**Searchlight Resources Inc.**
218-744 West Hastings Street, Vancouver, British Columbia, Canada, V6C 1A5
Phone: (604)684-2361



# DIAMOND DRILLING REPORT

on the

## YELLOWSTONE PROPERTY

(Yellowstone, Dixie, Midnight fractional,
Pasadena, Rio Tinto fractional and Malwaaz
reverted Crown-granted mineral claims)

NELSON MINING DIVISION

BRITISH COLUMBIA



NTS 82 F/3E

Latitude: 49° 08' 30"N
Longitude: 117° 08'W

Owner: **A. Higgins**
2107 42nd Ave.
Vernon, B.C. V1T 3J2

Operator: **Arakis Mining Corporation**
#700-625 Howe Street
Vancouver, B.C., V6C 2T6

Consultants: **Searchlight Resources Inc**
218-744 West Hastings Street
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by:

**David M. Nelles, B.Sc.**

January 7, 1988

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## INTRODUCTION

The Yellowstone property comprises six reverted Crown-granted mineral claims located in the Sheep Creek valley, approximately 12 kilometres southeast of Salmo, British Columbia. The Yellowstone vein, the subject of the program detailed in this report, 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 these veins produced over 80,000 ounces of gold and were productive over a maximum vertical range of 488 metres (1600 feet). The steeply dipping Yellowstone vein was developed on three levels and yielded 5,912 ounces of gold and 4,354 ounces of silver from approximately 17,000 tons of oxide ore. Unlike many of the larger mines, however, production at the Yellowstone was limited to an ore shoot developed over a restricted interval in Navada member sediments. All of this production came from above the mine's intermediate level.

To test the potential down rake extension of the ore shoot, a program of underground rehabilitation was undertaken to facilitate the diamond drilling of the Yellowstone vein both above and below the No. 3 level. This report details the results of this program.

**Location and Access**

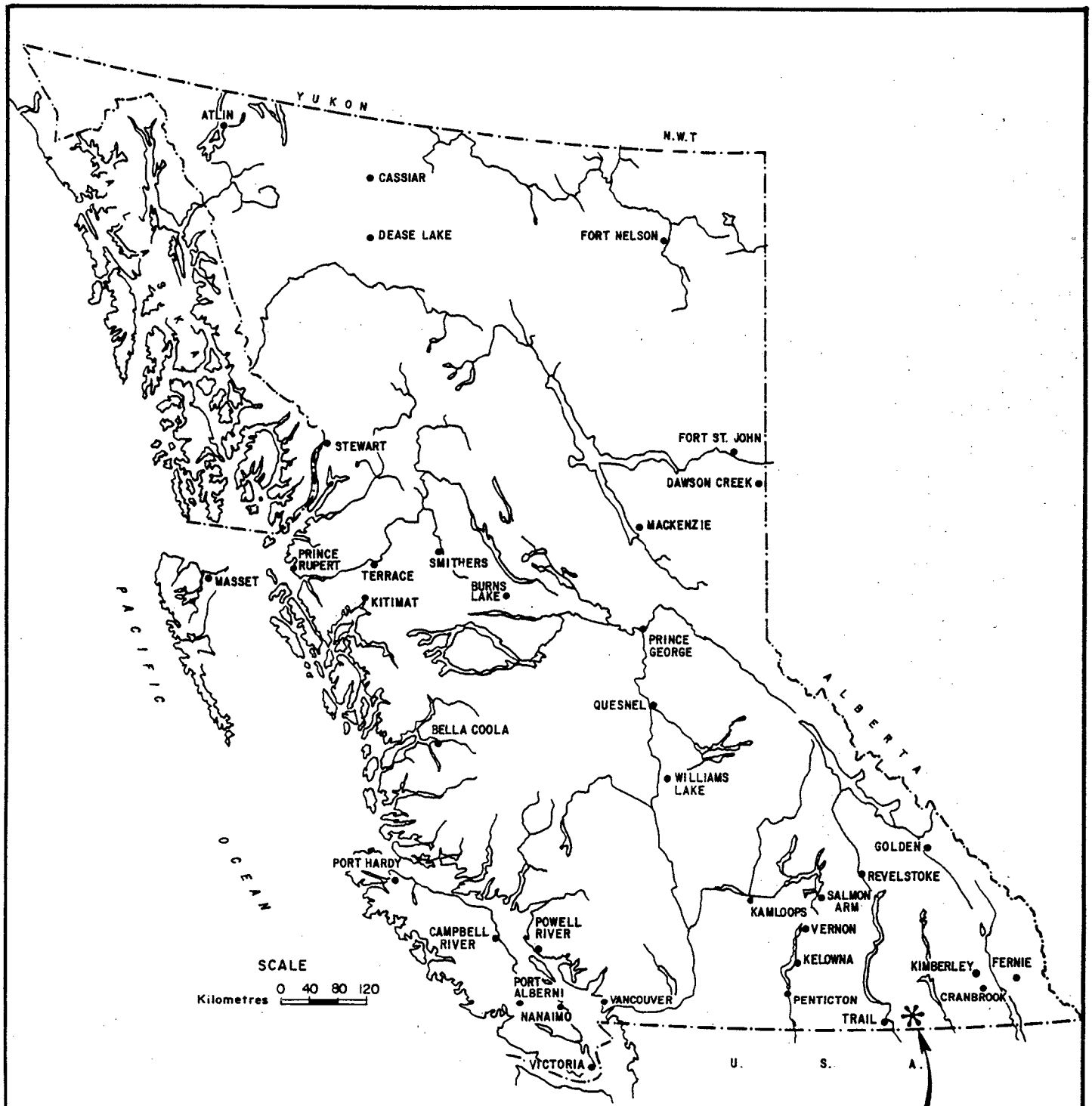
The Yellowstone property is located on NTS map 82 F/3E, near 49° 08' 30" north latitude, 117° 08' west longitude in the Nelson Mining Division of British Columbia (Figure 1). The property is situated approximately 12 kilometres southeast of Salmo, B.C. and can be reached via Sheep Creek road east of former Highway 3. This gravel road, which crosses both the Dixie and Malwaaz claims, is maintained by the Department of Highways and provides access to the Provincial campground on Sheep Creek.

The Yellowstone workings can be accessed by road south of Sheep Creek near its confluence with Waldie Creek. The No. 3 level is presently open and can be reached by vehicle. The upper and intermediate levels are linked by a cat road which traverses the hillside above the No. 3 level. This road would need upgrading to provide vehicle access. The Pasadena and Midnight fractional claims are currently accessed only by foot.

**Physiography, Vegetation and Climate**

The Yellowstone property is situated within the Nelson Range of the Selkirk Mountains, in an area characterized by moderate to steep relief ranging from 600 to over 2370 metres. The reverted Crown-granted mineral 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 lies within the Interior Cedar Hemlock biogeoclimatic zone which is characterized by moderate precipitation (~1.25 metres), warm summers and cool winters. Vegetation indigenous to the area includes western hemlock, Douglas fir, larch, western white pine, black cottonwood and western red cedar. Although mature stands of timber occur in some locations, fires 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 was being carried out as recently as September, 1987.




| ARAKIS MINING CORPORATION | | |
|---|---|---|
| YELLOWSTONE PROPERTY<br>NELSON MINING DIVISION, B.C. | | |
| LOCATION MAP | | |
| SEARCHLIGHT RESOURCES INC. | | |
| DATE:<br>FEB., 1987 | SCALE:<br>1:8,000,000 | FIGURE No.<br>1 |

**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. Pertinent information regarding these claims is summarized in Table 1:

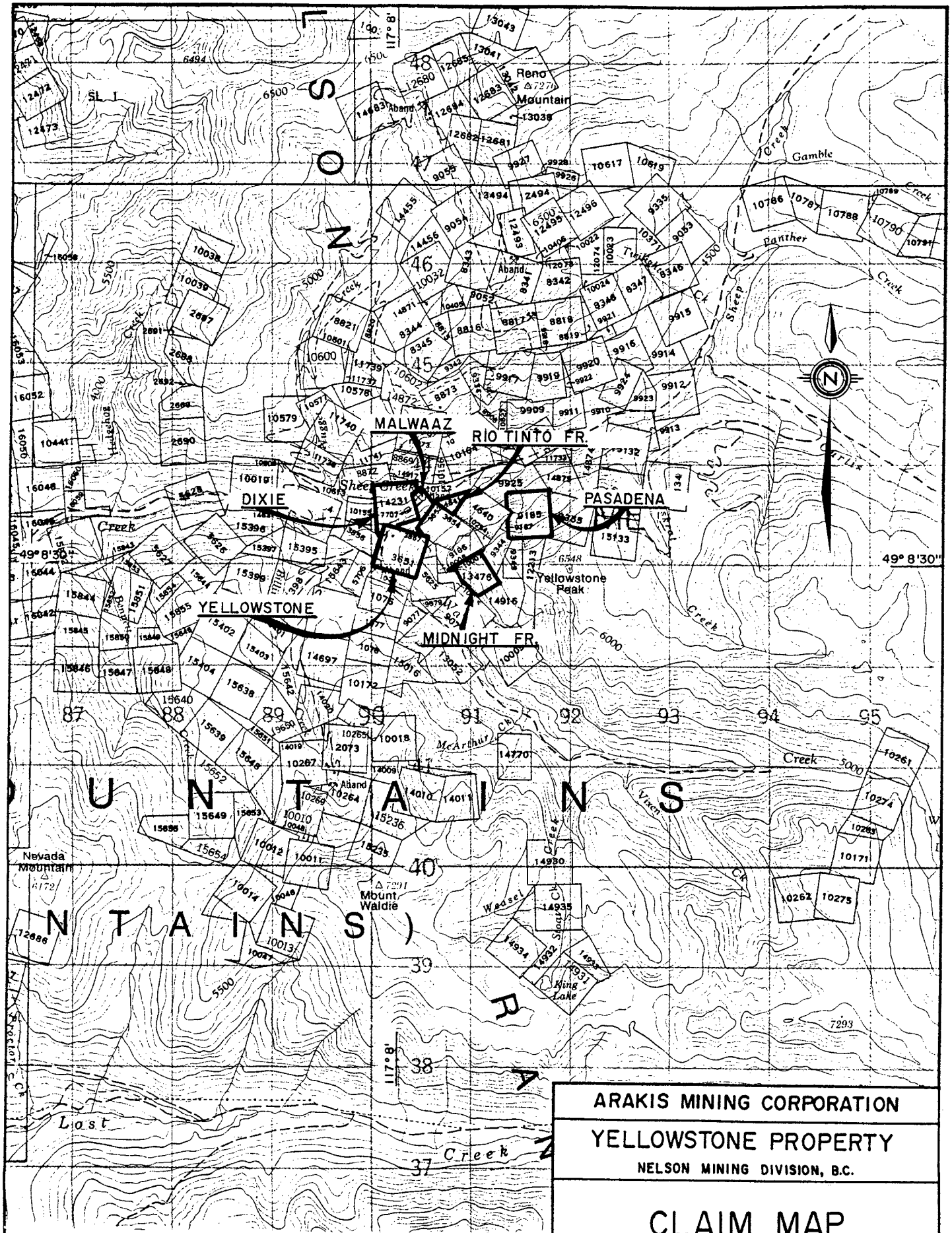
**Table 1**

**Claim Information**

| 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 |

* when the work described in this report is accepted.

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.




| ARAKIS MINING CORPORATION | | |
|---|---|---|
| YELLOWSTONE PROPERTY<br>NELSON MINING DIVISION, B.C. | | |
| CLAIM MAP | | |
| SEARCHLIGHT RESOURCES INC. | | |
| DATE:<br>FEB., 1987 | SCALE:<br>1:50,000 | FIGURE No.<br>2 |

**History**

The first recorded work in the Sheep Creek district began in July, 1896 with the discovery of the Yellowstone vein. This discovery is generally credited to Thomas Bennett, a well known prospector in the area. The interest generated by this 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) commenced as a crosscut, eventually drifting on the structure over a distance of 158.5 metres. The ore shoot on this level was developed over a distance of approximately 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 commenced in overburden. The drift followed the structure for approximately 270 metres, at which point a cross fault was encountered. Although the displacement on this fault is believed to be minor, additional development to the east was not attempted.

In 1900, a ten stamp mercury amalgamation mill was erected below the portal of the intermediate level. This mill processed approximately 17,000 tons of oxide ore, yielding 5,912 ounces of gold and 4,354 ounces of silver up to 1902. It is reported that this represented only 50% of the total gold content, a considerable amount 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 William Waldie who managed, after only a few hundred feet of drifting, to locate a major ore shoot. A tramway was subsequently built between the Queen portal and the Yellowstone mill. Waldie and his successors developed several shoots over the next decade and, by 1915, were working 186 metres below the original vein outcrop.

Although the claims of the original Queen group were staked parallel to the local 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 proved to be disappointing and it was not until 1912 that the camp's most productive and last important vein, the Reno, was discovered. Although in the less productive Reno 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, in part, 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 ton cyanide mill in 1929. This mill processed ore from the Reno Mine until it was destroyed by fire in 1932.

Following the fire, Reno Gold Mines Limited acquired the Nugget-Motherlode property, reconditioned the Motherlode mill and linked it to the Reno mine by way of a 12,500 foot aerial 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. This new mill operated until the mine closed in 1942. The Queen workings were dewatered and rehabilitated in 1934, and a subsequent re-examination led to the recognition of an important normal fault which had apparently displaced the western shoot. This discovery led to the location of additional ore west of the existing workings and to the decision to build a 150 ton cyanide mill, which operated from May, 1935 until 1950.

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

The total recorded production of the Sheep Creek camp from 1899 to 1951, inclusive, amounts 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 of this production can be found in Table 2.

TABLE 2

Sheep Creek Camp, Production 1900-1951

| Year | Motherlode, Nugget, Reno | | Queen and Sheep Creek | | Kootenay Belle | | Gold Belt | | Total Production of Camp | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Ore Milled or Shipped | Gold | Ore Milled or Shipped | Gold | Ore Milled or Shipped | Gold | Ore Milled or Shipped | Gold | Ore Milled or Shipped | Gold |
| | Tons | Oz. | Tons | Oz. | Tons | Oz. | Tons | Oz. | Tons | Oz. |
| 1900-01[1] | - | - | - | - | - | - | - | - | 16,988 | 5,421 |
| 1902-03[1] | - | - | 4,663 | 2,658 | - | - | - | - | 4,663 | 2,842 |
| 1904-05 | - | - | 10,924 | 4,773 | 415 | 1,252 | - | - | 11,339 | 6,025 |
| 1906-07[1] | 141 | 696 | 15,875 | 7,512 | 1,364 | 1,515 | - | - | 17,485 | 9,912 |
| 1908-09[1] | 7,148 | 9,326 | 20,086 | 11,543 | 3,148 | 1,947 | - | - | 30,456 | 22,935 |
| 1910-11[1] | 8,964 | 7,177 | 26,709 | 14,372 | 31 | 236 | - | - | 35,857 | 22,337 |
| 1912-13[1] | 42,041 | 23,924 | 18,474 | 6,095 | - | - | - | - | 60,503 | 30,164 |
| 1914-15[1] | 22,892 | 10,273 | 19,350 | 10,608 | - | - | - | - | 42,446 | 21,125 |
| 1916-17 | - | - | 2,060 | 860 | - | - | - | - | 2,060 | 860 |
| 1918-19[1] | - | - | 56 | 8 | - | - | - | - | 93 | 18 |
| 1920-21 | 15,577 | 4,873 | - | - | - | - | - | - | 15,577 | 4,873 |
| 1922-23 | 5,645 | 2,293 | - | - | 28 | 170 | - | - | 5,673 | 2,463 |
| 1924-25[1] | - | - | - | - | - | - | - | - | 4 | 15 |
| 1926-27 | - | - | 27 | 65 | 149 | 380 | - | - | 176 | 445 |
| 1928-29 | 2,008 | 1,807 | 1,756 | 229 | 282 | 538 | - | - | 4,046 | 2,574 |
| 1930-31 | 21,614 | 17,530 | - | - | - | - | - | - | 21,614 | 17,530 |
| 1932-33[1] | 24,055 | 14,861 | 1,850 | 150 | 915 | 1,308 | - | - | 27,102 | 16,953 |
| 1934-35[1] | 66,812 | 37,507 | 28,197 | 9,081 | 17,924 | 7,374 | 318 | 640 | 113,255 | 54,606 |
| 1936-37[1] | 88,729 | 50,895 | 109,216 | 40,417 | 63,464 | 12,822 | - | - | 163,327 | 115,757 |
| 1938-39[1] | 66,538 | 28,410 | 109,286 | 53,647 | 100,904 | 38,154 | 67,682 | 21,006 | 344,792 | 142,672 |
| 1940-41[1] | 52,016 | 18,535 | 110,129 | 52,312 | 73,481 | 22,427 | 118,868 | 32,759 | 354,408 | 126,041 |
| 1942-43 | 1,949 | 2,062 | 85,680 | 35,572 | 28,760 | 10,293 | 70,145 | 25,404 | 186,534 | 74,331 |
| 1944-45 | 1,713 | 585 | 37,688 | 14,885 | 248 | 107 | 1 | 14 | 39,650 | 15,561 |
| 1946-47 | 1,303 | 685 | 48,029 | 13,924 | 564 | 148 | - | - | 49,895 | 14,857 |
| 1948-49 | 362 | 184 | 53,424 | 19,126 | 748 | 652 | 154 | 45 | 54,688 | 20,109 |
| 1950-51 | 110 | 97 | 15,846 | 5,203 | 468 | 261 | 170 | 116 | 16,594 | 5,677 |

