

## MINFILE Detail Report BC Geological Survey Ministry of Energy, Mines and Petroleum Resources

| Location/Identification   |  |   |   |   |  |  |  |  |  |
|---|--|---|---|---|--|--|--|--|--|
| MINFILE Number:<br>Name(s):   | 082KSE037<br><u>NIP AND TUCK</u><br>TECUMSEH, NIP & T  | UCK, PAYMASTER  | National Mineral Inventory Nur  | nber: 082K8 Pb1   |  |  |  |  |  |
| Status:<br>Mining Method<br>Regions:<br>BCGS Map:<br>NTS Map:<br>Latitude:<br>Longitude:<br>Elevation:<br>Location Accuracy:<br>Comments: | Past Producer<br>Underground<br>British Columbia<br>082K048<br>082K08W<br>50 29 03 N<br>116 24 29 W<br>2553 metres<br>Within 500M<br>Location of adit portal | of No. 1 vein.  | Mining Division:<br>Electoral District:<br>Resource District:<br>UTM Zone:<br>Northing:<br>Easting: | Golden<br>Columbia River-Revelstoke<br>Rocky Mountain Forest District<br>11 (NAD 83)<br>5592632<br>541995 |  |  |  |  |  |
| Mineral Occurrence  |  |   |   |   |  |  |  |  |  |
| Commodities: Silver, Lead, Gold, Copper, Zinc, Cadmium, Antimony  |  |   |   |   |  |  |  |  |  |
| Minerals  | Significant:<br>Associated:<br>Alteration:<br>Alteration Type:<br>Mineralization Age:  | Galena, Sphalerite, Tetrahed<br>Quartz<br>Siderite<br>Oxidation, Silicific'n<br>Unknown | rite, Pyrite, Stibnite, Polybasite, F   | reieslebenite, Antimony   |  |  |  |  |  |
| Deposit   | Character:<br>Classification:<br>Type:   | Vein, Podiform<br>Replacement<br>I05: Polymetallic veins Ag-l                           | Pb-Zn+/-Au, J01: Polymetallic ma  | nto Ag-Pb-Zn  |  |  |  |  |  |
| Host Rock   |  |   |   |   |  |  |  |  |  |
| Dominant Host Ro  | ck: Sedimentary  |   |   |   |  |  |  |  |  |
| Stratigraphic Age<br>Middle Proterozoio   | Group<br>e Purcell   | <b>Formation</b><br>Mount Nelso   | n   | ous/Metamorphic/Other<br>-  |  |  |  |  |  |
| Isotopic Age  |  | Dating Method   | Material Dated  |   |  |  |  |  |  |
| Lithology: D  | olomite, Dolomitic Limeston  | 2   |   |   |  |  |  |  |  |
|   |  | Geolog  | ical Setting  |   |  |  |  |  |  |
| Tectonic Belt:<br>Terrane:  | Omineca<br>Ancestral North A   | Physiogra<br>merica   | phic Area: Purcell Mo   | intains   |  |  |  |  |  |
| Metamorphic Type<br>Grade:  | e: Regional<br>Greenschist   |   |   |   |  |  |  |  |  |
| Inventorv   |  |   |   |   |  |  |  |  |  |
| No inventory data   |  |   |   |   |  |  |  |  |  |

| Summary Production |         |                  |                |  |  |  |  |  |
|--------------------|---------|------------------|----------------|--|--|--|--|--|
|                    |         | Metric           | Imperial       |  |  |  |  |  |
|                    | Mined:  | 161 tonnes       | 177 tons       |  |  |  |  |  |
|                    | Milled: | 0 tonnes         | 0 tons         |  |  |  |  |  |
|                    |         |                  |                |  |  |  |  |  |
| Recovery           | Silver  | 460,603 grams    | 14,809 ounces  |  |  |  |  |  |
|                    | Gold    | 31 grams         | 1 ounces       |  |  |  |  |  |
|                    | Lead    | 82,315 kilograms | 181,474 pounds |  |  |  |  |  |
| Capsule Geology    |         |                  |                |  |  |  |  |  |

The Nip and Tuck is situated at 2553 metres elevation above sea level near the headwaters of Red Line Creek which is a tributary of MacDonald Creek, in the Golden Mining Division.

