

A BRIEF STATEMENT OF THE POINT ASTLEY MINING CLAIMS

The property consists of six full claims 600 feet by 1500 feet.

LOCATION:

The property is located on the South side of Sum Dum Bay, South-eastern Alaska, and about 45 miles south of the Alaska Treadwell Mine.

The claims extend along the shore of the cove or bay for 2000 feet, and from the shore line back and up the side of the low range of mountains, as shown by the map.

TITLE:

The title is held under the mining laws by right of location, and has been properly and legally recorded, and all regulations and laws have been fully complied with up to date.

GEOLOGY:

The veins of mineralized quartz fill the fissures and faults in a slate belt which has been upturned by the intrusions of the igneous rocks, serpentine and greenstones. The latter formations constituting the foot and the hanging walls. Beyond these intrusions on either side the formation is granite. The strike of the slate belt is northwest and southeast, and extends through and beyond the Alaska Treadwell and Juneau Alaska Mines properties. This slate belt is highly mineralized and carries higher values in the Sum Dum District than are found at the Treadwell and other large mines to the northwest. The total width of the slate belt is over 2000 ft. of which about 1400 ft. in width is mineralized.

VEINS:

There are several quartz veins, carrying mining values, two of which have been developed.

Vein #1 is on the west contact of the slate and intrusion. Width over twenty feet; dip 70 degrees to the N. E. The vein extends from the shore line southeastwardly up and over the mountain side, beyond the end lines of the claims. This pertains to all the veins.

Vein #2 joins Vein #1, near the shore line and then runs 600 feet from the parallel to Vein #1. It has a width of 15 feet.

Vein #3 is about 700 feet east of vein #2, and has a width of over 30 feet on the outcrops. Between these main veins and also eastward from Vein #3, the slate belt contains numerous smaller veins of mining ore.

The entire slate structure except the east side is mineralized. On the east side of the slate belt there is an unbroken and solid slate zone of about 700 feet wide that is barren, but beyond the barren zone there is a soft schist formation over 600 feet wide that still carries in leached out-crop values that average about \$2.00 per ton in gold and silver. On this noted slate belt there are several large operating gold mines, the most noted are the Alaska Treadwell and the Alaska Juneau Mines.

DEVELOPMENT:

A double compartment 6 x 10 ft. shaft has been sunk in the slate formation adjacent to the No. 1 vein to a depth of 200 feet and from which a cross cut tunnel has been run 129 feet cutting the vein for 20 ft. without finding the other wall.

Vein #2: a double compartment shaft has been sunk 100 ft. in the slate and from this a 90 ft. cross cut tunnel has been run in towards #3 vein. On the foot wall was found an 18 inch pay streak of very high grade ore. In running this cross-cut three veins are encountered, one being 3 feet wide; one 2 feet wide, and one 6 ft. wide. All were mineralized and carry gold and silver and copper.

Assays of samples taken from veins in Shaft No. 1 run from \$3.00 to over \$100.00 per ton in gold, silver and copper. All three are high grade streaks that assay several hundred dollars per ton. Samples cut across 20 ft. of the ore body in shaft No. 2 show an average of over \$5.00 per ton.

These assays are taken from various parts of the ore body from the better grade of ore:

Assays From C. E. Bogardus

	GOLD		SILVER		COPPER		
	Oz. per	value	Oz. per	Value	Per	Per	Total
Gener-	Ton	per ton	ton	per ton	cent	ton	value
al Assay	.05	\$1.00	\$47.10	\$28.66	14.36	28.72	53.38

Assays by A. L. Johnson U. S. Government Assayer

Assay No. 1	3.00	57.05	33.92	11.50	\$23.00	\$59.92
Assay No. 2	1.20	10.00	5.90	7.50	15.00	22.10

Assays from Falkenburg & Laucks

.12	2.40	12.7	7.60	11.00	33.00	43.00
.20	4.00	114.6	63.80	30.12	90.40	153.20
.14	2.80	13.3	8.00	13.31	29.90	50.70

Later Assays by C. E. Bogardus, Assayer & Chemist

<u>GOLD</u>		<u>SILVER</u>		<u>LEAD</u>		<u>COPPER</u>		
Oz per Ton	Value per ton	Oz. per ton	Value ton	per cent	Value ton	per cent	Value per ton	Total
.001	\$0.20	\$ 3.60	\$ 1.80	1.40	1.40	20.50	61.50	64.90
.02	.40	52.20	26.10	2.20	2.20	19.72	59.16	87.86
.01	.20	3.00	1.50	4.30	4.30			6.00
.01	.20	14.00	7.00	2.60	2.00	13.68	41.00	50.84

By Falkenberg & Laucks, Assayers, August 1915

<u>GOLD</u>		<u>SILVER</u>		<u>COPPER</u>			
Oz per ton	Value per ton	Oz per ton	Value per ton	per cent	Value	Total Value	
.16	\$3.20	953.0	\$479.00	32.4	129.50	611.80	
.10	2.00	14.00	7.00	7.45	29.80	38.00	

SMELTER TEST

No. 1

A shipment of ore from Vein No. 1 and Vein No. 2 were made to Tacoma Smelter. After paying the smelter charges, the low grade ore from Vein No. 1 netted \$4.53 per ton.

