IR 195-51

TERRITORY OF ALASKA

DEPARTMENT OF MINES

JUNEAU, ALASKA

10 July 1952

ITINERARY REPORT

TO: Phil R. Holdsworth, Commissioner of Mines

FROM: James A. Williams, Associate Mining Engineer

SUBJECT: Field trip by James A. Williams through the Cordova, Valdez, and Seward Recording Precincts, June 16 to July 4, 1952.

A field trip was made by the undersigned through the above precincts during the period of June 16 to July 4, 1952 for the purpose of visiting and examining three copper properties in the Prince William Sound area, a stibnite prospect on Kenai Peninsula, and such other work in the areas visited that might be deemed worthwhile. Properties investigated or examined were the Alaska Copper Corp. at Port Fidalgo, the old Threeman Mine at Landlocked Bay, the Beatson Mine at Latouche, and the K & T stibnite prospect at Kenai Lake owned by William C. Knaack and Dick Thomas of Seward.

16 June: Juneau to Cordova by Pacific Northern Airlines. Upon arrival at Cordova, information was given by the Cordova Air Service that there was a boat at the Alaska Copper Corp. property at Port Fidalgo with which the people come to Tatitlek to pick up supplies which the planes leave there for them. It was assumed then that the boat belonged to the Corp. and would be available for the trip across Fidalgo to the Threeman mine, and no air transportation was arranged for other than a charter direct to the Alaska Copper Corp. camp on the following day.

It was learned at this time that Cordova Air Service makes a thrice-weekly mail and passenger flight around Prince William Sound, but that they will not land at any place other than the scheduled stops without being paid considerably extra. The first scheduled stop is at Tatitlek, and the fare is $13.00. To have the plane stop at Port Fidalgo, you must pay them the $13.00 plus $20.00 extra for a "service charge", although Fidalgo is on a straight line between Cordova and Tatitlek. With the excess engineering equipment, it was seen that a charter to Fidalgo would be more economical for two men than the regular flight. To avoid excessive freight costs, the freight and mail for Fidalgo must be picked up where the plane leaves it at Tatitlek by a boat from the camp. This sort of treatment by the airline seems unnecessary and certainly is not encouraging to new operations attempting to make a start. It is one of the poorest

examples of bush service seen by the writer. There is an excellent beach at the camp that will not damage the planes' floats. Merle K. Smith is owner and manager of the Cordova Air Service.

While in Cordova, information was sought on any possible activities at Katalla in connection with the planned oil exploration program. Apparently nothing was started yet. One or two men were reported as being there, but that is all.

Also while in Cordova, the writer obtained shipping rates for ores and concentrates from the local Alaska Steamship Company agent. The present rate from Prince William Sound to Seattle is $9.00 per ton for ore or concentrates of a value up to $60.00 per ton, and there is a 25% increase in the rates for every 100% increase in value of the ore or concentrates above $60.00 per ton. Added to these rates is a 15% surcharge and a $1.80 per ton wharfage charge at Seattle to the Tacoma Smelter. However, the agent stated that if the shipments were large enough, no doubt arrangements could be made for better rates and for unloading at the smelter rather than in Seattle. He did not quote demurrage rates. Another source has quoted demurrage at $1300.00 per day.

RX 96-3

17 June: Cordova to the Alaska Copper Corp. Operation at Port Fidalgo. The location is in the Valdez Recording Precinct.

Upon arrival at the camp, it was learned that the boat being used for camp communication and freight hauling was owned by the camp cook, Joe Rock. Arrangements were made with him for transportation to the Threeman Mine at Landlocked Bay on the following evening. A short time after the agreement was made, his dog broke a leg, and Mr. Rock immediately set off for Cordova in the boat to take the dog to a veterinarian, promising as he left to return from town the following day.

