

WAGNER, ABBOT, AND JEWEL GROUPS -

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1. Summary

An examination was made of the Wagner, Jewell and Abbott groups in company with E. C. Stephens and Roy Leigh of Anaconda Copper Co., and Joe Gallo. The Wagner group has one of the best showings of galena and sphalerite in the Lardeau. However it is in an extremely rugged country with elevations running from 4000 ft. to over 8000 ft. Two routes are possible, one by way of Healy Creek would require the construction of 25 miles of road; the other by way of the Duncan River and Hall Creek, would require about 45 miles of road construction. The Duncan River route is probably better because it gives access to two properties that could not be reached by the other road, road construction along the Duncan River would be easier than along Healy Creek, and it gives access to the property at a maximum elevation of 4500 to 5000 ft., whereas the other route must cross a summit at an elevation of about 6500 ft.

Scattered outcrops on the Wagner Group suggest that a major break or fault has been filled with quartz containing galena, pyrite, sphalerite and tetrahedrite. High grade galena having a width of from one to two feet was seen in several exposures along the length of the vein. It is not possible to form an accurate estimate of width and grade because neither hangingwall or footwall is exposed in most places. In two places where the full width was observed, the vein is about 8 ft. wide and contains about 10% lead and 5% zinc. It is reported that silver is high. A few shipments of hand-sorted ore are reported to have contained from one to two ounces of silver to one percent of lead.

Exposures at the Jewell and Abbott groups are poor. They appear to contain ore that is similar to that in the Wagner. These groups are located on the strike and to the south of the Wagner vein.

The Bannockburn and Superior Groups were not examined. Old reports indicate that they contain some galena and that they might serve as a secondary source of ore providing the road followed the Duncan River route.

The Wagner and Jewell properties warrant a small amount of work to determine whether the vein structure is continuous between them. It should be possible to locate flat diamond drill holes or a cross-cut adit near the head of Hall Creek to test the vein structure at an elevation of about 4500 ft. If ore is present at this point it would be possible, to develop the property by drifting to the north and south of the vein. The adit would be much more accessible at this point because of its comparatively low elevation, and the drifts would have a chance of opening a large tonnage of ore because the surface of the mountain rises steeply both to the north and south.

Joe Gallo states that the owners require a total payment of \$600,000.00. The first payment is to be \$10,000. at the end of two years, and the second \$25,000 at the end of five years. A royalty of 10% on smelter returns is to be paid to the owner if the ore

is shipped from the property. This royalty is to apply on the purchase price. In addition, Joe Gallo wants an unstated sum of money in cash, to pay him for his work and expenses during the last two years in gathering information, getting options on the Wagner and Jewell groups, re-staking old claims,

2. Location

The properties are situated along the line between the Lardeau and Ainsworth Mining Divisions, on the divide between drainage into the Lardeau and Duncan rivers. Elevations range from 5,000 to 8,000 ft. Two routes are available.

1. From Gerrard at the south end of Trout Lake about one mile by road down the Duncan River, cross the river, thence by trail down the river to Healy Creek. From here the trail follows Healy Creek to the divide between it and Hall creek. The total distance from Gerrard is about 25 miles. The first six miles along Healy Creek is through a V-shaped valley along which a trail has been blasted through bedrock for a considerable part of the distance. The trail is scarcely wide enough for a horse with a pack to travel. A road along part of the route would be very expensive to build unless a more suitable location could be found at a higher elevation.

2. From Howser up Duncan Lake and the Duncan River to Hall Creek, a distance of 40 miles, and thence up Hall Creek to the divide. This route is considerably longer than the one up Healy Creek but the greater part of it as far as Hall Creek, would require very little rock work. It is through a wide flat-bottomed valley and would open up considerable forest and farm lands. Therefore it is possible that the Government would build this part of the road. The last 5 miles up Hall Creek would be difficult and expensive. This route would serve to greater advantage more prospects than would be the route up Healy Creek.

3. Ownership and Property:

Five groups of claims are situated within a small area near the headwaters of Healy and Hall creeks. Some are open for restaking but the most important - the Wagner Group - is owned by private individuals and is in good standing. Joe Gallo, Howser, B. C. has made an attempt to consolidate all of these properties and make them available to a mining company with sufficient capital to develop them. Final negotiations have not been completed but Mr. Gallo hopes that within a short time he will be able to offer for sale all of these properties as one large group.

4. History:

These properties were staked during the latter part of the 1800's and development work was done until about 1918. Since that time little or no work has been done on them and the trails have become inaccessible because of undergrowth and windfall. Joe Gallo spent three weeks there during 1948 clearing the Healy Creek Trail.

5. Production:

A few small shipments of hand-selected ore were made during early exploration. These were taken to the railway by packhorse and the cost of transportation was so great that the owners were limited to trial shipments only.

6. Development:

Practically all of the open cuts have been filled and some of the adits have caved. An adit was driven on the Wagner Group from the surface of a glacier. This consists of a drift along the vein for 100 ft., a crosscut to the southwest for 45 ft. and a winze said to be 60 ft. deep. The winze is filled with water. However, the surface of the glacier has been lowered at least 100 ft. since this work was done, and the vein is well exposed on the steep mountain slope below the adit.

