

TERRITORY OF ALASKA
DEPARTMENT OF MINES

Anchorage, Alaska

November 9, 1945

Mr. B. D. Stewart
Commissioner of Mines
Juneau, Alaska

Dear Mr. Stewart:

On August 15 and 16, 1945, a visit was made to the old Charles Wetzler lode claim on the west fork of Hurtle Creek in the Tiedel District. This claim has been relocated by Dominick Vietti and Jim Dolan of Valdez, and George L. Johnson of Anchorage. The visit was made in the company of all three owners.

Other reports give a resume of this property and district. Parenthetical additions are my own comments or explanations of differences.

From USGS Bulletin 662, pages 180, and 181
is the following-

"Hurtle Creek is a small stream which flows into the upper or south end of Tonsina Lake. It is formed by the union of two branches which come together about 2 miles from the lake. The west branch is about 5 miles long and flows almost due north, the east branch is somewhat longer and flows first north and then northwest. The valleys of both branches are above timber line, but spruce extends up the lower part of the creek to the forks. Both branches head against Boulder Creek, the east branch being separated from that stream by a comparatively low divide. Between the east branch and the upper part of Quartz Creek is a narrow ridge, which, at an elevation of 4500 feet, is crossed by a trail that leads to the Valdez-Fairbanks road at mile 55. (The trail leaves the highway at a point about 3 miles north of the Tiedel Roadhouse). The west branch rises in several small glaciers that lie in cirques at the south end of the valley.

The country rock of Hurtle Creek includes schist or slate and graywacke of the Valdez group, and is cut by numerous dikes of light-gray fine-grained diorite porphyry, whose courses are plainly seen on the steep rock walls of the valleys.

Two groups of claims have been staked on gold-bearing

quartz veins on the east side of the west branch of Hurtle Creek, and at the time of visit, in July 1916, were being developed by Messrs. Peter Layton and Charles Nelson, who, with one or two others are the owners. One of these groups, the Quail group, is about 2 miles (south) from the forks of Hurtle Creek, at an elevation of 4000 feet, and includes 10 claims. (Only one claim has been relocated, and this covers the two outcropping veins and the cross-cut tunnel.) *****

The veins of the Quail group have the better showing of ore and have been the most developed. The country rock at the workings is gray slate or schist (it is more schist than slate) which is much folded and sheared and cut by closely spaced northward trending joints that dip to the east. The deposits appear to lie in a fault zone of pressure and fracture. Some of northward-trending fractures have been filled with mineralized quartz veins, and at least four veins have been uncovered. (Only two could be found within any reasonable distance of the tunnel). The largest vein strikes north and dips 60 degrees E. (50 degrees) It ranges in thickness from 10 to 18 inches, and contains arsenopyrite, galena, and free gold in a gangue of quartz. Four feet below it is a parallel vein, 10 inches thick, and 1 foot above it is another vein, somewhat thinner. The fourth vein is 25 feet above the main vein and ranges in thickness from 1 foot to 15 inches. (These last two veins mentioned above were not found.) The dip is a little steeper than that of the veins below. (It was observed that the lower vein dipped 60 degrees E.) This vein contains the same minerals but a larger portion of free gold. (Assays and the examination of hand specimens indicated that the upper vein had more free gold.) Open cuts on the veins have exposed them for about 300 feet along the strike. The veins appear to be cut off or offset on the north by a light colored dike of diorite porphyry, which strikes east and dips south. This dike is exposed on the south side of a small creek about 500 feet north of the workings. In addition to the open cuts along the vein, a shaft, 10 feet deep (no indications of a shaft, but it may have been incorporated into the open cuts along the outcrop in later work), was sunk on the upper vein, and a tunnel was started below to crosscut the veins. This tunnel, which had been run 25 feet at the time the property was visited, will have to be driven 70 or 75 feet to reach the lower vein.

Nearly 3 tons of ore was packed out on horses to the Valdez-Fairbanks road in 1914 and shipped to the Tacoma smelter. At the time the property was visited, an arrastre, to be driven by water power, had been just completed but had not been in operation.

