

TABLE 1. - A COMPARISON OF CLEVELAND AND RENISON MINE GEOLOGY & RING RIVER GRID GEOLOGY

	RENISON (after Patterson et al 1981)	CLEVELAND (after P.L.F. Collins, 1981)	RING RIVER
Lithology	<u>Crimson Creek Formation:</u> volcaniclastic wackes, siltstones, shales.	<u>Crimson Creek Formation:</u> <u>Crescent Spur Sandstone:</u> 350m, turbidite grey fine to medium grained poorly sorted. Quartz feldspar, muscovite in matrix of quartz, chlorite, sericite, clay, also red argillite, grey chert, basalt and volcanoclastic wackes. Foot-wall to orebody and has quartz, wolframite, molybdenite stockwork. <u>Halls Formation:</u> 100m light to dark grey, purple shales with limestone, chert, greywacke mafic pyroclastic, basalt. - <u>orebodies</u> <u>Deep Creek Volcanics:</u> massive - pillowed basalt intercolated with pyroclastics, red argillite and chert.	<u>Crimson Creek Formation:</u> volcaniclastic wacke fine to coarse grained, to 20% feldspar, lesser quartz in chloritic matrix, also pale green, purple and black shales, and conglomerate. <u>Transition Formation:</u> quartz arenite, quartz lithic wacke, pale green to black shales, siltstones.
Youngest			
Oldest	<u>Success Creek Group No 1 Dolomite:</u> extreme alteration, uneconomic mineralisation <u>Red Rock Sequence :</u> quartz sandstones, commonly hematitic <u>No. 2 Dolomite - <u>orebody</u></u> <u>Renison Bell Shale:</u> thin bedded quartzite, interbeds quartz sandstone, shale, pyritic shale <u>No. 3 Dolomite: <u>orebody</u></u> <u>Delcoath Quartzite:</u> thick bedded quartz sandstone, micaceous sandstone siltstone shale.		<u>Rosebery Group:</u> <u>Munro Creek Slate</u> black shales and thin bedded quartz, minor limestone <u>Natone Volcanics:</u> rhyolite flows and crystal tuffs <u>Salisbury Conglomerate:</u> conglomerate minor limestone, dolomite <u>Westcott Argillite:</u> pale green to purple shale and siltstone, quartz feldspar wackes siliceous matrix <u>Stitt Quartzite:</u> thick bedded micaceous quartz arenite (quartz stockwork) and black shale <u>Chamberlain Shale:</u> quartz arenite siliceous siltstone, pale green-purple-black shales
Igneous Rocks	<u>Rine Hill Granite:</u> biotite granite, local greisen alteration in granite and surrounding sediments. Metamorphism towards granite changes from albite epidote to hornblende hornfels with increasing proximity to granite. Biotite extensively developed to within 200m of granite.	<u>Meredith Granite:</u> biotite adamellite with greisen veins and associated quartz porphyry dykes. Metamorphic aureole of albite epidote hornfels and hornblende hornfels extends up to 2.5km away from contact. Magnetite is disseminated throughout the contact aureole. There is no evidence of a contact aureole at Cleveland Mine.	No acid intrusive rocks outcrop. However a circular magnetic anomaly is unexplained by surface geology and may represent a granite body and magnetic contact aureole at depth.