The lower drift of the mine where the diamond drilling is being done was examined. This project is being financed by a DMEA loan, and the holes were planned so as to enter a zone which was supposed to contain ore according to the results of a resistivity and self potential survey by Schlumberger. Two holes and a part of a third had been drilled into areas that had been indicated as having the highest potential of the ore zone, but the cores show only slate, with very minute quantities of pyrite in one hole, so it appears that the program may be a failure. At any rate, the geophysical survey can no longer be regarded as having any value. The lower drift is rather barren, but the upper ones show more mineralization. A brief, separate report and map of the property will be prepared at a later date.

Mr. Chuck Herbert, manager of the operation, was not at the property at the time of the visit. Two men were the working crew, the diamond driller and helper. Equipment being used was all new, including a Joy diamond drill, Joy 210 foot compressor, small Skajit double-drum hoist, and duplex pump. As a matter of interest, the drill and compressor had Sullivan name plates that had been painted over, so it appears that Joy has taken over the Sullivan plants. In spite of the newness, trouble was being experienced with leaks developing in the radiator and fuel tank of the compressor.

Safety conditions were good with the exception of the driller not wearing a hard hat. He said he would put one on. A large first aid kit is kept at the camp, which is only a few minutes' walk from the working face. The camp is a partly rebuilt cabin being used for the mess house and a large tent for sleeping.

18 June: Went through all the old upper workings of the mine. The timbers are holding up quite well, and most of the stopes are still accessible. A fair amount of copper mineralization is evident, but the ore shoots have apparently been stoped out. The country rock is mostly slate, but bedding is difficult to distinguish and the ore control is not evident, except that the ore appeared to be where the wall rock is massive and not where it is mashed or distorted and crumbly. There is over 500 feet difference in elevation between the lower level and the lowest of the upper levels, a rather long distance to attempt to project ore bodies under the circumstances that exist here. It is presumed by the writer that the reason for drilling so far below the known ore bodies was that if the ore did not extend at least that far, there would not be enough for a profitable operation.

The cook did not come back. We attempted to get a call through to someone for transportation, but the radio transmitter was apparently not powerful enough to reach anyone. This is actually a question of safety, also, where a camp is completely cut off without communication or transportation, but the cook did return with his boat several days later.

19 June: Still at Fidalgo with no way of obtaining transportation.

20 June: In the morning, walked to Irish Cove where planes sometimes fly through and laid out a sign and built a fire to attract a pilot's attention should one fly that way. A mail boat came to camp at noon to deliver some groceries that Cordova Air Service was supposed to have delivered the previous week, and transportation was obtained on it to Landlocked Bay. The charge was $22.50 for this 7 or 8 mile trip. Prince William Sound seems to be a region of high priced transportation. The boat is the "Siren" and the skipper and owner is Pete Nicholoff. It makes a trip around the Sound twice a month and is based at Cordova. He agreed to come back and pick me up in four or five days.

21 to 25 June: Examined the Threeman Copper Mine at Land-locked Bay. This property is also in the Valdez Recording Precinct. KK 46-34

It was found that there are seven levels in the mine, but the three lower ones were inaccessible. The open levels and stopes were sampled and mapped wherever one could go with reasonable safety. A surface Brunton and tape traverse was run to tie the portals together for an accurate composite map. Twenty-two channel samples were cut in the mine and three more in a pair of nearby adits of uncertain ownership.

It does not appear at present (without calculating from the finished maps and assay returns) that anything like the reported 200,000 tons of 3% ore is blocked out as reported. However, mineralization mostly in the form of chalcopyrites does extend nearly throughout the mine, the highest grade of which is in narrow, rather inconsistant bands or shoots of nearly solid sulfides. Diamond drilling should show up more more lowgrade material. The ore control seems to be within the minor shears that are within the major shear zone trending NW and dipping NE. Much highgrade was found on the dumps as a result of the hand sorting operation and a large portion of these dumps could probably be milled profitably. The writer estimates the dump content could be easily ½%. In checking the geology of the nearby vicinity, it was noted that sulfides are widespread, even appearing in primary greenstone. In fact, this appears to be the best mineralized area the writer has been in to date. The possibilities of a fair-sized lowgrade milling operation here are good.

