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TERRITORY OF ALASKA
DEPARTMENT OF MINES
BOX 1391
JUNEAU, ALASKA

September 29, 1953

ITINERARY REPORT

TO: Phil R. Holdsworth, Commissioner of Mines

FROM: James A. Williams, Associate Mining Engineer

SUBJECT: Field Trip by James A. Williams and Robert H. Saunders to Seward Peninsula, 26 June to 14 July, 1953.

The chief purpose of the subject trip was to do a magnetometer survey of tin placer ground in the vicinity of Cape Mountain in an effort to locate probable channels for the benefit of the Zenda Gold Mining Company, currently drilling for tin there. A safety examination was made at the Lost River Tin Mine, and a mineral investigation was made of Hirk Edwards' antimony prospect on Big Hurrah Creek.

June 26: Juneau to Fairbanks via Pan American Airways.

June 27, 28: At Fairbanks and College. Joined Saunders.

Tried to contact John Butrovich regarding some asbestos in the Goodpaster country, but he was out of town. Saunders agreed to see him later.

June 29: Fairbanks to Nome via Wien Alaska Airlines.

Made a brief stop at Kotzebue enroute. Conferred with U. S. Commissioner George Francis, recorder of Noatak-Kobuk Recording Precinct, on the problem of inducing prospectors to properly locate their mining claims on their location certificates and assessment work affidavits. Mr. Francis was very willing to cooperate and stated that he would be glad to help out on the locations if he had the quadrangles covering the areas in question. We agreed to send him the maps, and it has since been done.

Saw Jack and Edith Bullock. They are still interested in the Ruby Creek (tributary to Shungnak River) copper prospect with Rhinehart Berg, and intend to furnish him a bulldozer to work with there. Archie Ferguson was formerly also financially interested in this venture, but has sold out to the Bullocks and Berg. Bob Saunders is scheduled to make a second examination of the prospect when Berg has done more exploratory work on it.

Bill Thomas and Alex Stout were repairing a bulldozer and other equipment with which they planned to mine the Sig Goodwick and Ted Tronstad ground on Dahl Creek (tributary to the Kobuk) which they have leased.

Fred Crane was still carrying on his usual promotional activities at Kotzebue. Currently, he was interested in an oil exploration company at Fairbanks known as Arctic Oil Ventures which had two geologists from the University of Alaska in the Selawik District looking for oil possibilities.

Upon arrival at Nome a conference was held with Dan Jones concerning various projects under consideration. Jones was advised to write to James Robbins and advise him that the requested coal examination on the Kukpowruk River was impractical because the TDM could not do more than had already been done in the way of measuring and sampling. Jones was given information from the "Analysis of Alaskan Coals" to forward in his letter. It was decided with Jones that the proposed Ablowalok kyanite prospect examination was not warranted at the time, and that the prospecting trip to the Sinuk River pegmatites should be indefinitely postponed. It was decided further that Saunders and the writer would make the requested trip to the Peace River radioactive show immediately upon returning from the Zenda project, and that the Hirk Edwards' antimony prospect on Big Hurrah Creek, the reported oil occurrence near the Koyuk River, and the Curtis gold prospect near Marshall would be investigated after the Peace River trip if they seemed to warrant the time and expense.

The site of the new TDM assay office building was visited and it was found that the forms were in place for the pouring of the footings, but that the contractor, Mr. Gillis, had his crew busy elsewhere. He could not be located that afternoon.

June 30: Nome to Tin City via Munz Airways. Tin City to Zenda Gold Mining Company camp on Boulder Creek on foot. RX 43-1 43-13 43-16

July 1 to July 8: Magnetometer survey of Boulder Creek and other streams in the vicinity of Cape Mountain to try to locate channels for the placer tin drilling program under way there. Cape Mountain is on the western tip of Seward Peninsula. The project was unsuccessful. A report will be written on the work by Saunders and the undersigned at a later date.

