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COMSTAFF PROPRIETARY LIMITED

HUSKISSON DIAMOND DRILL HOLE NO. 1

EXPLORATION LICENCE 5/63

PLAN LIST

- TAS 2-231 LOCATION MAP - HUSKISSON SERPENTINITE
- TAS 2-232 HUSKISSON SERPENTINITE GENERAL
- TAS 2-234 HUSKISSON SERPENTINITE -
 HUS. D.D.H. 1 DETAILS

72-903

ANG COORDINATES

EXPLORATION LICENCE 5/63HUSKISSON DIAMOND DRILL HOLE NO.11. LOCATION

The drill was sited at the intersection of the base-line and line 5N (see map Tas 2-232). It was aligned at 240° with a depression of 45° .

Subsequent bore-hole surveys (fluoric-acid etching) indicated that an angle of 50° was maintained by the hole.

2. DRILL TARGET

The drill was positioned and aligned so that the hole would penetrate beneath the geographical centre of the main geo-chemical anomaly. In addition it would pass through the serpentine contact zone at least 200' below surface.

Obviously, it was hoped that nickel mineralisation would also be encountered in the hole. It was thought that nickel mineralisation could occur within shear zones aligned parallel to the contact and dipping steeply eastwards. The hole as sited would intersect both the shear zones and the contact at a high angle.

3. SUMMARY OF GEOLOGY OF CORE0-21'

Mainly consists of fine-grained to coarse-grained weathered grey sandstone, occasionally sparsely pyritic, and locally with minor brown-green tourmaline. Quartz veining is common but with no preferred orientation.

21-49'

As above but with grey-black siltstones becoming more predominant. The siltstones frequently show signs of brecciation and shearing.

49-62'

Zone of altered tuffs, pyritised in part. Two types of tuff may be distinguished:

- (i) this type consists of numerous large, generally elongate, fragments of deformed and partly recrystallised quartz-rich rock, together with elongate fragments and vein-like folia rich in chlorite or serpentinite, set in a very fine-grained foliated mass;

- (ii) this tuff is composed of irregular fragments of quartz, abundant angular to lath-shaped fragments of twinned plagioclase and volcanic rock fragments, separated and partly replaced by pale green chlorite and abundant finely granular sphene, the whole showing foliation.

62-78'

This section consists largely of quartz-veined, grey-black, pyritised, indurated, foliated siltstone. Many of the quartz-veins replace minor faults with throws up to 1" but they have no preferred orientation. Minor lithologies include a very fine-grained chert-like rock, extensively veined by quartz and a possible fine-grained tuff.

78-111'

Doleritic or Gabbroic Zone. This zone consists of extensively altered dolerite or fine hornblende gabbro. The alteration in places appears to have been mainly pseudomorphous, without significant deformation. It may have been either "hydro-thermal" or low-grade (burial?) metamorphic in origin. Quartz-veining was observed occasionally and Geochemical and Mineralogical Laboratories Pty.Ltd. record the presence of localised zones of deformation indicated by foliated chlorite and fine fragmentation.

111-128'

This section consists of indurated, quartz-veined, highly pyritic black siltstone. Some chalcopyrite, pyrite, and possible pyrrhotite was recorded. Minor sandstone was present.

128-146'

Mainly grey-green, quartz-veined sandstone.

146-156'

Gabbroic zone? very vuggy, appears to be sparsely pyritic. Some siltstone and sandstone.

156'+199'

Mainly grey-black weakly pyritic indurated siltstone and minor sandstone. It is quartz-veined and brecciated in part.

199-203'

Contact zone of serpentinite. The contact appears to be at 70° to the long axis of the core. Ten inches of quartz rich ("jasperoid") rock is followed by 18" of compact dark green serpentinite. This, in turn, is replaced by highly sheared serpentinite. The contact between the sheared serpentinite and the compact serpentinite appears to be at 32° to the long axis of the core.

203-209'

Very sheared, talc-rich, pale, yellow-green serpentinite.

