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#### TERRITORY OF ALASKA

### DEPARTMENT OF MINES

JUNEAU, ALASKA

Report of Mining Investigations in the Innoko and Mt. McKinley Precincts
August 24 - 29, inclusive, 1946

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The Innoko drainage of the Ruby precinct, which takes in the area around Poorman, has been transferred to the Innoko precinct with recording office at Ophir. Placer mining is very active in the Innoko district, but it is mostly confined to small operations ranging from one to fifteen men employed. Some of the operations of ten men or more have indicated that their crews may be cut to a smaller number and that they will probably work only one shift next season. Some indicated that they do not intend to operate next season unless conditions improve. Very little prospecting and drilling is evident and there was a labor shortage and a lack of sufficient water. This season there is only one operating dredge in the two precincts. This is a new venture by Isageson and Peterson on upper Ganes Creek on ground owned by the Ganes Creek Mining Company. The Felder and Gale dradge, last operated by Nels Vibe on upper Yankee Creek, burned three years ago, and it is beyond repair. The Games Creek Mining Company dredge, owned by the Beaton and Shonbeck Estates, has sunk. It could, however, be raised and operated but at considerable expense. Reports were to the effect that Mrs. Shonbeck holds 55% of the stock of the Ganes Creek Mining Company, and that Loussac and partners own the remaining 45%. The company is asking \$200,000 for the property holdings on Games Creek and the dredge. The old dredge owned and operated by Strandberg and Sons on Candle Creek is in a very poor state of repair and it is also in need of several safety devices. Sid Paulson did not resume his operations on Colorado Creek in the Cripple Mountain area because of reported ill health. Reports were to the effect that he had sold out to the Olsen Brothers of Goodnews Bay Mining Company for \$100,000.

C. Mespelt and Company in the Mt. McKinley precinct were reported to have sold their holdings and equipment to Walter Culver and Associates. The latter expects to operate the mine all year, and they have seven men employed this season. In the same area Peter Egross and Robert Stone have located four lode claims along a quartz vein. This vein was reported by Mr. Egross as traceable for over 1000 feet, averaging 4 feet in width. He reported a 50-foot shaft on the vein and a 60-foot adit located 50 feet below the shaft. The vein occurs, according to Mr. Egross, near a contact of monzonite and limestone and contains the minerals malachite, bornite, sphalerite and free gold. Average values from samples taken for assay were reported to be \$197 per ton in gold.

The Kuskokwim Mining Company, under the direction of Harold Schmidt, operated the Mellick and Halverson quicksilver mine during a part of the spring and summer with an average crew of seven men. The company closed for the season on August 24. Safety conditions were reported to be adverse due to conditions in the unloading and dumping of waste from the retort, which was reported done partly in confined areas. The mine was closed and retorting had ended before the writer arrived in the area. The company was reported to be paying a 50% royalty to the New Idria Alaska Quicksilver Company.

The reduction of the price of diesel oil at Bethel to \$8 per drum by the installation of storage facilities by the Standard Oil Company will lower the mine operating costs in the Innoko and Mt. McKinley precincts. There is also a trend toward greater river transportation on the Kuskokwim, which should result in reduced river freight rates. These two reductions should encourage developments in mining, utilization of forest products and encourage a small amount of agriculture.

The Matheson and Savage operation on upper Spruce Creek has resumed mining under the direction of Mr. Matheson, after having been idle during the years 1944 end 1945. Bench ground on the Blue Bell claim is being mined this season. Stripping is done both with bull-dozer and with dragline. Mining is done by bulldozing and hydraulicking into boxes and dipping tailings with dragline. Only two men are employed and to date four cuts totaling 65,000 b.r.f. have been mined. The pay on Spruce Creek has been very spotty with the best spots in the vicinities of the small porphyry dikes.