The vein is poorly exposed on the Jewell Group because the old the old workings have caved.

A crosscut adit was driven on the Abbott Group for a distance of about 100 ft. No ore was seen in this adit. The portal section was timbered and could not be examined. Gunning (Mem. 161, p.81) reports that an irregular vein 2 to 3 ft. wide was exposed practically at the surface, and that a second 3 ft. irregular zone was exposed 10 ft. inside the adit.

7. Geology:

The formations in the neighbourhood of the prospects are the Hamill series, Badshot formation, and the Lardeau series. The Hamill series is composed of quartzite, schist, and limestone, and may be correlated in part with the Reno and Quartzite Range formations of the Sheep Creek area. The Badshot formation is limestone and probably represents part of the Metaline limestone. Immediately overlying the limestone is the Lardeau series. The lower part of this is a dark grey to black shale or schist. It is something similar to the Ledbetter shale in appearance.

The Wagner, Jewell and Abbott groups are in the dark shale overlying the Badshot limestone. The Bannockburn and Superior groups are reported to be in limestone and schist that underly the Badshot formations.

The Wagner group has the best showing. The vein strikes N. W. and dips steeply to the S. W. The strike is nearly parallel to that of the shale but in places it can be seen that the vein crosscuts the formation at a small angle. The general dip of the formation is to the N.E. whereas the dip of the vein is to the S. E.

The vein is up to 10 ft. wide and is composed of quartz with bands and small inclusions of schist. Sulphide minerals are galena, sphalerite, pyrite and tetrahedrite. They are usually scattered through and in the form of small stringers in the quartz. Several outcrops show one to two ft. of high grade galena near the hangingwall of the vein.

Workings have caved at the Jewell and the vein is poorly exposed. Rusty quartz with scattered sulphides is exposed at the surface.

The vein which is reported by Gunning, could not be seen at the portal of the Abbott crosscut. The crosscut is in shale throughout its entire length but the face appears to be within a short distance of the contact with the Badshot limestone. The limestone is exposed about 100 ft. above and to the east of the portal. It has been replaced by irregular shaped pods of pyrite, galena and sphalerite.

The Wagner, Jewell and Abbott are situated in about the same position with reference to the top of the Badshot limestone, the Abbott being somewhat closer to this contact than the Wagner. The three properties cover a distance of nearly 4 miles. The vein on the Wagner can be traced some 3,000 ft. horizontally and from 1,000 ft. vertically by means of isolated outcrops. There is no proof that these are part of the same vein but they are similar in character and line up along the same strike. This strike projected to the south would pass through or close to the Jewell and Abbott workings.

The general alignment and the similarity in character of the ore from the three properties suggests that a major structure, probably a fault, passes through this part of the country and that it has been filled, in part at least, by quartz containing varying amounts of galena, pyrite sphalerite and tetrahedrite.

The shales in the neighbourhood of the Wagner vein have been intruded by several aplite dykes. They are from 1 to 4 ft. thick and tend to be parrallel to the strike and dip of the shale.

8. Ore

It was not possible to form an accurate estimate of the width and grade of ore. Small isolated outcrops were seen along the creek bottom on the Wagner group. In most places the full width of the vein was not exposed. One outcrop near the south end showed about 10 ft. of quartz with scattered sulphides but most outcrops showed only a small amount of quartz, or in places, high grade galena. Neither the footwall nor the hangingwall was exposed.

These outcrops extend over a distance of a 1/4 mile in a N-S direction. To the north of this is a glacier which covers the ground completely for a distance of a 1/4 mile. To the north of the glacier, a knob of rock exposes the vein for a distance of 200 ft. The drift and winze were driven in this knob. Here the veins averages about 8 ft. in width and contains high grade stringers of galena and sphalerite up to 2 ft. in width.

9. Method of Developing

If the ore is continuous between the Wagner and the Jewell groups it should cross the upper part of Hall Creek at an elevation of about 4500 ft. Therefore it may be possible to start an adit at a comparatively low elevation and develop the ore from this point. The mountains rise steeply both to the north and to the south and the known outcrops of the vein range in elevation from about 6000 ft. to nearly 8,000 ft. Drifts from the elevation of the creek would have a chance of opening up a large tonnage of ore.

It would be necessary to project from the outcrops on the Wagner across the valley to the outcrop on the Jewell and then to locate flat diamond drill holes or a crosscut adit near the low point to intersect the vein and to determine whether it is continuous and contains ore.

10. Financial and Economic Consideration.

Some of the claims have been allowed to lapse and have been relocated by Joe Gallo. The price asked for the Wagner and Jewell groups is \$600,000.00. The first payment of \$10,000.00 is to be made at the end of 2 years, and the second of \$25,000. at the end of 5 years. The owners ask for 10% royalty on ore produced, this money to apply to the purchase price.

Joe Gallo has spent a part of the last two years collecting information and getting options on the properties so that it will be possible for one company to work all of the properties in the immediate neighbourhood. He wants payment, a part of it in cash for his work and expenses. He did not state how much he expected.

It would be necessary to build a road to the property before a large scale development program could be started. This would require a large sum of money because it would be necessary to do rock work on either route. The road up the Duncan River might be undertaken by the B. C. Government because it will open up timber land and some farm land.

A. G. Pentland.