An excerpt from USGS Bulletin 866, pages 27, 28, and 29 is as follows-

"They (the three groups of the prospects in this general area) are all auriferous quartz veins whose location was determined by the north-south system of joint planes: they show

like mineral composition, although varying widely in the proportions of the different minerals; and they are associated with dikes of quartz diorite and granite.

Hurtle Creek is a northwestward-flowing tributary as of nearly equal size which come together about $3\frac{1}{2}$ miles from the lake. The length of the creek measured on either branch is about 8 miles. Hurtle Creek may be reached by a little used pack trail that leaves the Richardson Highway 3 miles north of the Creek, descends this branch, then turns south up the west branch. The distance by trail from the highway to the property to be described is about 9 miles.

Several groups of claims, one of which is said to be patented, have been staked by different persons on Hurtle Creek, but the group on which most work has been done lies on the east side of the west branch, $2\frac{1}{2}$ miles from the forks (south). The claims are now the property of Charles Wetzler (relocated by Dominick Vietti, Jim Dolan, and George L. Johnson who, however, may have partners unknown to me. They are situated above timber line on the lower slope of the mountain, at 4000 feet above sea-level, or 2070 feet above Tonsina Lake. These claims are in an open valley on a moderately sloping hillside. The country rock of the general locality consists of slate and graywacke cut by a multitude of fine quartz veins, but at one place under consideration it consists of gray crinkly or satiny slate and sheared graywacke that is locally schistose. The strike of the cleavage is N 75 degrees W., and the dip is 50 degrees S. These rocks are broken by vertical joint planes striking N. 5 degrees W. and dipping steeply east, which contain mineralized quartz veins. About 500 feet east of the vein area is a sill of white porphyry 8 feet thick, dipping 50 degrees S., in bluish-gray slate or schist. The sill is offset by small transverse faults and appears to be separated by a fault plane from the underlying slate. The whole area gives evidence of extensive faulting and pressure disturbances.

Two principal mineralized quartz veins are the object of interest at this place. (See accompanying sketch). These veins are parralled (approximately) to each other, strike N. 5 degrees W. (the upper vein strikes north), dip 60 degrees E. (the upper vein dips 50 degrees E.), and are separated by 30 feet of the country rock. Each vein is exposed in an open cut for about 100 feet, and the two overlap in such a way that the distance from the north end of the west cut to the south end of the east cut is about 200 feet. The veins consist of rusty white quartz containing metallic sulphides, which in places are oxidized, leaving only the iron-stained cavernous quartz. They are of practically the same size as exposed in the open cut, and show some variation in thickness, reaching a maximum of more than a foot. The west vein appears to be somewhat more highly mineralized than the other.

A tunnel with its portal 90 feet west of the west (or lower vein) vein and 50 feet lower (in elevation) than the open cut was driven east 150 feet to intercept the veins. At 10 feet from the face of the tunnel a crosscut 35 feet long was driven to the south, and at the end of that the crosscutting to the east was resumed for 8 feet. The relation of the tunnel to the two veins on the surface is shown (on sketch accompanying).

A mineralized quartz vein was encountered 10 feet from the face of the main tunnel. This vein is 12 inches thick and is single on the north side of the tunnel. On the south side are two veins 2 feet apart and 10 inches thick, one of which tapers out. (The vein was found to be single on the north side of the tunnel, its width being 6 inches at the top of the crosscut face and about 10 to 14 inches thick at the bottom. On the south side, there is a local enlargement at the top of the crosscut where the vein measures 14 inches. It is about 7 inches at the bottom. White quartz stringers marked the edges of this enlarged section, but they as well as the vein material between seemed to be well mineralized. This enlargement diverged to the south, and taper downward. Should this vein in the crosscut be indeed, the lower vein on the surface, the continuity and strength shown by the vein on the surface is very deceiving, as no sign of slips or faults are evident on the surface.)

