
Name of claims Area Pat. Unpat._

Name of claims Area Pat. Unpat.
$\qquad$
$\qquad$
$\qquad$

EQUIPMENT ON PROPERTY

## PUBLISHED REFERENCES

## Parks and Swartley 16:118

Bull 14A page 117

MISCELLANEOUS RECORDS

Address . . . Baker: . Qregq4 $\qquad$
$\qquad$
$\qquad$
$\qquad$

Name of claims Area Pat. Unpat.
$\qquad$
$\qquad$
$\qquad$
$\qquad$


. . . . Hallowa COUNTY
. . . . Wallo w\% . 子ange AREA
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ELEVATION
ROAD OR HIGHNAY
DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S) $\qquad$
$\qquad$
$\qquad$
$\qquad$

## OPERATOR

Name of claims Area Pat. Unpat. $\qquad$

## PUBLISHIED RFFERFAEES

## MISCELIANEOUS RECORDS

Address $\qquad$
$\qquad$
$\qquad$
$\qquad$
Name of claims Area Pat. Unpat.

EQUIPMENT ON PROPERTTY

WALLOW RANGE WALLOWA DISTRICT


Gyllenberg's Claims.-Some 1,500 to 2,500 feet above and west of the Hurricane trail, and a mile or so beyond the mouth of Fall creek, is a considerable area of banded blue-gray crystalline limestone. Above this limestone is a large exposure of schist which apparently is conformable with the limestone. This high amphitheatric basin built of marble, and walled in by ancient volcanics from pit to gallevy, is swept almost clean of loosened stone.

Both limestone and superimposed schist have been cut by namerous dikes. Some of these are light in color, showing in the groundmass but few crystals of quartz and feldspar. These quartz parphyry dikes since they have neither mica nor hornblende approach aplite in character. In contrast to these acidic dikes are the more interesting lamprophyres. This rock occurs in slightly lens-like dikes parallel to the schistosity of the limestone.

In texture they are very fine-grained, almost dense. These dikes contain about 5 per cent of pyrite, and in thin sections are found to be a lamprophyre, variety kersantite.

Basalt dikes in this region are the youngest dikes of alt. A double dike of basalt is well shown. The ore, which is chiefly galena and sphalerite, with a little pyrite, occurs in small lenticularshaped bodies, less than a foot wide and only a few feet long. The long axes of these lenses are parallel to the schistosity or banding

## WALLOW RANGE <br> WALLOW DISTN゙CT <br> Hurricane Crest

GYLLENEFFG CLAIMS
noted above. On each side the limestone is recrystallized and nearly white in color. A little cerusite, lead carbonate, colored green by copper stains, was seen.

These small, tight lenses, although of high grade, in a limestone that has not been sheared or shattered to any extent, do not extend much hope of finding commercial ore bodies. A large area of this - limestone is exposed unobscured by any loose material, and this large area is roughly at right angles both to the banding of the limestone and to the small lenses of ore so far exposed. It would seem as if in this large. cross section absolutely free to be observed over the entire surface, there should be exposed more than two or three small lenses of ore before one is warranted in spending money to search for it


Fig. 49. Eagle Cap. According to Forest Service maps, elevation is $\mathbf{9 , 8 6 0}$ feet.
beneath the surface. It seems likely that emanations from the granitic intrusion finding their way into the limestone created these deposits.


WALLOWA RANGE $W A \angle L O W I G$ D/STRICT
 Looking eastward from Gyllenbergs in the foreground is seen
the limestone, dark because it is in the shadow, and to the left of the foreground it is seen to be cut by several basaltic dikes. In the background, high above Hurricane creek on the east side, is another hanging valley and glistening in the light of the descending sun is seen the massive marble of the Matterhorn (p. 83).