The superintendent of the drilling was Otto Oetjen, but he was absent at the time of the TDM work, and Glenn Adams, driller, was in charge. Adams is a very competent and experienced placer drill operator. This operation was on a DMEA loan, and John Mulligan, Bureau of Mines, was there also supervising the work. One 6-inch placer churn drill was being used. The work was on a two-shift basis, seven days a week, with a total crew of 8 men. They were very accommodating and cooperative. At the time of writing, the work is reported to be still in progress.

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July 9: Tin City to Lost River Tin Mine via Munz Airways. Safety inspection of mine.

As a result of complaints on safety conditions in the U. S. Tin Corporation mine at Lost River, the writer was directed to make a safety examination there while in that part of the country. Safety conditions were found to be reasonably good. The timbering in the lower drift where the ground is heavy was squeezing, but in no danger of collapsing suddenly. The management stated they were preparing to renew this timbering. A number of ladder rungs in the raises were found broken as a result of blasting, but these are replaced often, according to the foreman, Mr. Ernest Smith. The cage safety dogs and cable were OK and in good working order. Some motor-drive guards were out of place in the mill, but since the mill had only started shortly before, they had not been put into place yet. The mill foreman promised they would be properly replaced quickly. The various foremen and some of the other employees were taking a first-aid course from a local nurse. First-aid supplies were sufficient.

For the record, the water supply situation was investigated and the following was learned. The water source found by the water specialist taken there by the Commissioner of Mines earlier in the year was not prospected because of the reported reasons that first it was too cold to sink the shaft and then the thaw came suddenly and the runoff covered everything. As a result, Superintendent Kochersperger decided not to "take a chance" on this source and to use the other source that is 3000 feet further from the camp instead, making a total of 9000 feet of distance to transport the water. At the time of the visit, the path for the pipe line (it is to be on the surface) had been surveyed and was in the process of being graded. The pipe to be used is Transite with 7.2" outside and 6.8" inside diameters. The manufacturers of this pipe have promised that they have an improved product that will not crack from freezing or movement as Transite has done in the past. Insulation of the pipe will be by means of a box which was to be made of 2 x 12's and rock wool. A heating cable will be used also which will be thermostatically controlled, and when on full, will draw 88 KW. A new 200 KW power generator was planned to handle this load and other extra needs for electrical energy. At the time of the visit there had been a rather dry spell, and it was noted that Cassiterite Creek was so low that it hardly carried sufficient water for a 24-hour milling operation, so it may be that the pipeline will be necessary occasionally in the summer as well as in the winter.

A new section of the mill was under construction. This addition will house a forty-foot thickener, flotation cells, and the new 200 KW Diesel generator unit.

July 10: Lost River to Nome via Munz Airways.

On arriving back at Nome it was learned that Jones had departed for the Peace River area two days previously and would be gone for a

total of ten days, thus relieving Saunders and the writer of that examination. Charles Jones, Bob Curtis, Mrs. Hirk Edwards, and U. S. Commissioner Helen Bockman were all contacted on Department business.

Mr. Charles Jones was the person who had requested the investigation of reported oil seeps in the vicinity of the Koyuk River. He wanted TDM engineers to go out and hunt for the locality of the seeps, take samples, and report back confidentially to him without telling anyone else what was going on so that he would know what ground to lease for oil and not have someone else lease it before him. It was explained to him that the TDM could not do this because any investigation made on public domain must be made available to the public. He agreed then to look for it himself or hire a private individual to do it.

Bob Curtis of Alaska Airlines wanted an examination of his gold quartz prospect near Marshall, but it was learned upon talking to him that he was not ready for it yet, and wanted someone to be there when he went to do some blasting and excavating later in the season. It was decided that Martin Jasper would be the logical man to make the examination, and Curtis was informed that the writer would have Jasper get in touch with him for future arrangements on the investigation. Jasper was informed of the matter when the writer reached Anchorage at a later date.

Mrs. Hirk Edwards was contacted, and it was agreed to ride out with her the following day, since she was going out to the property over the weekend, and examine the antimony prospect on Big Hurrah Creek.

