## **TRODUCTION**

The Yellowstone property comprises six reverted Crown-granted mineral claims located proximately 12 kilometres southeast of Salmo, British Columbia. The Yellowstone vein, e target of the programme detailed in this report, was the first major discovery in the e ea. It was located in the late 1800's and led to the discovery of at least 32 additional productive vein systems in what became known as the Sheep Creek camp. Several of the v sins produced over 80,000 ounces of gold and were productive over a maximum vertical t unge of 488 metres (1600 feet).

The steeply dipping Yellowstone vein was developed on three levels and yielded 5,912 concess of gold and 4,354 ounces of silver from approximately 17,000 tons of oxide ore. Unlike many of the larger mines, production at the Yellowstone was limited to an ore shoot developed over a restricted interval in Navada member sediments. All of the production came from above the mine's intermediate level.

To test the potential of the Yellowstone vein along strike, both above and below the No. 3 level, a programme of underground development and diamond drilling was undertaken uring early 1988. This report details the results of the programme.

#### Location and Access

he Yellowstone property is located on NTS map 82 F/3E, near  $49^{\circ}$  08' 30" north latitude,  $17^{\circ}$  08' 00" west longitude in the Nelson Mining Division of British Columbia (Figure 1). ' he property is 12 kilometres southeast of Salmo, B.C. in the Sheep Creek valley. It is eached via Sheep Creek road which is followed for about ten kilometers east from Airport 'oad (former Highway 3). This gravel road, which crosses both the Dixie and Malwaaz laims, is maintained by the Department of Highways and is kept plowed during the winter.

he Yellowstone mine workings are reached by a 0.5 kilometer spur road to the south near the confluence of Sheep Creek and Waldie Creek. The No. 3 level is open and can be reached by vehicle. The upper and intermediate levels are reached by a logging skid road which traverses the hillside above the No. 3 level. This road would need upgrading to rovide vehicle access. The Pasadena, Rio Tinto and Midnight fractional claims are ccessible only by foot.

#### Physiography, Vegetation and Climate

The Yellowstone property is within the Nelson Range of the Selkirk Mountains, an area characterized by moderate to steep relief ranging from 600 to over 2370 metres. The claims lie on the western flank of Yellowstone Peak, near the confluence of Sheep and Waldie Creeks. Elevations on the property range from 940 metres within the Dixie claim on Sheep Creek to over 1700 metres within the Pasadena claim north of Yellowstone peak.

The property is within the Interior Cedar Hemlock biogeoclimatic zone which is characterized by moderate precipitation (~1.25 metres), warm summers and cool winters. Vegetation includes western hemlock, Douglas fir, larch, western white pine, black cottonwood and western red cedar. Although mature stands of timber occur in some locations, ffres and selective logging over the past century have encouraged extensive secondary growth, especially at lower elevations. Logging near the confluence of Sheep and Waldie Creeks is ongoing on a small scale.

## Property and Ownership

The Yellowstone property consists of six reverted Crown-granted mineral claims, all located in the Nelson Mining Division on NTS map 82 F/3E. Claim information is summarized in Table 1:

CLAIM NAME	ORIGINAL LOT #	RECORD #	AREA(Ha)	EXPIRES
Yellowstone	3651	840	20.27	Nov. 8, 1997
Dixie	. 14231	841	18.72	Nov. 8, 1997
Malwaaz	3652	837	5.26	Nov. 8, 1997
Pasadena	9185	839	20.17	Nov. 8, 1988
Rio Tinto fr.	4641	915	3.08	Dec. 29, 1997
Midnight fr.	13476	838	11.36	Nov. 8, 1988

# Table 1

**Claim Information** 

Arakis Mining Corporation is presently operating the Yellowstone property according to the terms of an agreement with Yukon Minerals Corporation, which has entered into a four year option agreement with the claims' owner, A. Higgins of Vernon, British Columbia. Under this agreement, Yukon Minerals can earn a 100% interest in the property subject to a retained 10% net profits interest.