Summary

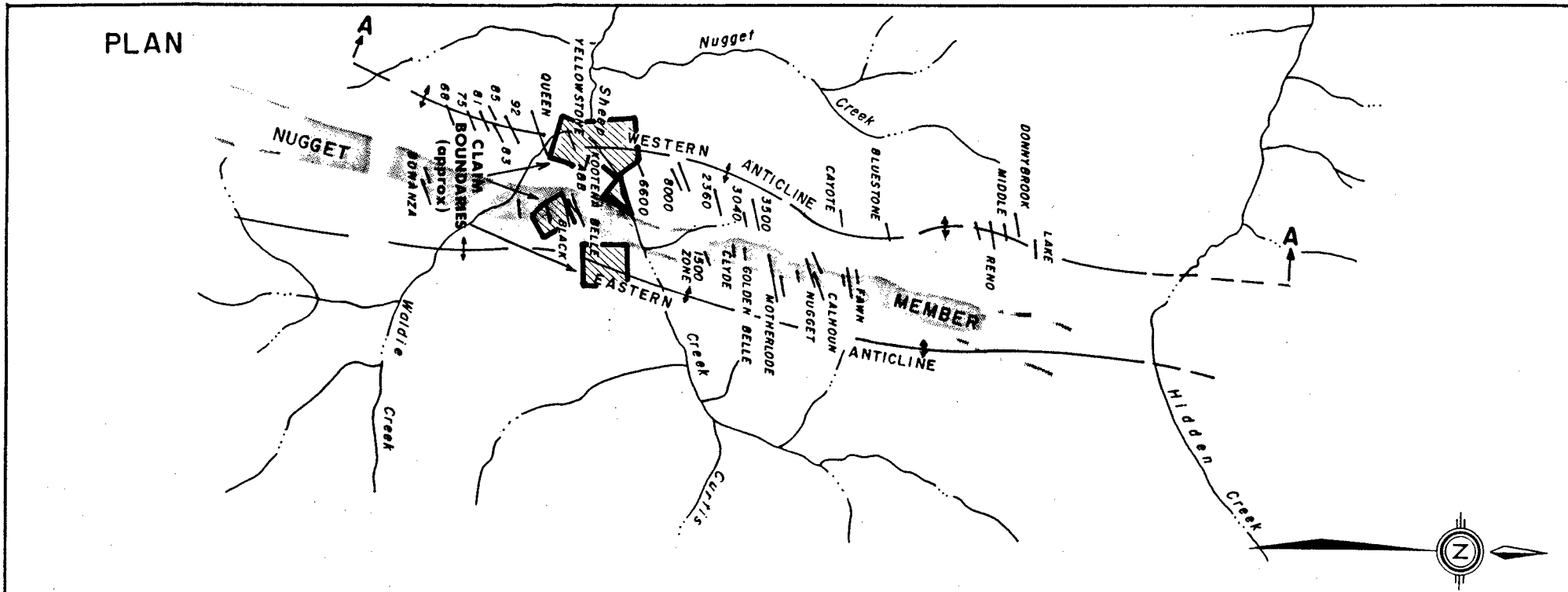
| | Ore | Gold | Silver | Lead | Zinc |
|---|---|---|---|---|---|
| | Tons | Oz. | Oz. | Lb. | Lb. |
| Columbia, 1932, 1933 | 42 | 31 | 46 | - | - |
| Fawn, 1915, 1935 | 74 | 131 | 13 | - | - |
| Gold Belt | 257,338 | 79,984 | 32,761 | - | - |
| Kootenay Belle | 292,893 | 109,937 | 37,153 | - | - |
| Motherlode, Nugget, Reno[2] | 429,667 | 231,932 | 184,502 | - | - |
| Ore Hill, 1906, 1914-15, 1918, 1936-38, 1940 | 3,669 | 2,849 | 5,415 | 186,940 | 166,784 |
| Queen and Sheep Creek[3] | 719,320 | 303,711 | 100,182 | - | - |
| Sumit, 1906, 1908, 1910-11, 1914, 1924, 1938 | 1,205 | 870 | 1,218 | 30,264 | 28,634 |
| Vancouver, 1909, 1911-13, 1932-33 | 383 | 964 | 412 | - | - |
| Yellowstone, 1900-02 | 16,989 | 5,606 | 3,091 | - | - |
| Totals | 1,721,580 | 736,015 | 364,793 | 377,568[4] | 312,633[4] |

1 Total for year includes any production from the Columbia, Fawn, Ore Hill, Sumit, Vancouver, and Yellowstone.

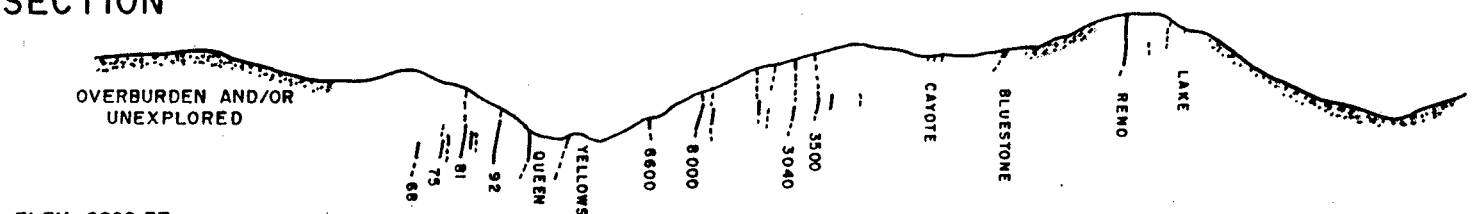
2 From 1906 to 1922 production was from the Motherlode and Nugget veins; from 1928 to 1938 production was mainly from the Reno vein; thereafter it includes production from Nugget, Motherlode, Bluestone, and Reno veins.

3 From 1900 to 1938 production was from the Queen vein; thereafter it includes production from other veins mined by Sheep Creek Gold Mines Limited.

4 The lead and zinc totals include lead, 143,033 pounds, and zinc, 92,625 pounds, recorded as recovered from 155,625 tons of ore from the Reno mine and minor quantities from Kootenay Belle, Sheep Creek, and the Nugget Motherlode.




## SECTION




SECTION A – A ALONG CREST OF WESTERN ANTICLINE

OVERBURDEN AND/OR UNEXPLORED

PRODUCTIVE VEIN

NON-PRODUCTIVE VEIN

SOURCE: GUNSTEEL RESOURCES INC.

METRES
1500 0 1500
3000 0 3000
FEET

ARAKIS MINING CORPORATION

YELLOWSTONE PROPERTY

NELSON MINING DIVISION, B.C.

# VEIN DISTRIBUTION
## SHEEP CREEK DISTRICT

SEARCHLIGHT RESOURCES INC.

| DATE: | SCALE: | N.T.S. | FIGURE No. |
|---|---|---|---|
| FEB., 1987 | As shown | 82F/3E | 4 |

Since 1951, activity in the camp has been limited, and it was not until recently that the potential of several of the major vein systems was reconsidered. Gunsteel Resources Inc., the only company besides Arakis recently active in the camp, is currently testing the Nugget, Calhoun, Fawn and several other veins within their extensive land holdings. Recent results indicate that their goal to develop 100,000 tons of ore averaging better than 0.3 ounces/ton gold will be realized in the near future. And although their plans are temporarily suspended, Gold Belt Mines is intending to dewater-water the Queen Shaft in an effort to evaluate their holdings.

The Yellowstone property was most recently assessed in 1982 by G. Salazar on behalf of Sandon Silver Mines Ltd. The program of underground geological mapping and sampling was successful in outlining several targets subsequently tested during the program described herein. Unfortunately, the assay plan accompanying Salazar's report was unavailable to the writer, who had to rely on written descriptions of the sample and target locations.

At present, part of the upper level workings can be viewed, although access is not recommended due to the unstable nature of the open stope. The portal of the intermediate level, however, has collapsed, and efforts to open it have proved unsuccessful. Rehabilitation of the No. 3 level drift undertaken as part of the present program has provided safe access to this level, although muck presently blocks the north drift approximately 25 metres from the face.

**Summary of Work**

The 1987 field program on the Yellowstone property focused on the Yellowstone reverted Crown-granted mineral claim and included the complete rehabilitation of the No. 3 level drift. This entailed retimbering the portal, mucking out all waste rock and relaying 250 metres of rail. A drill station was also established near the east end of the drift by extending a short crosscut eight metres to the north. Once complete, the entire level was geologically mapped (1:200) and channel sampled using an air chisel in preparation for 257 metres (843 feet) of underground diamond drilling. As part of this program, 43 channel, 85 core and 70 sludge samples were fire assayed for gold and silver. The core is currently being stored near the No. 3 level portal in a trailer. Core logs appear in Appendix 4, and a summary of drill hole information appears below.

**Table 3**
**Drill Hole Summary**

| DRILL HOLE | CORE SIZE | AZIMUTH | DIP | LENGTH |
|---|---|---|---|---|
| 87-A1* | AQ | $162^0$ | $+02^0$ | 18.29m |
| 87-B1 | BQ | $176^0$ | $+45^0$ | 19.51m |
| 87-B2 | BQ | $176^0$ | $+65^0$ | 21.95m |
| 87-B3 | BQ | $176^0$ | $+76^0$ | 34.44m |
| 87-A2 | AQ | $142^0$ | $+67^0$ | 30.18m |
| 87-B4 | BQ | $142^0$ | $+50^0$ | 16.15m |
| 87-B5 | BQ | $176^0$ | $-45^0$ | 29.26m |
| 87-B6 | BQ | $176^0$ | $-55^0$ | 38.71m |
| 87-B7 | BQ | $160^0$ | $-47^0$ | 27.74m |
| 87-B8 | BQ | $160^0$ | $-35^0$ | 20.73m |

* See Figure 5 for location.

The diamond drilling was accomplished using a Boyles Brothers JV5C rig from two stations established along the No. 3 level (see Figures 5 and 7). All of the collars were subsequently tied into new survey stations established throughout the drift. As many of the old survey stations, both underground and on the surface, could not be located, this survey has been keyed to a survey plan of the original Crown-granted claims prepared by the Ministry of Mines (Figure 3).

In addition to the work carried out on the Yellowstone claim, an attempt was also made to reopen and drain the Dixie adit, located within the Dixie reverted Crown-granted mineral claim north of Sheep Creek, using a track-mounted backhoe. Unfortunately, unstable ground near the portal precluded permanent access. A culvert was, however, installed to allow drainage.

## REGIONAL GEOLOGY

The Sheep Creek district is underlain by a thick sequence of sedimentary rocks of Lower to Precambrian age. The oldest rocks exposed are grit and quartzite belonging to the Three Sisters Formation. This unit is conformably overlain by massive white quartzite, argillaceous quartzite, argillite and grit belonging to the Quartzite Range Formation. This unit ranges from approximately 500 to over 700 metres in thickness and has been divided into the Navada, Nugget and Motherlode Members. Overlying the Quartzite Range Formation are argillite, argillaceous quartzite and grit assigned to the Reno Formation, which is in turn overlain by approximately 300 metres of limestone and argillite belonging to the Laib Group.

West of the Sheep Creek camp, granitic stocks and sills contemporaneous with the Cretaceous Nelson Batholith have intruded the Lower Cambrian rocks. A table of formations prepared by Mathews in 1953 is reproduced as Table 4.

Before this intrusive activity occurred, the sedimentary succession was folded into two tight northerly trending anticlines and an intervening syncline. The Yellowstone, Malwaaz and Dixie claims lie along the western anticline and are predominantly underlain by massive white quartzite, dark, thinly bedded quartzite and argillaceous quartzite belonging to the Nugget and Navada Members of the Quartzite Range Formation. The Pasadena claim lies on the east limb of the eastern anticline and is underlain by rocks belonging to the Three Sisters Formation. The Midnight fractional claim is situated on the eastern anticline and encompasses rocks assigned to the Nugget and Motherlode Members of the Quartzite Range Formation. The Rio Tinto fractional claim is underlain by sediments belonging to the Pend d' Oreille series and Reno Formation near the axis of the central syncline.

Subsequent to this deformation, northeasterly trending predominantly strike-slip faults cut the sedimentary sequence. Displacements along these structures varies up to 95 metres, and several have been traced for over 1500 metres on the surface. Gold mineralization in the district generally occurs where these faults have cut massive white quartzite of the Quartzite Range Formation. The origin of this mineralization has yet to be established, but an association with the intrusion of the Nelson Batholith in Cretaceous time has been considered.

TABLE 4

**Table of Formations**

| Age | Formation | | | Lithology | Thickness in Feet | | Remarks |
|---|---|---|---|---|---|---|---|
| Lower Cambrian | Laib Group | | | Argillite. | 200[1] | 1,000+[1] | Pb/Zn Deposits |
| | | | | Grey Limestone. | 150[1] | | |
| | | | | Argillaceous in some localities, elsewhere dominantly calcareous. | 300-500[1] | | |
| | | | | Limestone and argillite. | 150-300[1] | | |
| | | | | Argillaceous beds, biotitic and amphibolitic schists. | 100-300[1] | | |
| | | | | Limestone. | 0-60[1] | | |
| | Reno Formation | Upper Reno | | Impure dark bluish or greenish quartzite with some grit beds. | 125[2] | 50-900[1] | Productive only at Reno Mine |
| | | Lower Reno | | Argillite, argillaceous quartzite. | 450±[2] | | |
| Pre-cambrian (?) | Quartzite Range Formation | Navada Member | Upper Navada | Massive white quartzite. | 20-160 | 120 - 300 | Most Productive section at Sheep Creek Gold Camp, specially the massive white Quartzite members. |
| | | | Lower Navada | Dark, thin-bedded quartzites and argillaceous quarzties. | 100-140 | | |
| | | Nugget Member | Upper Nugget | Massive white quartzites. | 135-375 | 540-900 | |
| | | | Middle Nugget | White, grey and dark quartzites, dark argillaceous quartzites, and argillite. | 175-300 | | |
| | | | Lower Nugget | Argillite and dark argillaceous quartzite. | 150 225 | | |
| | | Mother lode Member | Upper Mother-lode | Massive white quartzite | 370-450 | 1,000 - 1,100 | Productive only at Motherlode Mine |
| | | | Middle Mother-lode | Argillite, grey grit & green schist | 50 | | |
| | | | Lower Mother lode | Massive white quartzite | 500-700 | | |
| | Three Sisters Formation | | | Grey grit, white quartzite and grit and green schists. | | 500+[1] | |

[1] Thickness or range in thickness for the northwestern part of the camp, near the Reno mine.
[2] Average thickness from measurements near Reno mine.