209-245'

Largely talc-rich apple green to dark green serpentinite, much veined with magnetite/chromite. Some shearing displacing earlier magnetite veins. Predominant shears are at 40° to long axis of core. Orbicular (?) chromite was observed to have developed in talc along one shear plane. Very occasionally, there is a small smear of pyrite along a shear plane.

245-254'

Pyritic zone. This section consists of dark green serpentinite, talc rich, and conspicuously containing pyrite in varying amounts throughout. The majority of shear zones were at 40° to the long axis of the core.

254-418'

This section consisted of mainly dark-green to apple-green, talcose serpentinite. Minor chromite was present. Shearing was recorded at 40° , 45° and 75° to the long axis of the core. No sulphides were observed.

418-600'

Here the character of the serpentinite appears to change from a much veined talcose to a less talcose "speckled" type. In the latter, chromite and magnetite occur as aggregates giving the core a speckled appearance, rather than in predominantly vein form. Major shears occur at 30° and 60° to the long axis. Where talc occurs it tends to be more confined to definite shear zones, rather than evenly distributed throughout the core.

4. GEOCHEMISTRY

4.1 General

During the preparation of the drill site, "gossanous" material was exposed at the serpentinite contact. Some of this material was "grab" sampled and sent for spectrographic scan with the resulting values of interest:

Co	10,000	ppm
Ni	6,000	ppm
Cr	2,500	ppm
Mn	10,000	ppm

This "gossanous" zone was located on the contact and for 30' either side. It consisted of thickly scattered nodules of manganese-rich material within the soil. The soil itself was red and lateritic over the serpentinite but was a buff colour over the adjacent tuffaceous sediments.

It now seems probable that this "gossanous" material is merely relict ferricrete that has been retained as weathered nodules in the soil, the manganese acting as a scavenger for the other elements.

4.2 Geochemistry of the Borehole

Sections of the core that showed visible mineralisation were split, crushed, and analysed by A.A.S. for Cu, Ni and Co. One section (55'-62') was analysed by spectrographic scan but the results were of low order.

The data are summarised on the attached table.

5. GEOLOGICAL CONCLUSIONS

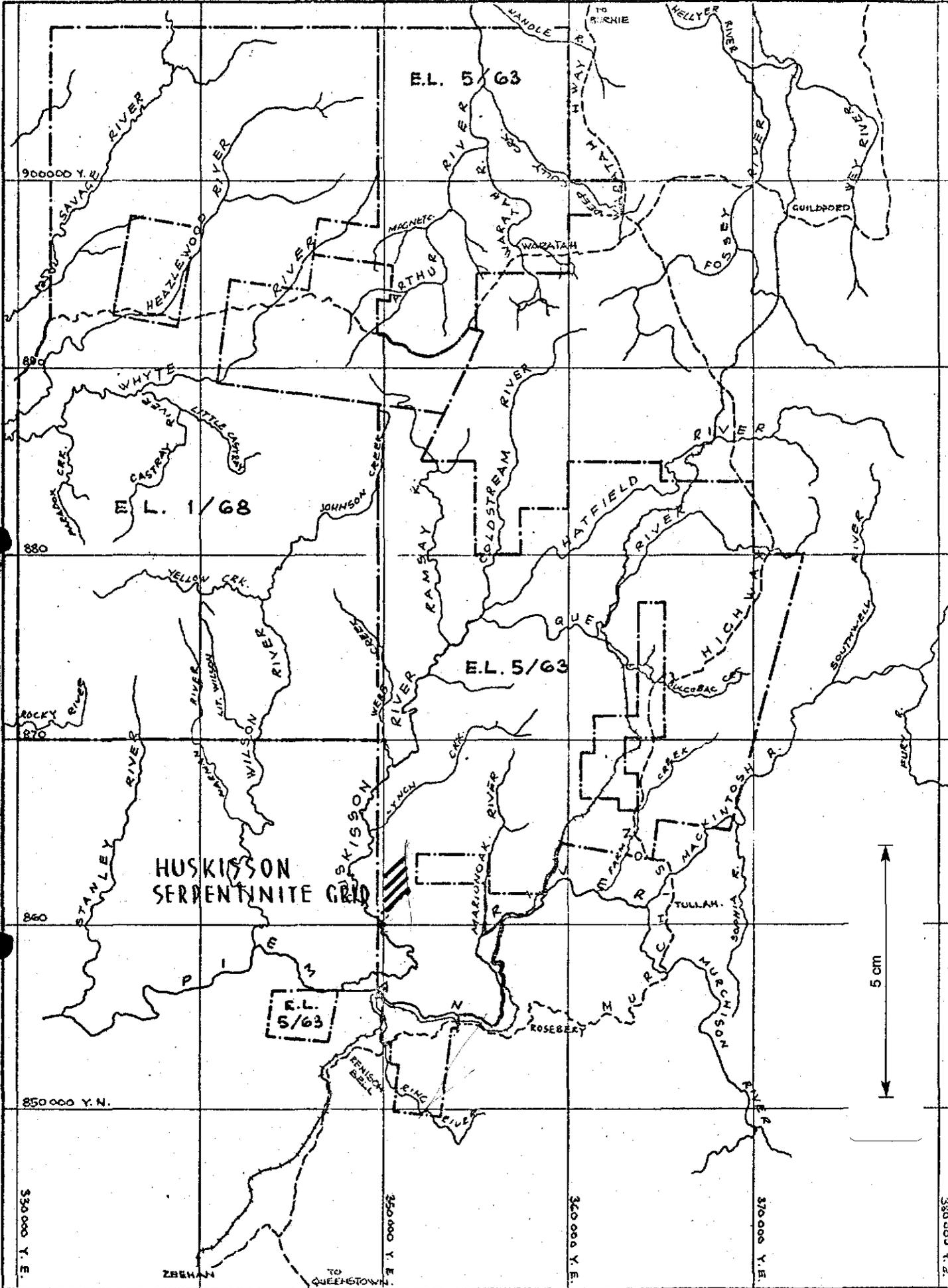
No economic mineralisation occurs at the intersected serpentinite contact. No economic mineralisation has yet been proved within the serpentinite.

