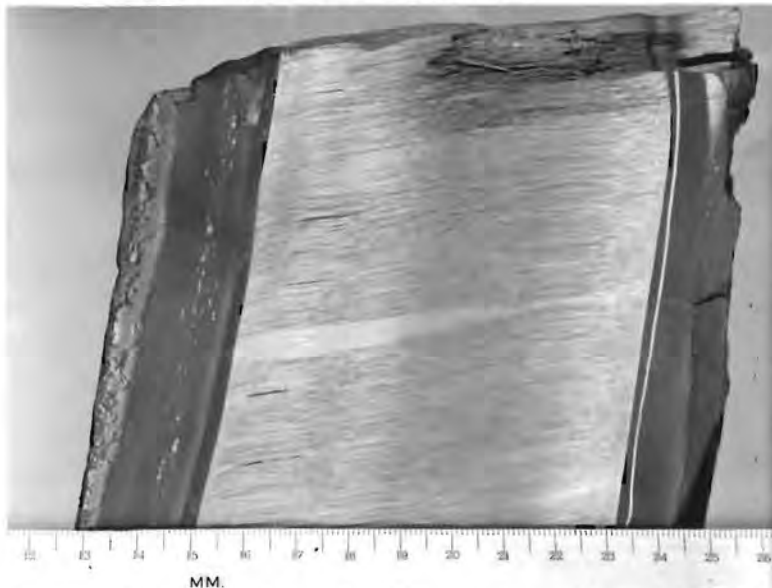


Plate XVII. - Simple or single seam of oxidised crocidolite (Griqualandite), Warrendale, Postmasburg District. (Spc. HH 118).

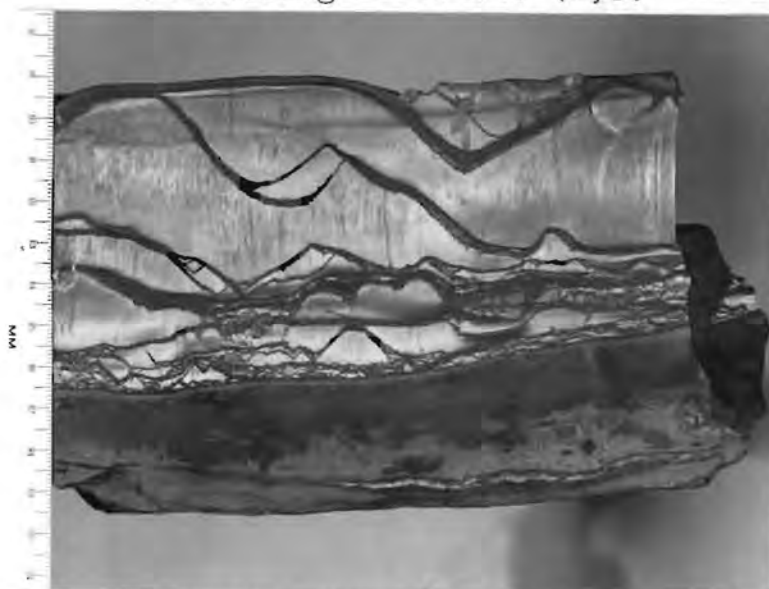


Plate XVIII. - Composite seam of oxidised crocidolite (Griqualandite) displaying "corrugated" or cone-in-cone structures and bifurcation of thin magnetite laminae. (Spc. HH 119).



Plate XIX. - Cone-in-cone structures in seam of oxidised crocidolite, Warrendale, Postmasburg District. The magnetite laminae in vicinity of the cone structures are dislocated. (Sp. HH 120).