## LOCAL GEOLOGY

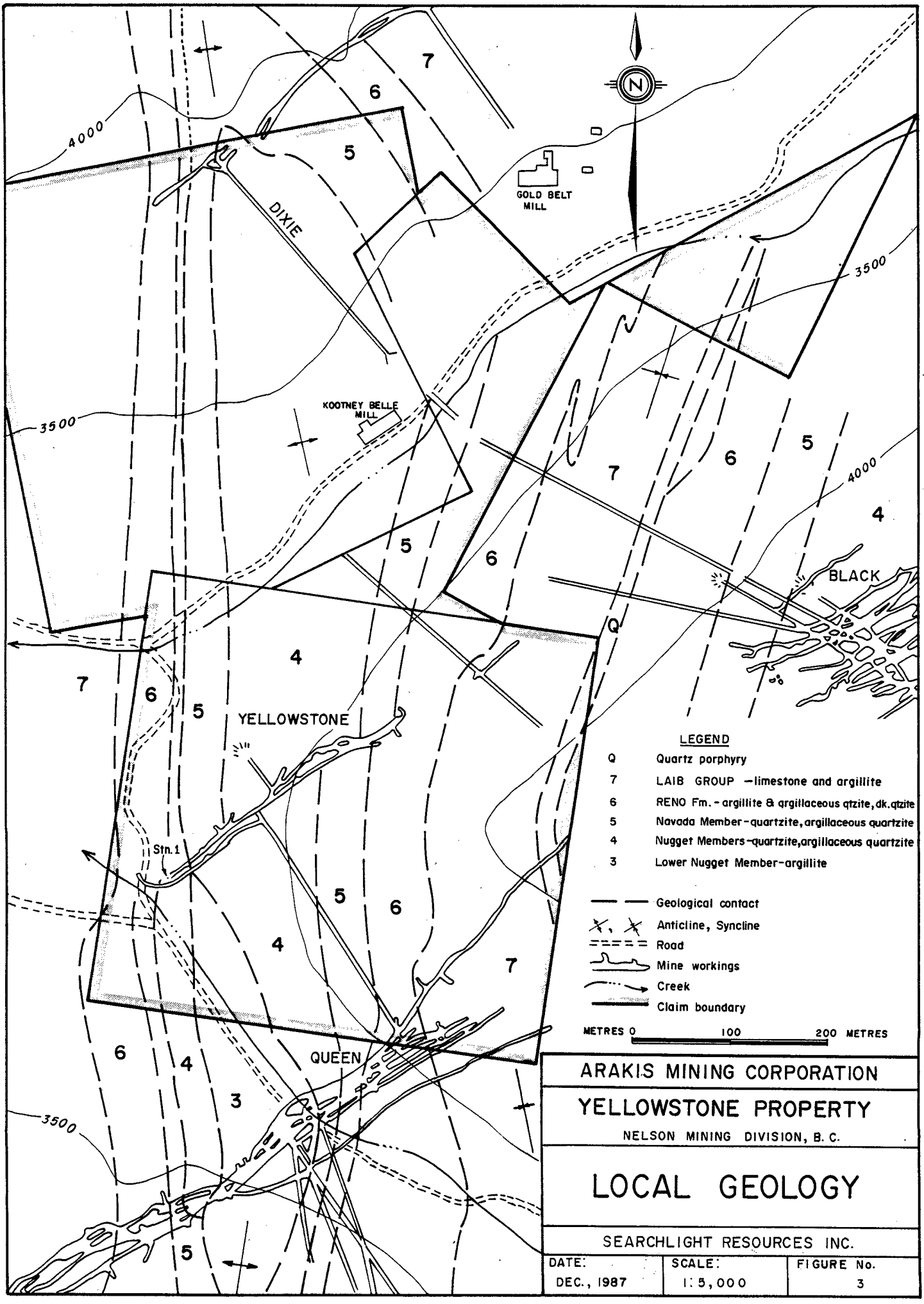
### Lithology and Structure

The Yellowstone workings expose massive to thinly bedded white to dark colored quartzite and argillaceous quartzite belonging to the Upper Nugget and Lower Navada members of the Precambrian Quartzite Range Formation. The Upper Nugget beds are made up predominantly of competent massive white quartzite containing minor impurities in the form of scattered muscovite flakes. The Lower Navada member comprises dark thinly bedded quartzite and argillaceous quartzite.

The sediments have been folded into a broad anticline whose axis bisects the claim from north to south. The sediments themselves strike just east of north and have been obliquely cut by a steep, variably south dipping strike-slip fault which has displaced the south wall as much as 46 metres to the west. Drag folds, previously interpreted as shears near the No. 3 level portal, are evident in the sediments adjacent to the fault, especially where bedding is obvious. Unfortunately, poor exposure in the underground workings and the close similarity of the members made the identification of lithological contacts difficult.

The Yellowstone fault was used as the lead on the No. 3 level, and forms either the north or south wall of the main drift for much of its length. Where the fault displaces massive quartzite east of station 5, the normally competent sediments have been shattered up to one metre into the north wall. This zone is bounded to the north by a series of related(?) fault splays which were also utilized by the original miners. Where observed, minor structures between the splays appear to parallel the main fault.

Although less common in the Sheep Creek camp, Lower Navada member sediments host the ore shoot between the surface and intermediate level of the Yellowstone mine. To date, no ore has been located in the more productive Upper Nugget quartzite presently exposed in the No. 3 level drift. Ore shoots stoped in the Queen mine were reported to be hosted by both Upper Nugget and Lower Navada member sediments, as well as quartzite assigned to the Upper Navada member.




ARAKIS MINING CORPORATION

# YELLOWSTONE PROPERTY

NELSON MINING DIVISION, B. C.

# LOCAL GEOLOGY

SEARCHLIGHT RESOURCES INC.

| DATE: | SCALE: | FIGURE No. |
|---|---|---|
| DEC., 1987 | 1:5,000 | 3 |

**Mineralization**

The Yellowstone vein, while nearly identical in most respects to many of the larger producers in the Sheep Creek district, has undergone only limited development since its discovery in 1896. Unlike the neighbouring Queen vein, which was productive over a vertical interval of approximately 300 metres, the Yellowstone was mined between the intermediate level and surface, a maximum distance of only 65 metres.

Although quartzite has been recrystallized along much of the fault, mineralized quartz introduced in solution has been observed only at the eastern end of the No. 3 level drift beginning approximately 4 metres east of station 10. Here, a vein dilates between two splays of the main fault. It is bound to the south by a thin seam of pyritic gouge and to the north by up to 0.1 metres of sericitic schistose sediments(?), both of which separate the vein from dark, thinly bedded quartzite on the hanging and footwalls. Just west of station 11, the vein splays into two. The main vein, which has widened to approximately 1.25 metres, continues into the north wall and is encountered again in a crosscut at station 13. From this cut, the vein continues for approximately 26 metres to the east before encountering a cross fault dipping $45^{o}$ to the west. Although discontinuous quartz veining was observed east of the fault, it is not clear whether this fault postdates the emplacement of the vein.

The southern and smaller splay, which varies from 0.12 to 0.28 metres in width, continues for 40 metres east of station 11, following a $084^{o}$ trending, steeply dipping fault for the majority of this distance. This vein likely represents a small offshoot of the main vein (see Figure 8). Just west of the face, the splay appears to be offset by the same cross fault encountered in the north drift. As no veining was observed east of this fault, it is probable that displacement has occurred, although the amount and direction have yet to be determined.

The veining comprises milky white medium to coarse grained quartz containing accessory muscovite, sericite and ankerite. Evidence suggests that this quartz has been introduced in solution along the fault and has been deformed and recrystallized, possibly the result of later fault movement. Late sulfide minerals, including pyrite and pyrrhotite with lesser marcasite, chalcopyrite and sphalerite, have subsequently been introduced into the quartz. The principle sulphides occur as long streaks paralleling the vein walls, in small fractures cutting obliquely across the vein, as irregular, nearly massive patches and as coarse disseminations. The other sulphides occur as fine disseminated grains near or within larger pyrite or pyrrhotite grains. A petrological report describing six quartz samples taken from the No. 3 level drift and vein intersections appears as Appendix 5.

Surface oxidation of these sulphides is reported to have taken place down to the intermediate level but is not apparent in fresh exposures along the No. 3 level drift. While removing most of the sulphides in the upper portions of the vein, oxidation appears to have had little or no effect on the precious metals.

Gold occurs in distinct shoots in its native form as isolated particles and in association with muscovite, ankerite and sulphides along distinct seams. Silver, in the form of argentite, occurs in association with gold as subrounded inclusions within sulfide grains and in irregular patches.

West of station 9A, sulfide mineralization in the wallrocks occurs only as rare veinlets and patchy disseminations. East of a point just west of station 9A, however, the pyrrhotite and pyrite content of the quartzite increases markedly. This increase, combined with groundwater seepage along the fracture system, has resulted in the precipitation of various iron oxides on the back and walls of the drift. Local sulfide concentrations within the shattered/remobilized quartzite exceed 40%, but generally average approximately 5%. East of the contact between the Upper Nugget and Lower Navada members on the north wall of the fault, the majority of the sulfide mineralization becomes confined to quartz veining previously described.

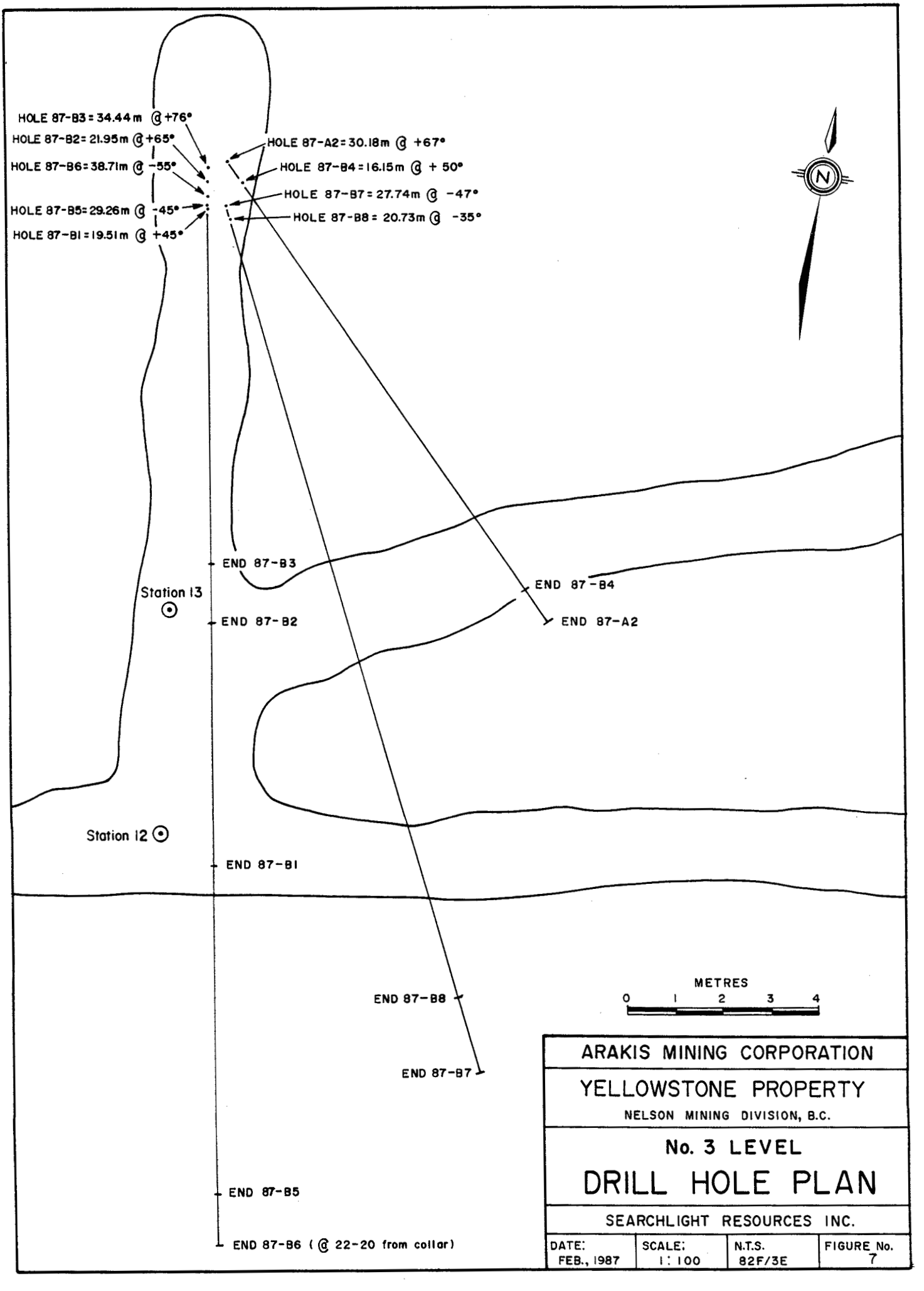
## RESULTS AND INTERPRETATIONS

Assay results from closely spaced channel samples taken along the No. 3 level drift confirmed the presence of elevated precious metal values in both splays of the Yellowstone vein as well as in several samples across recrystallized quartzite around station 9 (Figure 6). The best results were obtained from the south splay, where three consecutive samples graded better than 0.25 oz/ton gold, the best returning 0.356 oz/ton gold across 0.16 metres. Samples across the main vein also returned anomalous values, including 0.122 oz/ton gold across 1.31 metres and 0.100 oz/tongold across 1.37 metres. The best value obtained across recrystallized quartzite was 0.136 oz/ton gold across 0.89 metres. Complete assay results can be found in Appendices 1 through 3.

While the grade and continuity of the shoot on this level were not as good as that reported in the upper workings, ore grade veining was rarely continuous in even the most productive mines in the Sheep Creek camp. With this in mind, nine diamond drill holes (8 BQ & 1 AQ) were commenced from a station established in the north crosscut to test the grade and width of the vein both above and below the drift level (Figures 7 & 8). While significant intersections of sulphide rich quartz veining up to 8.53 metres were recovered in all of these holes, precious metal values were generally low. Some of the better intersections include:

| DRILL HOLE | INTERVAL | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-B1 | 10.59 - 11.00 | vein | 32254 | 0.110 | 0.12 |
| 87-B4 | 11.59 - 12.19 | vein | 32284 | 0.100 | 0.01 |
| 87-B8 | 14.63 - 15.24 | vein | 32350 | 0.102 | 0.02 |
| 87-B1 | 9.75 - 11.58 | sludge | 32351 | 0.345 | 0.03 |
| 87-B3 | 32.92 - 35.97 | sludge | 32368 | 0.170 | 0.09 |
| 87-A2 | 28.65 - 29.87 | sludge | 32378 | 0.098 | 0.02 |
| 87-B4 | 11.28 - 12.80 | sludge | 32381 | 0.136 | 0.03 |
| 87-B8 | 13.11 - 14.63 | sludge | 32409 | 0.168 | 0.04 |
| 87-B8 | 14.63 - 16.15 | sludge | 32410 | 0.124 | 0.02 |

It is interesting to note that several of the anomalous sludge samples were collected across intervals where the vein itself carried little or no precious metal values. This appears to indicate that gold is being lost in the cuttings, a factor that should be considered when additional drilling is carried out.




ARAKIS MINING CORPORATION

YELLOWSTONE PROPERTY

NELSON MINING DIVISION, B.C.

No. 3 LEVEL

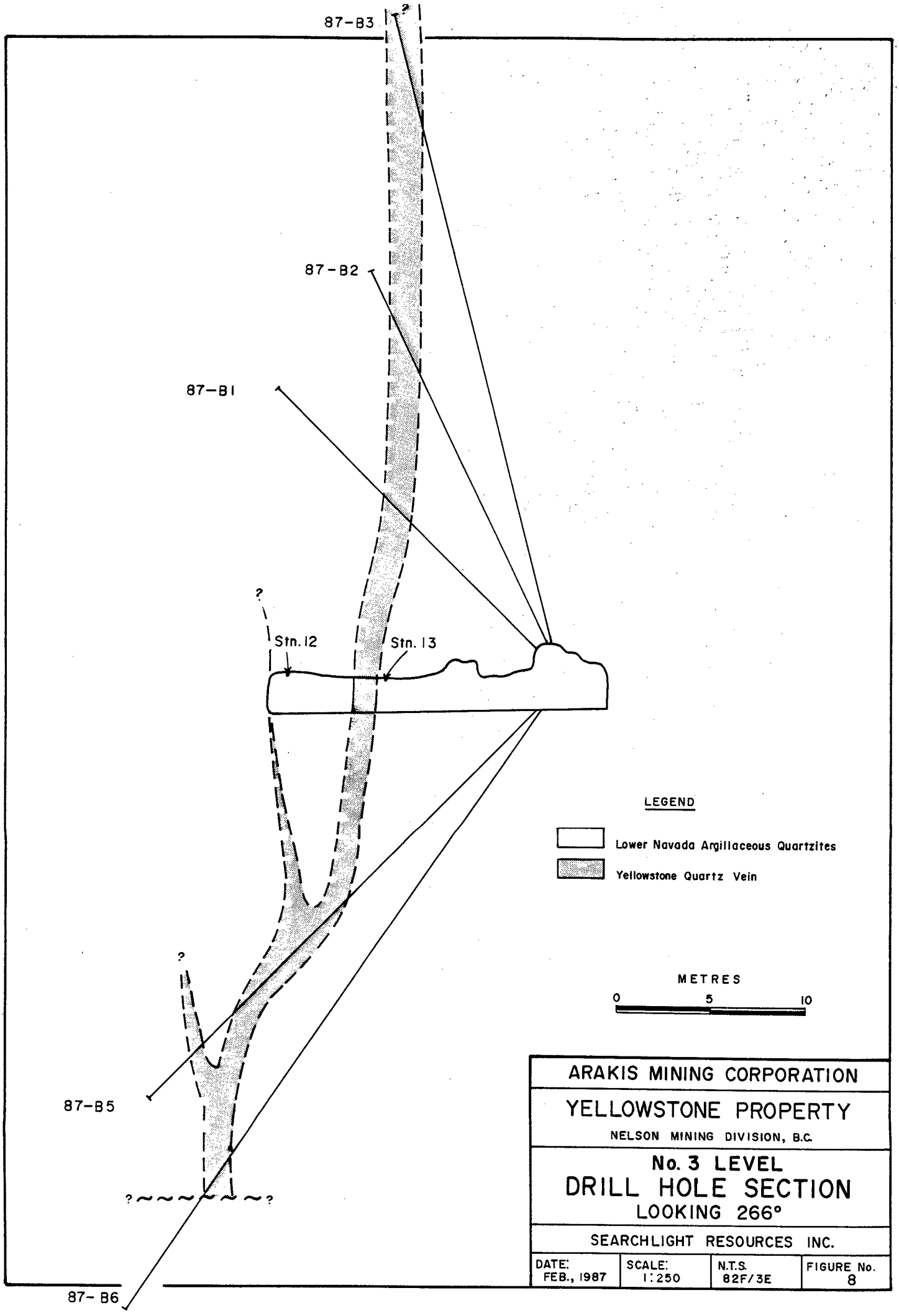
# DRILL HOLE PLAN

SEARCHLIGHT RESOURCES INC.

| DATE: | SCALE: | N.T.S. | FIGURE No. |
|---|---|---|---|
| FEB., 1987 | 1 : 100 | 82F/3E | 7 |

With the exception of their gold and silver content, most of the vein intersections were mineralogically similar to the ore grade mineralization described in Bulletin 31 (Mathews, 1953). It would appear that the lithological and/or structural control(s) necessary for the localization of ore were not ideal when vein emplacement occurred along this section of the fault. Although unusual in the camp, this control may be the argillaceous quartzites known to occupy the hangingwall of the ore shoot in the upper workings.

