

Windy Arm and Wheaton Properties
Cairnes, D.D. (1907) Geol. Surv. Can. Rept. pp. 24-28

Windy Arm Properties

Some of the most important claims in this district, commencing at the north, are, respectively, the Big Thing group, Montana, Joe Petty, Aurora, Thistle, Uranus, M. and N., Vault, Venus No. 1, Venus No. 2, all owned by the Conrad Consolidated; the Ruby Silver, owned by private parties, and the Venus Extension, Beach, Red Deer and Humber No. 1, owned by the Anglo-American Company.

Big Thing. - This property is situated about five miles in a northwesterly direction from Conrad, and differs from all other properties in the district, in that it is in granite formation. In the rest, quartz veins run in true fissures in the porphyrites, &c., of the Windy Arm series. The principal vein on the Big Thing was struck this summer at the end of an eight foot drift. A crosscut was then run sixty feet on the vein, and a winze was sunk which was down about fifty-five feet at the time visited last, early in October. The vein, which dips into the hill and appears to be of the elongated lense type, was widening rapidly in the bottom, becoming almost flat, and was about ten feet wide. The ore is chiefly secondary quartz and is very porous near the surface, showing considerable leaching action. The minerals are mostly oxides and carbonates, which will eventually change to the sulphides, &c. A considerable amount of stibnite, arsenopyrite and pyrite was found near the bottom. Occasional very high assays, running into the hundreds, are obtained in gold and silver, and it is claimed that the ore body will average close to \$30 per ton.

The Montana: is about four miles south of the Big Thing, and, like it and most of the Windy Arm properties, is situated high up on the bleak mountain sides, and all wood, supplies, machinery, &c., have to be packed or pulled up, or carried up on the trams. A 90,000 double cable aerial tramway runs from the northern extension of the Montana, the Mountain Hero, to Conrad, a distance of 12,697 feet, and has its upper terminal 3,400 feet above the lower.

A drift was run for about 700 feet in on the vein which is from two to five feet in width, with a streak of rich ore eight to eighteen inches next the hanging wall, assaying about \$90. The rest of the vein is much leaner and may run \$20. The strike is about N. 45° W., with low dips to the southwest. An incline shaft is being sunk on the lead, and about the first of October, when last seen, at a depth of 320 feet, the vein was about eight feet from wall to wall, containing, however, over four feet near the centre, of almost barren, leached, and somewhat decomposed porphyrite intersected by quartz stringers.

The values are chiefly in silver, the chief mineral being galena, though native silver, silver chloride, lead carbonate, argentite, pyrargyrite, tetrachedrite, pyrite and arsenopyrite are also found.

The Joe Petty is situated on the north side of Uranus creek, and contains a strong vein about six feet wide composed of alternating layers of decomposed iron-stained quartz and mineralized country rock. A shaft about fifty feet deep has been sunk on the lead and drifts run each way; at the end of a forty-foot crosscut that cuts the vein in the hill, drifts were also run. No work was done on the property this season.

The M. and N., to the east of the Joe Petty, holds a vein varying in width from twelve to fifteen inches, but it is high grade ore, and can be traced for a considerable distance. The high grade silver minerals, argentite, pyrargyrite, and stephanite were seen here.

The Uranus is situated just across Uranus creek from the Joe Petty. The vein is quartz and is traceable for at least 2,000 feet, with an average width, where seen, of about three and a half feet. The chief minerals are arsenopyrite and galena.

On the Thistle and Aurora, higher up the creek, above the Uranus and Joe Petty, surface work was being carried on, for the greater part of the summer, and very rich ore is reported to have been found. The ore is chiefly quartz, carrying chalcopyrite, zinc blende, malachite, and the rich silver mineral stephanite.

The Vault is situated on the south side of Pooley canon, about 3,000 feet from the beach, when last seen, in October, a drift on the vein was in over 300 feet. This is the same vein, in all probability, as the Venus No. 2, and can be traced for over 4,000 feet. It is in places twenty to twenty-three feet in width, being nearly all well mineralized quartz. In places there are four to six feet of almost solid galena. The vein here, as on the Venus, varies greatly in width, and at times is not more than a foot or so, but on the Vault, so far, except at the surface, at the entrance to the tunnel the vein is fairly uniform, much more so than on the Venus. An aerial tramway to the beach is under construction, and a shorter one spans the canon for the transport of wood and supplies. On the whole, this is the most promising looking property in the "Windy Arm" district.

Venus.—A crosscut taps Venus No. 2 about one hundred feet from the entry and drifts were run in the lead about the same distance each way. Some stoping also was done, the vein being eighteen inches to sixteen feet in width. In the stopes there are four to eight feet of good ore which will probably average over \$20 in gold and silver. A crosscut intersects the vein at 54 feet where drifts were also run. The vein where opened up in the lower level is narrower and leaner than above, but the narrowing is not likely to be very extensive as the vein looks well both to the north and south.

The chief minerals are galena, lead carbonate, arsenopyrite, chalcopyrite, malachite, pyrite and good deal of jamesonite and antimony ochre. The ore is chiefly argentiferous galena. Where the vein is wide it consists of alternating bands of quartz and more or less mineralized country rock.

A fifty-horse-power gasoline engine operates a compressor here to run the machines drills used on this property, but water-power from Pooley canon is being installed. An aerial two-bucket tramway 1,525 feet long runs from the lower Venus tunnel to the beach the upper terminal being 950 feet above the lower.

Some very rich ruby silver ore is found on the Ruby Silver claim to the west of and adjoining the Venus No. 2. The vein is from three to eighteen inches in width.

