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Carson City 015381
C.P.List #99, FD 30350.
Adverse report.
Inspector Fibush.

San Francisco, California,
December 15, 1926.

JAN 6 1927

The Commissioner of the
General Land Office,
Washington, D. C.

APPROVED:
(Signed) J. M. Haverstick
Division Inspector.

Sir:-

October 7, 15, and 16, 1926, I examined the E½, E½W½, and Lots 1, 2, 3, 4, Sec. 31, T. 28 N., R. 35 E., M.D.M., embraced in Central Pacific Railroad List #99, Carson City 015381, and submit the following report.

This section is located in the Humboldt Range, Pershing County, Nevada, and lies on the east slope towards Buena Vista Valley. It is a part of what has been classified as the Rochester District of the range.

GEOLOGY.

The section is cut by a wide canyon called Troy Canyon, embracing the S½N½. The SE¼SE¼, known as Fisher Canyon, is alluvial wash formed by the rocks from the

neighboring ridges. Between Fisher Canyon and Troy Canyon there is a high ridge with a slope toward the east. North of Troy Canyon there is a ridge of rhyolite and associated rocks, with a slope toward Troy Canyon.

STRUCTURE OF HUMBOLDT RANGE.

The Humboldt Range has a total length of 75 miles and attains a maximum altitude of 10,000 feet in Star Peak. The oldest rocks in the range consist of light-colored trachyte, keratophyres, and rhyolite. The rhyolites overlie the trachytes. These rhyolites are porphyritic. Overlying these volcanic rocks there are massive limestones, slaty limestones, and tuff beds, and some calcareous shales. These rocks were disturbed at one time, which has resulted in a complex folding. The disturbances were accompanied by the intrusion of granite and related rocks, and at this time mineralization began. Then came a period of great erosion, causing an accumulation of detritus at great depth. Then followed a flow of basalt. Faulting and tilting occurred, which makes the present Humboldt Range.

The principal ore deposits are silver ores carrying

varying small amounts of gold. These deposits are found in a gangue of quartz as fissure veins following the faulting and bedding. The ores are chiefly antimonial, the silver being in the form of tetrahedrite and argentite. There are also small amounts of galena, sphalerite, and pyrite present, but generally of no commercial value.

Due to the complex folding, the veins have no definite strike or dip but follow the faulting and bedding of the country rock. Some of the veins are vertical, others perpendicular, while others are comparatively flat. As a rule the veins are not continuous on account of the faulting and folding and therefore are often difficult to follow, and when lost are hard to find.

LOCAL GEOLOGY.

The underlying strata are rhyolites. In the W½S½ the rhyolites stand as a prominent outcrop with a northwest-southeast strike. In the SW¼SE¼ the rhyolite is buried to a great extent, but we find much evidence of its existence on the ground. About five acres in the extreme southeast portion of the SE¼SE¼ is wash material. The remainder of this forty shows a small ridge in which the underlying material is unconsolidated rock of volcanic

origin. The S½NE¼SE¼ shows unconsolidated material. The N½ is rhyolite. The NE¼NE¼ is covered with unconsolidated volcanic material. The NW¼NE¼ is covered with rhyolite. The greater portion of the S½N½ is wash material from Troy Canyon. The greater portion of the W½N½, or Lots 1 and 2, is a part of Troy Canyon except that portion of Lot 2 and the SE¼NW¼ showing a ridge of rhyolite.

MINERALIZATION.

The exposed rhyolite on this section is similar in character to that found in the Rochester District directly to the west on the same ridge, except that the Rochester District has a westerly slope while this section slopes to the east. This rhyolite is known as the Weaver Rhyolite. It is white in small spots but the greater portion is stained a yellowish red.

The ore bodies in this rhyolite are found in fissure veins, which are narrow, occurring along the fissures which have been caused by the faulting and folding of the country rock.

There has been no actual mine development in the rhyolite on this section, but there is much evidence of mining in Sections 25 and 36 directly west. There we

find extensive development consisting of tunnels, shafts, inclines, and open cuts. All of this development work has been done in the fissures found in the same character of rhyolite as is exposed in Section 31. Especially noticeable is the development of a fissure vein in the rhyolite in the SE¼SE¼ Sec. 25, where Herman Hildebrandt has opened up a vein which shows impressive values in gold. Panning indiscriminately along the exposed vein I obtained heavy values in coarse gold. Mr. Hildebrandt has also done considerable development work elsewhere in Sections 25 and 36 on the same rhyolite dike that strikes northeasterly into Section 31. I did not take any samples for assay from these workings, but Mr. Hildebrandt informs me that he has obtained values up to $8.00 in gold and silver.

