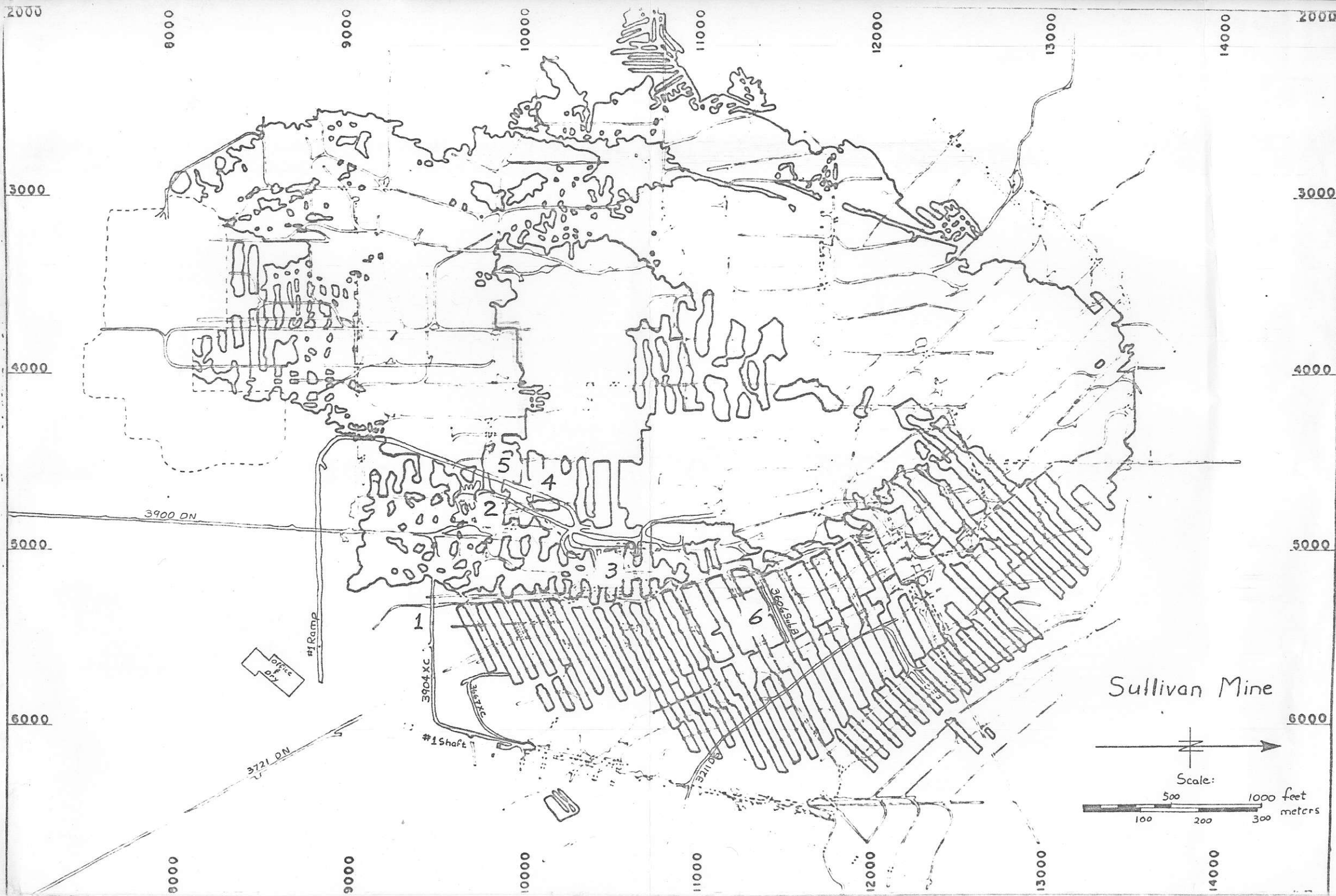


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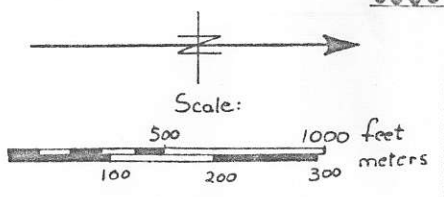
82F/09

*Smythson*COMINCO LTD.SULLIVAN MINEKIMBERLEY, B. C.G.A.C.GEOLOGY TOUR, MAY 7, 1981.

