

HISTORY:

Mineralization was first discovered in Wrinch Creek canyon in 1912 and was staked as the Silver Queen group. Soon after, claims were staked over the Chisholm vein system and in 1915 a shipment of 38 tons of ore grading 31% lead and 6 oz. silver was made from two shallow shafts on these claims. The Cole vein system was also staked as the Diamond Belle group in 1915.

The Silver Queen group was optioned to Federal Mining and Smelting Co. in 1923. This company completed more than 500 feet of drifting from three adits in Wrinch Canyon before dropping their option in 1924.

In 1928 the Owen Lake Mining and Development Co. optioned the Silver Queen, Diamond Belle and Chisholm groups. This company carried out an extensive programme of exploration which included sinking the Cole Shaft to a depth of 123 feet and driving a long cross-cut from the Earl Adit (see Figure 368-3) for approximately 3,000 feet. This drive cut the No. 2 and No. 3 veins at approximately 2,665 and 2,760 feet and was ultimately targeted to cut the Cole Vein at about 7,500 feet. About 1,020 feet of drifting was done on several new veins encountered during the driving of the long cross-cut, however the main drive was stopped at about 3,000 feet when development ceased in early 1930.

Canadian Exploration Ltd. acquired control of the crown granted claims covering the Wrinch and Chisholm Vein systems in 1941 and optioned the claims covering the Cole Vein system and nearby veins. The property was mapped and sampled and some underground rehabilitation performed. The ground covering the Cole veins was dropped in 1943. Canex worked on the crown grants in 1946 and 1947, rehabilitating all the old workings from the Earl Adit and carrying out extensive mapping and sampling.

In 1963 Nadina Explorations optioned the crown grants from Canex and in 1965 began retimbering the portals, as well as carrying out road construction and trenching.

In 1966 Nadina continued mine rehabilitation, drove 1,588 feet of drifts and raises and did extensive surface bulldozer trenching. In 1967 underground development was continued with 1,324 feet of drifting and 16 diamond drill holes totalling 1,559 feet.

Kennco Explorations Ltd. optioned the Nadina property in 1967 and carried out geological mapping, geochemical soil sampling and an induced polarization survey. They completed 1,511 feet of diamond drilling in 5 holes and did extensive trenching and test pitting with the idea that a porphyry copper deposit might be present at depth. The option was dropped at the end of 1967.

The area east of the crown grants received very little attention until it was acquired by Frontier Exploration Ltd. around 1960. Minor trenching and diamond drilling was carried out on the Jack and Axel veins in the early 1960's. In 1967 Frontier did extensive trenching of the veins; stripped and sampled the Cole System and carried out some x-ray diamond drilling.

In 1968, Nadina Explorations continued working on the area of the crown grants. Geochemical soil sampling was extended; at least 30 trenches were cut and additional areas were stripped and sample cuts blasted. The underground workings were geologically mapped and 660 feet of diamond drilling was done in 22 holes.

In 1969 the B. C. Ministry of Energy, Mines and Petroleum Resources' geological staff mapped the entire property in detail as well as the area surrounding Owen Lake. Nadina Explorations completed airborne geophysical surveys on their property and drilled 31 surface core holes totalling 10,637 feet. In addition 20 underground diamond drill holes totalling 3,561 feet and 4,000 feet of drifting were completed.

In 1970, Northgate Explorations optioned both the Nadina and Frontier properties. This company completed 13,500 feet of surface core drilling in both shallow and deep drilling. Underground exploration included 1,500 feet of diamond drilling and approximately 4,200 feet of drifting and raising. Northgate dropped their option at the end of 1970.

In 1971 the Bradina Joint Venture was formed (Nadina Explorations, Bralorne Can-Fer Resources and Pacific Petroleum) for the purpose of taking the property (Nadina ground only) into production. A feasibility study was prepared by Dolmage Cambell and Associates, surface EM and IP surveys were carried out, 6,000 feet of surface diamond drilling was completed in five holes and approximately 800 feet of drifting and raising was completed. In addition eight areas were prepared for stoping and 15,000 tons of development muck was stockpiled.