No definite zoning was observed within the core that would help determine the geological attitude of the serpentinite body. Observed minor sulphides within the serpentinite part of the core were not related to any markedly different rock type.

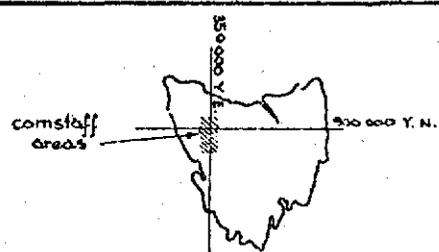
The contact intersection is steeper (near vertical) than was originally thought.

Depth	Geology	Observed Mineralisation	Cu	Co	Ni	
55-56'	altered mafic vitric tuff	possible pyrite	80	30	25) as part of spectrographic scan - other elements had values of low order
56-61'			40	40	200	
61-62'			30	30	100	
111-114'	indurated, quartz-veined black siltstone	Chalcopyrite, pyrite and possibly pyrrhotite	95	230	350) A.A.S.
114-117'			25	25	65	
117-120'			75	20	80	
120-123'			400	20	65	
123-126'			1,000	25	65	
126-129'			100	15	50)
240-243'	Dark green talc-rich serpentinite	Pyrite/magnetite/chromite	<5	65	1,700) A.A.S.
243-246'			<5	65	1,900	
246-249'			<5	60	2,000	
249-252'			<5	55	2,000	
252-255'			<5	60	2,000	

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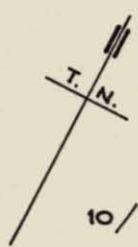
COMSTAFF PTY. LTD.

