PRODUCT GOLD | TERRITORY | N.T.S. AREA 92 H/8 | REF. AU 2

NAME OF PROPERTY NICKEL PLATE

OBJECT LOCATED - Ore zone, Nickel Plate claim (Lot 741).

UNCERTAINTY IN METRES 300. Lat. 49°22'25" Long. 120°01'50"

Mining Division Osoyoos District Similkameen

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

Nickel Plate Mountain is underlain mainly by a succession of Upper Triassic argillite, limestones, and volcanic rocks of the Nicola group, amongst which a nearly equal volume of igneous rock has been intruded in the form of sheets. The stratified rocks are truncated to the west by the Bradshaw fault, which follows Hedley Creek, and are floored by a large body of granodiorite and intruded by gabbro stocks, dykes, and sills. The base of the mountain consists of a large body of the Coast intrusions, whose upper margin roughly follows the bedding in the overlying intruded sediments. Dykes and sills from this body cut the sediments, but are not abundant, and only one of notable size cuts the ore zone. The sedimentary strata dip at a low angle to the west and the orebodies roughly follow the bedding down from the top of the mountain.

The basic intrusions are abundantly represented through the ore zone, and have played a paramount role in the origin and location of the ore shoots. The largest of them, known as the

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Associated minerals or products - Silver, copper, arsenic, cobalt.

HISTORY OF EXPLORATION AND DEVELOPMENT

The Nickel Plate property is located at elevations of 5,500 to 6,300 feet on Nickel Plate Mountain, 2 miles northeast of Hedley.

The orebodies have been developed by two mines, the Nickel Plate located on top of the mountain, and the Hedley Mascot (92 H/8, AU 4), located on the west slope. The original discovery was made at the top of the mountain and the orebody subsequently traced down the west face. The Mascot Fraction, a 17.2 acre claim staked in the early part of the century by Duncan Woods, was found to lie in the lower center of the Nickel Plate orebody, however terms agreeable to both the owner of the Nickel Plate and Mr. Woods could not be arranged. During the process of development the two mines were connected underground at several points.

The Nickel Plate group was located in September 1898 by Messrs. Wollaston and Arundell and sold the following year to M.K. Rodgers, who represented the Marcus Daly interests of Butte. The Bull Dog, Sunnyside, and Nickel Plate claims (Lots 739-741 respectively) were Crown-granted to Rodgers in 1900. By 1901 the whole of the mountain was staked.

The Daly interests incorporated two companies: the Yale Mining Company of Anaconda, Montana to acquire and operate the mine, and The Daly Reduction Company, Limited which was incorporated in British Columbia in March 1903 to install and operate the mill and surface facilities. The 40-stamp mill was put into operation in 1904, the ore being transported by a $1\frac{1}{2}$ mile electric tram at the top of the mountain, and a 10,000 foot gravity tram in two sections down the slope to the mill. Little development work was done from 1907 and with the failure to find ore in No. 4 adit it seemed to the Daly estate an appropriate time to relinquish sole ownership and an interest in the property was sold to the Exploration Syndicate of New York in 1909. Under the agreement Hedley Gold Mining Company was incorporated in Delaware to operate the mine; the Daly Reduction Company continued to operate the mill. By 1913 mill capacity had been increased to 250 tons per day.

Underground development to 1902 totalled about a mile and extended to a depth of 350 feet. The four separate Sunnyside orebodies were developed by 4 adits and 2 glory holes. The Nickel Plate orebody was developed by a large

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Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

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HISTORY OF PRODUCTION

From 1904 to 1963 inclusive, 3,315,196 tons of ore from the Nickel Plate and Oregon (French) mines were milled. From this ore 1,363,948 ounces of gold, 133,848 ounces of silver, and 2,162,815 lbs of copper were recovered. These figures include 32,463 tons of ore from the Oregon mine which were milled during the period 1950-55 inclusive and for which no separate returns are available.

MAP REFERENCES

Map 2 A, Hedley, (Geol.), Sc. 1":1,000' - accomp. Memoir 2.

Map 256 A & Fig. 16, Nickel Plate Mtn. (Geol. & orebodies) - accomp. Summary Report 1929, Pt. A, Sc. 1":500'.

Map 568 A, Hedley, (Geol.), Sc. 1":1 mile, Geol. Surv. of Canada. (1940).