In 1972, a 500 ton per day mill was completed and mining began on the No. 3 Vein and its extensions (see Figure 368-4). This operation was plagued with difficulties from its inception due to poor planning and bad management. Metallurgical problems resulted in poor metal recoveries and over design of the mill resulted in a 350-400 ton per day mine trying to feed a 600-700 ton per day mill. Operations ceased in September, 1973 after milling 200,000 tons, of which 40% was low grade, oxidized development muck and waste. During 1972-73 the Joint Venture drilled 47 surface diamond drill holes totalling 12,323 feet and 68 underground holes totalling 8,110 feet.

Also during 1972, Frontier Explorations carried out a detailed programme of shoot-back EM on their property east of the Nadina crown grants (see Figure 368-2). Airtrack percussion drilling and about 1,500 feet of diamond drilling in five holes was completed on the George Lake Lineament Vein.

In 1974, the Bradina Joint Venture completed 528 feet of drifting to establish two footwall drill stations. Six underground diamond drill

holes totalling 2,021 feet were drilled. Surface diamond drilling totalled 3,867 feet in 3 holes. The joint venture agreement was terminated late in 1974.

In 1977, the Nadina Explorations property was optioned by New Frontier Petroleum Ltd., the successor company to Frontier Explorations Ltd. A limited surface diamond drilling programme was completed. Four holes aggregating about 2,000 feet were wedged off previous deep drill holes. This option was dropped in 1978.

In 1980, Nadina was reorganized as New Nadina Explorations Ltd. and an extensive programme of backhoe trenching was performed. Two surface diamond drill holes totalling 1,014 feet were completed, some underground facilities were rehabilitated and new surface buildings constructed. New Frontier also carried out trenching on its property during 1980.

In 1981, New Nadina completed rehabilitation on the main level (2,600) in the Silver Queen mine, did 472 feet of drifting to establish three underground drill stations, drilled 28 underground holes totalling 6,470 feet and 4 surface holes totalling 1,776 feet.

In 1981, New Frontier Petroleum Ltd. sold all of its mining interests, including the 22 located claims at Owen Lake (east of Nadina ground) to a new company, Bulkley Siver Resources Ltd. This company attempted to raise money to complete the Earl Adit drive easterly to cut the Cole Vein system at depth. Only 100 feet of this drive was completed when the programme was terminated for financial reasons.

In 1982, a detailed re-evaluation of the New Nadina property was completed by Campbell Resources Ltd. A Questor airborne EM survey was completed over a portion of the property immediately adjacent to Owen Lake and limited metallurgical testing was carried out.

In 1983-84, New Nadina carried out a surface diamond drilling programme totalling 5,997 feet in eleven holes. An additional four holes totalling about 1,500 feet were drilled in March, 1984.

In 1985, Bulkley Silver optioned the New Nadina ground to put the entire camp under one management. A "max-min" EM Survey was conducted over the area of the Questor airborne anomaly (see Figure 368-3). Six diamond drill holes totalling 1,130 feet were drilled in this area in June, 1985.

1987-89

HOUSTON METALS CORP:

- EXTENDED BULKLEY X-CUT APPROX 2700' TO INTERSECT GEORGE LAKE VEIN.
- X-CUT FROM NORTH END OF NO. 3 VEIN TO INTERSECT NO. 2 AND NO. 1 VEINS.
- X-CUT FROM SOUTH END OF NO. 3 VEIN APPROX. 850' TOWARDS NG-3 VEIN. (STILL 150-200' SHORT OF INT'N.)
- X-CUT INTO HANGINGWALL OF NO. 3 VEIN IN SEVERAL LOCATIONS AND DRILLED CENTRAL PART OF NO. 3 VEIN BELOW 2600' LEVEL.
- DROVE DECLINE APPROX 2900' TO INTERSECT NO. 3 VEIN AT ELEV. 2425' AND DRILLED VEIN BELOW THIS AREA (SOUTH END OF VEIN)
- DISCOVERED AND DRILLED CAMP VEIN SYSTEM.

production 1972-73

181,622 tonnes mined
190,676 tonnes ~~mined~~ milled

3,156 oz Au.
438,796 oz Ag
892,896 lbs. Cu
1,547,181 lbs Pb
11,132,703 lbs Zn
508 oz Cd.