Samples of ore taken from the open cuts, from the tunnel, and from the dump show galena, sphalerite, arsenopyrite, and chalcopyrite or copper pyrite in white quartz. They also contain free gold. (Free gold is relatively easy to find in any vein material) Several years ago a small arrastre operated by water power from a little stream crossing the claims was built, but whether any recovery of gold was made is not known to me. (The arrastre still stands but shows evidence of little use.)

Several other open cuts on quartz veins in the north-south joint planes have been made in the vicinity of the tunnel and at points farther south in the valley, but none of those examined are as large or well mineralized as the two at the tunnel. (Numerous trenches from east to west across the apparent continuation of the two quartz veins have been dug but the results if any, are not known. To the north and south of the open cuts on the veins, the rock in place is much lower in elevation than at the open cuts, as is shown by the talus material and debris in sight at the bottom of the trenches and on the dumps beside them. It is doubted that any of this trenching has proven that the veins actually extend continuously to the dike which should cross the strike of the vein at about 500 feet to the north. The surface covering over the rock is probably much deeper than would be presumed from the general appearance of the valley).

The improvements at the property are a cabin and a small tool house and blacksmith shop at the tunnel mouth. If extensive development work is undertaken in the future, some attention will have to be given to the trail, for it is overgrown with alders on the hill slope near the highway and is washed out

in a few places. On the whole, the ground traversed by the trail is good; the climb out of the Tiekel Valley to the bench is steep but the footing is firm; and the valley of Hurtle Creek has less soft ground than the character of the topography would suggest, at least in the place selected for the trail.

The Wetzler claims are above timber line and are distant from a source of wood for fuel and mining uses. The nearest timber is around the mouth of Hurtle Creek, on Tonsina Lake, 5 miles away. Lumber for building could probably be obtained more economically from the outside, but for fuel and timbers the local supply will be sufficient for immediate use. (A caterpillar road can be easily made from the tunnel portal to the mouth of Hurtle Creek. Only one bridge would be necessary. Several good sites for a bridge across the east fork of Hurtle Creek are available. Plentiful gravel for road material, and good drainage would assure an inexpensive and dependable road)."

From USGS Bulletin 866, page 36, and 37 is the following-

"All the prospecting that has been done in the Tonsina District so far indicates that gold is the valuable metal most likely to be found there. The gold of the quartz veins is accompanied in places by a little galena, sphalerite, and indications of copper, but no one of these minerals has yet been found in quantities that suggest commercial values.

It is believed that the gold-bearing quartz veins are genetically related to the intrusion of the dikes of porphyritic granite and quartz diorite and are younger than the abundant small quartz veins so highly developed in the slate and graywacke. The gold-bearing quartz veins show a decided tendency to occupy the vertical north-south joint planes; that is, the system of joints which in general trend nearly north and dip at very high angles wither east or west. (East only in the vicinity of the tunnel). Yet the gold-bearing veins are not confined to such joint planes. None of the gold-bearing veins yet discovered have been known to continue uninterruptedly for more than a few hundred feet. In general they are rudely lenticular, and their horizontal dimensions may be regarded as giving some indication of the vertical extent. It is suggested that the prospector for lode deposits give special attention to veins of this kind, particularly where they are associated with the light colored dikes."

It is recommended that for the immediate future that the crosscutting of the structure to the east be resumed for approximately 25 feet more or less for an anticipated intersection with the upper vein. A raise on the vein showing in the tunnel, to the surface for a definite exploration of the vein and data on the actual differences to be seen in the vein in the open cut and that shown in the tunnel, should be of the greatest aid in proving or disproving the ultimate worth of the property, at least as far as these particular veins are concerned.

Inasmuch as most other prospects in this general area have proven that many of these fissure veins are intimately connected with nearby dikes, it seems worthwhile to do a certain amount of exploratory work in the vicinity of the dike which runs generally east and west at a point about 500 to the north of the tunnel. Trenching, and other surface prospecting should be done because of the distinct possibility of local enrichment of the veins nearer to the dikes.