Map 888 A, Princeton, (Geol.), Sc. 1":4 miles - accomp. Memoir 243.

#Plan of Hedley Mascot Claims, Sc. 1":700' (approx.).

Map 8526 G, Hedley, (Aeromag.), Sc. 1":1 mile.

*Map 92 H/8, Hedley, (Topo.), Sc. 1:50,000.
Geology of the Hedley Area, Sc. 1 cm:1 km, Fig. 2-10-1, Geological Fieldwork, 1986, p. 66, BCDM.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR	DMacR			
Date	03-80	02-82	12-83	05-87			

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PRODUCT GOLD	PROVINCE OR TERRITORY British Columbia	N.T.S. AREA 92 H/8	REF. AU 2

NAME OF PROPERTY NICKEL PLATE

DESCRIPTION OF DEPOSIT (continued)

"Toronto stock", is exposed as an oblong body 2,500 feet wide extending northerly for some 7,000 feet along the east side of Hedley Creek. To the northeast and east the stock sends off a great array of dykes, sills, and irregular apophyses. The largest of these, known as the "Climax stock", occurs on the westerly summit ridge of Nickel Plate Mountain. As its name implies it was originally believed to be a stock, but the lower contact has been found to be in part at least concordant with the intruded sediments, so that the body more closely resembles a large, irregular sill. Sills also occur on the south side of the Toronto stock, but are much less plentiful than on the north side. The basic intrusions are composed of gabbro, quartz gabbro, augite, diorite, quartz diorite, and porphyries; the last occurring only as part of the east end of the Climax stock and as sills and dykes.

Both the dykes and sills and the sedimentary rocks have locally been highly metamorphosed, the calcareous rocks to a massive aggregate of pyroxene and garnet, and the siliceous sediments to a flinty rock resembling chert.

The transition between the garnet-pyroxene rock and the unaltered limestone is abrupt, and it marks the limits of mineralization so closely that Billingsley introduced the special term "Marble line" to designate it.

Mineralization occurred in the Nickel Plate zone as a single system of interrelated orebodies, and in a half dozen lesser, scattered orebodies, designated the Sunnyside 1, 2, 3, 4, 4½, and Bulldog. About 1,200 feet to the southeast of the Nickel Plate and 250 feet below it is the northern orebody of the Sunnyside mine, commonly referred to as Sunnyside No. 4. Lying 400 feet to the south of the last is Sunnyside No. 3, while Sunnyside No. 2 lies 400 feet to the south of Sunnyside No. 3. A fifth orebody known as Sunnyside No. 1 lies on the southern border of the Sunnyside mineral claim.

The Nickel Plate zone occurs in an irregular, elongated block of ground approximately 350 feet wide horizontally, 215 feet thick, and 2,000 feet long. Within this the ore has been found in a series of five irregular sheet-like bodies 10 to 100 feet thick, each of which plunges at approximately 24 degrees northwest along its longest axis and overlaps those below en echelon. This arrangement of the orebodies gives the axis of the whole deposit a plunge of 28 degrees to the northwest steeper than that of the individual orebodies. The orebodies are named

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HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

glory hole and from Nos. 3 and 4 adits. The Dickson 30° decline, begun in 1912, was sunk from No. 4 adit at 5,600 feet elevation to the 4,825 foot elevation, with crosscuts to the footwalls of the orebodies. Operations were continuous until 1920 and seasonal for several years following due to problems with the company owned 1,600 horsepower hydro-electric plant. The orebodies were traced westward down dip and mined to the borders of the Mascot Fraction of the Hedley Mascot property and operations ceased early in 1931.

The Nickel Plate was optioned in 1932 by J.W. Mercer of New York for Mercer Exploration Company. A private, wholly owned subsidiary Kelowna Exploration Company, Limited was incorporated in British Columbia in July 1933 to acquire the property. Exploration and development was resumed and the mill re-opened in the spring of 1935. The Morning decline, begun in 1941 from near the foot of the Dixon decline, was sunk at 50° for 1,000 feet to the 4,150 level by 1948. A 46° decline was sunk from this level for 430 feet to enter the Morning claim on the far side of the Mascot Fr., the key claim of the Hedley Mascot property, and the orebodies were followed for an additional 600 feet of slope distance.