Mrs. Helen Bockman, U. S. Commissioner, was visited with a view to discussing the central recording problem with her. She is very busy and showed little enthusiasm about sending the records into TDM, but did agree that she could do a little better if she had maps to locate claims on and a better supply of TDM forms for the prospectors to fill out. It is believed she will be fairly cooperative in the future.

July 11: Nome to Hirk W. Edwards' property on the Solomon River via private vehicle of Edwards'. Examination of the antimony prospect in the afternoon.

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The stibnite show, known as the Gray Eagle prospect, belongs to the E. W. Quiggley estate and is leased by Edwards. It is located on the right limit of Big Hurrah Creek about a mile up from the Solomon River, and the geographical coordinates are 164° 15' W longitude and 64° 39' N latitude. Edwards excavated with a bulldozer while Saunders and the writer indicated where to dig and examined all that was exposed. Sample RHS-53-9 was taken, but the assay results are not yet available. A very brief report on this examination will be prepared separately at a later date. The prospect is mentioned on page 204 of U.S.G.S. Bulletin 722 by S. H. Cathcart.

July 12: Visited placer mining operations along the Solomon River and returned to Nome via Edwards' private vehicle.

Hirk Edwards was actively working placer ground belonging to the E. W. Quiggley estate on the left limit of Solomon River just below the confluence with Big Hurrah Creek. Quiggley died only recently. Edwards hires only one man, and they have a dragline-bulldozer-hydraulic outfit. The paystreaks are under limestone, posing a difficult mining problem. The channels appear to trend perpendicular to the river.

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Some distance below Edwards' operation was the shovel-in operation of Hank Briner and Jack Titus at the mouth of Penny Creek. Their small setup is shown in Figure 1. They had a small dam across the river and brought water to the sluice box from there with a pipe line. They used only 3 eight-foot boxes 18" wide with a combination of Hungarian and pole riffles at a 12" grade. As can be seen in the photo, they had mined only a very small cut but had found good pay and were doing quite well. As a matter of fact, they were the happiest gold miners the writer has seen in a long time. The discovery was made on a small fraction not being held (Lee Brothers ground is all around them) and so they are not having to pay any royalties. Three different varieties of gold were plainly visible in their pay.

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The Lee Brothers of Solomon very courteously escorted us all around their operation. They are operating one dredge and preparing another that has been idle for some time for operation. The idle dredge is shown in Figure 2. The dredges are both of the flume type, and were converted from trommel screen-stacker dredges because the flume type works more efficiently on the type of shallow ground that exists there on the Solomon River. They apparently have a very economical operation without much stripping or thawing expense, and they operate their dredge with a crew of two. All their men are Eskimos, and they claim to have a very reliable crew. The operating dredge digs about 5000 yards per day and the break-even point in cents per yard is quite low, but was given as confidential information. They claim that the ground is very low-grade and that they were not making much profit. Fairly large nuggets of magnetite and hematite show up in their concentrate. Their thawing method is unique in that they bulldoze the gravel level, or create many closely parallel channels, and run the river over the ground to thaw it. The camp has a very complete machine shop.

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Travis P. Lane was met on the road going into the Big Hurrah Mine, where he is manager, to open it up for the first time in the season. He had two Arizona miners with him and announced his intention of dewatering the mine, cleaning out the shaft, and getting the mine into operation if at all possible.

July 13: At Nome. Checked with Mr. Gillis on the progress of the new assay building and inspected the pilot or prospecting placer machine of Erikson Placers, Inc. Saunders returned to Fairbanks via Wien Alaska Airlines.

The footings had been poured during the weekend for the new building. Mr. Gillis was finally located at another job. He stated

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Figure 1. Briner-Titus shovel-in setup on Solomon River.

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Figure 2. Lee Brothers flume dredge being prepared for operation.

Figure 3. Erikson placer machine, hopper end.