It is also possible that the veining around the No. 3 level represents an unprofitable section within a larger ore shoot. Such sections were commonly encountered in some of the larger mines, including the Queen and Reno. This does not, however, indicate a lack of potential within favourable stratigraphy elsewhere along the fault, especially where argillaceous quartzites occur.




ARAKIS MINING CORPORATION

YELLOWSTONE PROPERTY

NELSON MINING DIVISION, B.C.

No. 3 LEVEL

DRILL HOLE SECTION

LOOKING 266°

SEARCHLIGHT RESOURCES INC.

| DATE: | SCALE: | N.T.S. | FIGURE No. |
|---|---|---|---|
| FEB., 1987 | 1:250 | 82F/3E | 8 |

## CONCLUSIONS

While limited success was had in defining extensions of the Yellowstone ore shoot below the intermediate level, important conclusions can be drawn as a result of the 1987 assessment programme:

1. A large proportion of the 'veining' observed in the No. 3 level drift is believed to have developed through the recrystallization of quartzitic wallrock brought about as a result of fault movement. Mineralized quartz introduced along the fault was only noted near the east end of the drift. Such a differentiation may be important in understanding the controls and distribution of ore along the fault.

2. Although the veining intersected in drill holes from the No. 3 level drift contained elevated precious metal values, the grade and continuity were not sufficiently high enough to constitute ore.

3. It appears that wallrock lithology has had at least some control on the localization of ore within the vein. If this is the case, the shoot mined in the upper workings should rake with the dip of the sediments. Since most of the productive veins in the district had sections which could not be mined profitably, it is unlikely that the grade of the down rake extension(s) of this shoot will be constant or necessarily sufficient to constitute ore. This is apparently the case where it was encountered on the No. 3 level.

4. As the grade of the veining sampled near the east end of the No. 3 level drift appears to be better where the Yellowstone fault trends more easterly, it is possible that structure also influenced the localization of ore.

5. There is still significant potential for the discovery of additional ore grade veining along the Yellowstone fault, where the necessary controls are present. The best target is thought to be where Lower and possibly Upper Navada sediments have been displaced by the main fault. To test this target, additional drilling will be required east of and below the face of the No. 3 level drift.

**COST STATEMENT**

DIRECT COSTS:

| | | |
|---|---|---|
| Room - | | |
| 126 mandays @ $10.00 | $1,260.00 | |
| Board | $2,314.83 | |
| Shift boss wages - | | |
| 15 days @ $100.00 | $1,500.00 | |
| Supplies, consumables | $2,617.92 | |
| Analytical expenses - | | |
| 128 rock/core for Au, Ag @ $14.50 | $1,856.00 | |
| 60 sludge for Au, Ag @ $16.50 | $990.00 | |
| 10 sludge for Au, Ag @ $14.50 | $145.00 | |
| Petrographic work - | | |
| 6 sections | $465.50 | |
| Truck rental - | | |
| 1 month @ $800.00 | $800.00 | |
| 9 days @ $26.67 | $240.00 | |
| 2199 km @ $0.12 | $263.88 | |
| Insurance, tax & gasoline | $233.62 | |
| Fuel and other transportation | $5,089.43 | |
| Equipment rental - | | |
| Loader/backhoe: 10 hours @ 72.00 | $720.00 | |
| Surveying equipment | $177.50 | |
| Snow plow | $635.00 | |
| Core Splitter | $50.00 | |
| Snowmobile | $160.00 | |
| Propane heater | $192.60 | |
| Air Drill | $50.00 | |
| Low bed: 7.5 hours @ 83.00 | $622.50 | |
| Surveying expenses & maps | $880.50 | |
| Drafting - | | |
| 18.5 hrs @ $25.00 | $462.50 | |
| Supplies | $87.50 | |
| Office expense, accounting | $1,364.50 | |
| Telephone | $453.32 | |
| Sub-total | $23,631.50 | |
| Management fee (20% direct costs) | $4,726.30 | |
| TOTAL DIRECT COSTS | | $28,357.80 |

CONTRACT EXPENSES:

| | | |
|---|---|---|
| Kalmikoff Diamond Drilling | $15,667.50 | |
| McCrory Holdings | | |
| Wages - | | |
| M. Nielsen: January 14 to February 28, 1987 | | |
| 2 days @ $150.00 | $300.00 | |
| 40 days @ $250.00 | $10,000.00 | |
| B. Buchannan: January 15 to February 28, 1987 | | |
| 1 day @ $150.00 | $150.00 | |
| 31.5 days @ $250.00 | $7,875.00 | |
| Truck rental - | | |
| 34.5 days @ $50.00 | $1,725.00 | |
| Honda ATC - | | |
| 1 day @ $30.00 | $30.00 | |
| Nemo Resources (Underground rehabilitation) | $35,720.51 | |
| Sub-total | $71,468.01 | |
| Management fee (10% contract expenses) | $7,146.80 | |
| TOTAL CONTRACT EXPENSES | | $78,614.81 |
| WAGES: | | |
| D. Nelles: January 15 to February 28, 1987 | | |
| 11.8 days @ $187.50 | $2,212.50 | |
| 32.0 days @ $225.00 | $7,200.00 | |
| S. Coombes: January 16, 1987 | | |
| 0.2 days @ $187.50 | $37.50 | |
| TOTAL WAGES | | $9,450.00 |
| MISCELLANEOUS: | | |
| Survey equipment - | | |
| 2 days @ $50.00 | $100.00 | |
| Water pump - | | |
| 1 month @ $350.00 | $350.00 | |
| Camp gear - | | |
| 1 month @ $200.00 | $200.00 | |
| Computer & copying | $373.00 | |
| Engineering and supervision (F.M. Smith) | $2,792.88 | |
| TOTAL MISCELLANEOUS | | $3,815.88 |
| **TOTAL EXPENDITURE** | | **$120,238.49** |

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## CERTIFICATE OF QUALIFICATIONS

I, David M. Nelles, do hearby certify that:

1. I am a geologist employed by Searchlight Resources Inc with business offices at 218-744 West Hastings Street, Vancouver, British Columbia.

2. I graduated from the University of British Columbia in 1983 with a Bachelor of Science degree in Geology.

3. I have practiced my profession in Canada and the United States since graduation.

4. I was directly involved with all of the exploration work carried out on the Yellowstone property in January and February, 1987.

5. The program carried out on the Yellowstone property was recommended and supervised by F. Marshall Smith, a Professional Engineer with offices in Vancouver, British Columbia.

6. This report is based on data generated from this program, as well as references obtained from Yukon Minerals Corporation and the Geological Survey of Canada.

7. I presently have no interest in the properties or securities of Arakis Mining Corporation, nor do I expect, at any future time, to receive any.

David M. Nelles, B.Sc.
January 7, 1988

# APPENDIX 1

**Assay Results - No. 3 Level**

| Sample Number | Width (m) | Distance (m) from station | Gold (oz/ton) | Silver (oz/ton) |
|---|---|---|---|---|
| 23563 | 1.37 | 4.25 W of 13A | 0.100 | 0.01 |
| 23564 | 1.95 | 7.75 W of 13A | 0.080 | 0.03 |
| 23565 | 1.25 | 10.60 W of 13A | 0.058 | 0.03 |
| 23566 | 1.41 | 13.20 W of 13A | 0.044 | 0.03 |
| 23567 | 1.55 | 18.75 W of 13A | 0.030 | 0.01 |
| 23568 | 1.62 | 2.00 E of 13 | 0.012 | 0.01 |
| 23569 | 1.31 | .At 13 | 0.122 | 0.05 |
| 23570 | 0.12 | 1.95 W of 12A | 0.126 | 0.03 |
| 23571 | 0.26 | 4.20 W of 12A | 0.022 | <0.01 |
| 23572 | 0.28 | 7.70 W of 12A | 0.028 | <0.01 |
| 23573 | 0.21 | 12.65 W of 12A | 0.030 | <0.01 |
| 23574 | 0.16 | 7.75 E of 12 | 0.356 | 0.05 |
| 23575 | 0.19 | 4.25 E of 12 | 0.292 | 0.02 |
| 23576 | 0.12 | .At 12 | 0.252 | 0.06 |
| 23577 | 1.31 | 5.25 W of 9A | 0.034 | 0.07 |
| 23578 | 1.17 | .At 9A | 0.058 | 0.07 |
| 23579 | 1.13 | 5.10 E of 9A | 0.024 | 0.05 |
| 23580 | 1.93 | 9.40 E of 9A | 0.016 | 0.01 |
| 23581 | 1.67 | 16.30 E of 9A | 0.010 | 0.01 |
| 23582 | 1.58 | 14.25 W of 9 | 0.014 | <0.01 |
| 23583 | 2.21 | 9.80 W of 9 | 0.008 | 0.02 |
| 23584 | 0.89 | 2.75 W of 9 | 0.136 | 0.09 |
| 23585 | 1.17 | 4.40 E of 9 | 0.070 | 0.07 |
| 23586 | 1.86 | 12.05 W of 10 | 0.076 | 0.07 |
| 23587 | 0.45 | 5.00 W of 10 | 0.042 | 0.07 |
| 23588 | 0.97 | 5.00 W of 10 | 0.012 | 0.07 |
| 23589 | 0.44 | 1.25 W of 10 | 0.102 | 0.05 |
| 23590 | 0.57 | 6.45 E of 10 | 0.042 | 0.03 |

**Assay Results - No. 3 Level**
**(continued)**

| Sample Number | Width (m) | Distance (m) from station | Gold (oz/ton) | Silver (oz/ton) |
|---|---|---|---|---|
| 23591 | 0.41 | 10.85 E of 10 | 0.004 | 0.01 |
| 23592 | 0.43 | 6.10 W of 11 | 0.002 | 0.01 |
| 23593 | 1.27 | 2.45 W of 11 | 0.058 | <0.01 |
| 23594 | 1.55 | 9.55 W of 12 | 0.046 | <0.01 |
| 23595 | 0.17 | 8.10 W of 12 | 0.070 | 0.01 |
| 23596 | 0.17 | 4.50 W of 12 | 0.106 | 0.01 |
| 23597 | 0.13 | 0.20 W of 12A | 0.106 | 0.03 |
| 32301 | 1.83 | 17.50 E of 8A | <0.002 | 0.02 |
| 32302 | 0.41 | 7.50 E of 8A | 0.002 | <0.01 |
| 32303 | 1.32 | 5.90 E of 8A | 0.004 | <0.01 |
| 32304 | 1.34 | 1.35 W of 8A | 0.002 | <0.01 |
| 32305 | 1.50 | 10.15 W of 8A | 0.008 | 0.03 |
| 32306 | 0.27 | 5.40 W of 7A | 0.002 | 0.01 |
| 32307 | 1.20 | 5.40 W of 7A | 0.006 | <0.01 |
| 32308 | 1.05 | 4.50 E 0f 5 | 0.008 | <0.01 |

# APPENDIX 2

## Drilling Results

| DRILL HOLE | INTERSECTION | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-B1 | 8.76 - 9.40 | footwall | 32251 | 0.010 | 0.07 |
| 87-B1 | 9.40 - 10.00 | vein | 32252 | 0.042 | 0.10 |
| 87-B1 | 10.00 - 10.59 | vein | 32253 | 0.020 | 0.12 |
| 87-B1 | 10.59 - 11.00 | vein | 32254 | 0.110 | 0.12 |
| 87-B1 | 11.00 - 11.43 | vein | 32255 | 0.008 | 0.04 |
| 87-B1 | 11.43 - 12.04 | hangingwall | 32256 | 0.002 | 0.02 |
| 87-B2 | 15.12 - 15.73 | footwall | 32257 | 0.002 | 0.05 |
| 87-B2 | 15.73 - 16.34 | vein | 32258 | 0.006 | 0.03 |
| 87-B2 | 16.34 - 16.95 | vein | 32259 | 0.028 | 0.03 |
| 87-B2 | 16.95 - 17.56 | vein | 32260 | 0.024 | 0.03 |
| 87-B2 | 17.56 - 18.17 | vein | 32261 | 0.002 | 0.01 |
| 87-B2 | 18.17 - 18.78 | vein | 32262 | 0.008 | 0.01 |
| 87-B2 | 18.78 - 19.69 | vein/hw | 32263 | 0.020 | 0.02 |
| 87-B3 | 10.70 - 11.10 | small vein | 32321 | <.002 | <0.01 |
| 87-B3 | 22.30 - 23.52 | footwall | 32264 | 0.014 | <0.01 |
| 87-B3 | 23.52 - 24.74 | qtzite/vein | 32265 | 0.006 | <0.01 |
| 87-B3 | 24.74 - 25.96 | qtzite/vein | 32266 | 0.004 | <0.01 |
| 87-B3 | 25.96 - 27.18 | qtzite/vein | 32267 | 0.014 | <0.01 |
| 87-B3 | 27.18 - 28.40 | qtzite/vein | 32268 | 0.008 | <0.01 |
| 87-B3 | 28.40 - 29.01 | vein | 32269 | 0.008 | <0.01 |
| 87-B3 | 29.01 - 29.62 | vein | 32270 | 0.004 | <0.01 |
| 87-B3 | 29.62 - 30.23 | vein | 32271 | 0.012 | <0.01 |
| 87-B3 | 30.23 - 30.84 | vein | 32272 | 0.002 | <0.01 |
| 87-B3 | 30.84 - 31.45 | vein | 32273 | 0.012 | <0.01 |
| 87-B3 | 31.45 - 32.06 | vein | 32274 | 0.020 | 0.06 |
| 87-B3 | 32.06 - 32.76 | vein | 32275 | 0.006 | <0.01 |
| 87-B3 | 32.76 - 33.00 | vein | 32276 | 0.024 | <0.01 |
| 87-B3 | 33.00 - 33.61 | vein | 32277 | 0.022 | <0.01 |
| 87-B3 | 33.61 - 34.44 | vein | 32278 | 0.018 | <0.01 |