The company name (Kelowna Exploration) was changed in 1951 to Kelowna Mines Hedley Limited. The orebodies opened by the 4,150 level decline were small and the decline was abandoned in 1954. Exploration and development work were discontinued and the mine closed in September 1955. Lessees shipped ore from mill cleanup in 1957, 58, 62 & 63. Reserves at closing were reported at 95,859 tons at 0.296 oz/t Au (GM Resources Limited 1979 AR).

Dundee Mines Limited optioned the property from Oil Participations Incorporated of New York in 1964. Work during the year included 3,513 feet of diamond drilling in 8 holes on the Warehorse claim.

In 1968 the Nickel Plate, comprising 83 Crown-granted claims owned by Burden Investors Services, Inc. of Delaware, was optioned by GM Explorations Limited, a wholly owned subsidiary of Giant Mascot Mines Limited. Work during 1968 and 1970 included geophysical and geochemical surveys and 3,053 feet of diamond drilling in 10 holes. A private company Mascot Nickel Plate Mines Limited was incorporated in 1971 by Giant Mascot Mines Limited (76%) and Burden Investors Services, Inc. (24%). Work during 1973 included 407 feet of surface diamond drilling in 3 holes. In 1974Noranda Exploration Company Limited held an option on the tailings

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DESCRIPTION OF DEPOSIT (continued)

consecutively downward, the top one which outcrops at the glory-hole being known as No. 1 orebody, the next below as No. 2 orebody, and so on to No. 5 orebody.

The ore deposits are of the contact metamorphic type, but unique inasmuch as they have arsenopyrite as the principal sulphide. Visible free gold occurred in considerable amounts at and near the surface. The ore consists of gold-bearing arsenopyrite in a gangue of metamorphic silicates. Chalcopyrite and pyrrhotite are common throughout many parts of the mine. Very small amounts of sphalerite and pyrite are also found, but these are unusual. The great majority of the sulphides occur disseminated through the gangue and the amount occurring as filling fractures or as distinct veins is insignificant. The ore carries about 0.66% cobalt.

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HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

area and carried out rotary drilling in 16 holes totalling 589 feet.

The company name (Giant Mascot) was changed in 1977 to GM Resources Limited. Rehabilitation of main adits and sampling was begun in 1979. The company name (Mascot Nickel Plate) was changed in August 1980 to Mascot Gold Mines Limited; in November 1980 the GM Resources interest in the company was reduced to 61.7%, and the Burden Investors interest to 7.6%. Drill indicated reserves, based on 1980-81 drilling, were reported as 148,238 tons at 0.273 oz/t Au (GM Resources, 9 month interim report, 1981).

By Oct. 1980, "A" adit was re-opened making Sunnyside zone accessible. By March 1981, there were drilled 67 holes (36 surface and 31 underground) totalling 6,543.5 feet. Dickson shaft was rehabilitated to the 600 foot level. Of the 31 underground holes, 23 were drilled in the Sunnyside No. 450 area and 8 in the North Dyke. To July 1981, there were diamond drilled 28,261 feet from underground and surface. From this work were outlined drill-indicated reserves of 376,593 tons grading 0.281 ozs Au/ton. (NM Feb. 25, 1982).

GM Resources Limited and three other companies were merged into a new company, Campbell Resources Inc which was incorporated in June 1983, thereby giving Campbell Resources a 76.5% interest in Mascot Gold Mines Limited. Reserves were reported at 500,000 tons grading 0.288 oz/t gold (Campbell Resources Inc 1983 AR). Through share transactions and amalgamations in 1984 Campbell Resources transferred its interest in Mascot Gold Mines to Royex Gold Mining Corporation; Mascot acquired 100% interest in the property and Royex became the major shareholder in Mascot. Extensive surface and underground drilling was carried out in 1984-85. Proven and probable open pit reserves were reported as 7,100,000 tons at 0.15 oz/t Au; underground reserves were proven 668,982 tons at 0.16 oz/t Au and probable 858,000 tons at 0.15 oz/t Au (International Corona Resources, Prospectus 10/09/86). Continued drilling in 1986 increased open pit reserves to proven 8,300,000 tons at 0.14 oz/t Au (Mascot Gold Mines Limited First Quarter Report, 1987).

Construction of a 2,700 ton per day concentrator began in April 1986 and milling operations began in April 1987.