Strandberg and Sons are operating on Candle Creek and have reached a point down stream to where the black muck covering the pay gravels has become a very expensive problem. This season, due to lack of thawed ground, the dredge was not operated. The dragline was used this season to mine a thawed area which the dredge had dug, but was unable to reach bedrock. The method used was to restack the dredge tailings, mine with dragline the lower gravels and pump the water from the pit. Further mining downstream will require a deeper digging dredge and one with a larger capacity. The right limit of Candle Creek is thawed and the left limit is frozen, and the total depth, mainly muck, ranges from 25 to 180 feet. The pay from the present mining site for one mile downstream was reported to average from 50 to 60 cents per yard.

The Isaacson-Peterson dredge on upper Ganes Creek began operating kh last year in August, but it had only a short season and a small production. This season the dredge began digging on May 14 working two ten-hour shifts. The ground was reported as very spotty, and they are attempting to dredge bench pay. This dredge was formerly operated by Moss and Larson.

Rosander and Reed have leased 76 claims on Yankee Creek, which is nearly all the ground on the creek. Nearly all the creek pay has been mined formerly by dredge, and they intend to mine side or bench pay with bulldozer and dragline. They are using the hydraulic-bulldozer method with dragline to dip and stack tailings. This season they are mining on claim No. 7 above discovery. This is the first season for this operation.

Nels Vibe has resumed mining on Little Creek, where he holds two miles of ground. This season he built a new ditch,  $1\frac{1}{4}$  miles in length, which has a cross-section of 6 by 12 feet. This furnishes an 80-foot head at the present mining site and makes available plenty of water for his bulldozer-hydraulic and dragline operation. Rock drilling and blasting is necessary to maintain his bedrock drain due to the hardness of the shale. He is only working one shift with a total of six men employed.

Joe Degnan is mining with three men employed on the Father Gilly Association claim on Little Creek below Nels Vibe. To date this season he has cleaned 50,000 feet of bedrock which was reported to average from 40 to 50 cents per bedrock foot. Last season Joe mined alone and produced \$20,000 during the season. The mining method used is hydraulice bulldozer and dragline.

C. McFarland started to mine this season with two men on Fifteen Pup, a tributary of Little Creek. Due to lack of water he had to discontinue. He was reported to have found some scheelite in a green dike, which was uncovered during mining operations.

Uctilla and Hard are operating two ten-hour shifts with a total of twelve men on Ophir Creek. This season the company, under the direction of Gus Uctilla, expects to clean 200,000 feet of bedrock, however, lack of water has limited them to 70,000 b.r.f. to date. Lack of water handicaps their thawing and slows down the mining.

The Hard and Uotilla operation on Bear Creek, tributary of Cripple Creek, is now confined to an old channel of Cripple Creek considerably above the present channels of both creeks. Hydraulic-bull-dozer method of mining is used with dragline to stack tailings. This operation is under the management of Eric Hard. To date this season 100,000 bedrock feet have been cleaned.

The Cripple Creek Mining Company located on upper Cripple Creek, and operated by Harold and Odin Strandberg, is mining on Discovery claim near the mouth of Fox Gulch which marks the end of the pay. This season they expect to finish the remaining pay ground by cleaning approximately 300,000 bedrock feet. They are still operating with the use of the old steam dragline and elevated boxes. The company has a new Bucyrus-Erie 54-B, 21-yard dragline ordered for next year. They intend to move their camp and operation to Colorado Creek on the north side of the Cripple Mountains and above Sid Paulson's ground. They have from three to six years ground there. A total of fifteen men are employed.

The Miscovich and Sons and the Vance Hitt operations on Flat and Poorman creeks near Poorman are now included in the Innoko precinct due to the change in boundary. Miscovich and Sons have done considerable preparatory work on Flat Creek such as thewing, ditch building, and installation. They started on this creek in 1942 and had mined only one small cut prior to this year. This season they have begun mining with the combined use of hydraulic-bulldozer, hydraulic lift and dragline. They have stripped and partly thawed 200,000 square feet and have completed three miles of ditch. They have an additional 2000 feet of ditch to complete to gain additional water from Bonanza Creek. They are already taking water from Timber and Last Chance creeks. Their total expenditure has been \$130,000.