It is the writers belief that the Werner Gabler people should be advised that an application for an exploration loan rather than a production loan would be more practical, if they can obtain a suitable option type of agreement with the owner and that they should start proceedings soon. The operation would almost certainly have to be a milling proposition rather than a sorting and shipping operation as before. A separate report complete with maps will be prepared as soon as the time is available.

The buildings, bunkers, and dock are completely rotted away, and there is no machinery or equipment of any kind on the property. The place was apparently stripped after it closed down.

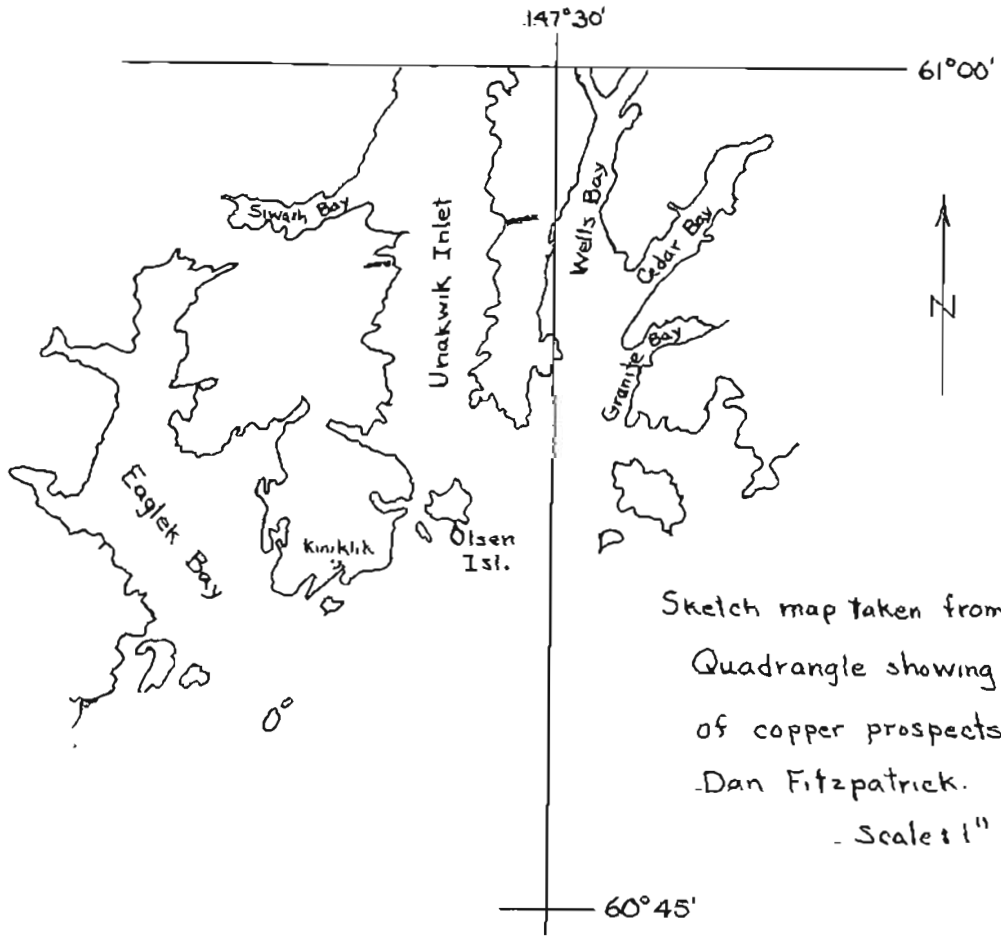
Besides visual observation, the extensive mineralization of the area is further evidenced by the many mines and prospects shown on the USGS map in Bulletin 605. As discussed with the Commissioner of Mines earlier, a well-planned large-scale exploration program would probably show up enough ore bodies in this area and around Prince William Sound to warrant a central treatment plant. With this sort of a setup, copper mining could be profitable again, and still further exploration would be encouraged.

