VISIT TO ENGINEER GOLD MINE October 1, 1975

Vom Schweler Snithers

On Oct. 1, 1975, Dr. Ted Grove, Bill Dudas and myself visited the old Engineer Gold Mine situated on the east side of Taku Arm, about 10 miles south of Golden Gate, 65 miles from Carcross and 25 miles from Atlin. We chartered a jet boat to take us from Atlin through the Atlin River and Graham Inlet into Taku Arm. Apparently one is only able to go through the Atlin River in jet boat when the water is high enough (i.e. late summer and fall). Otherwise the curent is very fast and shallow. On the way over, we stopped at the head of Rupert Creek and picked up Reg ? and his son and took them with us. Reg and his Dad used to operate the Engineer and Reg has 2 of the finest specimens of gold ever seen (quote Grove). We landed at the old site of the first Pat Burns grocery store built in the North on the shore of Takt Arm. Nu-Energy Development Corp. has bought the property and is currently working on the property. They are using a barge from Carcross to transport material (10 ton limit) 2-1/2 hours by boat. They are using the old Pat Burns store as the camp. Wrights Drilling (from Kamloops) is doing some underground drilling. Bill Gimour was the geologist on the property in charge of sampling. Bad winds can come up on Taku Arm and the lakes so one should be very careful. A vehicle has been brought on to the property.

We went underground on the No. 5 level portal. The host rock is shale and finely textured, bedded greywackes which in places are fossiliferous (pelecypods and ammonites). Folding appears to be significant i.e. tight and sharp. A good "stockwork" of quartz and qtz. bx. exists.

Two kinds of qtz. veining exist - 1. Massive ('bull') and 2. Vuggy (a la Babe).

Three or four varieites of dykes exist:1. Diorite

- 2. Fsp po
- 3. Dacitic
- 4. Andesitic

Mineralization consists principally of native Au in qtz. Present assaying gives 0.01 to 0.02 oZ/ton. Minor cpy and arsenpyrite in qtz.

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<u>Metamorphism</u> (or Mylonitization) gives the rock in places a bedded appearance. Some rare zones include breccia.

Faulting and/or shearing was probably a major ore control.

We walked out most of the 5 level and down the old shaft to just above the 6 level from where it is <u>flooded</u> downwards. Nu-Energy hope to dewater to enable them to work on the 6, 7, and 8 levels. The stopes <u>above</u> the No. 5 level were apparently well cleaned out (pers. commun. Tom Kirkwood, former owner). No stoping was done below the No. 5 level but a shaft exists to the No. 8 level with some cross cutting. The ore potential appears to rake downward steeply so that drill targets can be projected from the 6, 7 and 8 levels. Two names of veins are the <u>Engineer</u> vein and the <u>Double Decker</u> vein.

The ore was termed as good high-grade hand picking which could now support a 25 ton/day mill.

Apparently (Tom Kirkwood) good samples exist at the bottom of the dump (below portal) below the mill at <u>low</u> water (i.e. late May - early June).

Tom Kirkland (Atlin) and three partners last worked the Engineer 'till the early '50's.

Reg ? (another partner) says he has all the old company plans which he would sell (a figure of \$5000.00 was said by Ted Grove). On the other hand, Nu-Energy has very little info as most was lost in a fire at the property. Thus it would be to their advantage to purchase the info from Reg. - Reg ? lives in the cabin at the head of Rupert Creek on Graham Inlet..

Allemonite (a rare As-Sb alloy) exists here.

We walked around the surface and examined the large qtz. veins and also in the "Hub" area.

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We walked up the road back of the shore and came to the <u>old</u> dump and ball mill (hand-made). Some (Hub A) good samples of qtz-calcite breccia ore were observed and some green mariposite rock was taken. Apparently it may carry Au (Kirkwood).

Ref. 1905 - B.C.D.M. Ann. Rept. p. 80 - 81 1919 - B.C.D.M. Ann. Rept. p. 89 - 92