Although there has been no development work done on Section 31, there is much evidence of quartz float which has been eroded from the rhyolite outcrops. Samples taken from the SE¼SW¼ and the NW¼NE¼ show the following returns:

	Gold oz.	Gold value per T.	Silver oz.	Silver value per T.	Total value per T.
SE¼SW¼:-	0	- 0	- 1.3	- $.78	- $.78
N½NE¼:-	0	- 0	- .55	- .33	- .33

Near the south quarter corner between Section 31 and Section 6 of the township to the west, there is a rhyolite dike containing a fissure vein in place. This dike can be traced through the SW¼SE¼ and the NE¼SE¼. I sampled a quartz float in the SW¼SE¼ and obtained an assay of .03 oz. in gold and 2.97 oz. in silver, a total value of $2.40 per ton.

Troy Canyon throughout its entire length is underlain with gravel which has a depth of from 50 to 100 feet. The canyon is of the same character as American Canyon and others of this vicinity which at one time were producers of much gold, especially American Canyon which has a record of over seventeen million dollars.

The method of mining these canyons for placer gold is to sink shafts to bedrock and then drift along bedrock, taking up the gold in the process of mining. This method is rather tedious but apparently the values found

on the bed-rock were sufficient to warrant such methods. The proper method, of course, would be to hydraulic, sluice, or dredge the canyons, but there is insufficient water to permit of the regular methods of placer mining.

In Fisher Canyon, the greater portion of which occupies Section 6, there is evidence of much mining similar to that found in American Canyon. There is no authentic record of values obtained from this canyon, but from talking with some of the old-timers like Mr. Hildebrandt, I learned that gold is present in considerable quantities but due to the treacherous condition of the overburden the cost of mining is almost prohibitive. However, at some future time the proper method of handling this wash material will surely be found and the gold will be extracted. Mr. Hildebrandt has Troy Canyon under placer location and has done some development work to prove the mineral character of the canyon. He has sunk an 80-foot shaft in gravel to bed-rock in the northwest portion of the SW¼NE¼. Pannings taken from this gravel show much evidence of coarse gold and silver.

In a small canyon known as Budweiser Gulch, covering the $S\frac{1}{2}$ of Lot 4 and the $S\frac{1}{2}SW\frac{1}{4}SE\frac{1}{4}$, there is much evidence of accumulated gravel which has been mined by Frank Johnson and Herman Hildebrandt. There are several shafts sunk to bed-rock in the gravel. The panning of this gravel shows the presence of gold.

There are attached hereto a rough map of Section 31, an affidavit by Herman Hildebrandt, and some photographs.

In case the railroad company asks for a hearing the following may be called as witnesses:

Fred Johnson
Herman Hildebrandt
Percy Train, all of Lower Rochester, Nevada.

I recommend that the following tracts be eliminated from the selection on the charge that the land contains valuable deposits of gold, silver, and other minerals:

Lots 1,2,3,4; $NE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}NW\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, $SE\frac{1}{4}SW\frac{1}{4}$, $SW\frac{1}{4}SE\frac{1}{4}$, $SE\frac{1}{4}SE\frac{1}{4}$, $NW\frac{1}{4}SE\frac{1}{4}$, $NW\frac{1}{4}NE\frac{1}{4}$, and $S\frac{1}{2}NE\frac{1}{4}$;

and that the following tracts be classified as nonmineral and be clearlisted to the railroad:

$NE\frac{1}{4}NE\frac{1}{4}$ and $NE\frac{1}{4}SE\frac{1}{4}$.

Very respectfully,

N J Filbrick
Inspector

NJF/GEM

GPO

County of Pershing)
)ss
State of Nevada)

Herman Hildebrandt, being duly. sworn, says and deposes:

That he has mined in Pershing County for the past 14 years and is now operating in Sec. 25, T. 28 N., 36 E., MDM.

That this operation is now being done in a huge rhyolite porphyry dike striking NE-SW.

That he has extracted gold and silver from this dike in paying quantities.

That to his own personal knowledge wherever work has been undertaken in this dike valuable minerals have been extracted.

That he has knowledge that this dike lies in the SW¼ of Sec. 31, T. 28 N., R. 35 E., MDM. As he has operated in the SE¼SE¼ Sec. 36 directly west of Sec. 31 and to his best belief due to his many years experience as a practical miner, this dike on Sec. 31 contains the same valuable minerals, silver and gold, as found in Sec. 36 as well as Sec. 25 to the west of said Sec. 31.

That Troy Canyon runs in an easterly-westerly direction in the N½ Sec. 31. That he has said Troy Canyon under location as placer claims.

That he has sunk a shaft 80 feet in Troy Canyon in the NE¼NW¼ of Sec. 31 to bed-rock and extracted gold therefrom.

Herman Hildebrandt

Subscribed and sworn to before me this 16 day of October ,1926.

N. J. Fibush
Inspector