Regionally, the area is underlain by Proterozoic clastic sedimentary rocks of the Purcell and Windermere supergroups and by lower Paleozoic strata of the Beaverfoot and Mount Forster formations (Geoscience Map 1995-1).

The Purcell Supergroup strata include the Aldridge, Creston, Kitchener, Dutch Creek and Mount Nelson formations. The Windermere Supergroup unconformably overlies the Purcell Supergroup rocks and includes the Toby Formation and Horsethief Creek Group (Paper 1990-1).

In the vicinity of the occurrence, rocks of the Kitchener and Dutch Creek formations have been further subdivided and assigned to the Van Creek and Gateway formations. The Van Creek Formation correlates with the Lower Kitchener Formation while the Gateway Formation is equivalent to the lower portion of the Dutch Creek Formation. The Mount Nelson Formation has been subdivided into seven discrete members, a lower quartzite, a lower dolomite, a middle dolomite, an upper middle dolomite, an upper quartzite, and an upper dolomite (Open File 1990-26).

Rocks of the Horsethief Creek Group, Beaverfoot and Mount Forster formations are folded and overthrusted by rocks of the upper portion of the Dutch Creek Formation and the lower members of the Mount Nelson Formation. The sedimentary rocks have undergone regional metamorphism to at least greenschist facies.

The Nip and Tuck occurrence is hosted within a north-trending fault that cuts the middle dolomite member of the Mount Nelson Formation (Open File 1990-26, Figure 19b). Rocks of the Mount Nelson Formation are thinly laminated to massive, buff to grey dolomite and dolomitic limestone.

Mineralization is of two types. The first type is represented by the East, No. 1 and 3 veins. These consist of tabular to pod-like bodies of manganiferous siderite and pyrite, with variable amounts of galena, sphalerite, tetrahedrite and stibnite. The galena has numerous inclusions of polybasite and freieslebenite and some native antimony (Open File 1990-26). The second type, represented by the No. 2 and 4 veins, is as quartz veinlets containing tetrahedrite and galena within dolomitized limestone. The host carbonate rocks have been replaced by manganiferous siderite and pyrite (Assessment Report 11739).

The East vein lies on the east limb of a fold and the No. 1 vein is situated in a fault zone cutting the crest of the fold parallel to its axis. The No. 2 vein is approximately 30 metres west of the No. 1 vein and consists of disseminated mineralization within dolomitized limestone. The No. 3 vein is a body of altered limestone, 5 to 6 metres wide, containing disseminated pyrite and galena. The area is southeast of the No. 2 vein. The No. 4 vein lies between the No. 1 and 2 veins. The area of veining is 4 to 6 metres across and extends for 150 metres (Assessment Report 11739).

Sporadic production from the No. 1 vein from 1904 to 1923 yielded 460,603 grams of silver, 82,315 kilograms of lead and 31 grams of gold from 161 tonnes mined.

**Bibliography** 

EMPR AR 1900-806; 1902-136; 1903-140; 1904-114; 1905-146; 1906-135,248; 1907-90,213; 1908-89; 1915-82,97; 1916-516; 1919-113,146; 1920-113,139; 1922-184; 1927-265; 1928-277 EMPR ASS RPT \*11739 EMPR BC METAL MM00572 EMPR FIELDWORK 1989, pp. 29-37 EMPR FIELDWORK 1989, pp. 29-37 EMPR GEOS MAP 1995-1 EMPR INDEX 3-207,215 EMPR OF \*1990-26, p. 32, Figs. 19a,b EMPR PF (82KSE General File - Geology map by P. Billingsley, 1958) EMR MP CORPFILE (Golden Gate Exploration Ltd.) GSC MAP 12-1957 GSC MEM 148, p. 50; 369

GCNL #12, 1980; #125, 1981; #9, 1984

Pope, A.J. (1989): The Tectonics and Mineralization of the Toby- Horsethief Creek Area, Purcell Mountains, Southeast British Columbia, Canada, unpublished Ph.D. Thesis, University of London, England

EMPR PFD 4192

| Date Coded:   | 1985/07/24 | Coded By:          | BC Geological Survey (BCGS) | Field Check: | Ν |
|---------------|------------|--------------------|-----------------------------|--------------|---|
| Date Revised: | 1995/09/08 | <b>Revised By:</b> | Gilles J. Arseneau (GJA)    | Field Check: | Y |