MR 112-9

9/14/37 - H.G.W.

MR Juneau 112

#### SILVER FALLS GROUP (Formerly Clark Prospect)

Owners: R. Coughlin, Alfred Bonnett, John Price, Larry McKechnie, Phil McKanna.

Property consists of 6 claims, 4 claims lying parallel tothe Gold Bran ch of Carlson Creek on the north side of the creek and extending approximately 6,000 feet in a NW. direction from the junction with Carlson Creek. Two claims, which cover veins with a NE. strike, have common side lines and overlap the claims which run northwesterly. The property is approximately 7 miles from Juneau by trail and nearly the same distance from the mouth of Carlson Creek.

The Premier had an option on the property in 1932 which at that time included 21 claims. Approximately 16 men worked on the property for 6 weeks and about 600 samples were taken.

On the Kathleen claim, at an elevation of 1360 feet, a 150' tunnel has been driven to intercept a vein which outcrops on the surface at an elevation of 1520 feet. By using an angle shot from the portal of the tunnel to the outcrop, and the difference in elevation determined by aneroid, 180 feet was determined as the approximate distance from the portal to the vein.

The schistose country rock at the portal strikes N. 70° E. dip  $55^{\circ}$  N., 120 feet from the portal the strike is N. 30° E., dip  $70^{\circ}$  N., and at the face it strikes nearly north with a vertical dip.

Sample #251 - 124 feet from portal (left side) - 16" wide - light arsenopyrite & pyrite.

Sample #252 - 118-120 feet from portal (right side) - 24" wide - very light arsenopyrite & pyrite, including 6" hornblende schist.

Sample #253 - 120-122 feet from portal (right side) - 24" wide - very light arsenopyrite & pyrite.

Sample #254 - Face, 152 feet from portal (right side) - 24" wide - very light arsenopyrite & pyrite.

on the Kathleen claim The vein, as exposed in the outcrop 160 feet above the tunnel is 61 feet wide, and consists of 3 feet of white quartz on the hanging wall, 12 feet of schist and quartz mixed which is mineralized, and 2 feet of blue quartz on the footwall (Samples 255, 256 and 257, respectively). The vein can be traced along the outcrop for a distance of 300 feet. is cut off in a creek bed on the east by a brecciated shear zone which is quartz comented, and strikes NW. with a dip to the east. A 6-inch quartz stringer on the hanging wall was sampled (Sample #259). A 42 foot sample on the shear, omitting the 6-inch stringer, was taken as E ... No. 258.

3-3-1

\$ 255-1.48 6.60 \$54.75 SEP 20 137 3.62 256-0.06 0.58 2.36 SEP 20 137 257-0.14 1.24 258-0.18 2.36 259-0.06 1.50

85. 45 B. D. STEWART

Commissioner of Minen

2.77

# UNITED WESTERN MINES

# 1512 SMITH TOWER

SEATTLE, WASH.

March 28, 1940.

\$ 12,465.32

# SILVER FALLS GROUP OF MINING CLAIMS JUNEAU DISTRICT, ALASKA.

## SUMMARY OF EXPENDITURES.

# CAPITAL

First payment on purchase of property	\$ 5,000.00
DEVELOPMENT	
Workmen's Compensation F. O. A. Engineers Examination and Reports Equipment Freight on Equipment Explosives Trail Expense Supplies Groceries - Meats Lumber & Hardware Transportation Assaying Telegrams	22.66 52.75 77.58 77.58 77.59 84.76 96.28 84.76 85.65 86.70 86.70
	7,315.32
	\$ 12,315.32
Advance Harvey Moore 3/29/40	150.00

Plate A shows the position of the length of ore proved by Premier sampling, totaling 260 feet and not including the 95 foot length of ore proved in the Lenora Vein.

Plate A also shows the position of the length of a very probable ore between the Kathleen veins and the William R., totaling 190 feet.

The William R. has never been exposed between the Lower Kathleen and the Upper Kathleen. About thirty feet above its covered intersection with the Upper Kathleen, the first sixty feet averages 0.10 oz. gold across an average width of ten feet. This is not ore, but it does show that there has been quartz and gold mineralization since the faulting took place.

