6/46

LeGore Prospect
NAME

OLD NAMES

Gold, Silver, Copper and Molybdenum
PRINCIPAL ORE

MINOR MINERALS

3 S.	44 E.	7
T	R	S

Wallowa ..... COUNTY

Wallowa Range ..... AREA

about 7900' ..... ELEVATION

2 mi. of trail and 5 mi. of rd. from Joseph ..... ROAD OR HIGHWAY

..... DISTANCE TO SHIPPING POINT

PUBLISHED REFERENCES

Parks and Swartley, 16:138
Bulletin 14-A, page 117
Bulletin 12, page 44

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) Joe LeGore and Stanley LeGore ..... Address Joseph, Oregon .....

OPERATOR .....

Name of claims	Area	Pat.	Unpat.

Name of claims	Area	Pat.	Unpat.

EQUIPMENT ON PROPERTY

DEPARTMENTAL RECORDS on file in

	P'land	G.P.	Baker
REPORTS			
LeCore Prospect NSW May 24-28, 1943) Out	out x		
I have made no such report, nor have I examined any prospect in the vicinity of this. Please enlighten me on this score here.			
SHIPMENT AND ASSAY RECORDS			
MAPS			

WALLOWA RANGE WALLOWA DISTRICT

LA GORE PROSPECT

HURRICANE CREEK

Traveling westward from Joseph through an exceedingly fertile valley for a distance of three miles, we reach Hurricane creek, some 8 miles south of its junction with the Wallowa river near Enterprise. This north-flowing stream is about 4 miles west of the West fork, which it parallels; the broad, high mountain range of greenstone and marble, granite and schist, lies between them. Some 3 or 4 miles up from the entrance to the canyon, and some 6 or 7 miles from Joseph we reach the mouth of Fall creek, which flows into Hurricane in a series of cascades from the high mountains to the west. As in the previous trips, the first half of this distance we are hemmed in by typical greenstones, succeeded by schists and limestones.

La Gore Prospects.—A zig-zag branch trail, some two miles long, takes us up to the La Gore prospects, some 2,500 feet above. This elevated hanging valley has steep walls of badly contorted and faulted schists and marbleized limestones along the irregular granitic border of the intrusion.

The contact between the intrusion and the limestone is shown in the foreground adjoining the lighter colored exposure.

The deposit is 4 to 8 feet wide, has a general north-south strike and dips 60° toward the west. Considerable faulting is apparent, but the outcrops of rock in place are so nearly continuous that little difficulty should be experienced in locating these fault blocks. The principal contact-metamorphic minerals are garnet, epidote, quartz, calcite, chalcopyrite, pyrrhotite, and in the most northern claim, molybdenite.

Several cuts and two short tunnels constitute the development.

LA GORE PROSPECT

WALLOWA RANGE WALLOWA DISTRICT

This best appearing surface cut has chalcopyrite and pyrrhotite abundantly disseminated in what is probably an altered granodiorite. Here the vein is about 4 feet wide and is said to contain about $9 in gold, $2 in silver and $10 in copper.

Looking eastward across Hurricane creek from the La Gore cabin, one sees the outlines of the B. C. basin, where lead deposits in limestone, similar to those at Gyllenberg's claims, are said to occur.

GEOLOGICAL REPORT OF TWO MOLYBDENUM PROSPECTS IN THE WALLOWA MOUNTAINS

Wallowa

LeGore Prospect:

This molybdenum prospect is located in LeGore's Basin at the head of Falls Creek, tributary to Hurricane Creek, in the E½ of the SW¼ of sec. 8, T. 3 S., ~~R. 4 W.~~ R44E A good road from either Joseph or Enterprise extends to within about a mile of the junction of Falls Creek and Hurricane Creek. At Falls Creek, a trail leads upward to LeGore's Basin at an elevation of 7900 feet.