Three more channel samples were cut in a pair of drifts at tide level which are shown on the Bn 605 map as owned by Peter Steinmetz. Bands of sulfides here were noted as being rich in pyrrhotite and they were considered as being a possible source of nickel and cobalt.

26 June: Left Landlocked Bay in the evening aboard the mailboat "Siren." Dropped anchor in Irish Cove for the night.

27 June: Arrived in Cordova at noon. Cordova to Anchorage via PNA. Since there is no flight direct to Seward from Cordova, the flight to Anchorage was necessary at this time.

Just prior to leaving Cordova, a Mr. Dan Fitzpatrick introduced himself and stated that he and George Anderson have a copper prospect at Unakwik Inlet from which samples assaying 6 to 8% copper had been taken, and that he wished an examination. According to Fitzpatrick, the prospect is located as shown in the following sketch, the showing on the east side of the inlet being the one he is most interested in, (he claims that it can be traced for a long distance) and the one on the west side being a possible extension of the one on the east.



Sketch map taken from USGS Seward Quadrangle showing reported locations of copper prospects (in red) of Dan Fitzpatrick.

Scale: 1" = 4 miles.

An agreement was reached with Fitzpatrick whereby he was to pick me up at Latouche on the 1st of July with his fishing boat and take me to his prospect, and I would make the examination.

On arrival at Anchorage, the Threeman samples were deposited at the Assay Office where they were to be processed and pulps sent to the Ketchikan Assay Office.

28 June: Anchorage to Seward via Christensen Air Service.

29 June: Investigated the K & T prospect at Kenai Lake owned by William C. Knaack and Dick Thomas of Seward. Transportation out and back from Seward furnished by Mr. Knaack. KK 95-24

It developed that no one had done any work on the K & T property yet this year, and because of the late snow condition, the best part of the antimony vein (in a steep gulch) was still covered by deep snow, and another part of it was covered by slide and could not be located. As a result, an insufficient amount of the formation was exposed to allow one to form any conclusions. However, two channel samples were cut and photos were taken, and a very brief report will be prepared on this prospect. The description and appearance of the property make it look promising, though, and the writer recommends another visit there at a time when assurance can be obtained that the ground has been well opened up. This problem was discussed with Mr. Knaack, and he agreed to see that it was done before asking for an examination again. He also gives full consent to the making public of any information that we wish about his property. The country rock is a poor grade of slate and the vein appears to be a fairly consistant sill of igneous material (reportedly andesite) impregnated with antimony and varying from 18" to 24" where seen. The mineral crystallization is not that of pure stibnite, but what other important mineral might be included is not known at the moment. Samples have been sent for identification.

KK-94-1

Information was obtained of the Two Jims Mine operated on Surprise Creek in the Kenai Lake area by Jim Dunsmire and Jim O'Brien, two old-time partners. It is an unusual placer drift mine and is reported to be the only active operation in this part of the Kenai Peninsula. It consists of about 1500 feet of horizontal tunnel running upstream and starting in glacial till. It progresses through the glacial material into an underlying pre-glacial stream deposit and finally reaches bedrock where good pay was found. The pre-glacial stream deposit is reported to be a yellow gravel and muck, and both this and the glacial material are so tightly packed that no timbering has been required. A water line has been laid to the working face, and the material is sluiced through boxes where it is excavated and the tailings are apparently carried on out of the tunnel by the water.

At mile 26 on the highway out of Seward, it was noticed that a road cut to be blasted had been drilled, the holes loaded, and the wires to the electric caps were connected so that the circuits were completed except for the addition of the blasting machine.

