CANADA

DEPARTMENT OF MINES

GEOLOGICAL SURVEY BRANCH

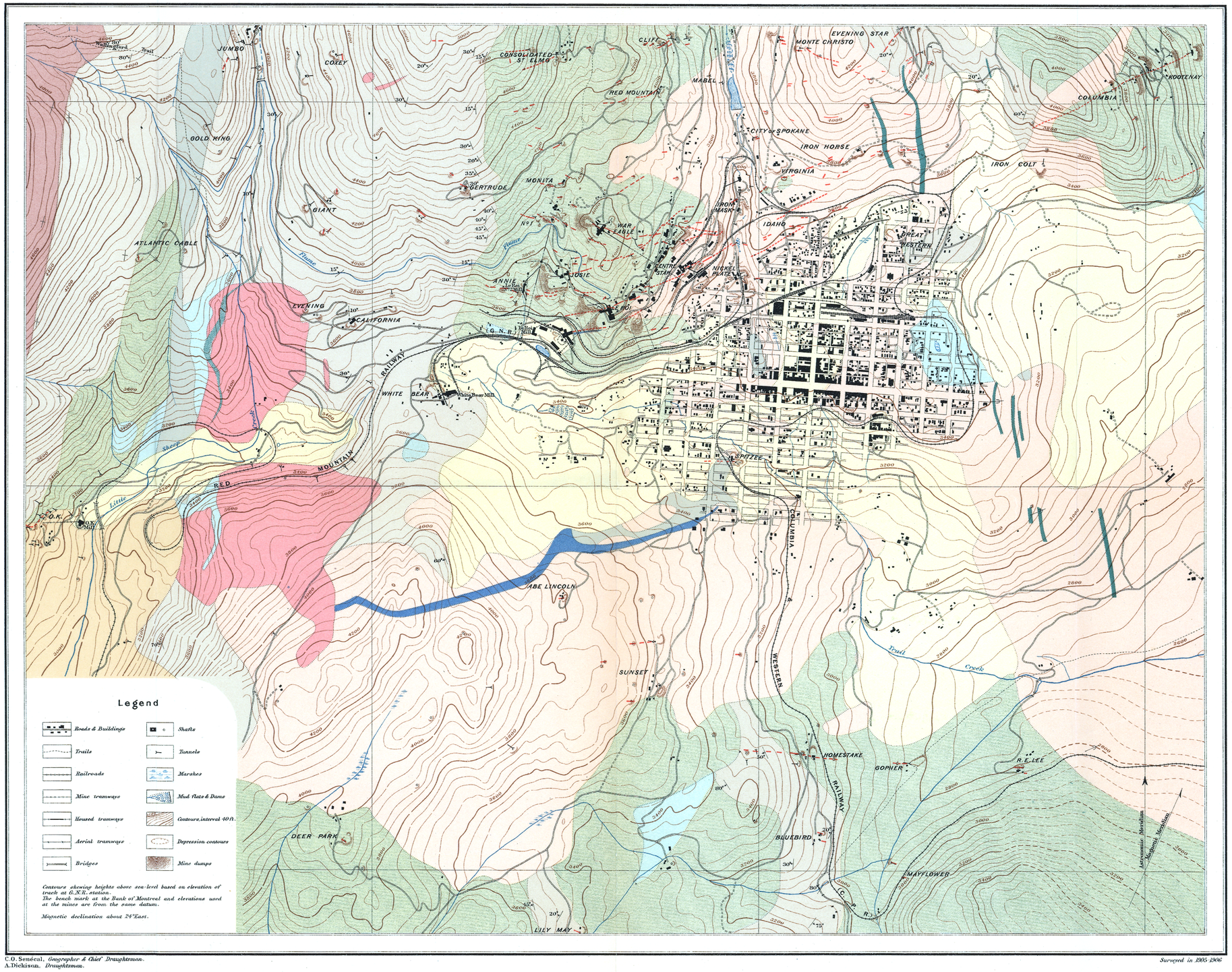
HON. W. TEMPLEMAN, MINISTER; A. P. LOW, DEPUTY MINISTER;
R. W. BROCK, DIRECTOR.