The higher grade from Vein No. 2 netted \$58.65 per ton.

No. 2.

TIMBER:

Spruce and Hemlock, situated in a Forest Reserve. The law permits a mining company to cut for its own use such timber as is required for mining purposes. By installing a small sawmill with a planing machine, all timber for buildings and mining timbers can be had at a very small expense.

The famous Treadwell Mine was operating on ore the total gross value of which was less than \$2.00 and the Alaska Jureau Mine averages about \$1.50 per ton. These great mines are located on the low grade section of the same

of the same slate formation or belt this property is on. The geology and the structure of the formation are the same, the difference being the ore deposition only. The values increasing towards the south.

TRANSPORTATION HARBOR:

This property is located on the shore line of a deep water cove protected by a land head and forming a natural harbor. It is the inner channel, or ship-way through which all vessels pass from Seattle to Alaska points.

It is about 45 miles nearer Seattle than the great mines of the Treadwell and the Alaska Juneau.

TRANSPORTATION OR FREIGHT COSTS:

On all shipments of 200 tons or over the freight rate to smelter is \$3.00 per ton.

POWER:

The present power plant consists of one 80 H. P. steam boiler. Water power is available from a lake, 600 feet above the mine.

CLIMATE:

The warm ocean current maintains a temperature that in winter seldom falls to 12 degrees above zero. The climate being more uniform and comfortable than Colorado or Idaho. The harbor and ship channel are open the entire year. The harbor is one of deep water, a loading dock only being necessary to permit the ocean freighters to take on or deliver freight on the property.

LABOR CONDITIONS:

Labor was paid \$5.00 per day during the year 1917 and 1918. The class of labor is generally good. Poor labor does not find employment, and strikes are not known in this part of the country.

COST OF MINING AND MILLING:

The mining cost will depend upon the magnitude of the plans adopted to exploit the property. With comprehensive development of this great Belt, the costs can be made to equal the low cost at the Alaska Juneau Mine, which is operating on ore having a gross value of less than \$1.50 per ton.

THE ORE OF THE "ALASKA COPPER":

It is a concentrating ore, sulphide of iron and copper, carrying gold and silver. Ten per cent of the ore will not require concentration and may be readily separated in the mine.

The balance of the ore will readily concentrate ten to one.

TONNAGE:

The capacity of the mill will be limited only by the capacity of the mining equipment, as the volume of ore in the 1400 feet width of the slate belt is as great as any of the mines now working.

EXTENSION OF THE PROPERTY:

At the present the continuance of the ore veins (beyond the claims now held by location) is open to entry, but has not been taken up or claimed because the water front or natural harbor is the key to economical mining and equipment.

UNDERGROUND CONDITION:

There is a little seepage from the surface during a heavy rain, which is handled by a small pump working one hour in the morning and infrequently at the close of the day shift. The mine is classed as a dry mine. The ore is easily drilled and subject to deep drill holes, producing large tonnage per shot. The unusual widths of the mine ore bearing veins, and the numerous small veins between them, and the general mineralization of the fractured slates may warrant the entire mass in part, at least of the slate belt.

PROSPECTING EQUIPMENT ON HAND:

This consists of:

- One belt driven four-drill air compressor and engine.
- One steam driven, three-drill air compressor.
- One double cylinder friction hoist of one and a half ton, capacity, with 2100 ft. cable, speed 300 per minute.
- One 40 H. P. boiler and setting.
- Two steam pumps, together with air drills, blacksmith tools.
- Buildings, bunk houses, eating houses, and all in good condition.

COMMENTS:

This property appears to have all the advantage of the great Treadwell Mine and the Alaska Juneau Mine, to warrant milling a very large tonnage. It has a much higher value per ton of ore than the nearby

mines. It has a protected harbor behind the numerous islands, and can deliver its concentrates directly into ore bins, that will permit immediate loading of a vessel on its arrival. The life of the mine under a large output will continue for many years, and when developed under competent management, will warrant the installation of the most modern methods of mining and milling.

The above statements are believed to be conservative and are based on several years of actual operation and development.

Respectfully,

/s/ H. Ahrenstedt.

State of Washington)
County of King) ss.

H. Ahrenstedt being first duly sworn on oath deposes and says:

That the above report on Point Astley, Alaska mining claims is correct, and the figures in the Assay Tests incorporated in the above report are correct copies of assays sheets, and the figures on the smelter test is a correct copy of same.

Subscribed and sworn to before me this 25th day of November 1927