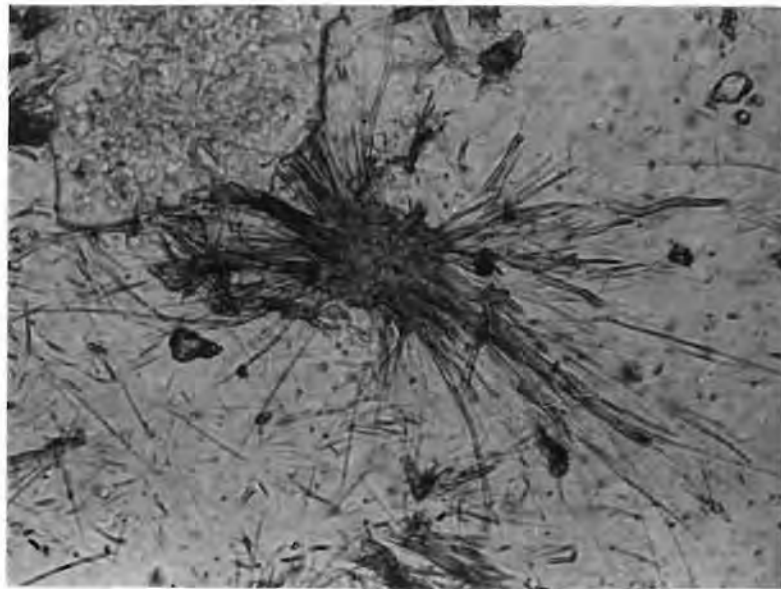


Plate XX. - Acicular crystals of riebeckite (dark-grey) in a matrix of chert (pale-grey) radiate from a core of almost tabular riebeckite in which only tiny specks of magnetite (black) remained intact. Large carbonate rhomb in upper lefthand corner. Ordinary light. X1080 (Slide HH 273).

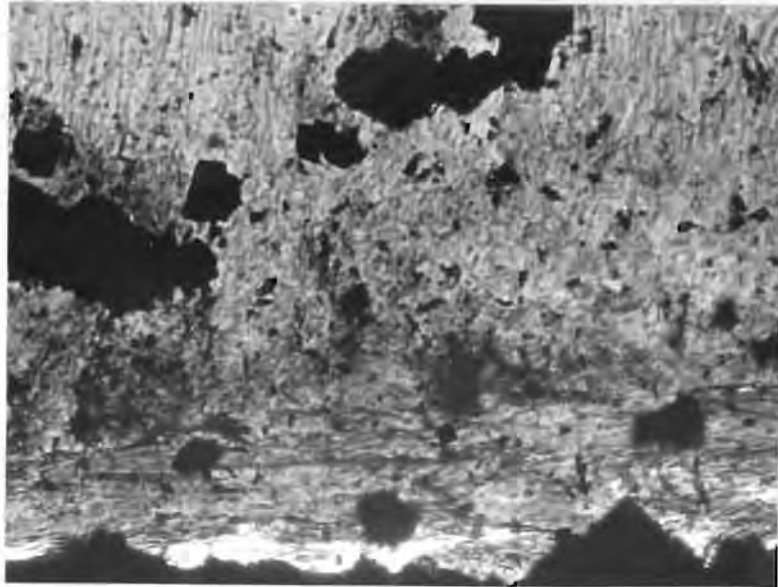


Plate XXI. - Lath-shaped and acicular crystals of riebeckite (dark-grey) oriented parallel to magnetite lamina (black) separate cross-fibre crocidolite (pale-grey) from magnetite laminae. Aggregates of magnetite (black) completely surrounded by crocidolite and also included in the lath-shaped crystals of riebeckite. Riebeckite in part separated from magnetite lamina by chert (white). Ordinary light. X480. (Slide HH 295).



Plate XXII. - Fibres of "morencite" arranged approximately perpendicular to the bedding. Koretsi South Mines. (Sp. HH 358).

**GEOLOGICAL MAP SHOWING THE DISTRIBUTION OF THE
LOWER GRIQUATOWN STAGE IN THE CAPE PROVINCE**

SCALE — 1:250,000
0 5 10 15 20 Miles

Compiled by H.J. Hanekom, M.Sc. from maps by L.G. Boshman, D.Sc. (1918-1919); S.B. de Villiers, B.Sc. (1961); E.F.R. Dreyer, B.Sc. (1965); L.N.J. Engelbrecht, B.Sc. (1958); P.O. Fockema, B.Sc. (1965);
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