PE-95-20

PE 95.20

TERRITORY OF ALASKA
DEPARTMENT OF MINES

PROPERTY EXAMINATION REPORT

PE 95-11

WILLIAM JOHNSON GOLD-QUARTZ PROSPECT
MILE 54 SEWARD-ANCHORAGE HIGHWAY
SEWARD QUADRANGLE, ALASKA

By

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SUMMARY

The gold occurring in the rather extensive shallow quartz talus on the William Johnson claim, located on Faulted Ridge Mountain west of Mile 54 on the Seward-Anchorage Highway, at its present stage of development is not considered to have any chance for milling profitably in the 1 ton Straub ball mill.

Work done to date has been limited to open-cuts in the talus, and samples taken from them have ranged from nil to $25.00 per ton, with a few selected samples reported double that amount.

It is believed that an average minimum grade of $50.00 to $60.00 per ton would have to be maintained to make the owner $10.00 to $15.00 per day working alone. The mill capacity is rated on a 24 hour basis, and a one man operation would not exceed 12 hours per day. Maximum gold recovery by amalgamation would probably be within limits of 50 to 60% of total gold content.

Future work should be limited to exposing and tracing the vein for several hundred feet and sampled carefully at 5 foot intervals to determine whether the vein carries values of interest across mining widths. If that proves to be the case, the vein should be drifted upon to give depths of 50 to 100 feet in effort to locate oreshoots of economic interest.

INTRODUCTION

The gold-quartz prospect of Wm. Johnson, Mile 54, Seward-Anchorage Highway, was examined September 15, 1956, at request of owner.

LOCATION AND ACCESSIBILITY

The property is located at approximate geographical coordinates Longitude 149° 30' and Latitude 60° 49'.

Mr. Johnson's cabin is ¼ mile west of and about 200 feet above the Highway at the 1250 foot elevation. From here to the showings at elevation of about 3160 feet - an airline distance of approximately 1¼ mile - it is an estimated 2½ miles over an excellent trail built by Mr. Johnson with a number of switchbacks having 15% grade across the mountain slope.

Situated on east slope of Faulted Ridge Mountain, an estimated 250 to 300 feet below ridge crest, the open-cuts and one ton Straub mill are located on south side of a short narrow draw on the steep (average 35 degree) mountain slope, about 3/4 mile north of Frenchy Creek gulch.* A bearing taken taken to the old Wibel placer camp buildings, located on east rim of Canyon Creek, is S61E.

Distance from the cabin across several low benches to foot of the mountain slope is estimated at 3/4 mile. This section crosses the old Pasa-Frenchy creek ditch at 1480 elevation, which is about 2/3rds the distance to foot of mountain slope (at 1620 elevation).**

CLIMATE AND VEGETATION

The district is typical of the central section of the Kenai Mountains on the Kenai Peninsula, with heavy snowfall during the winter and fairly frequent summer and fall rains. The winter months are relatively mild with with occassional short periods of sub-zero weather. During the summers temperatures of 70 to 80 degrees are not uncommon, but their average range is probably 55 to 60 degrees.

Willow, alder and other brush growth is abundant in area below the 1600 foot elevation; above that it is limited to occassional "clumps". Native grasses grow to 6 and 7 foot heighth up to the 1800 foot level. Although the low benches are swampy in places and several small ponds were noted, muskeg areas are small. Wild berries - such as blueberries, and cranberries do not appear plentiful in the vicinity.

Vegetation on the steep mountain slopes above the 1800 foot elevation is largely limited to a thin moss and scattered short grass growth.

* Refer to Maps No. 1 and No. 2, attached.
** Elevations by Paulin Altimeter.

Timberline in the area is around 1600 feet. The spruce growth is scattered with a few trees of 16 to 18 inches diameter being the largest observed. There is sufficient spruce to supply requirements for a small scale mining operation within a few miles of the property.

Poplar and birch, mostly of small size, is fairly abundant on the west side of the Highway; below the road it is of dense growth. A few cottonwood trees of good size were noted.

TOPOGRAPHY

The area is one of rugged relief; Mountain slopes are very steep and their ridge crests generally well rounded by glaciation. The valleys are narrow and deeply entrenched, as are the gulches at headwaters of the several streams.*

Faulted Ridge mountain ranges from 2500 feet elevation at its north end to 3500 feet at the south end. It is bounded on its north and west by Donaldson Creek, and on the south by Frenchy Creek.**

WATER SUPPLY

Water available on the property for this one ton mill is limited to melting snows in late spring and early summer, to the summer rains, and to a few very small "seeps" on the steep slope above the mill. Diversion of Donaldson Creek through a ditchline - a distance of 3 miles around the mountain-would not be practical for this proposed small scale operation.

Should future development work develop an orebody of economic importance, repair of the Pass-Frenchy Creek ditchline might develop sufficient water supply for a 25 to 50 ton mill located below the ditch.

HISTORY AND OWNERSHIP

The property consists of one lode claim, which was located and has been held by Mr. Johnson for 8 or 10 years. No gold-quartz discoveries or locations are known to have been previously made in this immediate vicinity. However, an old map (dated 1910) by D. M. Sleem, M. D., Seward, shows

(1) a group of 3 lode claims then held by Robinson and Calwel a short distance to the southwest, with one claim on north side and two claims on the south side of Frenchy (then called Fancy) Creek; and

(2) the Ben Guarelli group of 4 lode claims a quarter mile to northeast, with two claims on the north side and two claims on south side of Donaldsone Creek.**

* USGS Bul. 587, page 22.
** Refer to Maps No. 1 and No. 2, attached

The gold occurrence on the Quarrelli is reported to be of low grade and that the Robinson were located on strength of finding a few pieces of high grade "float". Amount of work done upon both groups was limited in extent. Both properties are said to have been abandoned for many years.