It seems to the writer that the William R. vein might be ore for the length between Upper Kathleen and Lower Kathleen. If this proves to be true, ore length of 260 feet will be added to the total. There are different ages of quartz in the Kathleen veins. Usually the gold mineralization occurs with the youngest quartz; also the ore shoots in the Lenora vein occur near granitic tongues and dikes. The surface is covered near the part of the William R. between the lower and Upper Kathleen. If a granitic intrusion caused the post-fault mineralization it would be a reasonable explanation of the gold in the Lower and Upper Kathleen adjacent to William R. where the veins were shattered by the faulting, and also it would mean the William R. might well carry good gold values between the Lower and Upper Kathleen. Also if the mineralization is prefault and occurred along both Kathleen and William R. as an intersection ore body, still after the faulting the William R. between the faulted parts of the Kathleen would probably be ore.

There are also other definite possibilities of new ore being found on the property, notably at the intersection of the Lower Kathleen and Alice veins in the vicinity of Johnny' Clark's caved tunnel where the car wheels lie. Then there are the possibilities in the large Lenora b vein lower down the mountain, especially at the intersection of the Lenora and Upper Kathleen.

#### RECOMMENDATIONS

The writer recommends that the payment due January 1, 1940 be made.

It is recommended that a compressor be taken in over the snow in February and the tent camp re-established when the snow is gone, probably the latter part of May.

It is recommended that the portable compressor be taken near the Upper Kathleen tunnel and that the northeast drift be extended to and under the William R. Fault vein. This can be done before all the snow is gone.

It is recommended that a short crosscut tunnel be driven from down the gulch, about sixty feet lower than the 1939 short Lower Kathleen crosscut; this tunnel to crosscut to the Lower Kathleen, drift on the Lower Kathleen southwest, drift on the William R. Northwest, and then drift on the Supper Kathleen southwest.

It is recommended that first open cuts be made and then short tunnels be driven, if necessary, to explore the ground now covered where the Lenora and Upper Kathleen veins intersect, and also in the vicinity of Johnny Clark's car wheels caved tunnel.

Respectfully submitted.

HARRY TOWNSEND

1707 Hoge Building Seattle, Washington November 9, 1939.

Copy to Phie McKenna - 3/31/39

" Lany Formend - 4/3/29

" Welcoy - Feb }

GROUP

CHOUP

## SILVER FALLS

## Juneau Precinct

## Wilcox Samples

#251 ~ 254

Taken in tunnel as follows:

	Location	Width of Sample	Nature of Material Sampled
#251 0.06 0.72 \$2.42	Left side of tunnel at point 124 ft. in from portal.	16 in.	Light mineralization arsenopyrite and pyrite.
#252 Au. Ag. Val. 0.02 Nil \$0.70	On right side of tun- nel - from ll8 to 120 ft. in from portal	(from F.W.	Very light mineralization arsenopyrite and pyrite. Sample includes 6 ins. of hornblende schist.
#253 Au. Ag. Val. 0.16 0.14 \$5.66	On right side of tun- nel from 120 to 122 f in from portal.		Very lightly miner- alized with arseno- pyrite and pyrite.
#254 Au. Ag. Val. 0.10 0.26 \$3.62	At right side of face of tunnel, 152 ft, from portal.	24 in.	do. do.

Total strip sampled on right side of tunnel - 6 ft.

Where intersected in the tunnel the Kathleen vein strikes N. 30° E. and dips 70° NE. At the face of the tunnel the strike of the formation is North and the dip is vertical. The vein on the Kathleen claim is exposed at the outcrop, which is 160 feet in elevation above the tunnel level. At this point the vein is  $6\frac{1}{2}$  feet wide and it was sampled in 3 sections as follows:

Sample No. 255: Across 3 ft. of white quartz on the hangwall side oz. oz.

Sample No. 256: Across 12 ft. of mineralized mixture of schist and quartz.

<u>Ag</u>. <u>Val</u>. 0.58 \$2.36

Sample No. 257: Across 2 ft. of bluish quartz, next to footwall.

, } -

The vein can be traced for a distance of 300 feet along the outcrop easterly from the exposure where the above samples were taken. The strike is N. 30° E. and the dip 70° NE. It is cut off on the easterly end in a creek bed by a fault zone, which is composed of cemented quartz fragments, and which strikes N. 50° W. and dips 35° Northeasterly. A 6-inch quartz stringer on the hanging wall of this shear zone was sampled. An assay of this sample resulted as follows:

A sample taken across the shear zone for a width of  $4\frac{1}{8}$  feet, and from which the 6-inch quartz stringer was omitted, gave assay results as follows:

On the Alice claim the outcrop of a mineralized zone is exposed in an open cut that is 58 feet in length. This zone strikes N. 55° E. and dips 70° Northeasterly. It is made up of a greenish dike 15 feet in width that is bordered on the footwall side by a quartz vein  $5\frac{1}{2}$  feet in width and on the hangingwall side by a band of quartz bodies that range in width from 3 feet to 8 feet.

