

KAMLOOPS MINING RECORD.

"4. Thirty feet north-west of last, twelve feet of ore.

"5. West of last, a vein three feet thick.

"6. South-west of last, numerous croppings of good ore undeveloped. At a low estimate 10 per cent of the mass here is ore.

"7. North-east of No. 3 a vein four to ten feet. This is the principal source of output at present, and is connected with the railway by an aerial tramway.

"All the veins run in easterly and westerly direction, and are nearly vertical or dipping northward at high angles."

The workings referred to in paragraph 7 are between 400 and 500 feet above the C.P.R. track, an adit is here cut along the road on a dry level and the ore is being stoped out through the surface. from 80 to 100 feet above, the vein has been traced for several hundred feet on the surface, and an estimate made that there are 250,000 tons of ore in sight above this level, and 2,000,000 tons would be a very moderate estimate of the quantity of ore which this property will produce above the level of the C.P.R. track.

According to assays made on the large shipments of the ore to the different smelters the yield ranges from 60 to 68 per cent. of metallic iron.

In connection with this large deposit of high grade iron ore, it may not be out of place to mention that good coking coal can be had 55 miles up the North Thompson river, which is navigable for three months in the year, and this period is expected to be greatly lengthened by building wing dams on some of the river bars, which the Dominion Government are at present looking into. Analysis of this coal made by Dr. J. B. Harrison, as per annual report of the Geological Survey of Canada, Vol. ii., 1894, page 231 B., gives slow coking the following:

Hygroscopic water.....	2.22 per cent.
Volatile combustible matter.....	32.05 " "
Fixed carbon.....	52.81 " "
Ash.....	12.92 " "

This percentage of ash would be greatly reduced by washing and thus make a first-class coke of it.

The cost of delivering ore on the car at the mine is at present about \$1.25 per ton; if the work was done on a larger scale with more labor-saving devices, this might be considerably reduced.

The rate for freight charged by the C.P.R. between the mines and seaport of Vancouver is \$2.40 per ton. This however, may be reduced if shipping in larger quantity by special arrangement.

From the report of Superintendent J. Fleetwood Wells, the following particulars concerning the property are taken:

Samples from different parts of the deposit have

been assayed and analysed with results as follows:

Analysis by Reynolds, Carter & Reynolds, iron and steel merchants, 18 St Swithin's Lane, London, Eng. Three samples were submitted with the following results:

	No. 1 Sample.	No. 2 Sample.	No. 3 Sample.
Moisture.....	trace	trace	trace
Silica.....	4.2100	3.8500	4.0500
Proxide of iron.....	63.56	62.29	65.71
Protoxide of iron.....	26.13	24.98	22.17
Manganese.....	trace	trace	trace
Alumina.....	3.78	3.08	3.05
Lime.....	1.00	3.85	
Magnesia.....	.39	.24	3.46
Sulphuric acid.....	1.58	1.70	.17
Phosphoric acid.....	trace	trace	trace
Carbonic acid.....	none	1.03	.82
Comb. mixture.....	.66	.55	.48

Silver, copper, tungsten and titanium were absent.

Two samples were submitted to Mr. W. E. Crichton, Oregon Iron Works, Oswego, U.S.A., and gave the following results:

	No. 1 Sample	No. 2 Sample
Iron.....	67.25	64.97
Silica.....	2.04	4.81
Phosphorous.....	.258	.155
Sulphur.....	.232	.187

The following is the result of an assay made at the Trail smelter, Trail, B.C.:

Gold.....	.02 oz. per ton
Silver.....	trace
Iron.....	62.10 per ton.
Silica.....	4 00

Assay made by W. Pellew-Harvey, Vancouver, B.C.:

Iron.....	66.60 per ton.
Gold.....	none
Silver.....	6 oz. per ton.
Lead.....	none

The main outcroppings occur on the summit of the hill to the southward, at a height above the railway track of some 500 feet, and a considerable amount of ore has been obtained from an open cut, from which a vein running east and west, 16 to 18 feet wide of good ore was worked. Some 5,000 tons were taken from this vein until the intrusion of a more or less large rock fault led to its being discontinued for the present, and the last shipment this year was taken from the floor of the same vein as being more economically obtained. These upper workings are connected with the railway by an aerial gravity tramway some 1400 feet in length.

Another important deposit of ore from which some 2,000 tons of ore was taken, is on a level with the railway track, where the ore occurs in large and lenticular masses. The ore has been extract-