1909

Legend

	Alluvium	Pleistocene
	Mesozoic	
	Palaskite	Tertiary ?
	Lamprophyric Dikes	
	Serpentine	Post Jurassic ?
	Sheep Creek Diorite Porphyrite	
	Granite Porphyry	
	Nelson Granodiorite	
	Porphyritic Monzonite	Jurassic ?
	Monzonite	
	Volcanic Agglomerate	Triassic ?
	Palæozoic	
	Augite Porphyrite	Carboniferous
	Mount Roberts Formation	

- *Veins*
- *Approximate outcrop of vein, not exposed, but projected from underground workings.*
- *Geological boundaries, defined.*
- *Geological boundaries, undefined.*
- *Dip and strike*
- *Vertical strata*
- *Glacial striæ*



C. O. Senécal, *Geographer & Chief Draughtsman.*
A. Dickison, *Draughtsman.*

Surveyed in 1905-1906

Explanatory Notes

Alluvium. *The areas occupied by alluvium represent portions of the district over which bed-rock is entirely concealed. Elsewhere exposures are common though often wanting in the immediate vicinity of contacts.*

Palaskite. *Exposures of typical palaskite may be found west of the Jumbo over the area occupied by the large dike of this rock.*

Lamprophyric Dikes. *Dikes varying widely in size and character and of different ages are exceedingly numerous but only a few of the larger ones are represented on the map. While dikes of lamprophyric character predominate in numbers, other types some of which are directly connected with the porphyritic monzonite, the granodiorite, etc., are also common. All the rock bodies save those of palaskite are cut by dikes.*

Serpentine. *Exposures of typical serpentine may be found on the rocky knolls several hundred yards south of the mine tramway leading to the O.K. mill.*

Sheep Creek Diorite Porphyrite. *Exposures of this type are common along the whole course of the dike of this rock running north from Sheep Creek.*

Granite Porphyry. *Exposures of typical granite porphyry may be seen along the course of a small dike below the Le Roi head-works and just east of the aerial tramway.*

Nelson Granodiorite. *The smaller bodies of granodiorite outlined near the top of Red Mountain appear to have been involved in a zone of shattering. Small patches of granitic types too small to map, also occur in this vicinity. The common phases of this type may be seen in numerous exposures along the line of the G.N. Railway on the slopes of Deer Park ridge.*

Porphyritic Monzonite *This type is well shown in the quarry within the city limits, west of the line of the C.P. Railway and north of Columbia Avenue*

Monzonite *The large area of monzonite is the western portion of an ovoid mass about five miles long. The monzonite body is composed of various types differing considerably in general appearances. Common phases of this type may be seen in numerous exposures on the slopes of Monte Christo mountain. A very coarse form outcrops near the old shaft of the Le Roi and a fine grained, dark variety occurs in the rear of the city hall.*

Volcanic Agglomerate. *The volcanic agglomerate is well exposed along the Wallingford trail.*

Augite Porphyrite. *Typical augite porphyrite is exposed at the head of the gully just west of the War Eagle. A somewhat different variety can be seen on the road near the Deer Park mine while the material composing the band leading north from Sheep Creek may be in part of tuff aceous origin. Cutting the augite porphyrite of Red mountain and vicinity are many dikes and irregular masses of diorite porphyrite not shown on the map, this rock type may be seen in the railway cuttings along the lower slopes of Red mountain below the Le Roi headworks.*

Mount Roberts Formation. *Over the western portion of the camp the rocks of this group are largely of dark slates passing into arenaceous forms with which occur some calcareous beds. On Red mountain and at other points, these beds seem to be represented by hardened, altered forms. On Red mountain and elsewhere, the strata are penetrated by many bodies of diorite porphyrite not shown on this map.*

Economic Geology. *The main exposures of veins are shown on the map but not mineralized areas. It being impossible on this scale to indicate widths, no distinction is drawn between wide veins and narrow ones. The approximate position on the surface of veins that are not exposed but are developed underground is also marked. These positions, obtained by projecting the veins from the mine plans to the surface, show where the vein may be expected to outcrop if the dip should remain constant. On account of faulting and the number of veins it is unsafe to connect exposures unless the vein can be actually traced between.*
On the northern half of the sheet the veins are mostly pyrrhotitic gold copper ores. West of Little Sheep Creek as on the O.K. gold quartz veins occur, and along the southern edge on the Lily May, Bluebell, Mayflower, etc., silver-lead veins occur.

4	Township 28	2
33	34	35
	Township 9	
28	27	26

Geological Sheet

ROSSLAND MINING CAMP

BRITISH COLUMBIA

Scale : 1200 Feet to 1 Inch - 1/14,400

Feet 1200 600 0 1200 2400 3600 Feet

Economic Geology by R. W. Brock.
Areal Geology by G. A. Young.
Topography by W. H. Boyd.

№ 1004