I was informed that this practice of loading holes, connecting the wires, and leaving them unguarded for long periods of time before blasting with traffic passing at times almost over the top of them has been standard practice on this road since construction first started two years ago. It being Sunday, none of the construction people were available to talk to about it. The contractors on this particular section of the highway are a combine of the firms of Manson, Osgood, and Halvorson Construction Companies, and the supervising agency is the Bureau of Public Roads.

On July 4th, a Mr. Edwards of the Manson Construction Co. was on the plane with the writer coming from Cordova to Juneau. The explosives matter was brought up, and Mr. Edwards stated that their loading crews are very limited, it often takes two days or more to get a group of holes loaded, but that they did not necessarily load them as soon as they were drilled. It developed from the conversation that Manson Construction Co. is doing a road job in the Ketchikan area, so it is assumed that they are the same firm doing the work where a similar circumstance was observed by the Commissioner of Mines earlier this year. In the interests of public safety, it appears that a regulation controlling the above practice should be put into effect.

30 June: Weathered in at Seward.

Received corresponding stories from three local amateur prospectors of a man who had been in Seward a short time before with a rich sample of carnotite four or five inches in diameter. They said it was a definite sulfur-yellow and caused a violent reaction on a Geiger counter. No one knew his name for sure, but one of the men thought it might be Walker and had gotten the information that the deposit was approximately 70 miles north of Anchorage and that the formation had a width of a little over 20 feet. If this information is accurate, it sounds like a better radioactive deposit than anything found in the Territory to date. The sources of this information besides the above-mentioned Mr. Knaack, were Russell Norton, Box 364, Seward, and M. H. (Si) Sidener, owner of a local drugstore in Seward. A request was left with these people to notify the Department immediately if they learned anything further or if the man happened to come to Seward again.

1 July: Seward to Crab Bay via Scenic Alaska Air Service and Crab Bay to Latouche by halibut boat. Investigated buildings, machinery, and workings of Beatson Mine at Latouche.

Scenic Alaska Air Service is composed of one Seabee flown by B. C. "Tiny" Trakowski. He has done extensive flying in Prince William Sound and is reported to be the best pilot to engage when a charter flight is necessary out of Seward. The water at Latouche was too rough to land on when we arrived, so we landed at Crab Bay, across the channel, and the trip to Latouche was completed aboard a halibut boat.

At Latouche nearly everything is in bad condition. The mill buildings and bunkhouses are all collapsing or will collapse soon. A few photographs were taken of the buildings and headframe, and if they turn out well, will be added to this report later. Practically all of the machinery, including the hoists, crushers, Deisels, turbines, boilers, flotation agitators and motors, etc. were sold and shipped to the Cascade Co. of Seattle long ago. Four 8 x 8 Hardinge conical ball mills remain that were used very little and could probably be used again. Five Marcy cylindrical mills about 4 x 8 also remain, but are unfit for further use. Two drum type vacuum filters about 8' wide and 10' in diameter are still set up in the mill and a direct heat, cylindrical rotary drier about 4' in diameter and 30' long also remains. These probably could not be used, though, and all the plumbing and belting is gone. Flotation cells minus agitators remain, but they would not be suitable for use now. Much usable timber could be salvaged from the buildings, but the buildings would have to be rebuilt. In many places, the floorboards have rotted to the point that one must be careful where he steps so as not to fall through. The headframe over the main shaft is collapsing and some of the concrete foundations are breaking up. Most of the track rails are either nearly rusted away or missing completely. No usable ore cars could be found. The dock is in fair condition but would have to be rebuilt or well reinforced for heavy use.

The mill flow sheet apparently ran as follows: Ore was hoisted from the shaft and dumped into the bin over the primary crusher which was immediately adjacent. Primary crushing was done by a gyratory crusher and secondary crushing was done by two Symons cone crushers. Then the material went into the Marcy ball mills with return circuits, then into the flotation cells from which the heads went into two thickeners. From the thickeners it went to the filters and then to the drier and into concentrate bins from which it was hauled by rail tram to the bins at the dock where it was loaded on the ships by belt conveyor. Crude ore was also shipped. It was further noted in the mill that the material had to be elevated between nearly all of the operations.