Six samples were taken along this mineralized zone as follows:

Sample No. 260

<u>Au.</u> 0.04 0.16 \$1.47

At the easterly end of the exposure. At an elevation of 1200 ft. alongside a creek and above an old abandoned tunnel. Taken across 3 ft. of bluishgray mottled quartz in the center of a quartz body 15 ft. in width.

Sample No. 261

Au. Ag. Val. 0.20 2.16 \$7.97

Sample No. 262

Au. Ag. Val. 1.64 8.26 \$61.09

Sample No. 263

<u>Au</u>. <u>Ag</u>. <u>Val</u>. 0.04 1.30 \$1.98

Sample No. 264

Au. 12.62 oz 20.10 \$450.70

Sample No. 265

<u>Au</u>. <u>Ag</u>. <u>Val</u> 0.06 0.52 \$2.33

Taken across 8 ft. of quartz band on the hangingwall side of fine-grained dike above the east end of the main stripping and at an elevation of 1260 ft.

Taken across 6½ ft. of quartz mostly of mottled bluish color and with arsenopyrite odor on hanging-wall side of dike at a point about 30 ft. SW from Sample No. 261.

Taken across 3 feet of white quartz at a point 35 feet SW of Sample No. 262. This band of white quartz lies above the bluish band.

Taken across a band of bluish quartz 56 inches in width that is below sample 263 and separated from it by a 2-foot band of schist - at the westerly end of the open-cut.

Taken across a quartz band  $5\frac{1}{2}$  ft. in width that lies along the footwall side of dike opposite Samples Nos. 261 and 262.

The exposed outcrop of the ledge on the Lenora Claim, which is a strong quartz vein with irregular schist inclusions, extends from an elevation of 1540 feet to an elevation of 1700 feet at the brow of the ridge separating two small streams that drain into the Gold Branch of Carlson Creek. The outcrop strikes from N. 35° W. to N. 40° W. and dips from 70° to 75° Easterly. Seven samples were taken along this ledge as follows:

Sample No. 266

<u>Au</u>. <u>Ag</u>. <u>Val</u>. 0.02 0.08 \$0.73 Across 2 feet in width next to footwall of which section 9 inches is bluish quartz and the balance is schist mineralized with arsenopyrite. Location of sample is 6 ft. above lowest exposure and at an elevation of 1540 ft. Sample No. 267

<u>Au</u>. 7.78 \$15.38

Sample No. 268

 $\frac{\text{Au.}}{\text{0.08}}$   $\frac{\text{Ag.}}{\text{1.08}}$   $\frac{\text{Val.}}{\text{$3.23}}$ 

Sample No. 269

<u>Au</u>. <u>Ag</u>. <u>Val</u> 0.08 0.88 \$3.19

Sample No. 270

<u>Au.</u> <u>Ag.</u> <u>Val.</u> 0.04 1.86 \$2.23

Sample No. 271

<u>Au.</u> <u>Ag.</u> <u>Val.</u> 0.26 3.90 \$10.85

Sample No. 272

Au. Ag. Val. 3.28 \$2.91

Taken across a width of 4 ft. of bluish quartz next to Sample No. 266 and extending to the hanging-wall.

Taken at a point 25 ft. above the lower end of exposed outcrop across the ledge, 4½ ft. in width that includes an 8 inch band of schist.

(Note: At a point 2 ft. above this sample the ledge is composed of a mixture of schist and quartz)

Taken at a point 20 ft. above Sample No. 268 across a width of 42 ft. of quartzose schist that contains about 30 per cent quartz.

Taken at a point 20 ft. above Sample No. 269 across a width of  $3\frac{1}{2}$  ft. of vein matter that is composed of about 75 per cent quartz.

Taken at a point 10 ft.below the bluff outcrop, at the top of the hill at an elevation of 1700 ft. across 5 ft. of bluish quartz with a small amount of schist inclusions.

Taken at a point 35 ft. below edge of bluff across 3 ft. of intercalated quartz and schist containing stibnite.

MR Juneau 12 1939 P

SUMMARY REPORT SILVER FALLS PROSPECT, CARLSON CREEK, JUNEAU DISTRICT, ALASKA.

## GENERAL FEATURES

Location - It is six miles up Carlson Creek and one mile up Gold Fork, seven miles altogether from Sunny Cove, Taku Inlet. There is a foot trail (not used for six years) and some work is necessary to brush out and regrade across slides. The outcrops now found are at elevations of 1300 to 1800 feet.

