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DEPARTMENT OF MINES
SOUTH AUSTRALIA

Preliminary Report on the Victoria Hut Devidite Prospect

by

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associated Plans - US.298.
US.299.

Report No. C.W.18.

Prospect No. U.P. 111.

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PRELIMINARY REPORT ON THE VICTORIA HUT DAVIDITE PROSPECT.

INTRODUCTION:

Uranium mineralisation was found by the Mines Dept. prospectors on the 12th March, 1954, in an area about 3 miles northeast of the Mt. Victoria Hut. The occurrence is in small well defined mineralized zones which sample assays indicate may be of economic value.

LOCATION:

The prospect is situated on the side of a hill approximately 2½ miles northeast of Mt. Victoria Hut which is 5 miles north of the Crocker Well drilling camp. (fig. 1) Access may be obtained via good track to within about 1 mile of the prospect. The final mile is reasonably easy cross country travel which would allow a 2 wheel drive vehicle to approach within a few hundred feet of the prospect.

GEOLOGY:

Uranium mineralization is found in Archean rocks of the Kalabity Series which is a complex of alternating granites, migmatites, feldspathic schists, pegmatities and gneisses. The prospect is composed chiefly of meta-sediments and migmatites with lesser amounts of granite. Included in the migmatites are a variety of granites, pegmatities and meta-sediments that are too broken and intermixed to be conveniently mapped separately. The meta-sediments are mostly gneisses which trend east-west and have a near to vertical dip.

Davidite has been introduced to form well defined mineralized zones which have an east-west trend and dip near to vertical. The zones are composed of foliated biotite migmatite that shows signs of local shearing. The individual outcrops of these zones vary in width from 4 to 20 ft. and extend discontinually for 300 ft.

ORE MINERALS:

Uranium is in the form of davidite with small amounts of torbernite and uranophane. The davidite is intergrown with rutile and hematite and is finely disseminated for the most

EXTENT AND GRADE OF MINERALIZATION:

The major portion of mineralized outcrop is included in a rectangular block with an area of about 20,000 sq. ft. Of this area approximately 15% is mineralized rock and the remainder is migmatite and alluvium. Samples cut at two locations gave the following radiometric assays: U4/6707—.5% U3O8—/width 7 ft.; U4/6708—.4% U3O8—.width 4 ft. (see fig. 2)

These assays indicate that uranium of ore grade exists in the mineralized outcrops.

In addition to the above block, an outcrop of approximately 600 sq. ft. is of economic interest. Radiometric assay of sample U4/6706 (see Fig. 2) across 15 ft. of this outcrop is .2% U3O8. There are also other small outcrops of radioactive rock in the area of the map, but they are too minor to be considered at this time.

PROPOSED DRILLING PROGRAM: (see fig. 2)

To test the mineralized zones at depth and possibly find new mineralization, it is proposed to sink 2 diamond drill holes inclined 45° and directed north. VH# 1 would be collared at coordinates 250S-200W and be drilled to a depth of 125 ft. This is aimed to intersect mineralization at approximately 20 ft. and 45 ft. below the surface. VH# 2 would be started from coordinates 350S-350W, be drilled to a depth of 125 ft. and aimed to intersect mineralization at approximately 45 ft. below the outcrop.

Should the first two holes show encouraging results, it is recommended that two additional holes be drilled to test other mineralized zones and search for mineralization obscured at the surface. These holes should be inclined at 45° and directed south. VH# 3 would start from coordinates 150S-300W, be 100 ft. in length, and aim to cut mineralization at 25 ft. below the outcrop. VH# 4 would be drilled from coordinates 150S-375W, would be 120 ft. in length and aim to intersect mineralization at 25 ft. and 75 ft. below the surface.

Total drilling recommended is 250 ft. for initial exploration and an additional 220 ft. if the first testing gives encouraging results.

SUMMARY:

Davidite was found in March 1954 northeast of Mt. Victoria Hut in the Crocker Well area. Mineralization occurs in well defined zones of biotite migmatite; and samples indicate ore grade (.26%-.58% U3O8). Outcrops of davidite mineralization are not continuous, but if all the surface exposures could be mined there could be up to 300 tons of mineralized rock per foot of depth. Thus this prospect gives indication that should uranium mineral continue in depth it might be worth mining.