The underground works are mostly under water. The water level is just below the main adit which is just below mill level. The main shaft passes through this adit and the ore was all hoisted from below. It is a three-compartment shaft, one for man hauls and two for hoisting ore. The timbering appears to be in fair condition, although some of the lagging is quite rotten. The adit was entered to a point beyond the shaft where water was dammed by a fall. The glory hole was partly full of water and no portals around or above it could be found that were not caved or covered with snow. The Ladysmith workings were also visited, but not entered. This ore body is quite soft and required an excessive amount of timbering, so it was not considered wise to enter any of the adits alone unless for a

more urgent purpose. All surface structures here are in ruins. What could be seen of an adit from one of the portals did not appear to be too badly deteriorated, however.

Some of the mill information was obtained from Pete Hjort who worked in the mill, but does not remember the details too well. Antone "Tony" Zuanich, who worked underground, also still lives at Latouche and is reported to be a very good source of information on the old workings. He was gone from Latouche on a short vacation at the time of the writer's visit. Probably the best source of information ~~is~~ to correspond with Mrs. Hazel Leonard, Postmistress of Latouche.

There is a small community at Latouche which consists of at least six persons the year around and several more during the summer. Mr. Wallace Bailey has purchased the surface rights from Kennecott and is endeavoring to start a year-around sea food packaging industry there which will sell directly to the Alaskan consumers. At present he sells ice and bait to fishing boats and buys and refrigerates fish. The enterprise is called the "Latouche Fish and Cold Storage Co." and is associated with Boothe Fisheries. Itinerants may obtain food and lodging there with Mr. and Mrs. Fred Riker who operate a family style hotel service. Air mail service is three times weekly and the mail boat stops twice monthly. Radio communication is maintained with Anchorage.

The refrigeration and ice plant are in the old power plant and are operated by a water wheel on the end of an eight-inch wood-stave pipe line. A similar pipe line and water wheel operate a 30 KVA light plant.

2 July: Latouche to Cordova via Cordova Air Service. By the afternoon of July 2nd, Dan Fitzpatrick still had not shown up at Latouche, though the agreement was for him to pick me up there on the first with his boat. Upon arrival of the mail plane, the pilot said that he had seen Fitzpatrick in Cordova on the preceding evening, so I decided to fly to town rather than wait longer. Upon arrival in Cordova, several people told me that Fitzpatrick was still in town, though I could not locate him at his hotel or elsewhere. The girl in the airways office had heard the information that he had had a quarrel with his partner about their property. I finally left a note for him at his hotel telling him that under the circumstances it appeared that he had lost interest in an examination of the prospect, and gave him my address in case he wanted to write to me about it.

3 July: Awaiting transportation in Cordova. Could not obtain a seat on the PNA plane going through to Juneau. Still saw nothing of Fitzpatrick.

Obtained a story from Wes Kennedy, manager of the Windsor Hotel, that the Department of the Interior intends to make a National Park of the Wrangell Mountains. If this is true, the proposed park would no doubt include large areas of highly mineralized country,

and would retard or prevent the development of these areas. The Department of Mines and all other interested agencies and persons should watch for this move and be ready to try to counteract it.

