1910

L. D. Huntoon.

REPORT

REPORT ON THE GLACIER VIEW GOLD MINING CLAIMS, -/Ex 1/2. 4/2

AUK BAY, ALASKA

The area in which these claims are located was examined by me in 1910 at which time I was favorably impressed with the prospective possibilities of developing a very large low grade gold mine. I recommended at that time securing an option and exploring the property by diamond drilling. A favorable option could not be secured. Since that date several of the early owners of the group of claims in question have died. An option has now been secured from the present owners. I again recommend the group of claims as favorable prospect for a large low grade gold mine.

Prospective Value and Summary

To appreciate the prospective value of the Auk Bay group of claims one must consider the history of the Alaska Treadwell, Alaska Juneau, and Perseverence Mines.

The Juneau area was first worked by ground sluicing (shallow surface placers) and placer mining. The Auk Bay claims have been worked by ground sluicing with the recovery of superficial gold.

The formations of the three mines cited above comprises highly altered diorites and slates containing later quartz as veins and a net work of quartz veinlets together with about 2% of auriforous pyrite. The Auk Bay claims have the same formation, structure and mineralization.

The ore deposits at Juneau were of considerable width and have gone to depth. The mineralized zone at Auk Bay has considerable width and the mineralization points to great depth.

Samples of what I consider to be the lowest grade of material exposed gave most encouraging results for a large low grade gold deposit.

The occurrences of the values are probably more or less erratic. Much higher values than the average probably occur as zones and pockets both across and along the mineralized zone as indicated by ground sluicing.

I consider that such exploratory work as has been done has not been sufficient to determine the economic values.

It is my opinion that this particular group of claims is an unproven prospect for a low grade gold deposit of large dimensions. I consider the group worthy of thorough exploration by diamond drill.

Detailed Report

The Auk Bay area was examined by me during the summer of 1910. Since that date I have kept in close contact with the area by correspondence. The following report is based on my original notes and such information as has come to me through correspondence and the press.

Location:

The Glacier group of claims is located on "Treasury Hill" about two miles from deep salt water, Auk Bay. They are approximately 15 to 20 miles northwest of Juneau, Alaska. The waters of Auk Bay connect with the "inside channel" through which the ocean steamers ply along the coast.

Titles:

This particular area on Treasury Hill was staked in 1908 and held by the original owners for a number of years. Many of the original owners have died and title was allowed to revert to the Government. It is my understanding that the same group of claims have been restaked, recorded, and the title is in good standing.

Acreage:

5400? The property consists of nine mining claims; approximately 6000 feet long by 1500 feet wide.

Topography:

We have along the Auk Bay coast comparatively flat land for half a mile suitable for buildings. The ground then rises in two or more benches to an elevation of 1600 feet. Between the shore and the center of the group of claims the surface is heavily wooded and covered with a dense growth of ferns and underbrush. In the parks, or timber free areas, the surface is covered with a wet growth of moss containing innumerable small pools of water. There are few if any rock exposures other than those exposed by the early prospectors in the ground sluicing operations.

Climate:

Due to the Japan current skirting the Alaskan coast, the climatic conditions are most favorable. Little or no snow falls along the west slope until higher elevations are attained.

The claims, elevation 1600 feet, are covered more or less with snow during the winter months. Auk Bay is open during the entire year.

History:

A slight historical review of the discovery of the orebodies at Juneau and their bearing on the Auk Bay discoveries may be advisable: In the Juneau area the early discovery of gold in 1880 was made in the placers of Gold Creek and the superficial placers on the present Alaska Juneau property. Much activity occurred in 1881 and the claims were staked both on the mainland and Douglas Island. Quoting from the U. S. G. S.:

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"The first work, on the present Treadwell and Ready Bullion
properties and on the mainland near Juneau, was that of placer
mining. * * * Many of these miners made several dollars a day with
shovel and sluice box * * *.

** * * On Douglas Island the Treadwell claim * * * a 5-stamp mill erected in 1882 * * * .

" * * * placer miners * * * washed gold from the decomposed outcrop to the value of several thousand dollars."