LOCATION MAP
HUSKISSON - SERPENTINITE

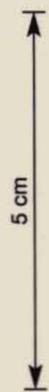
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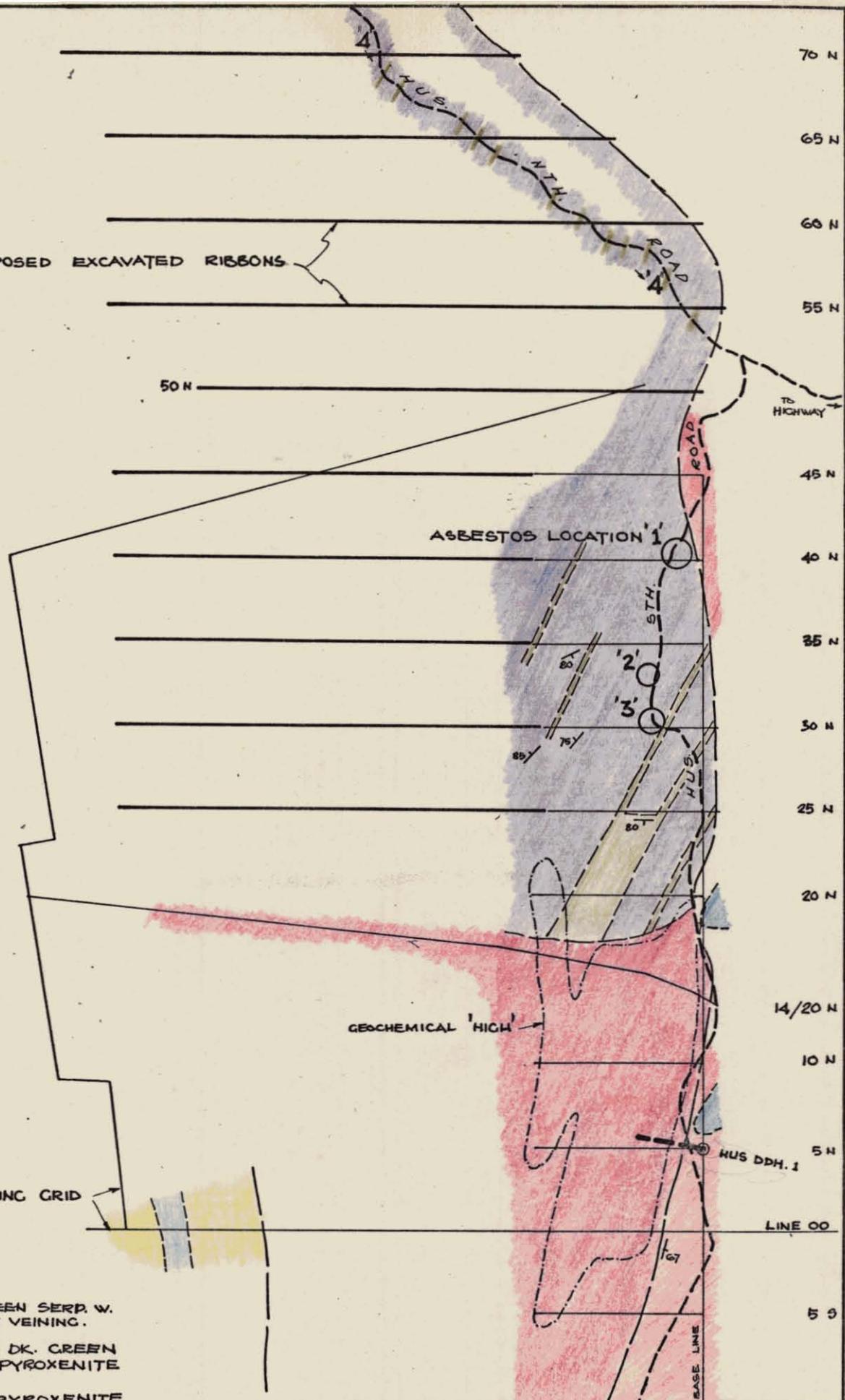


10/ PROPOSED EXCAVATED RIBBONS



EXISTING GRID

- PALE GREEN SERP. W. FINE ORE VEINING.
- LAYERED DK. GREEN SERP. & PYROXENITE
- GREEN PYROXENITE
- TUFF
- GABBRO
- SANDSTONE
- LIMESTONE



COMSTAFF PROPRIETARY LIMITED		
HUSKISSON SERPENTINITE GENERAL		
TECHNICAL DATA FROM REPORTS - D.F.L. 1969/70 : D.W. 1971		
OWN: G.E.C.	SCALE: 1:10,000	TAS 2-232