## Drilling Results
## (continued)

| DRILL HOLE | INTERSECTION | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-A2 | 18.90 - 19.81 | footwall | 32279 | 0.004 | <0.01 |
| 87-A2 | 19.81 - 21.03 | vein | 32280 | 0.006 | <0.01 |
| 87-A2 | 21.03 - 21.94 | hangingwall | 32281 | 0.006 | <0.01 |
| | | | | | |
| 87-B4 | 9.75 - 10.98 | footwall | 32282 | 0.016 | <0.01 |
| 87-B4 | 10.98 - 11.59 | vein | 32283 | 0.014 | 0.01 |
| 87-B4 | 11.59 - 12.19 | vein | 32284 | 0.100 | 0.01 |
| 87-B4 | 12.19 - 12.80 | vein | 32285 | 0.066 | <0.01 |
| 87-B4 | 12.80 - 13.26 | vein | 32286 | 0.002 | <0.01 |
| 87-B4 | 13.26 - 14.33 | hangingwall | 32287 | 0.004 | <0.01 |
| | | | | | |
| 87-B5 | 13.65 - 14.33 | footwall | 32288 | <.002 | <0.01 |
| 87-B5 | 14.33 - 15.24 | vein | 32289 | <.002 | <0.01 |
| 87-B5 | 15.24 - 16.16 | vein | 32290 | <.002 | <0.01 |
| 87-B5 | 16.16 - 17.07 | vein | 32291 | <.002 | <0.01 |
| 87-B5 | 17.07 - 17.99 | vein | 32292 | 0.002 | <0.01 |
| 87-B5 | 17.99 - 18.90 | vein | 32293 | <.002 | <0.01 |
| 87-B5 | 18.90 - 19.35 | vein | 32294 | <.002 | <0.01 |
| 87-B5 | 19.35 - 20.42 | vein | 32295 | 0.004 | 0.01 |
| 87-B5 | 20.42 - 21.34 | vein | 32296 | <.002 | 0.01 |
| 87-B5 | 21.34 - 22.10 | vein | 32297 | 0.002 | <0.01 |
| 87-B5 | 22.10 - 22.86 | vein | 32298 | <.002 | <0.01 |
| | 22.86 - 24.38 | core lost | | | |
| 87-B5 | 24.38 - 25.25 | wallrock | 32299 | 0.002 | <0.01 |
| 87-B5 | 25.25 - 26.13 | vein | 32300 | <.002 | <0.01 |
| 87-B5 | 26.13 - 27.74 | hangingwall | 32320 | <.002 | <0.01 |
| | | | | | |
| 87-B6 | 28.05 - 28.96 | footwall | 32322 | <.002 | <0.01 |
| 87-B6 | 28.96 - 29.57 | vein | 32323 | <.002 | <0.01 |
| 87-B6 | 29.57 - 30.18 | vein | 32324 | 0.014 | <0.01 |
| 87-B6 | 30.18 - 30.79 | vein | 32325 | 0.042 | <0.01 |

## Drilling Results
## (continued)

| DRILL HOLE | INTERSECTION | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-B6 | 30.79 - 31.34 | vein | 32326 | 0.004 | 0.01 |
| 87-B6 | 31.34 - 32.31 | hw/fault? | 32327 | <.002 | <0.01 |
| 87-B6 | 32.31 - 33.22 | hangingwall | 32328 | <.002 | <0.01 |
| | | | | | |
| 87-B7 | 11.28 - 12.19 | footwall | 32329 | <.002 | <0.01 |
| 87-B7 | 12.19 - 12.80 | vein | 32330 | <.002 | <0.01 |
| 87-B7 | 12.80 - 13.41 | vein | 32331 | <.002 | <0.01 |
| 87-B7 | 13.41 - 14.02 | vein | 32332 | <.002 | <0.01 |
| 87-B7 | 14.02 - 14.63 | vein | 32333 | 0.012 | 0.02 |
| 87-B7 | 14.63 - 15.24 | vein | 32334 | 0.002 | 0.03 |
| 87-B7 | 15.24 - 15.85 | vein | 32335 | <.002 | <0.01 |
| 87-B7 | 15.85 - 16.76 | vein | 32336 | <.002 | <0.01 |
| 87-B7 | 16.76 - 17.52 | vein | 32337 | <.002 | <0.01 |
| 87-B7 | 17.52 - 18.28 | vein | 32338 | 0.004 | <0.01 |
| 87-B7 | 18.28 - 19.81 | vein | 32339 | <.002 | <0.01 |
| 87-B7 | 19.81 - 21.34 | vein | 32340 | 0.002 | <0.01 |
| 87-B7 | 21.34 - 22.25 | hangingwall | 32341 | 0.002 | <0.01 |
| | | | | | |
| 87-B8 | 7.54 - 8.45 | footwall | 32342 | <.002 | <0.01 |
| 87-B8 | 8.45 - 10.06 | vein | 32343 | 0.032 | <0.01 |
| 87-B8 | 10.06 - 11.58 | vein | 32344 | 0.010 | 0.02 |
| 87-B8 | 11.58 - 12.19 | vein | 32345 | 0.006 | <0.01 |
| 87-B8 | 12.19 - 12.80 | vein | 32346 | <.002 | <0.01 |
| 87-B8 | 12.80 - 13.41 | vein | 32347 | <.002 | <0.01 |
| 87-B8 | 13.41 - 14.02 | vein | 32348 | 0.004 | <0.01 |
| 87-B8 | 14.02 - 14.63 | vein | 32349 | 0.048 | 0.02 |
| 87-B8 | 14.63 - 15.24 | vein | 32350 | 0.102 | 0.02 |
| 87-B8 | 15.24 - 16.05 | vein | 32401 | 0.046 | <0.01 |
| 87-B8 | 16.05 - 16.81 | wallrock | 32402 | 0.012 | 0.03 |
| 87-B8 | 16.81 - 17.58 | vein | 32403 | 0.048 | 0.02 |
| 87-B8 | 17.58 - 18.49 | hangingwall | 32404 | 0.010 | <0.01 |

# APPENDIX 3

## Sludge Sample Results

| DRILL HOLE | INTERVAL | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-B1 | 9.75 - 11.58 | vein | 32351 | 0.345 | 0.03 |
| 87-B1 | 11.58 - 13.11 | vein/hw | 32352 | 0.024 | 0.02 |
| 87-B1 | 13.11 - 14.33 | hangingwall | 32353 | 0.012 | <0.01 |
| 87-B1 | 14.33 - 16.46 | hangingwall | 32354 | 0.002 | <0.01 |
| 87-B1 | 16.46 - 17.98 | hangingwall | 32355 | <.002 | <0.01 |
| 87-B1 | 17.98 - 19.51 | hangingwall | 32356 | 0.004 | <0.01 |
| 87-B2 | 14.33 - 15.85 | footwall | 32357 | 0.006 | 0.01 |
| 87-B2 | 15.85 - 17.37 | vein | 32358 | 0.042 | 0.07 |
| 87-B2 | 17.37 - 18.90 | vein | 32359 | 0.016 | 0.01 |
| 87-B2 | 18.90 - 20.42 | vein | 32360 | 0.054 | 0.03 |
| 87-B2 | 20.42 - 21.95 | hangingwall | 32361 | 0.016 | <0.03 |
| 87-B3 | 25.30 - 26.82 | fw/veinlets | 32362 | 0.064 | 0.04 |
| 87-B3 | 26.82 - 28.35 | fw/veinlets | 32363 | 0.038 | 0.01 |
| 87-B3 | 28.35 - 29.87 | vein | 32364 | 0.012 | <0.01 |
| 87-B3 | 29.87 - 31.24 | vein | 32365 | 0.018 | 0.02 |
| 87-B3 | 31.24 - 32.31 | vein | 32366 | 0.050 | 0.03 |
| 87-B3 | 32.31 - 32.92 | vein | 32367 | 0.072 | 0.04 |
| 87-B3 | 32.92 - 35.97 | vein | 32368 | 0.170 | 0.09 |
| | | lost hole | | | |

**Sludge Sample Results**
**(continued)**

| DRILL HOLE | INTERVAL | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-A2 | 16.46 - 17.98 | footwall | 32370 | 0.016 | <0.01 |
| 87-A2 | 17.98 - 19.81 | footwall | 32371 | 0.010 | <0.01 |
| 87-A2 | 19.81 - 21.03 | vein | 32372 | 0.014 | <0.01 |
| 87-A2 | 21.03 - 22.56 | hangingwall | 32373 | 0.022 | <0.01 |
| 87-A2 | 22.56 - 24.08 | hangingwall | 32374 | 0.012 | <0.01 |
| 87-A2 | 24.08 - 25.60 | hangingwall | 32375 | 0.048 | <0.01 |
| 87-A2 | 25.60 - 27.12 | hangingwall | 32376 | 0.022 | <0.01 |
| 87-A2 | 27.12 - 28.65 | hangingwall | 32377 | 0.020 | <0.01 |
| 87-A2 | 28.65 - 29.87 | hangingwall | 32378 | 0.098 | 0.02 |
| 87-A2 | 29.87 - 30.16 | hangingwall | 32379 | 0.048 | 0.03 |
| 87-B4 | 9.75 - 11.28 | fw/vein | 32380 | 0.022 | 0.01 |
| 87-B4 | 11.28 - 12.80 | vein | 32381 | 0.136 | 0.03 |
| 87-B4 | 12.80 - 14.33 | vein/hw | 32382 | 0.030 | <0.01 |
| 87-B4 | 14.33 - 16.15 | hangingwall | 32383 | 0.016 | <0.01 |
| 87-B5 | 11.28 - 12.80 | footwall | 32384 | 0.002 | <0.01 |
| 87-B5 | 12.80 - 14.32 | footwall | 32385 | <.002 | <0.01 |
| 87-B5 | 14.32 - 15.85 | vein | 32386 | 0.002 | <0.01 |
| 87-B5 | 15.85 - 17.37 | vein | 32387 | <.002 | 0.01 |
| 87-B5 | 17.37 - 18.90 | vein | 32388 | 0.004 | 0.04 |
| 87-B5 | 18.90 - 20.42 | vein | 32389 | <.002 | 0.02 |
| 87-B5 | 20.42 - 22.86 | vein | 32390 | 0.002 | <0.01 |
| 87-B5 | 22.86 - 24.38 | wallrock | 32391 | <.002 | <0.01 |
| 87-B5 | 22.86 - 24.38 | re-grind | 32392 | <.002 | <0.01 |
| 87-B5 | 24.38 - 26.52 | wr/vein | 32393 | <.002 | <0.01 |
| 87-B5 | 26.52 - 27.74 | hangingwall | 32394 | 0.002 | 0.01 |
| 87-B5 | 27.74 - 29.26 | hangingwall | 32395 | <.002 | 0.01 |

**Sludge Sample Results**
**(continued)**

| DRILL HOLE | INTERVAL | DESCRIPTION | SAMPLE | Oz/T Au | Oz/T Ag |
|---|---|---|---|---|---|
| 87-B6 | 17.07 - 20.12 | footwall | 23598 | 0.002 | <0.01 |
| 87-B6 | 20.12 - 23.16 | footwall | 23599 | <.002 | <0.01 |
| 87-B6 | 23.16 - 26.21 | footwall | 23600 | <.002 | <0.01 |
| 87-B6 | 26.21 - 27.74 | footwall | 32396 | <.002 | <0.01 |
| 87-B6 | 27.74 - 29.26 | fw/vein | 32397 | 0.002 | <0.01 |
| 87-B6 | 29.26 - 30.78 | vein | 32398 | 0.056 | 0.02 |
| 87-B6 | 30.78 - 32.31 | vein/hw | 32399 | 0.014 | 0.02 |
| 87-B6 | 32.31 - 33.53 | hangingwall | 32400 | 0.010 | <0.01 |
| 87-B7 | 10.36 - 11.89 | footwall | 32309 | 0.006 | <0.01 |
| 87-B7 | 11.89 - 13.41 | fw/vein | 32310 | 0.004 | 0.01 |
| 87-B7 | 13.41 - 14.94 | vein | 32311 | 0.020 | 0.07 |
| 87-B7 | 14.94 - 16.76 | vein | 32312 | <.002 | 0.01 |
| 87-B7 | 16.76 - 18.29 | vein | 32313 | 0.002 | <0.01 |
| 87-B7 | 18.29 - 19.81 | vein | 32314 | 0.004 | 0.01 |
| 87-B7 | 19.81 - 21.34 | vein | 32315 | 0.020 | 0.02 |
| 87-B7 | 21.34 - 22.86 | hangingwall | 32316 | 0.006 | 0.01 |
| 87-B7 | 22.86 - 24.38 | hangingwall | 32317 | <.002 | <0.01 |
| 87-B7 | 24.38 - 25.91 | hangingwall | 32318 | 0.002 | 0.02 |
| 87-B8 | 7.01 - 8.53 | footwall | 32405 | 0.006 | <0.01 |
| 87-B8 | 8.53 - 10.06 | vein | 32406 | 0.010 | <0.01 |
| 87-B8 | 10.06 - 11.58 | vein | 32407 | 0.036 | 0.01 |
| 87-B8 | 11.58 - 13.11 | vein | 32408 | 0.022 | <0.01 |
| 87-B8 | 13.11 - 14.63 | vein | 32409 | 0.168 | 0.04 |
| 87-B8 | 14.63 - 16.15 | vein | 32410 | 0.124 | 0.02 |
| 87-B8 | 16.15 - 17.68 | wr/vein | 32411 | 0.064 | 0.02 |
| 87-B8 | 17.68 - 20.73 | hangingwall | 32412 | 0.070 | 0.01 |

# APPENDIX 4

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo, B.C. | District: Nelson | Hole No.: 87-A1 | Length: 18.29 m (60')
Commenced: 5/2/87 | Completed: 6/2/87 | Core Size: AQ | True Bearing: 162.5° | Corr. Dip: +2°
Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:
% Recovery: | Collar Dip: +2° | Date: 12/2/87 | Objective: Test geology to South of YS fault

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1.22 | Reamed | 0→1.22 | - | | | | | | | |
| | | | fine grained | 3.05 | 95 | | | | | | | |
| | 1.22 | 2.40 | Thinly bedded, argillaceous quartzite with chloritic argillite partings and pervasive fine-coarsely disseminated & streaked pyrite (0-10%). Bedding at ~15° // Dk green color. Blocky core | 4.57 | 100 | | | | | | | |
| | | | | 6.10 | 100 | | | | | | | |
| | | | | 7.62 | 80 | | | | | | | |
| | | | | 9.14 | 80 | | | | | | | |
| | | | | 10.67 | 100 | | | | | | | |
| | | | | 12.19 | 100 | | | | | | | |
| | | | | 13.72 | 90 | | | | | | | |
| | 2.40 | 3.05 | Light grey massive quartz vein(s) approximating core axis | 15.24 | 60 | | | | | | | |
| | | | Local pyrite associated with argillaceous quartzite wall rocks | 16.46 | 75 | | | | | | | |
| | | | True thickness appears to be < 5 cm | 17.98 | 75 | | | | | | | |
| | 3.05 | 18.29 | Same as 1.22 → 2.40 | 18.29 | 90 | | | | | | | |
| | | | End of Hole | | | | | | | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 12/2/87
Checked by: | Date:
Hole No.: 87-A1
Page: 1 of: 1

# DRILL HOLE RECORD

Property: Yellowjacket | Location: Salmo B.C. | District: Nelson | Hole No.: 87-B1 | Length: 19.51m (64')
Commenced: 9/2/87 | Completed: 10/2/87 | Core Size: BQ | True Bearing: 176 | Corr. Dip: +45°
Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:
% Recovery: | Collar Dip: +45° | Date: 12/2/87 | Objective: To intersect YS vein(s) ~ 8m above #3 level

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | ANALYSIS Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0.3 | Reamed | 0→0.3 | – | | | | | |
| | | | fine grained (vein serpentine?) | 3.35 | 100 | | | | | |
| | 0.3 | 9.4 | Massive – thinly bedded, 'dirty' granite w/ chloritic parting. Med. green grey w/ local disseminated & patchy pyrite. Bedding @ ~30°. Intense chloritization near vein footwall | 4.88 | 95 | | | | | |
| | | | | 6.10 | 100 | | | | | |
| | | | | 6.71 | 85 | | | | | |
| | | | | 8.23 | 95 | 8.76 – 9.40 | 32251 | 0.64 | | |
| | | | | 10.67 | 100 | 9.40 – 10.0 | 52 | 0.60 | | |
| | 9.40 | 11.43 | Massive translucent – opaque white quartz vein with local patchy pyrite associated with chlorite | 11.58 | 100 | 10.0 – 10.59 | 53 | 0.59 | | |
| | | | | 13.11 | 95 | 10.59 – 11.0 | 54 | 0.41 | | |
| | | | Pyrite < 3% overall but as much as 15% near vein walls | 14.33 | 100 | 11.0 – 11.43 | 55 | 0.43 | | |
| | | | | 16.46 | 85 | 11.43 – 12.04 | 56 | 0.61 | | |
| | | | | 17.98 | 95 | | | | | |
| | | | | 19.51 | 95 | | | | | |
| | 11.43 | 19.51 | Same as 0.3 – 9.37. Bedding @ EoH ~ 10° | | | | | | | |
| | | | End of Hole | | | | | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 12/2/87
Checked by: | Date:
Hole No.: 87-B1 | Page: 1 of 1

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo BC | District: Nelson | Hole No.: 87-BZ | Length: 21.95 (72')
Commenced: 10/2/87 | Completed: 11/2/87 | Core Size: BQ | True Bearing: 176 | Corr. Dip:
Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:
% Recovery: | Collar Dip: +65 | Date: 13/2/87 | Objective: Intersect YS vein ~ 18 m above #3 level