It will be noted in the above quotation from the U. S. G. S. that all of the mines were first operated by ground sluicing of free gold from the superficial deposits. The first mill was erected in 1881 on the Treadwell and operations continued until 1917 when the mine was accidentally flooded.

The Auk Bay area is located northwest and on the same general trend of the Juneau gold bearing formations. Surface gold was won in the early days by ground sluicing and placer mining. In 1908 the original group of claims, now known as the Glacier group, was staked and produced from ground sluicing probably \$5000. In 1910 at the time of my visit, favorable terms could not be obtained. Later two or three options were given, more or less work done, and the options allowed to expire.

Many of the original prospectors and owners have since died and title was allowed to revert to the Government. I am advised that the claims have recently been restaked, recorded, and that this title is in good standing.

Development:

Under "Topography" I stated that prospecting is most difficult due to the dense growth of ferns and water soaked moss. At the time of my visit prospecting had been done for quartz with a pointed steel rod. Many shallow pits had been dug in the center of the southeast group and the center of the northwest group. These activities were about 3000 feet apart and on the same general strike. The southeasterly workings cover an area of probably 400 feet in diameter and indicate a width of 100 feet. The northwesterly workings extend along the strike for 1000 feet, and expose a width of 25 to 50 feet or more. All openings panned gold.

Geology:

The geology of the area is fully discussed in Bulletin 502 of the U.S.G.S. The general geology and structure of the Auk Bay area is similar to that of the mines in the Juneau area. Ground sluicing in placer operations preceded the opening of large mines in the Juneau area. Ground sluicing has given most favorable results at Auk Bay and exposed the formation for approximately 1000 feet at one point and 400 feet at another point.

The formations at Auk Bay comprise highly altered diorite, slates containing veins and veinlets of gold bearing quartz and auriferous pyrite similar to the mines at Juneau.

The geological survey referred to above was made by Adolph Knopf who was in the area at the time of my visit and with whom I frequently had correspondence regarding the prospective possibilities of the area. During my correspondence I mailed Mr. Knopf a suit of specimens to which he refers in the following letter:

March 14, 1911 - "I have been working on the petrography of those rocks and find that they are so altered from the action of vein forming solutions (which is a good sign so far as it goes, but unfortunately does not guarantee economic metallization) that I doubt whether the original character of the rocks can be established."

May 10, 1911 - "It is a fact of some interest that most of the specimens showed that the gold was located in fragments of country rock embedded in the quartz and that around these fragments there are usually clusters of dull white crystals of albite."

Quoting from Bulletin No. 502, page 15:

"The similarity in origin of the deposits to those of Juneau, whose behavior in depths is known, renders it highly probable that the gold content found near the surface will persist downward without essential change in value."

Mineralization:

The width of the mineralization at the time of my visit appeared to vary from 50 to 100 feet or more. The minerals comprise quartz, auriferous pyrite, and free gold similar to the mines at Juneau. As recorded under "development" the prospectors did their ground sluicing at two points, approximately 3000 feet apart. Their work on the southeast claims covered an area approximately 400 feet; their work on the northwest claims extended for about 1000 feet along the strike.

The sequence or genesis of deposition has not been determined to my knowledge. From Knopf's correspondence there appears to have been fragmentation with gold deposited in the fragments of the country rock. I personally found free gold in the fragmentary quartz. It is my opinion that there were two eras of gold deposition: Auriferous pyrite followed by free gold; the free gold appears to be related to the era of quartz deposition.

From conversations with the prospectors relative to their recovery from ground sluicing, it is my opinion that along and across the belt will occur zones containing much higher values than the average. This same condition I observed on the assay map of the Perseverance Mine. If this condition is true at Auk Bay several diemond drill holes will be required to prove the value of this property.

Commercial Ores:

Many factors enter into what may be considered commercial ore: Location and size of the deposit; amenability to treatment; and recovery vs. costs. The location of the property is ideal for operations on a large scale. The mineralized belt appears to be very large. The grade or value of the mineralized zone has not been determined. The cost on a large tonnage basis should not exceed from \$1.00 to \$1.50 per ton (similar to present cost at Juneau).