Because of the deep snows the prospecting time is limited from late June to October. During these months the basin is accessible by a steep pack trail. The property is located on and near the contact of granodiorite which makes up the north wall of the basin, at the head of Falls Creek, with a tongue of somewhat altered calcareous to silicious shale and massive limestone, which extends northward into the granodiorite. (see plate No.____) Northwest-striking and vertical columnar basalt dikes cut other rocks without noticeable alteration of wall-rock.

The granodiorite has intruded the metamorphics. Small inliers of shale are found on the granodiorite and fensters in the shale expose the underlying intrusive. In the area mapped the metamorphics consist of a thin blanket overlying the granodiorite. The "blanket" thickens to the north and south.

The metamorphics strike N. 5° E. and dip 40° west. The dips are nearly normal to the contact with the granodiorite. Erosion has stripped off most of the metamorphics. The mineralized limestone lens (see Plate No.____) is cut through in two places.

The intrusion of the granodiorite resulted in a more or less continuous alteration zone along the contact with the metamorphics, which is best developed in the limestones.

The alteration zones consist mostly of grossularite with some metallic sulphides and vary in width from a few inches to several feet, as compared with zones consisting wholly of garnet in the metamorphics at some distance from the contact. The sulphides are slightly disseminated in tactite zones which are an assemblage of metamorphic minerals consisting of grossularite, epidote, quartz, calcite and wollastonite, and traces of scheelite.

Primary metallic sulphides include molybdenite, pyrite, chalcopyrite and very minor amounts of sphalerite. Secondary minerals are generally small fracture fillings or coatings on primary minerals and include molybdite, limonite, azurite, cyrsocolla and calcite. One narrow vein (¼ inch) of fluorite was found cutting the granodiorite.

The mineralized zones in most places do not stand out from the surrounding rock. In prospecting the area the contacts can be closely located and when the few inches of talus is removed the mineralized zones may be seen. At the present time, more than a dozen shallow open cuts expose the mineralized zones.

For the most part the mineralization parallels the limestone-granodiorite contact and the zone is of varying width never more than 20 feet wide. Small stringers of tactite follow and cut across bedding planes but do not seem to have extended very far into the metamorphics.

They narrow rapidly giving an impression of shortness, although garnetization

appears on the surface at considerable distance from known outcrops of intrusive. Of the minerals occurring only scheelite and garnet are of restricted occurrence being associated with high temperatures or pressures, or both; the others are "presistent minerals" found in deep to shallow environments. The contact relations and the mineral association suggest a contact-metamorphic paragenesis of the mineralization. Limonite, azurite, crysocolla and molybdite are oxidation products of the primary minerals.

No molybdenite or scheelite deposits of possible economic importance have yet been discovered. The development work, with one exception, has been restricted to shallow open cuts along the limestone-argillite contact, which show spotty occurrences of metallic sulphides. No serious attempt has been made to drift along the limestone-granodiorite contact where it is exposed by downward cutting of the creek, or where the limestone pinches out against granodiorite at the entrance to the long tunnel. The long tunnel is entirely in granodiorite.

Conclusions: 1. Geologic conditions were such that sparse metallization and abundant garnetization took place.

2. The restricted size of metallized spots suggests a paucity of metalliferous solutions in the magma.

3. Molybdenite and other metallic sulphide occurrences in the immediate area are scattered, and apparently are not connected. Evidently each occurrence was due to metasomatic solutions having been diffused by the magma at scattered points and not concentrated before migration.

4. The limestone remnant is so small that a workable deposit is doubtful even though ore of commercial grade should be discovered along the contact.

(Nine channel samples were taken for assay. The assay returns were as follows:)

Sample	Length	Width	Molybdenum	Tungsten
1	6'	4"	Nil	Nil
1-A	15'	4"	Trace	Nil
1-B	1'	4"	Nil	Nil
2	9'	4"	0.18%	Trace
3	1'	4"	Nil	Trace
4	10'	6"	0.49%	Nil
5	6'	4"	Trace	Nil
6	12'	4"	Nil	Nil
7	5'	4"	0.03%	Nil

W. L.