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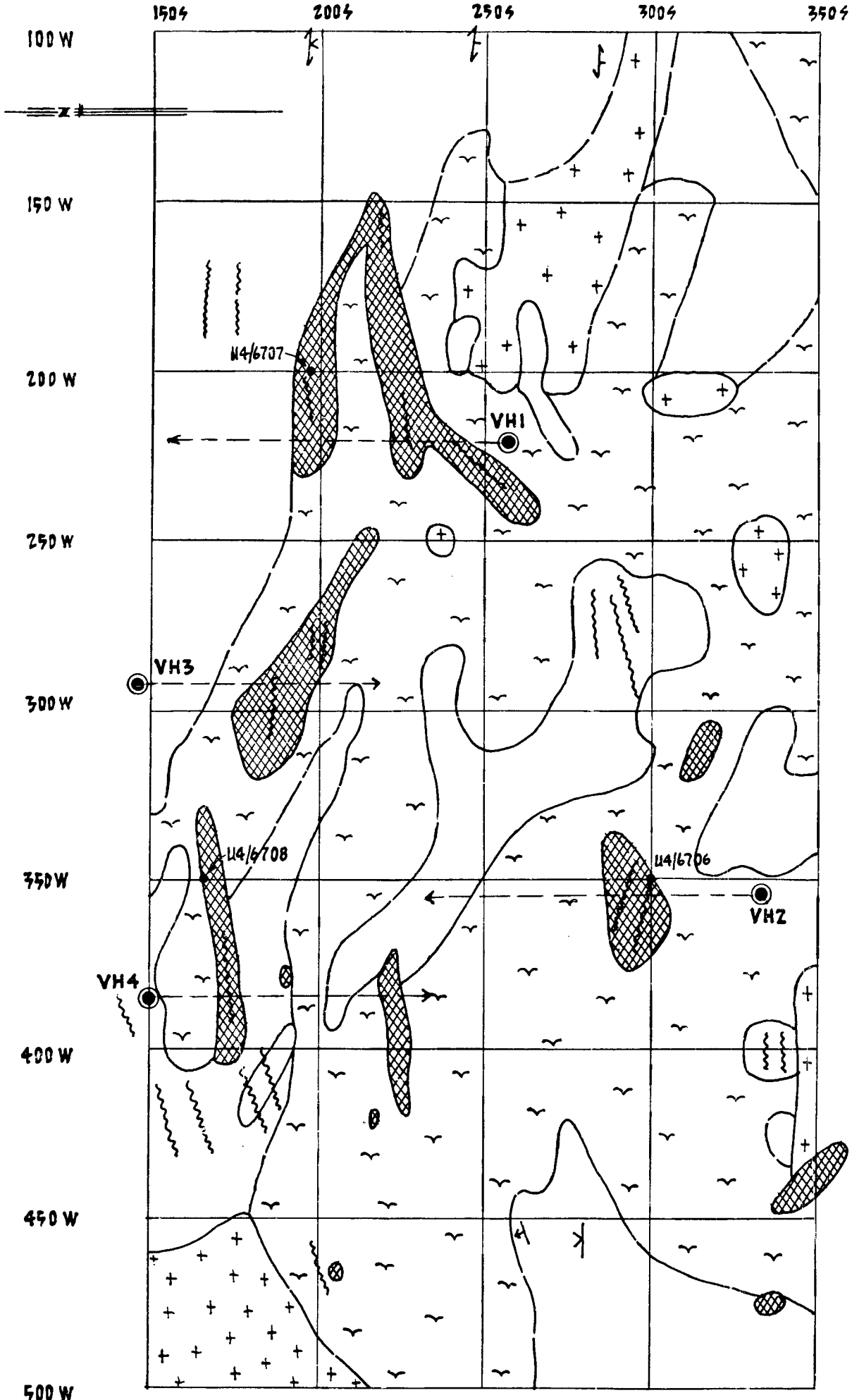


MINERALISED OUTCROP
MIGMATITE
MASSIVE RED GRANITE
SAMPLES U4/6706
LEUCO-GRANITE
ALLUVIUM AND SCREE
QUARTZ
PROPOSED BOREHOLES VH2

To accompany Report by R.K. Pitman

S.A. DEPARTMENT OF MINES

Approved	Passed	Drn.	VICTORIA HUT DAVIDITE PROSPECT	D.M.	Scale 40 Ft. to 1 inch
		Tcd.		Req.	SU 5299
Director		Ckd.	SURFACE PLAN		
		Exd.			Date 30.3.54 Fd (ES)

