

CASTLE GOLD PROPERTY

PROPERTY

The Castle property is comprised of 90 claim units for a total of 2250 hectares in the Liard Mining Division, B.C. Teck Corporation discovered the property in 1980 during a regional geochemical stream sediment sampling program. Subsequent exploration identified a 3½ kilometre long gossan zone in sericitized pyritic Triassic Stuhini Group volcanics. A 2.4 kilometre length of this zone has been explored by geochemical and geophysical methods and one program of diamond drilling. The possibility for the discovery of low grade bulk tonnage gold and/or high grade vein-hosted gold deposits remains good and the property requires additional drill testing.

LOCATION AND ACCESS

The property is located 15 kilometres west of the village of Iskut and 70 kilometres south of Dease Lake in northern B.C. Latitude and longitude of the property are 57°48'N, 130°12'W. Access to the property is by helicopter from Dease Lake or seasonal helicopter bases at Iskut or at Bob Quinn, south of Iskut. An ATV trail from Iskut also provides access to the eastern property area.

PROPERTY STATUS

The property consists of 90 contiguous units in five mineral claims. The claims are in good standing until March and July 2001. The claims are owned by Teck Corporation with Silver Standard Resources Inc. retaining a 10% interest.

PROJECT HISTORY

Teck Corporation discovered the Castle property in 1980 during a regional geochemical stream sediment sampling program for copper in the Stikine area. Anomalous copper and gold values were found in silts from streams draining the Castle area.

A review of Minister of Mines records shows that Sumitomo Metal Mining Canada Ltd. explored the area in the early 1970's. Sumitomo conducted a geochemical soil survey for soluble and total copper. In 1973 they drilled 550 metres in five diamond drill holes. Results from the drilling were not recorded for assessment, and the core is no longer available. Three of the old collar locations were located in the main area of mineralization drill tested by Teck.

Initial work by Teck Corporation consisted of geological mapping and geochemical soil and rock sampling. A pyritic alteration zone measuring at least 1400 metres long and up to 200 metres wide and anomalous in gold and copper was identified. Anomalous silver and molybdenum values occur within the gold-copper anomaly.

In 1987 Teck Corporation entered into a joint venture agreement with Kappa Resources Corporation on the Castle property. Consolidated Silver Standard Mines Ltd. elected to maintain a 10% participation interest. The control grid was re-established and extended. Additional geochemical sampling was done and the area of the main geochemical anomaly was geophysically surveyed with total field magnetics, self-potential, induced polarisation, and VLF-EM. Although outcrop exposures are sparse in the immediate area, extensive rock sampling was done where possible in the area of the alteration zone.

In 1988 eleven diamond drill holes for a total of 1190 metres were drilled from four drill sites. The drill holes primarily targeted geophysical anomalies, and the margin of the main gold-copper geochemical anomaly. The core of the main geochemical anomaly was not drilled as it was assumed that the gold and copper values had been partly transported by soil creep. Mineralization is hosted by volcanics and is fracture related with associated sericite alteration, quartz veinlets and stringers, and occasionally barite stringers. Encouraging but narrow gold-silver values were intersected.

In 1990 Triumph Resources Ltd. entered into an option/joint venture agreement on the property with Teck and Silver Standard. Triumph hand trenched the main zone in areas of shallow overburden covered IP chargeability anomalies, and completed reconnaissance geochemical rock and soil sampling of the eastern extension of the zone. The objective of this program was to locate shallow highgrade gold zones. The length of the gold-copper anomaly was extended to about 2.4 kilometres during this program.

In 1996 Teck Corporation geologically reconnaissance mapped most of the property area and did minor additional geochemical rock sampling. It was concluded that northerly faulting across the main alteration zone was influential in location of mineralization.

GEOLOGICAL SETTING

The property is located in the northern part of the Klastline Plateau. Triassic andesitic and pyroclastic volcanic rocks that are locally overlain by remnants of Quaternary basaltic extrusive volcanic flows underlie the claim area. The oldest volcanics are green and purple flows and pyroclastics with minor interbedded sediments. These predominantly volcanic rocks have been intruded by felsite and feldspar porphyry dykes of undetermined but possibly Cretaceous-Tertiary age.

The structure bosting the alteration zone has been traced continuously for 3½ kilometres and intermittently further along strike. The main part of the zone trends about N40°W and follows the south side of Purdey Creek. The widest part of the gold-copper anomaly is about 240 metres. To the east the alteration zone appears to narrow and trend more E-W. More recent mapping indicates that the zone may widen again to +200 metres further to the east.