The gravels on Flat Creek are thin, ranging from 4 to 5 feet in thickness, but are covered with 30 feet of frozen black muck. The low gradient of the bedrock and the great thickness of the muck make the utilization of the hydraulic lift and the dragline for stacking tailings very practical. The method of mining is to thaw the muck and gravels with hydraulic giants and ground sluice, thence bulldoze the gravels in front of the hydraulic lift and aided by a hydraulic giant, thence the elevator elevates the material into the boxes 14½ feet above, and thence the dragline dips the tailings and stacks them alongside on top of the frozen muck banks. Considerable gold was visible on top of the phyllite bedrock in the pit. The best pay was distributed in small areas containing red and yellow oxides of other metals where the bedrock showed evidence of permeation by hot mineralized solutions.

Vance Hitt has resumed thawing operations on Poorman Creek at Poorman on the Forno and Lutro ground. Considerable black frozen muck has been encountered ranging from 35 to 80 feet in depth. Portions of this ground has been drift mined, but the old shafts and drifts are refrozen. Mr. Hitt has done considerable preparatory work such as building three miles of ditches, installing pumping machinery, and stripping considerable ground by bulldozer. He reports that the pay ranges over 1000 feet in width and averages from \$0.50 to \$1.50 per bedrock foot. The gravels are fine and average 10 feet in thickness, and contain a noticeable amount of wood tin. He intends to mine with dragline and elevated boxes next year. A total of five men are employed this season.

# Active Mining Operations in the Innoko and Mt. McKinley Precincts during 1946.

## Dredges:

Name of Company	Location	No. Dredges	No. Men
Strandberg & Sons	Candle Creek	1	Idle
Isaacson & Peterson	Ganes Creek	1	6
Games Creek Mining Co.	Ganes Creek	1	Idle (sunk)
Draglines:			
Matheson & Savage	Spruce Creek		3
Strandberg & Sons	Candle Creek		7
Rosender & Reed	Yankee Creek	·	4
Nels J. Vibe	Little Creek		5
Degnan & Rosander	Little Creek		3
Uotilla & Hard	Ophir Creek	,	12
Hard & Uotilla	Bear Creek		8
Cripple Creek Mining Co.	Cripple Creek		15
Miscovich & Sons	Flat Creek - Poorman		6
Vance Hitt	Poorman (thawing only)	)	5
Hydraulic-bulldozer:	•		
C. McFarland	15 Pup - Little Creek		3
Hydraulic:		`	
Hugh Wilson	Cripple Creek		i
Victor Hill	Spruce Creek		1
	,	_	Tall

Costs in the Innoko and Mt. McKinley Precincts

Two routes for freight:

No. 1 - via Nenana to Ruby thence via road to Poorman section - now in Innoko precinct.

No. 2 - via Bethel and Kuskokwim River to Candle Creek Landing thence via road to Takotna and Ophir.

Diesel oil at Ruby - \$14.00 per bbl.

## Air freight:

Ruby to Poorman - 4 cents per 1b. Fairbanks to Poorman - 20 cents per 1b.

Freight via cat road, Ruby to Poormen - 22 cents per 1b.

Diesel oil, Candle Landing, Kuskokwim - \$15.90 per bbl.

Strandberg & Sons, Candle Creek, diesel oil cost - \$16.30 per bbl.

Iseacson & Peterson, upper Games Creek, diesel oil - \$23.00 per bbl.

Matheson & Savage, Spruce Creek, diesel oil at mine - \$20.00 per bbl.

Hard & Uotilla, Bear Creek, diesel cil - \$26.00 per bbl.

Cripple Creek Mining Co., Cripple Creek:
Diesel oil - \$22.00 per bbl.
Wood cut (not hauled) - \$9.00 per cord.