It is also recommended that a thorough sampling of the surface crops of the veins and that exposed in the tunnel be done for a complete knowledge of the present economic value of the property as it is.

Little expense would be necessary for improvement of the cabin or tool shed for immediate use. It is believed that a passable cat road can be made over the old pack trail at little expense and with a minimum of changes in the route. Should future development warrant it, a combined timber haulage road for timber from Tonsina Lake, and an access road from the Richardson Highway in the vicinity of the Tonsina Roadhouse, and which would follow the general line and grade of the Tonsina River may be a project for consideration.

Mr. Charles Wetzler, a resident of Valdez, is an elderly man who has met with a serious disability in the past, and who is still interested in the outcome of the property in which he has spent so many years of hard work and privation. Although he has no longer any rights in the property, he still believes in these veins as having possibilities for a good, small mine.

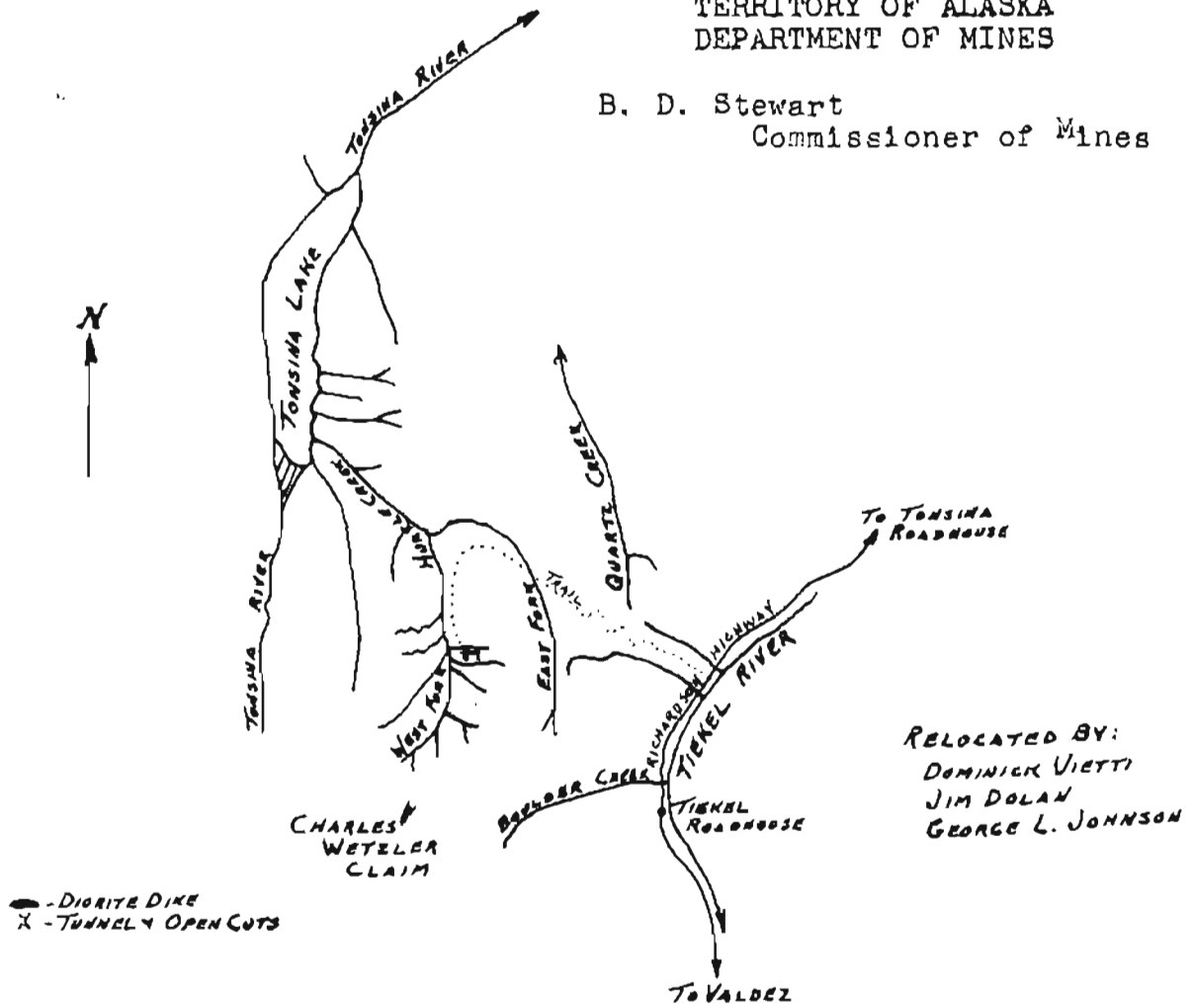
Several other veins and dikes are to be seen in both valleys of the branches of the Hurtle Creek, as they are also to be seen in every other creek valley in this district. Further investigation should be made at some future time for a revaluation of the prospects in the light of modern transportation and modern equipment, and new methods of mining and milling.