The prospecting on the Johnson claim has been limited to the digging of a number of open-cuts along a 300 to 350 foot section with no underground work to date. None of the open-cuts revealed a vein in-place, but do show an abundance of vein quartz which has broken down in small pieces, and is slowly "creeping" downhill. It should not be difficult to locate the vein or veins from which it was derived. Balance of work done has been confined to the trail building, and hauling the one ton mill up the hill and setting it up alone. The latter was completed a short time before the property was visited and had not operated.

GEOLOGY

Formations of the area are typical of the Kenai Peninsulas eastern region, and are confined to closely folded slates and graywackes. These have been classed as "undifferentiated slates and graywackes" of the Sunrise Group of probable Lower Cretaceous Age.* The only igneous intrusion reported in the district is the Gilpatrick Dike.-This structural feature is considered to be a persistent one for a distance of 12 to 15 miles at least, and that most (if not all) of the old gold quartz prospects from the McMillan on the south to the Quarelli on the north - all located on west side of the highway from about Mile 40 to Mile 55 - are close to or directly related to this dike.

No dikes or other intrusives were observed or reported by Mr. Johnson to be exposed upon his claim. However, an outcrop of what he believes to be the Gilpatrick dike was pointed out at top of slope on south side of Frenchy Creek gulch. Its projection northerly would suggest its continuation would place it near or cutting through the section in which his open-cuts are located. Strike of sediments at millsite is N10W and dip 50 to 55 west.

Mineralization

Although a vein "in place" was not seen in the four or five open-cuts cleaned out partially for inspection and sampling, Mr. Johnson reports it was in place in several cuts that were "stuffed-in". Its strike he considered to be about N70W and dip steeply to the south. The alignment of his open-cuts have that general bearing, which would indicate the vein cutting the sediments at an angle of 60 degrees to their strike.

The broken quartz (talus) has a thickness of 2 to 3 feet, which is covered by a surface "mantle" of 6 to 18 inches of soil and fine schistose slate and graywacke talus. Maximum size of the quartz noted was 9 inches. Most of the (bull) quartz had slate or graywacke on one or both sides; indications pointed to their source being from a narrow vein(or series of narrow parallel veins?).

* USGS Bul. 587, page 118, and
USGS Bul. 907, Plate 1.

Mineralization in the quartz is limited to a small amount of pyrite and arsenopyrite; total sulfides present are estimated at less than 1%. The same minerals were noted in similar amounts in the fine slate (argillite) talus, as disseminated grains and in fine discontinuous veinlets.

No free gold was observed in numerous pieces of quartz examined. The fine talus material was panned at number of points; only two very fine colors was obtained in one pan.

Sampling

Encouragement for work done to date by Mr. Johnson has been based largely on getting "good prospects" in panning the fine talus material at numerous points. Samples taken for assay by him of the talus material are reported to have run from a dollar or two up to $25.00 per ton, with one sample said to have gone considerably higher.

With the numerous open-cuts "sluffed in" by heavy rains, only three were cleaned out (partially) at time of visit for sampling. Assay results of these are as follows:-

Assay Results

Sample No.	Width in.s	Au oz	Ag oz	Value $	Description
1-WJ	Grab	0.22	nil	$7.70	Open-cut upper side of trail about 200' NW same elev. of mill. Mr. Johnson estimates cut to be 30 to 35 feet below obscured vein outcrop. Little pyrite and arsenopyrite. Qtz with some slate.
2-WJ	20	0.12	nil	4.20	Open-cut on mill level 40 feet NW of #1-WJ, and estimated 25 to 30 feet below covered outcrop. Qtz with some slate adhering. Little disseminated arsenopyrite and pyrite.
3-WJ	Grab	0.04	nil	1.40	From bottom of cut 35 feet SW and 20 feet up slope from #2-WJ. Quartz with little arsenopyrite and pyrite.

The above points were selected by Mr. Johnson as being representative of what he had found in area as a whole.

CONCLUSIONS

With the limited work done to date on this prospect confined to open-cuts in the quartz-talus slope, and the vein not exposed on surface or any sub-surface development work done upon it, it is not possible to make a fair appraisal of the property's possible value.

However, the small size of the quartz talus suggests its source to be from a vein of one to two foot in width, or from a number of closely spaced, narrower veins. The width of the talus as traced by open-cuts - a distance of 300 feet or more - and Mr. Johnson's statement of several open-cuts showing

what he considered to be a vein "in place", having a N70W strike and steep southerly dip, cutting the formation at a 60 degree angle - suggests it may occuppy a strong fissure which may have considerable lateral extant.

From results obtained in samples taken by owner in the past, and from the three taken at representative points during examination of the prospect last year, it seems obvious that the values are much toolow to hold a reasonable expectation that the 1 ton mill could recover enough gold, through milling the quartz talus to pay a living wage.

Any further work which may be done upon the prospect should be confined to -

(1) Tracing and exposing the vein "in place" by means of trenching and/or open-cut work for several hundred feet. Then if sampling at close (five foot) intervals shows values of economic interest across mineable widths, the next step should be to

(2) Follow the vein by drifting upon it at depth of 50 to 100 feet for sufficient distance to determine whether there is an oreshoot (or shoots) of value worth mining.

It is estimated that the gold values would have to average $50.00 a ton (at least) value as fed to the mill now set-up on the property in order to make wages for one man. Reason for this it that the rating of the one ton mill is on a 24 hour basis, and it seems reasonable to expect that the gold recovery by amalgamation will be about 50% of total values in the ore.

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Anchorage, Alaska
May 17, 1957