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | ANALYSIS Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 0→ | | | | | | |
| | 0 | 10.70 | Light to dark grey fine-coarsely bedded fine grained 'dirty' quartzite. Bedding @ ~ 40°. Local white | 2.74 | 95 | | | | | |
| | | | interbeds (possibly veinlets // paralleling bedding) and 'vein | 3.35 | 100 | | | | | |
| | | | serpentinite' parting. V. Minor pyrite. Core becomes | 3.96 | 100 | | | | | |
| | | | more blocky 'towards vein. | 5.18 | 90 | | | | | |
| | | | | 6.71 | 100 | | | | | |
| | | | | 8.23 | 100 | | | | | |
| | | | | 9.75 | 100 | | | | | |
| | 10.70 | 15.73 | Serpentinized core. Alteration incr. toward vein | 11.28 | 100 | | | | | |
| | | | Extremely blocky, dark green soft rock with | 12.80 | 100 | | | | | |
| | | | pearly luster. Relic bedding visible. | 14.33 | 95 | 15.2-15.73 | 32257 | 0.61 | | |
| | | | | 15.85 | 100 | 15.73-16.34 | 58 | 0.61 | | |
| | | | lt. grey | 17.37 | 90 | 16.34-16.95 | 59 | 0.61 | | |
| | 15.73 | 19.40 | White massive fg. quartz vein with pyritic 'vein | 18.90 | 95 | 16.95-17.56 | 60 | 0.61 | | |
| | | | serpentine' patches & parting. Minor sections of | 20.42 | 100 | 17.56-18.17 | 61 | 0.61 | | |
| | | | altered wallrx (green gabbites?) Total sulfides < 3% | 21.95 | 100 | 18.17-18.76 | 62 | 0.61 | | |
| | | | hanging wall/vein 'contact appears transitional | | | 18.78-19.69 | 63 | 0.91 | | |
| | | | | | | | | | | |
| | 19.40 | 21.95 | Same as '0-10.70. Section includes a 10 cm (true width) | | | | | | | |
| | | | white quartz vein approximately paralleling bedding | | | | | | | |
| | E.O.H | | @ 20.55 m. Scattered pyrite above w/ serpentine patches. | | | | | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Checked by: | Hole No.: 87-BZ
Date: 13/2/87 | Date: | Page: 1 of: 1

# DRILL HOLE RECORD

Property: Yellow Stone | Location: Salmo, B.C. | District: Nelson | Hole No.: 87-33 | Length: 34.44 (113')

Commenced: 11/2/87 | Completed: | Core Size: BQ | True Bearing: 176° | Corr. Dip:

Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:

% Recovery: | Collar Dip: +76 | Date: 15/2/87 | Objective: Intersect YS vein midway between level 2 & 3

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | ANALYSIS Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 2.75 | Reamed | 0→ | | | | | | |
| | | | | 2.75 | = | | | | | |
| | 2.75 | 10.70 | Light grey – dark green massive – thinly bedded f.g. argillaceous graphitic. Bedding @ ~ 30°. Minor patchy pyrite. Widespread chlorite (?) partings. ↓ Serpentine. | 3.35 | 100 | | | | | |
| | | | | 4.88 | 100 | | | | | |
| | | | | 6.40 | 95 | | | | | |
| | | | | 7.92 | 95 | | | | | |
| | | | | 9.45 | 95 | | | | | |
| | | | | 10.06 | 100 | 10.70–11.10 | 32321 | | | |
| | 10.70 | 11.16 | Quartz vein @ ~ 45°. ~ White quartz with irregular patches of pyrite/chlorite (?) including a 20 cm section of chlorite w/ pyrite near center of vein. Total sulfides ~ 5% | 11.58 | 95 | | | | | |
| | | | | 13.11 | 100 | | | | | |
| | | | | 14.63 | 100 | | | | | |
| | | | | 16.15 | 100 | | | | | |
| | | | | 17.68 | 100 | | | | | |
| | | | | 19.20 | 100 | | | | | |
| | 11.10 | 18.10 | Dark bedded argillaceous graphite with serpentine partings & patchy pyrite. Increasingly bedding @ ~ 40° | 20.73 | 95 | 22.30–23.52 | 32264 | | | |
| | | | | 22.25 | 95 | 23.52–24.74 | 65 | | | |
| | | | | 23.77 | 100 | 24.74–25.96 | 66 | | | |
| | | | Local massive sections | 25.30 | 100 | 25.96–27.18 | 67 | | | |
| | | | | 26.82 | 60 | 27.18 28.40 | 68 | | | |
| | | | | 28.35 | 85 | 28.40–29.01 | 69 | | | |
| | | | | 29.87 | 95 | 29.01–29.62 | 70 | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 15/2/87 | Checked by: | Date: | Hole No.: 87-33 | Page: 1 of 2

# DRILL HOLE RECORD

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample interval | Sample No. | Length | ANALYSIS Au-oz/ton | ANALYSIS Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 18.10 | 28.40 | Increasingly altered argillaceous granite. Med-dk grey foliated/laminated granite with local irregular granite veinlets increasing in number towards 28.40m. Minor disseminated pyrite (locally up to 3%) localized in and around granite veinlets. Broken blocky core from ~22.0m → Extensive devit of serpentine through this section | 29.87→ | | 29.62-30.23 | 32271 | | | |
| | | | | 31.39 | 100 | 30.23-30.84 | 72 | | | |
| | | | | 32.31 | 100 | 30.84-31.45 | 73 | | | |
| | | | | 32.72 | 100 | 31.45-32.06 | 74 | | | |
| | | | | 34.44 | 100 | 32.06 32.67 | 75 | | | |
| | | | | | | 32.67 33.00 | 76 | | | |
| | | | | | | 33.0-33.61 | 77 | | | |
| | | | | | | 33.61-34.44 | 32278 | | | |
| | 28.40 | 34.44 | Lt grey fine grained massive granite vein with coarsely disseminated pyrite (total ~ 3-5%) and altered local vein serpentine. Relatively competent core | | | | | | | |
| | | | Lost hole when drill bit broke - could not re-enter. Hole finished in vein | | | | | | | |
| | | | EOH | | | | | | | |

Project _____ Logged by DMN Checked by _____ Hole No. 87-B3

Location _____ Date 15/2/87 Date _____ Page 2 of 2

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo. B.C. | District: Nelson | Hole No.: 87-A2 | Length: 30.18 m (99')

Commenced: 14/2/87 | Completed: 15/2/87 | Core Size: AQ | True Bearing: 142 | Corr. Dip:

Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:

% Recovery: | Collar Dip: +67° | Date: 13/2/87 | Objective: Fan out to intersect YS vein to the east

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1.22 | Reamed | 1.22→ | | | | | | |
| | | | f.g. to clean | 2.74 | 95 | | | | | |
| | 1.22 | 19.90 | Thinly bedded – massive argillaceous quartzite. Lt grey – to grey-green with bedding @ ~45–50°. Cleaner sections more massive. Bedded sections have numerous chloritic (?) partings. Minor disseminated – patchy pyrite (<1%) form secondary folding evident in local sections. Core increasingly altered (→ serpentine (?)) toward vein. | 4.27 | 80 | | | | | |
| | | | | 5.79 | 100 | | | | | |
| | | | | 7.32 | 95 | | | | | |
| | | | | 8.84 | 95 | | | | | |
| | | | | 10.36 | 80 | | | | | |
| | | | | 11.89 | 95 | | | | | |
| | | | | 13.41 | 75 | | | | | |
| | | | | 14.94 | 95 | | | | | |
| | 19.90 | 21.03 | Fine grained massive white quartz vein. No visible sulphides. Poor recovery, blocky rock. Core has been ground. Minor sulphides in FW, HW qtzites | 16.46 | 95 | | | | | |
| | | | | 17.98 | 100 | 18.90–19.81 | 32279 | | | |
| | | | | 19.51 | 70 | 19.81–21.03 | 80 | | | |
| | | | | 19.81 | 50 | 21.03–21.94 | 32281 | | | |
| | 21.03 | 30.18 | Lt–dk grey massive quartzite with pyrite veinlets & irregular patches (total <1%). Fairly competent core | 21.03 | 50 | | | | | |
| | | | | 22.56 | 90 | | | | | |
| | | | | 24.08 | 85 | | | | | |
| | | | | 25.60 | 95 | | | | | |
| | | | EOH | 27.13 | 80 | | | | | |
| | | | | 28.65 | 95 | | | | | |
| | | | | 30.18 | 90 | | | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 18/2/87 | Checked by: | Date: | Hole No.: 87-A2 | Page: 1 of 1

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo. B.C. | District: Nelson | Hole No.: 87-34 | Length: 16.15 m (53')
Commenced: 16/2/87 | Completed: 16/2/87 | Core Size: BQ | True Bearing: 142 | Corr. Dip:
Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:
% Recovery: | Collar Dip: +50° | Date: 18/2/87 | Objective: Fan out to intersect Y/S vein to east

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | ANALYSIS Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 0.91 | Reamed | 0 → 0.91 | – | | | | | |
| | 0.91 | 10.98 | Green-light grey thinly bedded - massive fine grained quartzite. 'Bedding' @ ~ 65°. Chloritic (?) partings common through bedded sections. Scattered pyrite veinlets & irregular patches. Core becomes increasingly serpentinized toward vein. | 2.44 | 100 | | | | | |
| | | | | 3.96 | 100 | | | | | |
| | | | | 5.18 | 100 | | | | | |
| | | | | 6.40 | 100 | | | | | |
| | | | | 7.62 | 100 | | | | | |
| | | | | 8.23 | 95 | 9.75 - 10.98 | 32282 | | | |
| | 10.98 | 13.26 | Fine grained massive white quartz vein. First half of vein contains ~ 10-20 % disseminated - massive pyrite associated with serpentine (?). Latter half is essentially barren (white). Broken blocky rock. Footwall serpentinized qtzites are pyritic. | 9.75 | 90 | 10.98 - 11.59 | 83 | | | |
| | | | | 11.28 | 90 | 11.59 - 12.19 | 84 | | | |
| | | | | 12.80 | 90 | 12.19 - 12.80 | 85 | | | |
| | | | | 14.33 | 95 | 12.80 - 13.26 | 86 | | | |
| | | | | 16.15 | 95 | 13.26 - 14.33 | 32287 | | | |
| | 13.26 | 16.15 | As for 0.91 - 10.98 | | | | | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 18/2/87 | Checked by: | Date: | Hole No.: 87-B4 | Page: 1 of 1

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo, BC | District: Nelson | Hole No.: 87-B5 | Length: 29.26m (96')
Commenced: 17/2/87 | Completed: 19/2/87 | Core Size: BQ | True Bearing: 176° | Corr. Dip:
Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:
% Recovery: | Collar Dip: -45 | Date: 19/2/87 | Objective: Intersect YS vein trend #3

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1.22 | Reamed | 0 → | | | | | | |
| | | | | 1.22 | - | | | | | |
| | 1.22 | 3.05 | Massive light grey fine grained quartzite. Typical. | 3.05 | 75 | | | | | |
| | | | | 4.27 | 75 | | | | | |
| | | | | 5.18 | 65 | | | | | |
| | | | | 6.71 | 85 | | | | | |
| | | | | 8.23 | 80 | | | | | |
| | 3.05 | 4.50 | Massive, essentially barren white quartz vein w/ v. minor patchy pyrite on fractures & local serpentine veinlets (<1mm) | 9.75 | 95 | | | | | |
| | | | | 11.28 | 100 | | | | | |
| | | | | 12.80 | 65 | | | | | |
| | | | | 14.33 | 100 | 13.65-14.33 | 32288 | | | |
| | | | | 15.85 | 100 | 14.33-15.24 | 89 | | | |
| | 4.50 | 13.30 | Massive lt. grey fine grained quartzite w/ local serpentine partings & minor patchy pyrite on fractures. 10 cm section of brecciated quartzite @ 10.95 m. Core becomes blocky from 11.28 → | 17.37 | 100 | 15.24-16.16 | 90 | | | |
| | | | | 18.90 | 100 | 16.16-17.07 | 91 | | | |
| | | | | 20.42 | 90 | 17.07-17.99 | 92 | | | |
| | | | | 21.34 | 30 | 17.99-18.90 | 93 | | | |
| | | | | 22.86 | 95 | 18.90-19.35 | 94 | | | |
| | | | | 24.38 | 0 | 19.35-20.42 | 95 | | | |
| | 13.30 | 14.33 | Serpentinized argillaceous (?) quartzite on vein footwall. | 24.99 | 75 | 20.42-21.32 | 96 | | | |
| | | | DK green w/ local relic bedding. V. minor patchy pyrite | 26.52 | 90 | 21.32-22.10 | 97 | | | |
| | | | | 27.74 | 95 | 22.10-22.86 | 98 | | | |
| | | | | | | 22.86-25.25 | 32299- | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 19/2/87 | Checked by: | Date: | Hole No.: 87-B5 | Page: 1 of 2

# DRILL HOLE RECORD

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION (<0.3m) | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 14.33 – | 22.86 | Massive white quartz [illegible] with sections of included serpentinized argillaceous rock (pyrite (<1mm), < 3%) inclusions in these sections. Where qtz/rocks 'melt serpentine' it appears barren | 22.74 | → | 2525-26.13 | 32308 | | | |
| | | | | 29.26 | 70 | 26.13-27.74 | 32320 | | | |
| | 22.86 – | 24.38 | Lost 5' of core – likely serpentinized qtzite as no core was recovered when section was redrilled. | | | | | | | |
| | 24.38 – | 25.25 | Serpentinized argillaceous qtzite. Broken blocky dark green rock w/ minor pyrite. | | | | | | | |
| | 2525 – | 26.15 | Short section of white quartz vein w/ patchy vein serpentine & assoc. dk brown xline mineral (sphalerite ?). Brown mineral totals < 2% of section. V. minor pyrite | | | | | | | |
| | 26.15 – | 29.26 | Serpentinized argillaceous quartzite on hanging wall of vein(s). Alteration decreases away from contact Bedding @ ~ 10° (?). EOH | | | | | | | |

Project Yellowstone Logged by DMN Checked by Hole No. 87-35

Location Salmo, BC Date 19/2/87 Date Page 2 of 2

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo, B.C. | District: Nelson | Hole No.: 87-B6 | Length: 38.71 m (127')

Commenced: 19/2/87 | Completed: 21/2/87 | Core Size: BQ | True Bearing: 176 | Corr. Dip:

Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:

% Recovery: | Collar Dip: -55° | Date: 22/2/87 | Objective: YS vein at depth

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1.22 | Reamed | 0→ 1.22 | — | | | | | |
| | 1.22 | 2.50 | Massive lt grey granite. Indistinct partings (bedding) @ ~40°. / Minor disseminated pyrite | 2.74 | 90 | | | | | |
| | | | | 4.88 | 95 | | | | | |
| | | | | 6.40 | 95 | | | | | |
| | | | | 7.92 | 75 | | | | | |
| | 2.50 | 3.10 | White f-g granite vein @ ~25° w/ patchy or streaked pyrite (total < 2%) and assoc chlorite (?). Brown | 9.45 | 95 | | | | | |
| | | | mineral (?) streaked and disseminated, occurs within | 10.97 | 100 | | | | | |
| | | | 20 cm of fw contact. Doesn't appear to be sphalerite | 12.50 | 100 | | | | | |
| | | | | 13.41 | 95 | | | | | |
| | | | | 14.02 | 100 | | | | | |
| | | | Local dirty sections | 15.54 | 100 | | | | | |
| | 3.10 | 28.96 | Massive lt grey granite. Bedding @ ~25–30° | 17.07 | 100 | | | | | |
| | | | Scattered serpentine partings. Local granite veinlets (<7cm) | 18.59 | 100 | | | | | |
| | | | w/ patchy pyrite / serpentine. Blocky, ground core from | 20.17 | 95 | | | | | |
| | | | 20.15 – 24.69 m. V. minor disseminated pyrite | 21.64 | 90 | | | | | |
| | | | increasing, with serpentine, toward vein. | 23.17 | 90 | 28.05-28.96 | 32322 | | | |
| | | | | 24.69 | 75 | 28.96-29.57 | 23 | | | |
| | | | | 26.21 | 100 | 29.57-30.18 | 24 | | | |
| | | | | 27.74 | 100 | 30.18-30.79 | 25 | | | |

NOTE: All angles measured from core axis.

