

intruded by granite and microdiorite, were observed in the Owen Lake area. Deposits of galena, sphalerite and copper carrying some silver values are found filling shear zones and fractures in diorite, and as replacements in pyroclastics. In the Buck Flats area, tuffs and breccias are intruded by diabase. Irregular veins and stringers and disseminated replacement deposits of galena, sphalerite and pyrite are found in tuffs and breccias.

The geology and mineral deposits of the Lardeau map area,¹ Kootenay District, British Columbia, were examined by J. F. Walker, M. F. Bancroft and H. C. Gunning. Precambrian and Palaeozoic sediments, Triassic greenstone dykes and sills and post-triassic granite batholiths are found occupying the area. Contact metamorphic deposits containing pyrrhotite, chalcopyrite and a little zinc blende and arsenopyrite, gold quartz veins, silver-lead-zinc veins, galena-sphalerite replacement deposits in limestone, quartz-tetrahedrite veins and silver-lead veins were observed.

J. F. Walker described mineral developments in the Salmo map area,¹ Kootenay District, British Columbia. The greater part of the area is underlain by sedimentary rocks which are intruded by large and small masses of the Nelson batholith. The sedimentary succession is folded into a series of anticlines and synclines. Zinc and zinc-lead replacement deposits in limestone are found along the westerly anticline. Gold fissure veins are found along the central quartzite anticline. Some gold deposits lie to the east of this anticline, and to the west between it and the zinc belt are some sulphides carrying gold.

The lead-zinc deposits of Dorion and McTavish townships, Thunder Bay District, Ontario,³ were examined by J. E. Hawley. Precambrian micaceous schists and sediments, iron formation, granite, granite-gneiss, pegmatites and diabase dykes and sills comprise the bedrocks. The lead-zinc deposits occur in fractured and faulted rocks, chiefly diabase, sediments, mica schist and granite. The deposits are in the form of simple veins in fractures and as part of the cementing material in brecciated fault zones. Low grade iron ore and sandstone suitable for building stone are also found.

H. M. Bannerman in studying the mineral deposits of the eastern part of Rush River area¹ and the northern portion of Woman River area,¹ Sudbury District, Ontario, found Precambrian schistified lava flows, pyroclastics, iron formation, local bands of clastic sediments, greenstone intrusions, ultra-basic dykes, intrusive granites and gneiss associated with numerous dykes and sills of diorite, altered diabase and quartz porphyry and a profusion of fresh-looking diabase dykes. The iron formation consists of two members, one of which is sedimentary and the other replacement deposits. The sedimentary member is made up of interbanded silica and iron carbonate or haematite, but locally the carbonate or haematite gives place to pyrites. Where contact metamorphism has been severe the carbonate and haematite have been converted into magnetite. These silicious deposits occur as discontinuous overlapping flat lenses, and on the whole are too lean to be considered of economic importance. The replacement deposits lie almost exclusively in the rhyolite and greenstone schists immediately south of the banded silica. These deposits are extensive and contain large concentrations of iron. They are composed of iron carbonate, pyrite, magnetite and pyrrhotite. Lead-zinc-copper concentrations are found associated with pyrite, magnetite and pyrrhotite in the replacement member; lead-zinc-copper deposits associated with pyrite are also found in the banded silica and sediments; and copper-gold deposits associated with pyrite are found in granitic rocks.