Part way back on the descending trail one gets a view up Hurri-
cane creek of Eagle Cap, 10 miles away. Continuing our journey from the point where we left it to climb to Gyllenbergs we start on the long trail up Hurricane creek. Within the first mile we look deep down where Hurricane creek has carved its deep channel in solid marble. (P. 84)

For several miles the trail passes through dense forest, mountain meadows and bowlder strewn paths. On both right and left large blocks of limestone and schist, surrounded by the granodiorite, are observed until we are well past the Matterhorn beyond which granodiorite prevails. We are entering upon the broadest exposure of the Wallowa range granitic intrusion. Some distance past the Matterhorn we mount more rapidly to enter a region in which the granodiorite is heavily scored by glacial action.

Looking backward we see in the distance the white edge of the Matterhorn and nearby the stunted vegetation and the glacial smooth-
ing of the granodiorite. Continuing on we pass through parks paved with white granodiorite, and at various points we catch glimpses of distant Eagle Cap, which on closer view is seen to carry on its protected sides vast banks of eternal snow. We cross here the upper end of the East fork of Lostine creek and look eastward and down into Mirror lake with Lake basin in the distance. (Figs. 47, 48, 49, 50)

Part way up the last steep climb we look northward and down the East fork of the Lostine getting a distant view of the main stream.

Next we reach the pass to the Minam and get a closer west side view of Eagle Cap, the highest Oregon peak east of Mt. Hood. (Figs. 51, 52)

On the other side of the pass in the narrow valley below us is Minam lake, from the north end of which the West fork of the Lostine flows northward, while from its southern end the Minam river starting southward swings rapidly around the mountains there to flow northwest into the Wallowa at Minam, more than 50 miles away. From this pass, and across the lake a little north of west is seen Brown mountain, whose irregular basaltic top attests the filling of old drainage systems by recent volcanic flows. Erosion since has left but this mountain top to hint of what once has been. (Fig. 53)

To the south of west we note the granite ridge around which the Minam makes its sharp curve toward the north. In the middle distance, some 600 feet higher than Minam lake, is seen a cirque lake which is 23 miles from Joseph, and on the shore of which is Donelly's camp. Cutting across the high saddle beyond is the Donelly vein.

## State Department of Geology and $^{\text {Mineral }}$ Industries

1069 State Office Building Portland 1, Oregon

HECLA CONSOLIDATED MIMI COMPANY
Wallow a County (load, sine geld, and inter)

Local name: Gyllenberg claims(?).
Offlee: Baker, Oregon. John L. Rand, President; M. Ethel Brooks, Sec.Treas., both of Baker, Oregon. Capital stock, $\$ 1,000,000$; par value $\$ 1$ all subscribed, issued and paid up. (1915 report).

Owns 11 claims in about sec. 21, T. 3 S., R. 44 E., on the west aide of Hurricane Creek, about 9 miles from Joseph.

Some 1500 to 2500 feet above and west of the Hurricane trail, and a nile or so beyond the mouth of Fall Creek, is a considerable area of banded bluegray crystalline limestone. Above this limestone is a large exposure of schist which apparently is conformable with the limestone. This high amphitheatric basin built of marble, and walled in by ancient volcanics from pit to gallery, is swept almost clean of loosened stone.

Both limestone and superimposed schists have been cut by numerous dikes. Some of these are light in color, showing in the groumd-mass but few crystals of quartz and feldspar. These quartz porphyry dikes since they have neither mica nor hornblende approach aplite in character. In contrast to these acidic dikes are the more interesting lamprophyres. This rock occurs in slightly lenslike dikes parallel to the schistosity of the limestone.

In texture they are very fine-grained, almost dense. These dikes contain about 5 percent of pyrite, and in thin sections are found to be a lamprophyre, variety kersantite.

Basalt dikes in this region are the youngest dikes of all. A double dike of basalt is will show. The ore, with Is chiefly galen anis sprinterite, with
a little pyrite, occurs in small lenticular-shaped bodies, less than a foot wide and only a few feet long. The long axes of these lenses are parallel to the sehistoalty or banding noted above. On each side the limatone Ls recrystallised and nearly white in color. A little cerussite, lead carbonate, colored green by copper stains, was seen.

From - The Mingral Resourcen of Oregent Oreg. Dur. of Kines and Geolear, vol. 2, no. 4, p. 118, December 1916.