For many years the Treadwell operated successfully on ores assaying from \$2.00 to \$2.75 per ton. The assay map of the Perseverance, which I had the privilege of examining in 1910, showed values of \$1.00 to \$5.00, an average of about \$2.00 per ton. The Alaska Gold erected their plant on the assumption that the ore would give a recovery of about \$1.50 a ton. A recent report states that the Alaska Juneau averaged 90.16 cents in September and \$1.0246 per ton in October of this year and that this ore is being handled at a profit.

Samples and Assays;

An insufficient amount of work had been done at the time of my visit to attempt to take representative or average samples. I therefore decided to select what appeared to me to be lowest grade material for samples. To avoid any surface enrichments all samples were taken from the discarded dumps, thoroughly washed and hand sorted. Fractured pieces and those which indicated fair values were discarded. Following are the values received:

			Sample of quart				
NW. of cat	oin					 \$	1.60
as above -	Sample No.		Country rock;	altered dio	•		1.40
eiderable	_		- 304: About 1 short tunnel.				
	No. 303:	Quertz	from trench -		 .		2.00
	No. 304:	Quartz	from tunnel			~ •	1.20
southeast	-		Considerable st		about 100 fe		1.00
southeast pockets fr	of above.		~ 307: Severa cospectors clair	-			
	No. 306:	Quartz				• •	3.00
	No. 307:	Diorit			- ~ ~		0.80

Natural Advantages:

For large operations the property is most advantageously located. Ocean steamers plying the Alaskan coast via the "inside channel" pass within view of the shore. Auk Bay offers a protected "inside" harbor. Along the shore is a considerable area of level ground for buildings. A good water supply for large milling operations and domestic purposes is accessible. The topography offers several mill sites. A hydroelectric line passes within three miles of the property. The climate is the same as at Juneau; never very cold and never very hot.

Louis Doramus Huntoon

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REPORT ON THE

Consulting Mining Engineer

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AUK BAY - ALASKA

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about 2 miles from deep salt water, at Auk Bay. They are
approximately 15 to 20 miles north west of Juneau, Alaska.
The waters of Auk Bay connect with the "inside channel" through which the
ocean steamers plying along the coast pass.

TITLE:- This particular area on Treasury Hill was staked in 1908 and held by the original transfers owners for a number of years. Many of the original owners have died and title was allowed to refert to the Government. It is my understanding that the same group of claims have been re-syaked, recorded, and the title is in good standing.

ACREAGE: - The property consists of nine mining claims; approximately 6,000 feet long by 1500 feet wide.

TOPOGRAPHY: We have along the Auk Bay coast comparatively flat land then for half a mile suitable for buildings. The ground/rises

in two or more beaches to an elevation of 1600 feet. Between the shore and the center of the group of claims the surface is heavily wooded and covered by a dense growth of ferns and underbrush. In the parks

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CLIMATE: - Due to the Japan Gurrent skirting the Alaska coast the climatec conditions are most favorable. Little or no snow falls along the west slope until higher elevations are attained.

The claims, elevation 1800 feet, are covered more or less with snow during the winter months. Auk Bay is open the entire year.

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Sample No. 301 :- Sample of quartz from shallow
trench, 800 feet N.W. of cabin\$1.60
Sample No. 302:- Country rock; altered diorite;
same location as above 1.40
SemplesNo. 303 - 304, About 1200 feet N.W. of
cabin. Considerable surface work and short tunnel. Width exposed
25 to 35 feet.
No. 303:- Quartz from trench 2.08
No. 304:- Quartz from tunnel 1.20
Sample No. 304:- Considerable surface work and
short tunnel about 100 feet south-east of above.
Quartz 1.00
Samples Nos. 306 - 307 Several shallow pits
about 150 feet south-east of above. The prospectors claimed to have
mined several rich pockets from here.
No. 306 - Quertz \$3.00

NATURAL ADVANTAGES: For larte operations the property is most advantageously located. Ocean steamers plying the Alaskan coast via the "inside channel" pass within view of the shore.

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