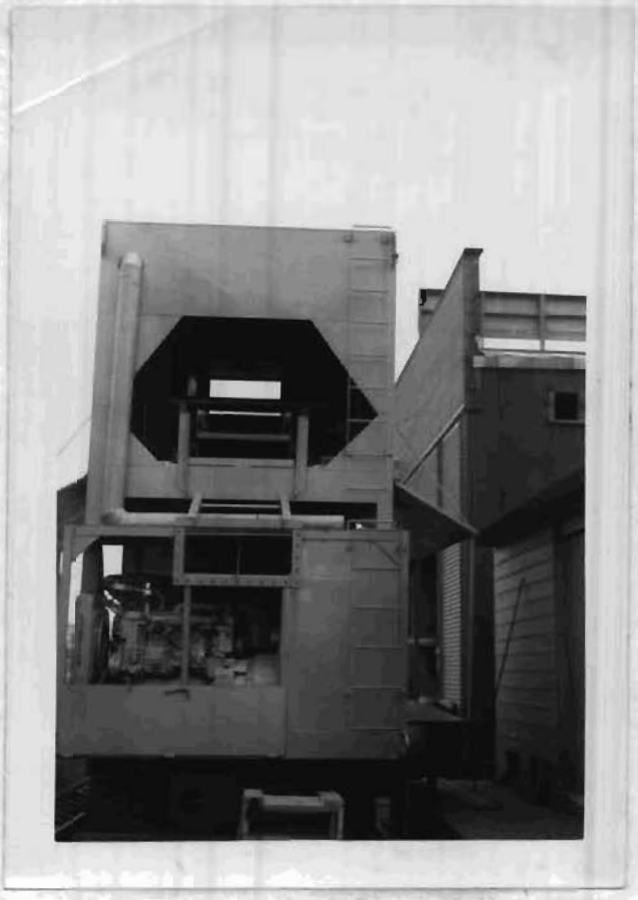

Figure 4. Erikson placer machine, stacker end.

Figure 5. Erikson placer machine, showing jigs.

Figure 6. D-8, equipped with Hyster unit, to be used as dragline with placer machine.

that he was ready to erect the forms for the basement walls, but was waiting for Jones to tell him where the basement door and windows were to be located. He claimed that he would probably miss the deadline called for in the contract, but not very far. The reason for this statement was that he wanted to give the walls plenty of curing time before moving the building onto them.

Figures 3, 4, and 5 are photos of the Erikson Placers, Inc., pilot or prospecting placer machine for prospecting scheelite-bearing placer gravels. This machine was still under construction when visited, but Mr. Erikson hoped to get it out on the creeks shortly. The machine is not self-propelled, but must be towed by a tractor. The boom-equipped D-8 in Figure 6 will be rigged as a dragline for the excavating and feeding the machine. A hopper will be mounted so as to catch the gravel and funnel it into the upper hole shown in Figure 3. From there the material goes across a vibrating screen which can be seen in Figure 4. A trommel screen was not used for lack of space, according to Mr. Erikson. The screen undersize is then split and goes across either of two banks of two Pan American jigs each. These can be seen in Figure 5. The concentrate is of course collected from the jigs. The hopper has a grizzly from which the oversize is apparently thrown to one side, and the screen oversize goes out on a stacker which is attached to the obvious place about the center of the machine in Figure 4. The machine is equipped with a rather ingenious hydraulic leveling device to quickly level it each time it moves to a new position. The power plant is a Caterpillar Diesel as shown in the photos, and water will be brought to it with hydraulic pipe and a large hose.

The prospecting plan was to dig trenches across the various channels known to carry scheelite, feeding the gravel into the machine as the trench progresses, and cleaning up frequently on the way across in order that the locations of the values may be accurately determined. Creeks to be prospected according to Mr. Erikson were Butterfield, Bangor, Twin, Bonita, and others. The results of the prospecting will be used to determine where to mine with the large placer machine which is still in the planning stage and is quite a different affair from this one.

July 14: Nome to Anchorage via Alaska Airlines.

James A. Williams

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Associate Mining Engineer