Logged by: DMN | Date: 22/2/87 | Checked by: | Date: | Hole No.: 87-B6 | Page: 1 of 2

# DRILL HOLE RECORD

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION (-grey, short, included) | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton |
|---|---|---|---|---|---|---|---|---|---|---|
| | 28.96 | 31.34 | Massive white, quartz vein w/, sections of serpentine | 27.74 | → | 30.79-31.34 | 32326 | | | |
| | | | (chlorite ?) / pyrite. Average pyrite 2-3% - local | 29.26 | 90 | 31.34-32.31 | 27 | | | |
| | | | sections up to 20% (massive) pyrite in quartz. | 30.79 | 95 | 32.31-33.27 | 32328 | | | |
| | | | Relatively good recovery | 32.31 | 75 | | | | | |
| | | | | 33.83 | 100 | | | | | |
| | | | | 35.36 | 100 | | | | | |
| | | | | 36.88 | 100 | | | | | |
| | 31.34 | 32.31 | Section of serpentinized argillaceous qtzite. Recovery ~ | 38.41 | 100 | | | | | |
| | | | 65% Possible fault zone? Extremely broken, alt'd (gougey) | 38.71 | 90 | | | | | |
| | | | core | | | | | | | |
| | 32.31 | 38.71 | Massive to thinly bedded argillaceous quartzite | | | | | | | |
| | | | Bedding @ ~30-35°. Dk grey - grey green w/ | | | | | | | |
| | | | serpentine partings. Relatively competent core. | | | | | | | |
| | | | EOH | | | | | | | |

Project Yellowstone Logged by DMN Checked by Hole No. 87-36

Location Salmo, B.C. Date 22/2/87 Date Page 2 of 2

# DRILL HOLE RECORD

Property: Yellowstone | Location: Salmo B.C. | District: Nelson | Hole No.: 87-B7 | Length: 27.74 m (91')

Commenced: 21/2/87 | Completed: 22/2/87 | Core Size: BQ | True Bearing: 160 | Corr. Dip:

Lat.: | Dep.: | Elev.: | Hor. Comp.: | Vert. Comp.:

% Recovery: | Collar Dip: −47° | Date: 23/2/87 | Objective:

| Colour Plot & Dips | DEPTH from | DEPTH to | DESCRIPTION | RECOVERY run | RECOVERY % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 12.19 | Alternating bands of dk green-grey fine grained argillaceous quartzite and white-grey massive quartzite. V. indistinct bedding in arg. qtzite. Local serpentinitic parting in both. Little or no pyrite | 0→ | | | | | | | | |
| | | | | 2.74 | 40 | | | | | | | |
| | | | | 4.27 | 95 | | | | | | | |
| | | | | 5.79 | 75 | | | | | | | |
| | | | | 7.32 | 90 | | | | | | | |
| | | | | 8.84 | 95 | 11.28-12.19 | 32329 | | | | | |
| | | | | 10.36 | 100 | 12.19-12.80 | 30 | | | | | |
| | 12.19 | 21.34 | Massive white f.g. quartz vein w/ local serpentinitic fractures. V. coarsely disseminated, streaked (along fractures) & banded pyrite - locally assoc w/ serpentine. Local sections appear barren of all mineralization except for massive white quartz. Lost most core between 18.28-21.34 apparently due to cavities. Core recovered was ground. f.g. | 11.89 | 95 | 12.80-13.41 | 31 | | | | | |
| | | | | 13.41 | 95 | 13.41-14.02 | 32 | | | | | |
| | | | | 14.94 | 100 | 14.02-14.63 | 33 | | | | | |
| | | | | 16.76 | 80 | 14.63-15.24 | 34 | | | | | |
| | | | | 18.23 | 75 | 15.24-15.85 | 35 | | | | | |
| | | | | 19.81 | 10 | 15.85-16.76 | 36 | | | | ←60% | cc |
| | | | | 20.34 | 15 | 16.76-17.52 | 37 | | | | | |
| | 21.34 | 27.74 | DK. green finely bedded argillaceous quartzite bedding @ ~ 20°. Serpentinitic partings & little or no pyrite | 22.86 | 95 | 17.52-18.28 | 38 | | | | | |
| | | | | 24.38 | 90 | 18.28-19.81 | 39 | | | | ←10% | " |
| | | | | 25.91 | 100 | 19.81-21.34 | 40 | | | | ←15% | " |
| | | | | 27.43 | 100 | 21.34-22.25 | 41 | | | | | |
| | | | EOH | 27.74 | 75 | | | | | | | |

NOTE: All angles measured from core axis

Logged by: DMN | Checked by: | Hole No.: 87-B7

Date: 24/2/87 | Date: | Page: 1 of 1

# DRILL HOLE RECORD

Property Yellowstone | Location Salmo B.C. | District Nelson | Hole No. 87-88 | Length 20.73m (68')

Commenced 23/2/87 | Completed 24/2/87 | Core Size BQ | True Bearing 160 | Corr. Dip

Lat. | Dep. | Elev. | Hor. Comp. | Vert. Comp.

% Recovery | Collar Dip -35 | Date 24/2/87 | Objective Fan

| Colour Plot & Dips | DEPTH from | to | DESCRIPTION | RECOVERY run | % | Sample Interval | Sample No. | Length | ANALYSIS Au-oz/ton | Ag-oz/ton | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 8.45 | Alternating bands of dk grey green f.g. argillaceous | 0→ | | | | | | | | |
| | | | quartzite and white-grey massive quartzite | 2.44 | 50 | | | | | | | ○ |
| | | | bedding v. indistinct in argillaceous sections, which | 3.96 | 95 | 7.54-8.45 | 32342 | | | | | |
| | | | display chloritic/serpentine partings. Minor pyrite | 5.49 | 95 | 8.45-10.06 | 43 | | | | | |
| | | | on fracture sfcs - usually assoc w/ chlorite/serp. | 7.10 | 100 | 10.06-11.58 | 44 | | | | | |
| | | | Core becomes increasingly alt'd & pyritic near | 8.53 | 90 | 11.58-12.19 | 45 | | | | | |
| | | | vein fw. | 10.06 | 45 | 12.19-12.80 | 46 | | | | | |
| | | | | 11.58 | 40 | 12.80-13.41 | 47 | | | | | |
| | 8.45 | 16.05 | Massive grey-white quartz vein w/ serpentinitic | 13.11 | 75 | 13.41-14.02 | 48 | | | | | |
| | | | fractures & veinlets. Abundant pyrite as coarse | 14.63 | 100 | 14.02-14.63 | 49 | | | | | |
| | | | disseminations, patches on fractures "veinlets" & | 16.15 | 90 | 14.63-15.24 | 32350 | | | | | |
| | | | gouge filling. Pyrite (0-40% - average 3-5%) is locally | 17.68 | 95 | 15.24-16.05 | 32401 | | | | | |
| | | | assoc w/ serpentine. Local sections of vein contain | 19.20 | 90 | 16.05-16.81 | 32402 | | | | | ○ |
| | | | minor calcite (w/ pyrite). Local sections barren of all but qtz. | 20.73 | 95 | 16.81-17.58 | 32403 | | | | | |
| | 16.05 | 16.81 | Serpentinized argillaceous quartzite w/ patchy | | | 17.58-18.49 | 32404 | | | | | |
| | | | pyrite on fracture sfcs. Dk green & broken | | | | | | | | | |
| | | | | | | | | | | | | |
| | 16.81 | 17.58 | Quartz vein as for 8.45-16.05 | | | | | | | | | |
| | | | | | | | | | | | | |
| | 17.58 | 20.73 | As for 0-8.45 | | | | | | | | | |

NOTE: All angles measured from core axis.

Logged by DMN | Date 24/2/87

Checked by | Date

Hole No. 87-88

Page 1 of 1

# APPENDIX 5

Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist
A.L. LITTLEJOHN, M.Sc. Geologist
JEFF HARRIS, Ph.D. Geologist

P.O. BOX 39
8887 NASH STREET
FORT LANGLEY, B.C.
VOX 1JO

PHONE (604) 888-1323

Invoice 6342
February 1987

Report for: David Nelles,
Searchlight Resources Inc.,
218 - 744 West Hastings Street,
Vancouver, B.C., V6C 1A5

Samples: Six polished thin sections of Quartz vein cutting pelitic schist

Summary:

The samples are of a complex vein zone cutting a muscovite-rich pelitic schist. Early quartz veins were deformed and recrystallized during deformation and kink-folding of the schist. Some sulfides may have been introduced at this time. Later veins cut the deformed quartz vein; these are dominated by pyrrhotite and lesser pyrite, with minor amounts of ankerite, muscovite, chalcopyrite, sphalerite, native gold and argentite. Minor late veinlets consist of chlorite and ankerite. Pyrrhotite is variably replaced. In all samples, some grains are fresh, others are altered to dusty pyrite with low reflectivity, and others are altered to extremely fine to fine grained pyrite/marcasite and lesser marcasite. The latter two minerals are distinguished on the basis of anisotropism, with marcasite having high anisotropism, and pyrite/marcasite having weak anisotropism.

The pelitic schist contains moderately abundant detrital heavy minerals, including Ti-oxide and zircon. Tourmaline is abundant in one sample (# 5); it may be a detrital mineral in part, which was coated with deuteric rims. Other grains probably are deuteric in origin.

Sample 1: deformed quartz vein, minor late veinlets of pyrrhotite-pyrite-ankerite, and seams of muscovite-ankerite

Sample 2: (from same hand sample as Sample 1) deformed quartz vein, later veins and replacement patches dominated by pyrrhotite and lesser pyrite, ankerite, and muscovite. A few seams contain concentrations of native gold and argentite.

Sample 3: quartz vein (recrystallized), with late seams and patches of muscovite, pyrrhotite-pyrite, and ankerite. Argentite forms two inclusions in one pyrrhotite grain.

Sample 4: quartz-(muscovite) vein with late seams and patches of pyrrhotite-pyrite-ankerite-muscovite. Native gold forms one grain in quartz very near a patch of pyrrhotite. The rock is cut by minor late veinlets of chlorite-ankerite-(pyrite). Similar to Sample 3.

Sample 5: pelitic schist (muscovite ± Ti-oxide, tourmaline, and zircon) cut by vein of quartz-apatite-pyrrhotite-(pyrite-chalcopyrite-sphalerite). A broad zone of secondary biotite appears to be associated with the sulfide-rich concentrations in the vein. Both vein and rock were deformed and recrystallized.

(continued)

Sample 6: Vein of quartz-pyrrhotite-(pyrite) with inclusions of pelitic schist (as in Sample 5 but with more abundant, probably secondary, quartz).

Photomicrographs were taken of gold and argentite grains to illustrate their sizes and textures. These will be sent later this week when the film is developed.

John G. Payne

Sample 1 — Deformed quartz Vein, Minor Later Veinlets of Pyrrhotite-Pyrite-Ankerite, and seams of Muscovite-(Ankerite)

The rock is a medium to coarse grained quartz vein, which was strongly deformed and partly recrystallized to much finer grained aggregates. One late vein and a few veinlets are dominated by pyrrhotite with lesser pyrite and ankerite.

| | |
|---|---|
| quartz | 97-98% |
| pyrrhotite | 1½-2 |
| pyrite | 0.5 |
| marcasite | 0.1 |
| muscovite | 0.1 |
| ankerite | 0.3 |
| chalcopyrite | trace |

Quartz forms grains averaging 1-3 mm in size. They are strained moderately to strongly, and recrystallized in irregular patches to very fine grained aggregates. Dusty opaque inclusions of uncertain composition are common.

Pyrrhotite and pyrite are concentrated in late veinlets and patches. Pyrrhotite forms patches up to 1.5 mm in size. Many grains are fresh, and some are altered in patches to extremely fine grained marcasite. Other patches are altered to dusty pyrite with low reflectivity and a few lenses of extremely fine grained marcasite. Pyrite forms subhedral to euhedral cubic grains up to 0.1 mm in size. Some of these are disseminated in the quartz vein.

Muscovite is concentrated in wispy, discontinuous lenses up to 2 mm long. These appear to be secondary, and cutting across the quartz vein along strongly strained seams of quartz.

Ankerite is concentrated as thin selvages along borders of sulfide aggregates, mainly in the vein zones, and also locally disseminated in the quartz vein. A few seams contain both ankerite and muscovite.

Chalcopyrite forms scattered disseminated grains in quartz up to 0.015 mm in size; these generally are near patches of pyrrhotite.

Sample 2 — Deformed Quartz Vein, Later Veins and Replacement Patches dominated by Fe-sulfides, Ankerite, and Muscovite; Native Gold and Argentite are concentrated in a few seams.

The rock is a medium to coarse grained quartz vein, which was deformed and partly recrystallized to finer grained aggregates. It is cut by veins and replaced in patches along veins by Fe-sulfides, ankerite, and muscovite, with local concentrations of native gold, argentite, and chalcopyrite. The muscovite may be in part original seams in the vein parallel to foliation, along which later solutions deposited sulfides, carbonate, and precious-metal minerals.

| | |
|---|---|
| quartz | 88-92% |
| pyrrhotite | 5- 6 |
| pyrite | ½- 1 |
| marcasite | 0.2 |
| muscovite | 2- 3 |
| ankerite | ½- 1 |
| chalcopyrite | trace |
| Ti-oxide | trace |
| argentite | trace |
| native gold | trace |

Quartz forms an aggregate of anhedral grains averaging 1-3 mm in size. These were strained strongly and partly recrystallized to irregular, subgrain aggregates of very fine grain size. Much of the quartz contains dusty opaque inclusions of uncertain composition.

Many veins form a subparallel set cutting the deformed quartz vein. These are up to 1 mm wide. Some are dominated by sulfides and some are dominated by muscovite. Locally ankerite is the dominant mineral. A few major veinlets cut the rock at a high angle to the main set.

Pyrrhotite forms patches up to 2 mm in size in the veins, and up to 1 mm in size disseminated in the quartz aggregates. Some patches of pyrrhotite are fresh; others are altered moderately to strongly to very fine grained intergrowths of secondary Fe-sulfides. In these, pyrite(?) forms dense patches of low reflectivity, caused by intergrown non-reflective carbonate or silicate. Marcasite forms patches up to 0.1 mm in length of extremely fine to very fine grained aggregates showing strong anisotropism. In places pyrrhotite is altered to intergrowths of pyrite and non-reflective material showing botryoidal textures.

Muscovite forms seams of very fine grained flakes, mainly oriented parallel to the seams.

Ankerite forms very fine to locally fine grains and aggregates, commonly as thin seams bordering sulfide patches, and less commonly intergrown with muscovite.

Chalcopyrite occurs with pyrrhotite as patches from 0.03-0.1 mm in size. It commonly occurs at the end of a patch of pyrrhotite.

Pyrite forms scattered cubic grains up to 0.4 mm in size in quartz, and aggregates of smaller, subhedral cubic grains in some of the later veins.

Ti-oxide occurs in a few lenses up to 0.07 mm in length associated with muscovite-rich seams. It also forms one patch of prismatic grains up to 0.25 mm in length, associated with a small patch of pyrrhotite.

Native gold and argentite are concentrated strongly in one seam containing muscovite, ankerite, and minor sulfides. Grains are up to 0.09 mm in length, and are free of Fe-sulfides. Argentite grains are much more irregular than those of native gold. Argentite forms an irregular patch in one of the crosscutting seams; it is associated with minor ankerite in this seam.

Sample 3 Quartz Vein with Late Seams, Patches of Muscovite, Pyrrhotite-Pyrite, and Ankerite; trace of Argentite

The rock is a fine grained quartz vein, whose texture indicates slight deformation and recrystallization. It contains disseminated patches and seams of muscovite/sericite and of sulfides. A few major seams up to 1 mm wide contain abundant muscovite, sulfides, and ankerite. Ti-oxide is moderately abundant with muscovite. Trace minerals include chalcopyrite, sphalerite, and argentite. Pyrrhotite is partly fresh and partly altered to dusty pyrite and marcasite.

| | |
|---|---|
| quartz | 93-95% |
| muscovite | 2- 3 |
| pyrrhotite | 3- 4 |
| pyrite | ½- 1 |
| marcasite | 0.2 |
| ankerite | 0.3 |
| Ti-oxide | 0.2 |
| sphalerite | trace |
| chalcopyrite | trace |
| argentite | trace |

Quartz forms anhedral grains averaging 0.05-0.2 mm in size. These have slightly to moderately sutured borders and commonly show slightly wavy extinction. Textures suggest recrystallization, which may have been more uniform and more intense than that in samples 1 and 2. Dusty opaque inclusions are much less common than in quartz in samples 1 and 2.

Muscovite/sericite is concentrated in wispy seams and patches, and locally forms extremely fine grained disseminated flakes. Much of the muscovite is very fine grained. Associated with muscovite-rich seams are moderately abundant patches of Ti-oxide up to 0.07 mm in size.

Pyrrhotite forms irregular patches up to 2 mm in size. It is partly altered to patches of extremely fine grained marcasite, and elsewhere to dusty pyrite. The latter locally shows botryoidal outlines against fresh pyrrhotite. It also forms a few wispy veinlets from 0.01-0.03 mm in width.