### History

The first recorded work in the Sheep Creek district began in July, 1896 with the discovery of the Yellowstone vein. The discovery is credited to Thomas Bennett, a well known prospector in the area. The interest generated by the discovery led to the location of the Queen vein, parallel to and 275 metres (900 feet) south of the Yellowstone. It is believed that both these veins outcropped, as they were eventually stoped to the surface.

The Yellowstone vein was developed on three levels, the upper level (elevation 1064 metres) being driven on outcrop and stoped to the surface, approximately 30 metres above at the highest point. The intermediate level (elevation 1038 metres) started as a crosscut, eventually drifting on the structure over a distance of 158.5 metres. The ore shoot on this level was developed over 37 metres and was stoped to the upper level 34 metres above The No. 3 level (elevation 977 metres) was driven from a point near Waldie creek and started in overburden. The drift followed the structure for approximately 270 metres eas to a cross fault. Additional development beyond the fault was not attempted.

In 1900, a ten stamp mercury amalgamation mill was erected below the portal of the intermediate level. The mill processed about 17,000 tons of oxide ore from the Yellowstone, yielding 5,912 ounces of gold and 4,354 ounces of silver up to 1902. It i reported that this represented only 50% of the total gold content, a considerable amoun being lost in the pyrite. No production is reported from the No. 3 level.

In 1902, the syndicate operating the Queen mine relinquished their bond to Williar Waldie who managed, after only a few hundred feet of drifting, to locate a major ore shoo. A tramway was subsequently built between the Queen portal and the Yellowstone mil. Waldie and his successors developed several shoots over the next decade and, by 1911, were working 186 metres below the original vein outcrop.

Although the claims of the original Queen group were staked parallel to the locil stratigraphy, efforts soon focused on the location of strike extensions of the structures. This led to the discovery of the Kootenay Belle veins on the Yosemite claim, originally staked in 1898.

Numerous discoveries were made in 1905, including the Navada (6600), Columbia (8200, Motherlode, Nugget, Peggy and Clyde veins. Veins located between 1906 and 1908 prove 1 to be disappointing and it was not until 1912 that the camp's most productive and la t important vein, the Reno, was discovered. Although in the less productive Rero formation, the Reno vein produced approximately 147,000 ounces of gold up to 1951.

Production reached a peak in 1913, but began a sharp decline in 1916 due to war related problems and the depletion of the richer and more easily mined parts of the ore shoots. Rising costs, labour troubles and a cave-in at the Queen mine led to its eventual shut-down in July of that year. Once closed, the mine became flooded and it was not until 1934 that efforts were made to rehabilitate the old workings.

In November 1922, the Nugget mill closed and activity in the camp was limited to a small amount of exploratory work and to the shipment of select ore from several of the mines. By 1928, however, at least two shoots had been exposed on the Reno property as a result of extensive surface and underground development. This prompted the establishment of a 30 con cyanide mill in 1929. This mill processed ore from the Reno Mine until it was burned lown in 1932.

Following the fire, Reno Gold Mines Limited acquired the Nugget-Motherlode property, econditioned the Motherlode mill and linked it to the Reno mine by way of a 12,500 foot terial tramway. At this time, a rise in the price of gold prompted renewed activity at the Kootenay Belle, Queen and several other mines in the camp.

At the Kootenay Belle, a 50 ton mill was established in the autumn of 1934, only to be replaced by a mill with twice the capacity two years later. The new mill operated until the nine closed in 1942. The Queen workings were dewatered and rehabilitated in 1934, and a ubsequent re-examination led to the recognition of an important normal fault which had parently displaced the western shoot. This discovery led to the location of additional ore vest of the existing workings and to the decision to build a 150 ton cyanide mill, which perated from May, 1935 until 1950.

Around this time, a crosscut from level 7 of the Queen mine was driven north toward the 'ellowstone vein. This crosscut intersected a strong, wide but apparently barren vein a pproximately 165 metres below the Yellowstone's upper level workings. No further c evelopment is reported to have taken place.

The total recorded production of the Sheep Creek camp from 1899 to 1951, inclusive, mounts to 736,015 ounces of gold and 364,793 ounces of silver from 1,721,580 tons of ore. This ranks the camp as the eighth largest gold producer in British Columbia. A summary cithe production is in Table 2.