Water Power - J. C. Dort of the U. S. Forest Service says a 100 foot dam can be located at the forks a little pver two miles above its mouth giving 15,000 acre-feet of storage. "The primary power capacity for development with a power house at the mouth of Carlson Creek would be approximately 3,000 mechanical horsepower at 80 per cent efficiency and 100 per cent utilization."

There is also the possibility of buying power from the Alaska Juneau Annex Creek power plant. Its power line is approximately four miles from the property.

Timber - There is practically no timber on the claims. There is some fair timber on Carlson Creek about a mile from the property.

Claims and Ownership - The map shows the six claims, Effic, Kathileen, Alice, Grizzly, Lenora, and William R., for which assessment work has been done. The property is owned by Messrs. John Price, Larry McKechnie, Robert Coughlin, Philip F. McKanna, and Alfred Bonnett, all of whom reside in Juneau.

General Geology - The geology is shown on Plate 2 (insert map), as mapped by Dr. Buddington of the U. S. Geological Survey. The Silver Falls group is on the western flank of the coast range granitic batholith.

On account of heavy brush and limited time the writer was unable to thoroughly map the general geology on the claims. The gold quartz veins cut blocky hornblende schist in the metamorphosed zone very close to the granitic.

Mining Geology - Plate 3 is a geological map of the area where the best looking veins are partly stripped. During the summer of 1932 considerable work and sampling was done on the property. Maps showing very complete sampling with assay results accompany this report. These old cuts are mostly caved but the writer's samples, where taken, check the assay results of the samples taken seven years ago.

SUPPLEMENTAL STATEMENT NOVEMBER 1939 TO SUMMARY REPORT BY HARRY TOWNSEND, MARCH 1939 ON SILVER FALLS PROSPECT CARLSON CREEK, JUNEAU DISTRICT, ALASKA.

## WORK COMPLETED DURING 1939

The following work was done in 1939 on the Silver Falls Prospect under the capable direction (on the ground) of Robert L. Thorne, Mining Engineer:

- 1. Ten additional lode claims located and millsite located adjoining the lode claims on the southeast and several millsites located on the beach of Sunny Cove at the mouth of Carlson Creek.
  - . 2. Cabin built at mouth of Carlson Creek.
- 3. Trail extended four miles from Camp 2 (Alaska Juneau Annex Creek Power Line) to the main outcrops.
- 4. Tent camp established at Mouth Gold Branch, a mile from main outcrops.
- 5. Drift run fifteen feet northeast from cross tunnel Upper Kathleen. This drift driven by hand and did not reach the ore shoot.
- 6. Stripping done on vein near lower end line of Alice. This outcrop did not contain commercial values.
- 7. Crosscut driven under Lower Kathleen ore shoot thirty feet below surface. Three samples across quartz 3.5 to 4 feet wide on north-west side of dike assayed 0.44, 0.68 and 0.75 oz. gold. These samples are very encouraging, taken from a tunnel with 30 foot backs and not from an open cut.
- 8. Camp equipment stored under lean-to and in tunnel and rock house when snowfall made a tent camp impractical.

Plate A shows the property as first seen by the writer and also the 1939 work and the location of the ore shoots proved by Premier sampling in cuts now partly caved.

Work this summer shows that the intersection of the Lower Kathleen has almost surely never been exposed on account of deep talus cover. It is possible that Mr. Eaton got his high assay from within the Lower Kathleen ore shoot as partly defined by Premier sampling.

The writer is of the opinion that the Lower Kathleen and Upper Kathleen are very likely to be the same vein faulted by the William R. fault vein.

The vein in the tunnel is a slightly banded quartz vein containing sparse pyrite and arsenopyrite. The writer's sample across the two-foot vein in the tunnel assayed 0.21 oz. gold and 1.63 oz. silver. Two feet of schist alongside the vein assayed only 0.01 oz.gold and 0.35 oz. silver.

Fifty feet northeast of the tunnel and 140 feet higher a thirtyfoot length of this vein is exposed. Four samples taken by the writer
across an average width of 2.1 feet assayed from 0.58 oz. gold to 2.13
oz. gold and the weighted average is 1.52 oz. gold and 10.0 oz. silver.
The schist along the footwall is sheared and mineralized containing
about 15% erratic quartz and sparse pyrite and arsenopyrite. The footwall schist is exposed for a length of only fifteen feet. Two samples
assayed: 0.15 oz. gold and 0.55 oz. silver across 3.7 feet; 0.23 oz.
gold and 1.59 oz. silver across 4.5 feet. Seventeen samples taken in
1932 indicate an oreshoot in this cut 100 feet long x 5.11 feet wide
assaying 0.457 oz. gold and 3.60 oz. silver.