Respectfully submitted.

Harry L. Fiedler
Associate Mining Engineer

TERRITORY OF ALASKA
DEPARTMENT OF MINES

B. D. Stewart
Commissioner of Mines



WETZLER CLAIM LOCATION

TIKEL DISTRICT, ALASKA

TRACED FROM U. S. G. S. BULL. 866 MAP

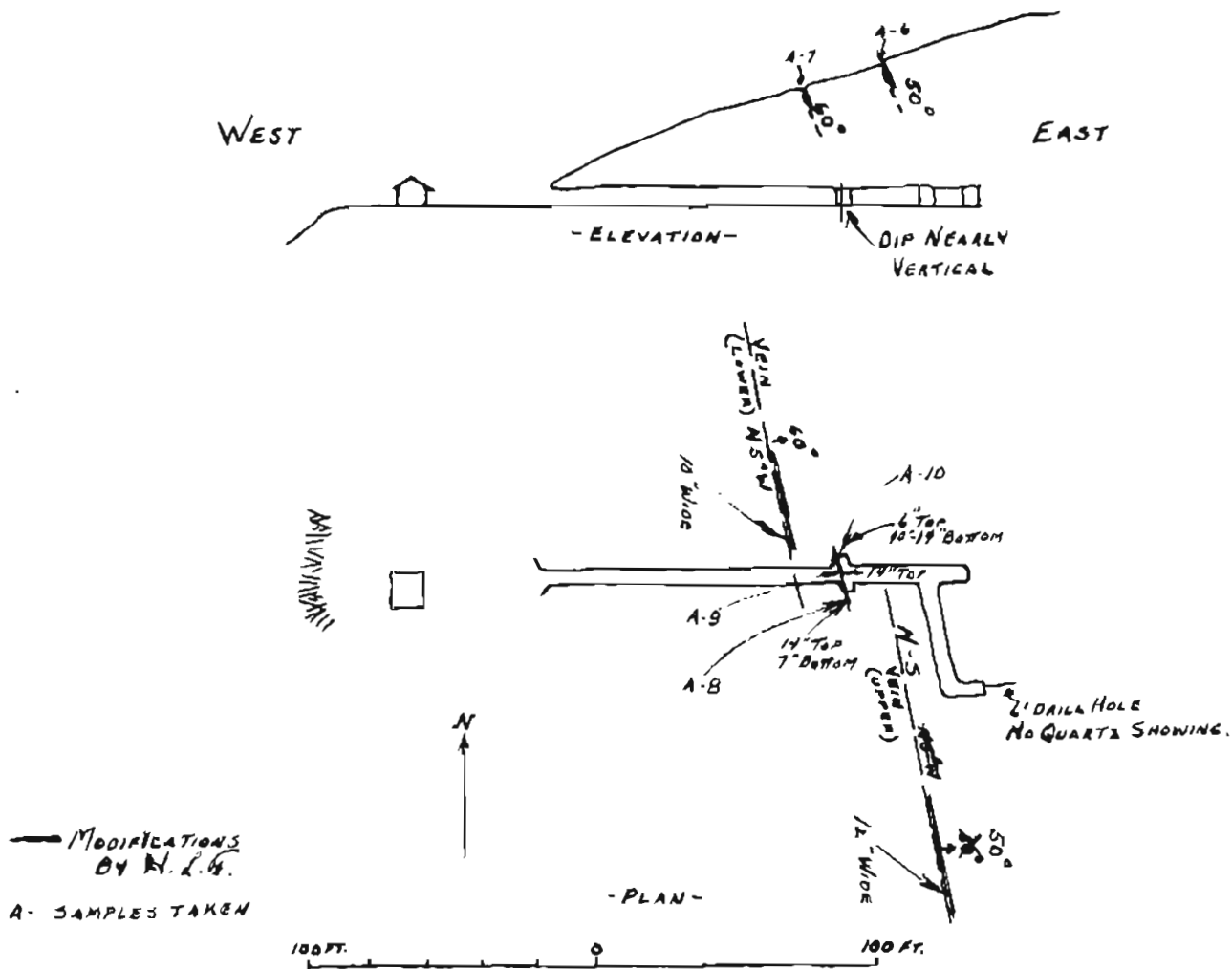
SCALE - 1/4 MILES

AUGUST 16, 1945

H. L. G.

TERRITORY OF ALASKA
DEPARTMENT OF MINES

B. D. Stewart
Commissioner of Mines



Charlee Wetzler Tunnel,
on Hurtle Creek, Tielke District.

Traced from USGS Bulletin 866 map, with
modifications.

August 16, 1945
HLF

TERRITORY OF ALASKA
DEPARTMENT OF MINES
ASSAY OFFICE

Anchorage, Alaska, July 26, 1945.

REPORT OF ASSAY

On samples received from George Johnson

Address City. Samples from Wetzler Claims* on Hurtle Creek.

Assay No.	Mark on Sample Owner's Description	OUNCES PER TON		Value Per Ton	PERCENTAGE OF
		Gold	Silver		
3215	#1 B.B. Top of X-cut	1.20	9.6	\$ 48.81	
3216	Right of X-cut X-cut #2	6.36	2.6	224.44	
3217	Left of X-cut B.B. #3	1.00	5.4	38.83	
3218	Vein on Surface S-4 (#2 vein)	1.42	7.0	54.67	