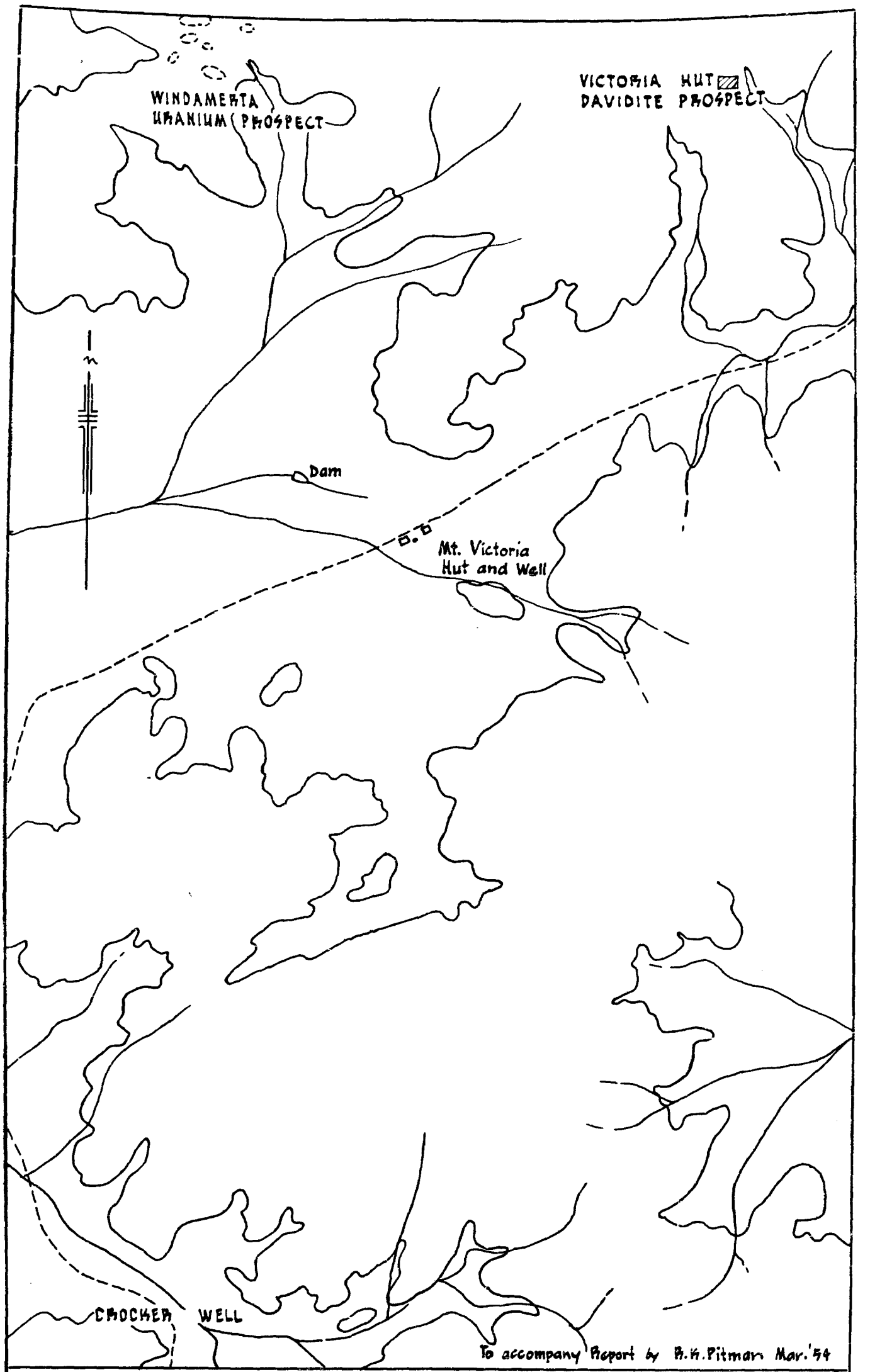
SCALE IN FEET

40 0 40 80 120 160 200

10 0 10 20 30 40 50 60

SCALE IN METRES

5



S. A. DEPT. OF MINES

Approved	Passed	Drn. K	VICTORIA HUT DAVIDITE PROSPECT LOCALITY PLAN	D.M.	Scale 1·8 IN. = 1 MILE
		Tcd.		Rec.	SUS298
		Ckd. R.R.			Fd (E3)
	CD	Fwd			Date 25·3·54