The main alteration zone follows a band of fracturing, shearing and silicification sub-parallel to Purdey Creek. Strong phyllic alteration consisting of sericite and pyrite is found within green volcanics. Weaker propylitic alteration with pyrite is found in medium to coarse grained andesitic volcanics. Local disseminated pyrite, chalcopyrite, and minor bornite are found within the alteration zone. Several areas with veinlets and fracture fillings of quartz, quartz-carbonate, and occasionally barite occur within and proximal to the alteration zone. Visible gold associated with quartz veining is present at several locations. Although disseminated and veinlet related copper sulphides continue in the eastern part of the alteration zone, the strongest gold-copper geochemical response is in the western part of the alteration zone south of Purdey Creek.

GEOCHEMICAL SURVEYS

Soil geochemical results indicate a broad copper anomaly over the main zone with good molybdenum correlation. The gold anomalies lie largely within the main copper anomaly and smaller silver anomalies occur within the gold anomalies. Zinc partly correlates with the eastern, upstream, copper-gold area, and flanks the western, downstream, copper-gold anomaly. Higher soil survey values in copper, gold, and silver are strongly anomalous and include copper to 5,593 ppm, gold to 13,656 ppb, and silver to 25.4 ppm.

Several phases of rock sampling have been completed along with hand trenching. Trenching was largely confined to locations where veining occurs in

outcrop and within the stronger alteration zone where geophysics indicated a higher concentration of sulphides. Gold and silver values were obtained from various parts of the property with an overall average of sampling in the 0.3 to 0.7 g/t Au range. The highest gold values generally were returned from narrow veirus or fracture zones and range up to 140 g/t Au.

GEOPHYSICAL SURVEYS

Total field magnetic, VLF electromagnetic, self potential, and dipole-dipole induced polarization surveys were completed over the gold-copper anomalous western part of the alteration zone.

Magnetic lows occur just southwest of the Purdey Creek lineament. They partly correlate with the geochemical anomalies and probably are a result of pervasive alteration.

A strong chargeability anomaly is located within the mapped alteration zone southwest of the Purday Creek lineament. This anomaly is adjacent to but offset to the southwest of the main geochemical anomaly and is likely caused by sulphide filled fractures and disseminations. This chargeability anomaly is associated with a resistivity low and correlates well with the strongest and largest SP anomaly detected.

A zone of high resistivity exists between the chargeability high and the Purdey Creek lineament. This resistivity high partially underlies the main geochemical soil anomaly and is believed to be related to silicification. This torget has not been drill tested.

DIAMOND DRILLING

Eleven holes were drilled from four locations in 1988. Drilling targets were selected based on IP chargeability anomalies. Better gold values were obtained from zones of stronger sericite alteration with coarse disseminated pyrite, hematization, and silicification. The drilling tested a strike length of 525 metres and returned numerous intervals of >0.7 g/t Au over widths of up to 15 metres. A selection of assay intercepts is tabulated below:

DDH	g/t Au	Width (m)
CAS 88-7	10.94	1.2
CAS 88-7	8.23	2.1
CAS 88-8	2.85	6.7
CAS 88-8	1.71	6.6
CAS 88-9	0.72	15.1
CAS 88-9	1.23	5.0

EXPLORATION POTENTIAL

Both low grade bulk tonnage gold targets and high-grade vein hosted gold targets exist on the property.

The copper-gold soil anomaly has not been adequately drill tested. Priority should be given to the area where there is a correlation with IP resistivity highs in the core of the geochemical anomaly. Exploration (geology, geochemistry, geophysics, drilling) is also required along the strike of the alteration zone to the east.







LEGEND



COPPER >200 PPM

GOLD >200 PPB

COINCIDENT Cu - Au ANOMALY

- TECK 1988 DIAMOND DRILL HOLE
- O SUMITOMO DIAMOND DRILL HOLE
- PURDEY CREEK LINEAMENT

) <u>20</u>0m





LEGEND

I.P. CHARGEABILITY >10 PFE (FRASER FILTERED)

MAGNETICS, TOTAL FIELD >1000 GAMMAS

MAGETICS, TOTAL FIELD <400 GAMMAS

S.P. <100 MILIVOLTS

TECK 1988 DIAMOND DRILL HOLE

O SUMITOMO DIAMOND DRILL HOLE

--- PURDEY CREEK LINEAMENT

0 200m



TECK CORPORATION CASTLE GOLD

GEOPHYSICAL COMPILATION INDUCED POLARIZATION MAGNETICS SELF POTENTIAL