4 July: Cordova to Juneau via Pacific Northern Airlines.

Respectfully submitted,

James A. Williams

JAMES A. WILLIAMS
Associate Mining Engineer

1. View of Latouche from the dock.

2. Headframe and mill buildings at Latouche.

3. Marcy mills in foreground. Hoist house in upper left.

4. View of Latouche mill from tramway to dock.

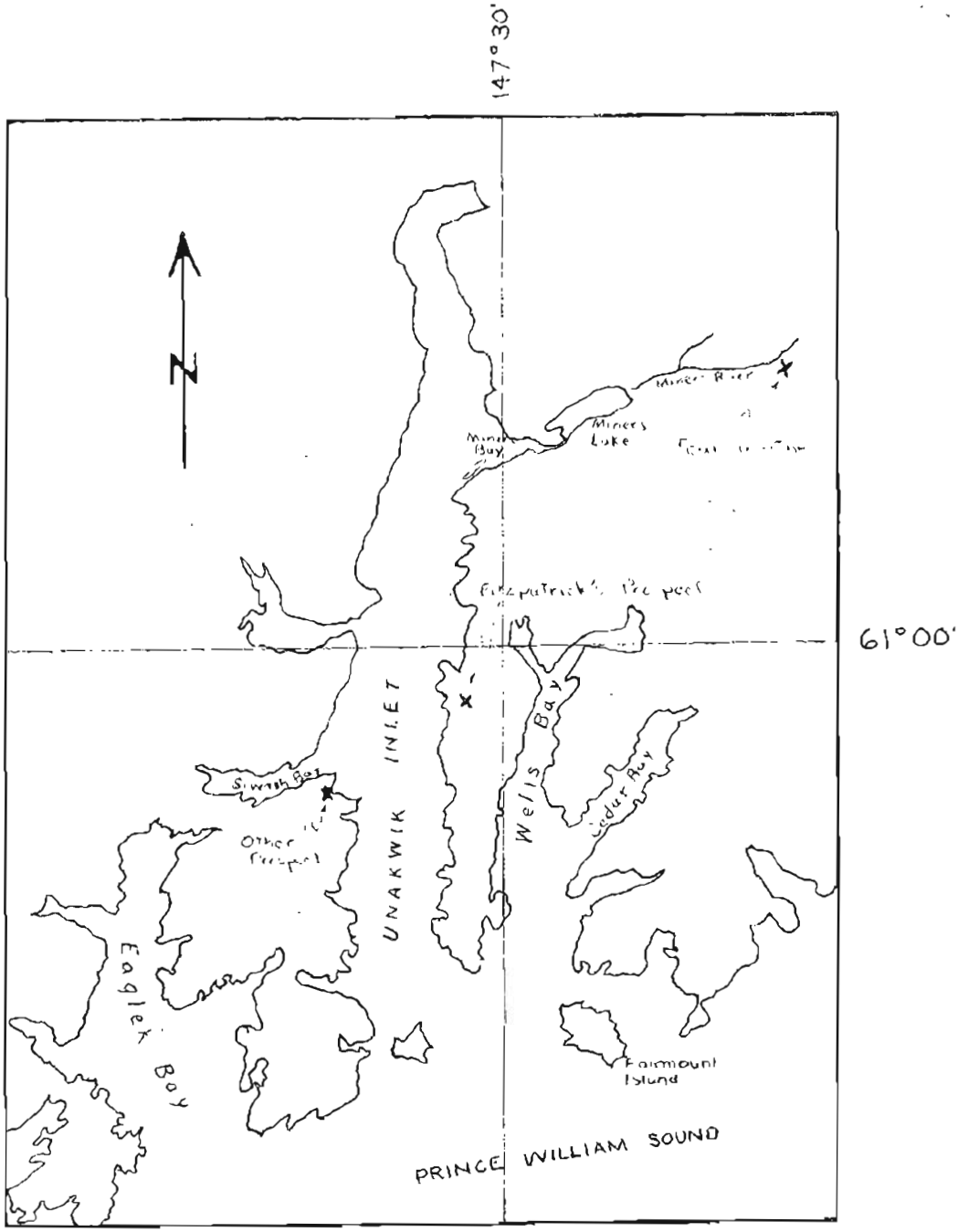


Figure 8. Locations of Fitzpatrick's two prospects and the Four-in-One prospect.

Map adapted from U.S.G.S. quadrangles.

Scale: 1 inch equals 4 miles.