Location No. on Map	Mine Location Code	Remarks
1	3904XCE	A lower Cretaceous lamprophyre (minette) dyke is displaced by east-dipping low angle thrust faults, as is the "D" Band.
2	3907 Shop	Near southeast edge of zone of footwall tourmalinite. Conformable tourmalinite-argillite contact and a crosscutting fragmental zone may be seen.
3	3906 Sub A	This sub drift displays a cross section of the ore zone, at a location very close to the transition between upper "massive" pyrrhotite - rich ore and lower bedded ore. Fragments of argillite, tourmalinite and quartz occur in the pyrrhotite rich sulphides exposed in the first 40 feet of the sub. The average grade of this material is 1.1oz/ton Ag, 0.8% Pb, 1.3% Zn, 50.8% Fe and 0.53% Sn. Near the end of the drift, complexly folded galena-rich high grade ore and pyrrhotite - laminated argillite abut against a steep north - trending fault. No assay is available for the galena - rich ore here.
4	#1 Cutout on #1 Ramp	Mass flow units interbedded with pyrrhotite-laminated tourmalinite in the footwall. Zones interpreted as detourmalinized zones, with bedding planes tracable across the contact of detourmalinization are exposed.
5	#2 Cutout on #1 Ramp	A zone of tourmaline-rich rocks in the footwall. A zone of chaotic breccia and crosscutting conglomerate are exposed.
6	3606 Sub B	This sub drift is a major stop, and affords an excellent cross section of bedded ore, from footwall conglomerate through each ore band up to the "I" quartzite marker. Points to note are: Footwall conglomerate, footwall slates, relatively thick bedding of sulphides in basal half of Main Band compared with higher in section, increasing incidence of intercalated waste in Bands above the Main, "triplet" nature of the B Band, nature of the waste layers between Bands, and the many styles of deformation of sulphide and non-sulphide layers. The Main Band here assays 3.4 oz/ton Ag, 19.3% Pb, 18.6% Zn and 21.3% Fe. The package from the base of the Main Band to the top of the D Band including intercalated waste assays about 1.9/15/12/16.

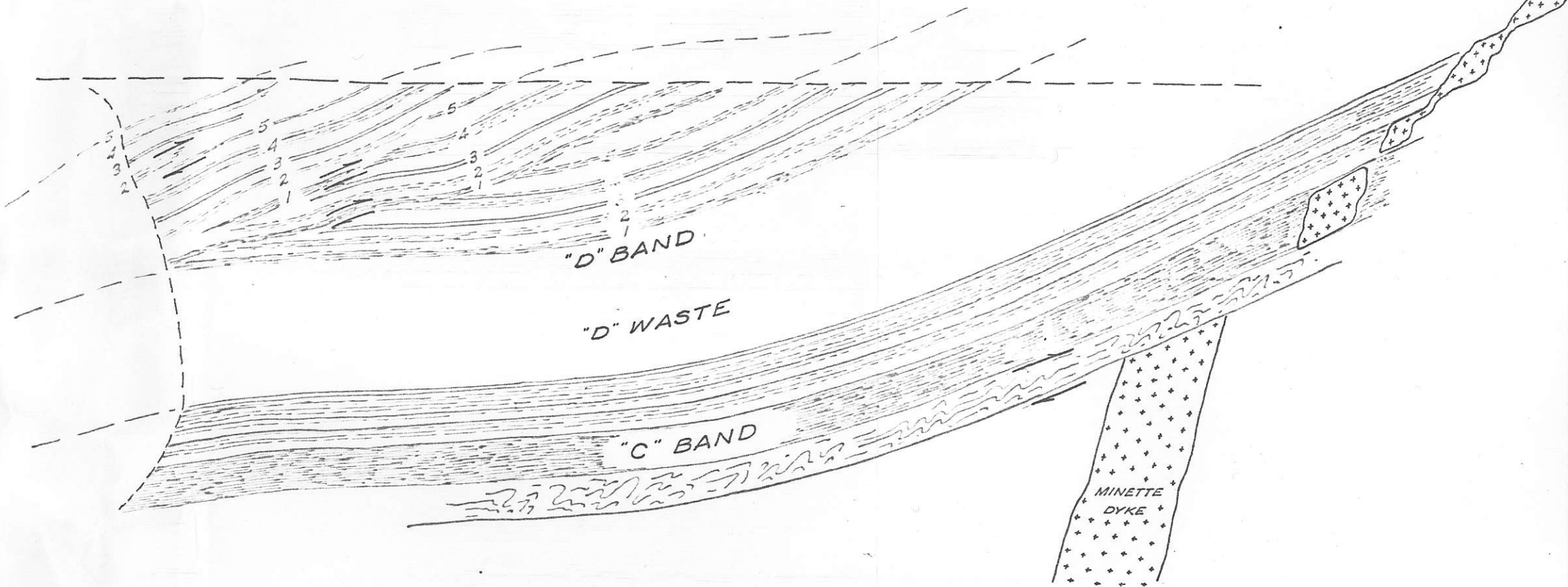


Sullivan Mine





SOUTH WALL 3904 X.C.E. SHOWING POSITION OF ORE BANDS



CLOSEUP OF "C" AND "D" BANDS SHOWING POST ORE OVERTHRUST IN "D" ORE BAND AND POST ORE, POST DYKE MOVEMENT ALONG BOTTOM OF "C" BAND

Location 1

TITLE: POST ORE MOVEMENT ON "C" AND "D" ORE BANDS - 3904 X.C.E.

Plate No:

Drawn by:	Signed	Date	Scale: 1 inch = 1.5' ±	feet	Drawing No. 5
Checked by:	S.B. HAMILTON	SEPT 1959	Refer Drawing Nos.:		
Approved:			File:	Cab.	Dr.
					Secti