

R E P O R T
O N

GEOLOGICAL SURVEY OF WYOMING

T H E H O M E , F A Y A N D M I N N E H A H A P L A C E R S .

-0-

The Home, Fay and Minnehaha placer mines are situated on Douglas and Beaver Creeks about 50 miles south west of Laramie, Albany County, Wyoming, and may be reached by wagon road to Centennial and from there to the mines by the old Keystone road.

The claims are all contiguous and occupy portions of sections 10, 15, 21, 22, 27 and 34 of Township 14N, Range 79 west of 6th principal meridian as shown on the attached sketch taken from a map of the ground.

T H E H O M E .

The Home placer is the principal ^{claim} of the group and is a patented claim of 160 acres consisting of the bottom land along Douglas creek both above and below the junction with Beaver creek.

The gravel on this claim is of varied composition and size and no scheme is available that will work the entire claim. The gravel on the upper portion or that portion above the mouth of Beaver Creek consists of large granite boulders more or less rounded and associated with the smaller wash of schist and debris from the dyke rocks of the region, which grade in size down to the pebbles and sand found below. These larger boulders range in size from one foot to four feet in diameter and are scattered from one end of the narrow part of the canon to the other, the canon at this point being about 80 to 250 feet wide. *granite*

Practically no work has been done in this part of the claims for placer workings and an estimate of the value of this gravel is difficult to obtain but it is very evident that the values would have to be very high to render it pay dirt in the face of the conditions found.

The central part of the Home or that portion lying below the mouth of Beaver creek and extending to the head of the willow covered flats just below stake "No 2" on the plat, is covered with timber with the exception of a small plat just below the mouth of Florence creek. This timber is very thick along the stream and in bunches on the flat, the size of the trees varying from 16" in diameter to small jack pines and under brush. The gravel on this part of the claim is not so coarse as the upper part where the fall is greater, although many large boulders are

H.P.S.

found scattered all over the flat and more or less covered with debris.

The most available ground is found below the ground just described and consists of a willow covered flat from 600 to 800 feet wide and about 2000 feet long, ending in a narrow canon.

On this flat most of the work has been done and most of the gold obtained. The gravel here is from three feet in the present stream bed to eight feet in other parts of the flat and consists of a series of irregular layers of coarse gravelly sand and rounded irregular boulders varying from an inch or less to twelve inches in diameter. Some large boulders are found but mostly lying on bedrock and on the edges of the beds.

gold

The bedrock of the stream is mostly the granite of the region and is decomposed and soft for three or four inches and may be shoveled up with ease. A small strata of clay is noted at some points but is not general and the gravel is as a rule very loose and free working.

Several holes were sunk in this vicinity in the endeavor to reach bedrock and ascertain the values there but owing to the strong current of under ground water very little progress could be made and bed rock was only reached in two instances. After several futile attempts the effort was abandoned, it being impossible to make any progress at this season of the year without a pump and other appliances.

As far as could be determined the values are found on bed rock, the overlying gravel being free from gold, as numerous tests with panning samples showed; the other tests in the same manner on bed rock gave a value of the ground tested of from 18 cents to 24 cents per cubic yard. This is not given as a statement of the value of the ground in general but as a sample of values.

gold

To test this ground thoroughly would require a force of men working from a month to six weeks, with proper facilities for keeping the water down and handling the gravel.

It was noted that the gold found was on an irregular spot on the bed rock and around a few of the larger boulders.

The canon below the above described ground is very narrow and filled with large granite boulders and wash. It would not be available for placer purposes except at great expense.

H.P.3.

A number of bars on either side of the creek were noted but appear to be of limited extent and showing many large boulders included in the wash.

THE, FAY.

This is a tract of 120 acres and is patented and contains a portion of Beaver creek and Florence creek with a high hill between that is covered with timber ~~and~~ extending across the head of Beaver creek and over the major part of the claim, leaving but a small part available for placer purposes. This part lies along the western side of Beaver creek at and below Nugget creek, extending to the junction with the Home placer and connecting with it. Bedrock is found from eight to twelve feet deep and but little has been done here to determine the values.

The character of the gravel has been found to be similar to that on the Home flats but with a larger percentage of boulders.

No work was done on this ~~ground~~ as the same conditions of underground water was found to prevail. This ground may readily be prospected by a series of trenches across the open ground.

THE MINNEHAHA.

This claim extends up Douglas creek in the manner shown and shows a condition similar to that found on the upper portion of the Home with the larger boulders predominating and rendering the ground difficult to work with profit. No work was done here owing to the water.

TO PROSPECT.

As before stated it will require the services of a gang of men for over a month to properly sample the placer ground available.

This may be done to advantage in the early fall when the water is low and may more easily be handled by pump from the different holes or in main ditch with wing ditches through the gravel on either side.

This work systematically carried out would demonstrate beyond a doubt the value of the ground and the most economical method of working it.

The ground at present available is estimated at from 45 to 50 acres for the group; this does not include the ground covered with timber which would be very expensive to clear.

H.P.4.

WATER SUPPLY.

The water supply furnished by Douglas creek and the tributary creeks is ample for all purposes if properly handled. The rapid fall of the stream on the Minnehaha and upper part of the Home gives abundant head for hydraulic work on the lower part of the claims. The principal draw back is the low hills immediately surrounding the proposed workings, as a suitable site for headgates etc would be of necessity at some distance from the outlet and the force diminished.

The flat condition of the ground renders sluicing difficult and it is suggested as the least expensive method, to use an elevated sluice and elevate the gravel by mechanical means or, by hydraulic elevator if it is found by actual survey that sufficient fall may be had without an expensive and long pipeline.

It is considered that an expensive plant is not warranted by the ground accessible for hydraulic work and that the ground to be profitable must be worked on a comparatively small and inexpensive scale.

A. C. Beeler,

State Geologist,

Date of Examination, .

July 22-24, 1901.