3219	#5, 3 places on vein (#1), about 30 feet apart.	7.16	12.2	259.26	

**Renamed -
Brown Bear Claim (B.B.)*

(signed)

LEO H. SAARELA

Leo H. Saarela ASSAYER.

TERRITORY OF ALASKA
DEPARTMENT OF MINES
ASSAY OFFICE

Anchorage, Alaska, September 22, 1945
 & October 26, 1945

REPORT OF ASSAY

On samples received from Harry L. Fiedler

Address Department of Mines, Anchorage

Assay No.	Mark on Sample Owner's Description	OUNCES PER TON		Value Per Ton	PERCENTAGE OF		
		Gold	Silver		Pb	Cu	Zn
3338	A-6 Hurtke Creek, Tiekel District, Charles Wetzler claim, outcrop of upper vein.	0.02	trace	\$ 0.70	trace	trace	trace
3339	A-7 Charles Wetzler claim, outcrop of lower vein.	1.40	5.8	53.11	2.30	0.36	1.13
3340	A-8 Charles Wetzler claim, right side drift.	1.12	1.6	40.33	0.97	-0.1	0.55
3341	A-9 Charles Wetzler claim, crosscut roof at drift inter- section.	0.28	0.8	10.36	1.25	trace	0.17
3342	A-10 Charles Wetzler claim, left side drift.	0.72	4.1	28.32	6.20	1.00	2.57

(signed) LEO H. SAARELA
 Leo H. Saarela ASSAYER.