On the Venus Extension are two veins about thirty feet apart. The upper seam has about four feet of good ore, over half of which was being sacked, when visited in October. The sacked ore will probably run \$50 to \$60 per ton. An incline sunk on the vein was down about forty feet. The lower seam has about two feet of ore, which is chiefly argentiferous galena with considerable arsenical iron and pyrite.

The Peach claim, lying to the south of the Venus Extension, and supposed to be on the same lead as the Humper No. 1, has over ten inches of ore claimed to average about \$150 in silver with probably \$5 in gold. The chief minerals are galena, argentite, zinc blende and pyrite.

The Red Deer has about six inches of, in places, almost solid galena, which is claimed to run over \$90 per ton.

THE Humper No. 1 is a particularly promising property, though only about seventy feet of work, which was chiefly in drifts, had been done at the time of my visit. The vein, which can be traced for at least 1,700 to 1,800 feet, is from eighteen inches to four feet in width and carries a large amount of argentite, ruby silver and stephanite, as well as native silver, galena, and pyrite. About eight inches of the vein will average over 300 ounces in silver and a narrow streak of argentite which is quite persistent and

has a width of half to three-quarters of an inch, runs 3,000 ounces in silver.

Some native copper is found in the east side of Windy Arm, but the work done is insufficient to determine whether it exists in paying quantities.

The ore values given in this report were obtained from a number of samples taken and also from a great number of assay returns kindly shown the writer by mine managers, mine superintendents, prospectors and others, during the season.

WATSON AND WHEATON RIVERS PROPERTIES

Considerable excitement was caused this season by the finding by D. Hodnett and J. Stager of quartz carrying free gold and telluride minerals between the Watson and Wheaton rivers. The first claim, The "Gold Reef," was staked, on June 25, on Gold hill, which is

situated about fifteen or twenty miles southwest from Robinson siding. Within ninety days of the staking over 700 claims had been located.

A belt, or belts, of schists, approximately half a mile wide, outcrops in a northwest and southeast direction, near the eastern edge of the granites, which often become porphyritic. Dikes of greenish porphyry and porphyrite occur in the granites, also near the eastern edge, and it is in this disturbed belt that the quartz veins were mostly found. They are, as a rule, very persistent and can sometimes be traced for several miles. Outcrops of quartz closely resembling each other are seen in almost straight lines, at short intervals, and with the same general strike from the Watson river to about eight or ten miles south of the Wheaton river, a distance of nearly twenty miles, and although most of the veins found were in this narrow belt, about two miles wide, Mr. Porter and others discovered, towards the close of the season, some deposits of quite pure stibnite, and other minerals, at a considerable distance to the west.

The first discoveries on Gold hill, Hodnett mountain and Mineralhill are all in the line of strike of the veins and just south of the Watson river. The main lead is, for long distances, ten to fourteen feet of almost solid quartz in places fairly well mineralized with galena, argentite, chalcopryite, malachite, and pyrite. The vein on the Gold Reef which is in the schists, and is well defined on the surface, appears to be four or five feet in width. A pocket or seam of very rich ore carrying coarse gold was found in this vein from which came also the rich telluride minerals, sylvanite, hessite and telluric ochre. Further work on this claim has disclosed, as yet, no more of the rich minerals.

A group of claims, the Custer, Alice M, and Ramon, staked just south of the Gold Reef on a grey copper lead looked somewhat promising, although no work had been done when seen. The width of the vein was somewhat indefinite on account of wash and slide rock, but is probably about six feet and appears to be well mineralized.

The Legal Tender, staked by Mr. J. Perkins, lies to the northwest of these properties, and is on a very steep rugged hill on the south bank of the Watson river. The vein is in a fissure in the granite, and is three to three and a half feet in width where exposed; it is quartz carrying a considerable amount of argentiferous galena with some chalcopryite, malachite, and pyrite. The values are chiefly in silver and the vein is claimed to average about \$40 per ton.

On Big Bend mountain to the south of the Wheaton river and seven or eight miles southeast of Gold hill, and in the line of strike of the mineral belt, a number of claims were staked by L. Belnew, O. Dickson, J. Perkins and others on strong well-defined quartz veins carrying galena, chalcopryite, pyrite, &c. Also southwest of this again, in the same direction, on Stevens mountain, and to the west of it, a number of similar looking claims were located by Messrs. Stevens, H. Gilliam and others.

In addition to occasional assays running as high as \$300 or over, a number of fairly average assays - from \$20 to \$60 - were obtained in this section, but, with the exception of a small amount of work done on the Gold Reef, no attempt has been made to prove to what extent the veins are mineralized or what values they really carry.

Taking into consideration the large quantity of mineralized quartz in this part of the country and the small amount of prospecting done, the results appear very encouraging and should stimulate both prospectors and capitalist to investigate this belt more closely, particularly to the northwest and west. There are certainly some very rich ores in this section.

Coal, also, was found about two miles to the east of Gold hill, at the same horizon as that in the "Whitehorse coal fields to the north, but whether it will be in payable quantities remains to be seen.

A group of four claims known as the Union Mines is situated on the hills just to the west of Anie Lake, about nine miles due west of Lansdowne siding and about three or four miles east of Gold hill. These claims were first staked by W. P. Schnobel in 1898, and are supposed to cover the ground known as the "lost Mine." Some development has been done on them and preparations are being made to work through this winter. A ten ton shipment of ore gave, according to Mr. Schnobel, returns of over \$20 per ton. The values are chiefly in silver, with a little gold.