There is probably some surface concentration in the surface cut, but in the opinion of the writer most of the increase in value is caused by the open cut being close to the intersection of the vein with the Icy gulch mineralized shear zone. Two reasons supporting this opinion are: 1. The part of the surface outcrop not oxidized is more strongly mineralized than the vein where crosscut by the tunnel. 2. About ten years ago Mr. Eaton examined the property for the United Eastern Company. His samples at the intersection of the larger vein to the southeast and the Icy gulch shear zone assayed 2.95 oz. gold in the main vein and from 0.40 oz. to 1.1 oz.gold in the Icy gulch shear zone. Three hundred feet from this intersection Mr. Eaton obtained only 0.10 oz. gold in the Icy gulch shear zone. Slide rock covered this important intersection at the time of the writer's examination.

About a hundred feet northeast of the intersection there is an open cut, partly caved, shown on Plate 3. At one place there is seven and a half feet of quartz on the southeast side of a six to eight foot basic dike and about ten feet of quartz on the northwest side not fully exposed. The writer's samples from the vein in this cut assayed 0.10 oz. gold and 0.22 oz. silver across 3.5 feet, 0.34 oz. gold and 0.98 oz. silver across an additional 4 feet, 0.50 oz. gold and 4.98 oz. silver across another 5 feet on the northwest side of the dike, and there is 5 feet more that was too covered to sample. 100 feet to the southwest Mr. Eaton obtained a four-foot sample across this vein or part of it, assaying 2.95 oz. gold from a cut now caved. He also reported that the vein is not faulted by the Icy gulch shear zone. In 1932 many samples indicate an ore shoot 100 feet long by 7.64 feet wide northwest side of dike assaying 0.328 oz. gold and 3.17 oz. silver. Southeast of the dike heavy overburden cut down the length of the ore shoot exposed to 60 feet by 3.5 feet wide assaying 0.41 oz. gold and 1.47 oz. silver.

Plate 2 shows the location of the Lenora vein. Plate 4 shows results of the writer's samples from the hundred foot length now exposed. Samples from the northwest fifty feet assayed only 0.03 oz. and 0.04 oz. gold. Samples taken from the southeast fifty feet assayed 0.12 oz. gold, 2.52 oz. silver across 4.5 feet, and 0.12 oz. gold, 7.05 oz. silver across 5 feet. About 150 feet to the southeast the owners report a sample across ten feet assayed 0.28 oz. gold. One of the accompanying maps shows the work done and the many samples taken in 1932 from cuts, now caved, in the Lenora vein. Two distinct ore shoots are indicated. One is 50 feet long by 7.6 feet wide assaying 0.22 oz. gold and 5.00 oz. silver. The other is 45 feet long by 4.1 feet wide assaying 0.26 oz. gold and 4.44 oz. silver.

## CONCLUSION.

The five ore shoots disclosed by the 1932 open cut work total 2045 square feet of 164 tons per foot of depth with a gold value of 0.34 oz. The writer considers the probabilities for more ore particularly good in view of the intersection possibilities of the veins with shear zone. Accordingly the reasonable expectancy of ore might well be increased to 500 tons per foot of \$11.90 gold ore. There is at least enough silver to bring the value to \$13.00 in gold and silver. Further prospecting may also add to the expected tonnage.

No metallurgical tests have been made on the ore, but sulphides are sparse and it is apparently an ore easy to treat by amalgamation and cyanidation. Rejects of the writer's samples are available for metallurgical tests.

#### RECOMMENDATIONS

- 1. Stake ten or twelve additional claims. (Completed).
- 2. Brush out and roughly regrade the trail from Sunny Cove to the property, a distance of seven miles, and establish a summer camp at the northeast end of the property. (Under construction by appropriation from Alaska Road Commission).
- 3. Drift a hundred feet along the vein northeast from the tunnel shown on Plate 3.
  - 4. Crosscut under the outcrop shown on the east side of Plate 3.
- 5. Strip the surface at the intersection of this last vein and Icy gulch shear zone.
- 6. Use an airplane to drop tents and anything else that can take the rap and use back-packing for the first work in order to put the initial money into actual development.

Respectfully submitted,

March 27, 1939.

2 and 1 7-50 Sprill SILVER FALIS GROUP (Formerly Clark Prospect)

See claim prop in Brook file Envel. # 15

Owners: R. Coughlin, Alfred Bonnett, John Price, Larry McKechnie, Phil McKenna.

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