Pyrite forms disseminated cubic grains averaging 0.1-0.2 mm in size in quartz. It also occurs in patches with pyrrhotite as cubic grains up to 0.5 mm in size.

Ankerite occurs in irregular patches and as rims on sulfide patches. Grains are very fine to extremely fine in size.

Sphalerite was recognized in one grain 0.06 mm across associated with a patch of ankerite. Near the border of the sphalerite grain are moderately abundant inclusions up to 0.002 mm in size of chalcopyrite. Sphalerite is colorless.

Chalcopyrite forms a very few grains up to 0.05 mm in size with ankerite or with pyrrhotite. It also forms a few inclusions in pyrrhotite averaging 0.01-0.02 mm in size.

Argentite forms two subrounded inclusions from 0.02-0.04 mm in size within one large grain of pyrrhotite.

Sample 4 Quartz-(Muscovite) Vein with Late Seams and Patches of Pyrrhotite-Pyrite-Ankerite-Muscovite. Trace of Native Gold

The rock is a fine grained quartz vein as in Sample 3. It contains moderately abundant disseminated and patchy sericite/muscovite, and later seams and patches of pyrrhotite, pyrite, ankerite, and muscovite/sericite. It is cut by a late veinlet containing ankerite, green-brown chlorite, and sulfides. Native gold occurs in quartz near a patch of pyrrhotite.

| | | | |
|---|---|---|---|
| quartz | 89-92% | veinlets | |
| sericite/muscovite | 5- 7 | ankerite-chlorite-(pyrite) | minor |
| ankerite | 0.5 | | |
| pyrrhotite | 2- 3 | | |
| pyrite | ½- 1 | | |
| Ti-oxide | minor | | |
| marcasite | 0.2 | | |
| chalcopyrite | minor | | |
| native gold | one grain | | |

Quartz forms an anhedral aggregate of grains averaging 0.05-0.15 mm in size. Textures are as in Sample 3, and indicate moderate recrystallization in a relatively uniform stress field. Sericite and locally muscovite occur in disseminations, patches and seams; grain size is extremely fine to very fine. Ti-oxide occurs with sericite as irregular, extremely fine grained aggregates up to 0.03 mm in size.

Ankerite occurs in seams and patches, in part associated with sulfides or muscovite.

Pyrrhotite forms anhedral patches up to 1 mm in size. It commonly is intergrown with pyrite (possibly secondary after pyrrhotite) or with marcasite (after pyrrhotite). Some pyrite shows botryoidal outlines against fresh pyrrhotite, indicating that it is secondary in origin. Other patches of pyrite consist of subhedral aggregates of cubic grains averaging 0.05-0.15 mm in size. A few pyrite grains are up to 0.5 mm across. Much of the subhedra to euhedral pyrite probably is primary. Marcasite forms lensy to irregular patches up to 0.1 mm in size of extremely fine grains with strong anisotropism. It also forms a few patches of subhedral grains averaging 0.05-0.1 mm in size; these have weak anisotropism.

Chalcopyrite forms a few grains up to 0.1 mm in size, coarsely to very finely intergrown with pyrrhotite, and smaller grains included in patches of pyrrhotite.

Native gold forms one equant, anhedral grain up to 0.03 mm in size in quartz adjacent to a larger patch of pyrrhotite.

Late, wispy veinlets up to 0.05 mm in width consist of extremely fine grained, medium greenish-brown chlorite(?) with lesser extremely fine grained ankerite, and scattered patches of very fine grained pyrite.

Sample 5 Pelitic schist (with Heavy Mineral Concentration) cut by Quartz-Apatite-Pyrrhotite-(Pyrite-Chalcopyrite-Sphalerite) Vein; Secondary Biotite zone associated with Sulfides.

The rock is dominated by sericite/muscovite, with scattered zones of relic plagioclase, and with disseminations and local concentrations of tourmaline, zircon, and Ti-oxide. Epidote forms a few ragged porphyroblasts. The rock is cut by an irregular quartz vein containing abundant apatite, and with pyrrhotite and lesser pyrite concentrated along the border. In this zone are coarser grained intergrowths of Ti-oxide and pyrrhotite. Biotite is concentrated in a lenticular zone near one side of the sample, more or less associated with the greatest concentration of sulfides. Textures suggest that the rock and vein both were deformed. The rock contains numerous tight kink folds, and the contact of the rock and vein is very irregular.

| | |
|---|---|
| sericite/muscovite | 40-45% |
| Ti-oxide | 4- 5 |
| tourmaline | 1- 1½ |
| zircon | 0.3 |
| plagioclase | 1½-2 |
| epidote/zoisite | 1- 1½ |
| biotite | 10-12 |
| quartz | 25-30 |
| pyrrhotite | 4- 5 |
| pyrite | ½- 1 |
| chalcopyrite | 0.1 |
| sphalerite | minor |
| apatite | 1½-2 |
| calcite | trace |

Sericite/muscovite forms an aggregate of extremely fine to very fine grains showing a prominent foliation. In places it contains ragged patches of plagioclase; textures suggest that plagioclase grains are partly altered to sericite/muscovite aggregates. Plagioclase grains are very fine to fine grained.

Ti-oxide forms irregular patches of extremely fine grains; patches are up to 0.15 mm in size, and commonly are concentrated in irregular clusters. Near the vein, Ti-oxide forms patches up to 1.5 mm in size of fine prismatic grains in two orientations at about 60° to each other. Interstitial to Ti-oxide are very fine grains of pyrrhotite.

Tourmaline forms disseminated, subhedral to euhedral prismatic grains from 0.1-0.5 mm in length and up to 0.1 mm across. Grains commonly are zoned, with detrital(?) cores of slightly darker green color surrounded by rims of paler green color. Pleochroism is from nearly colorless to pale or light/medium green.

Zircon forms rounded to subrounded grains averaging 0.05-0.12 mm in size. A few appear to be zoned, with rounded to subhedral cores and thin overgrowths. It is concentrated moderately in irregular patches, commonly with Ti-oxide.

Epidote/zoisite forms a few ragged, equant to prismatic grains up to 1.5 mm in length. The mineral is colorless to pale greyish green, with grey interference color. Many of the grains appear to be porphyroblasts.

Biotite is concentrated near one side of the section as aggregates of very fine to locally fine grains with pleochroism from pale to medium orange brown. Grains are coarsest adjacent to sulfide patches. Away from the zone of abundant biotite, biotite forms extremely fine grained patches and disseminations in the host rock.

(continued)

The quartz vein is dominated by medium to coarse grained quartz which has been deformed (showing prominently strained extinction) and slightly to moderately recrystallized to finer grained aggregates with irregular grain outlines.

Apatite forms anhedral to locally euhedral grains from 0.2-0.8 mm in size. It is concentrated mainly along and near the border of the vein, but a few grains occur in the center of the vein and a few occur as porphyroblasts(?) in the host rock.

Calcite forms extremely fine grained seams and patches, in part associated with apatite, and in part associated with sulfides.

Pyrrhotite forms patches up to a few mm across of fine to very fine grained aggregates. Some pyrrhotite is replaced by secondary dusty pyrite and by extremely fine grained aggregates of marcasite with strong anisotropism, or coarser grained aggregates of marcasite/pyrite with weak to no anisotropism.

Pyrite forms scattered subhedral to euhedral grains up to 0.6 mm in size associated with pyrrhotite.

Chalcopyrite forms anhedral grains up to 0.2 mm in size, mainly along borders of larger pyrrhotite patches.

Sphalerite forms grains up to 0.1 mm in size, mainly associated with chalcopyrite and pyrrhotite. Sphalerite is colorless.

Pyrrhotite occurs as disseminations in the rock, mainly associated with patches of Ti-oxide. Probably pyrrhotite formed by replacement of original Ti-oxide or Ti-Fe-oxide in these patches.

Sample 6 Quartz-Pyrrhotite-(Pyrite) Vein with inclusions of Silicified Pelitic Schist (Muscovite ± Ti-oxide, Zircon)

The rock contains fragments up to 2 cm long of a muscovite-rich pelitic schist enclosed in a deformed and recrystallized vein dominated by quartz with patches of pyrrhotite-pyrite-(ankerite). The schist is somewhat similar to that in Sample 5, but contains more abundant quartz. Pyrrhotite is replaced in many patches by secondary Fe-sulfides.

| rock (20-25% of sample) | | vein (70-75% of sample) | | |
|---|---|---|---|---|
| muscovite | 15-17% | quartz | 65-67% | |
| quartz | 4- 5 | pyrrhotite | 4- 5 | (includes altered |
| Ti-oxide | ½- 1 | pyrite | ½- 1 | pyrrhotite) |
| zircon | minor | ankerite | 0.5 | |
| | | chlorite | 0.2 | |
| | | apatite | minor | |
| | | marcasite | minor | |
| | | chalcopyrite | minor | |

The rock is dominated by very fine grained muscovite showing a prominent foliation. Quartz forms lenses and patches, irregularly intergrown with muscovite; textures suggest that the pelitic schist was partly silicified, probably during introduction of the vein. Ti-oxide forms patches up to 0.15 mm in size of extremely fine grained aggregates. Zircon forms subrounded to subangular detrital grains from 0.05-0.12 mm in average size. * (see at bottom of report)

The vein is dominated by quartz which shows a variety of textures indicating different degrees of recrystallization. Parts of the vein, mainly away from fragments, consist of medium to coarse grained quartz which has been strongly deformed and irregularly recrystallized in part to much finer grained aggregates. These zones contain abundant dusty opaque inclusions. Elsewhere, the vein consists of more uniformly grained quartz averaging 0.05-0.15 mm in grain size. These grains probably represent more strongly recrystallized material. They have less strained extinction and are relatively free of dusty opaque inclusions.

Pyrrhotite occurs in irregular patches up to a few mm across. Fresh pyrrhotite forms anhedral aggregates of grains averaging 0.1-0.3 mm in grain size. Much of the pyrrhotite is altered to secondary Fe-sulfide/carbonate/oxide aggregates. Some of these are dominated by dusty pyrite with lower reflectivity than normal. Others are composed of extremely fine grained aggregates of pyrite with intimately intergrown patches of low reflectivity (probably hematite). Marcasite forms a few patches up to 0.2 mm long of extremely fine grained aggregates with strong anisotropism.

Pyrite forms scattered subhedral cubic grains averaging 0.2-0.3 mm in size.

Pyrrhotite locally forms scattered patches up to 0.07 mm in size within aggregates of very fine grained, secondary pyrite.

Ankerite occurs as rims around patches of Fe-sulfides, and also as irregular fracture-filling(?) veinlets cutting the sulfides. These may be associated in origin with the event that caused alteration of pyrrhotite.

Chlorite forms extremely fine grained patches, seams, and veinlets up to 0.05 mm in width. Chlorite is light to medium brownish green in color with very low birefringence. It is concentrated along borders of the vein.

Apatite forms scattered anhedral to subhedral grains from 0.03-0.1 mm in average size.

Chalcopyrite occurs with pyrrhotite as grains up to 0.1 mm in size, and in quartz as grains averaging 0.02-0.03 mm in size.

* Muscovite forms moderately abundant porphyroblastic thin flakes up to 0.15 mm in length

# Sample Analytical Procedures

Both the rock and sludge samples were shipped to Chemex Labs in North Vancouver, B.C. where they were dried, crushed, riffle split and pulverized to -150 mesh. Half assay ton sub-samples were then fused in litharge, carbonate and siliceous fluxes. The resulting lead button containing the precious metals was then cuppeled. The combined silver and gold was finally weighed on a microbalance, parted, annealed and again weighed as gold, the difference in the two weighings being the silver. The gold and silver values are reported in oz/ton with 0.003 and 0.01 detection limits respectively.

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# CERTIFICATE OF ANALYSIS A8711722

To : SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5

Project : YELLOWSTONE
Comments:

Page No. : 1
Tot. Pages: 1
Date : 5-MAR-87
Invoice # : I-8711722
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32342 | 207 | --- | < 0.01 | < 0.002 |
| 32343 | 207 | --- | < 0.01 | 0.032 |
| 32344 | 207 | --- | 0.02 | 0.010 |
| 32345 | 207 | --- | < 0.01 | 0.006 |
| 32346 | 207 | --- | < 0.01 | < 0.002 |
| 32347 | 207 | --- | < 0.01 | < 0.002 |
| 32348 | 207 | --- | < 0.01 | 0.004 |
| 32349 | 207 | --- | 0.02 | 0.048 |
| 32350 | 207 | --- | 0.02 | 0.102 |
| 32401 | 207 | --- | < 0.01 | 0.046 |
| 32402 | 207 | --- | 0.03 | 0.012 |
| 32403 | 207 | --- | 0.02 | 0.048 |
| 32404 | 207 | --- | < 0.01 | 0.010 |
| 32405 | 207 | 219 | < 0.01 | 0.006 |
| 32406 | 207 | 219 | < 0.01 | 0.010 |
| 32407 | 207 | 219 | 0.01 | 0.036 |
| 32408 | 207 | 219 | < 0.01 | 0.022 |
| 32409 | 207 | 219 | 0.04 | 0.168 |
| 32410 | 207 | 219 | 0.02 | 0.124 |
| 32411 | 207 | 219 | 0.02 | 0.064 |
| 32412 | 207 | 219 | 0.01 | 0.070 |

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# CERTIFICATE OF ANALYSIS A8711331

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Project : YELLOWSTONE
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Page No. :1
Tot. Pages: 1
Date :03-MAR-87
Invoice # :I-8711331
P.O. # :NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32264 | 207 | -- | < 0.01 | 0.014 |
| 32265 | 207 | -- | < 0.01 | 0.006 |
| 32266 | 207 | -- | < 0.01 | 0.004 |
| 32267 | 207 | -- | < 0.01 | 0.014 |
| 32268 | 207 | -- | < 0.01 | 0.008 |
| 32269 | 207 | -- | < 0.01 | 0.008 |
| 32270 | 207 | -- | < 0.01 | 0.004 |
| 32271 | 207 | -- | < 0.01 | 0.012 |
| 32272 | 207 | -- | < 0.01 | 0.002 |
| 32273 | 207 | -- | < 0.01 | 0.012 |
| 32274 | 207 | -- | 0.06 | 0.020 |
| 32351 | 207 | 219 | 0.03 | 0.345 |
| 32352 | 207 | 219 | 0.02 | 0.024 |
| 32353 | 207 | 219 | < 0.01 | 0.012 |
| 32354 | 207 | 219 | < 0.01 | 0.002 |
| 32355 | 207 | 219 | < 0.01 | < 0.002 |
| 32356 | 207 | 219 | < 0.01 | 0.004 |
| 32357 | 207 | 219 | 0.01 | 0.006 |
| 32358 | 207 | 219 | 0.07 | 0.042 |
| 32359 | 207 | 219 | 0.01 | 0.016 |
| 32360 | 207 | 219 | 0.03 | 0.054 |
| 32361 | 207 | 219 | < 0.03 | 0.016 |
| 32362 | 207 | 219 | 0.04 | 0.064 |
| 32363 | 207 | 219 | 0.01 | 0.038 |
| 32364 | 207 | 219 | < 0.01 | 0.012 |
| 32365 | 207 | 219 | 0.02 | 0.018 |
| 32366 | 207 | 219 | 0.03 | 0.050 |

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Project : YELLOWSTONE
Comments:


Date : 28-FEB-87
Invoice # : I-8711720
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32309 | 207 | --- | < 0.01 | 0.006 |
| 32310 | 207 | --- | 0.01 | 0.004 |
| 32311 | 207 | --- | 0.07 | 0.020 |
| 32312 | 207 | --- | 0.01 | < 0.002 |
| 32313 | 207 | --- | < 0.01 | 0.002 |
| 32314 | 207 | --- | 0.01 | 0.004 |
| 32315 | 207 | --- | 0.02 | 0.020 |
| 32316 | 207 | --- | 0.01 | 0.006 |
| 32317 | 207 | --- | < 0.01 | < 0.002 |
| 32318 | 207 | --- | 0.02 | 0.002 |
| 32329 | 207 | --- | < 0.01 | < 0.002 |
| 32330 | 207 | --- | < 0.01 | < 0.002 |
| 32331 | 207 | --- | < 0.01 | < 0.002 |
| 32332 | 207 | --- | < 0.01 | < 0.002 |
| 32333 | 207 | --- | 0.02 | 0.012 |
| 32334 | 207 | --- | 0.03 | 0.002 |
| 32335 | 207 | --- | < 0.01 | < 0.002 |
| 32336 | 207 | --- | < 0.01 | < 0.002 |
| 32337 | 207 | --- | < 0.01 | < 0.002 |
| 32338 | 207 | --- | < 0.01 | 0.004 |
| 32339 | 207 | --- | < 0.01 | < 0.002 |
| 32340 | 207 | --- | < 0.01 | 0.002 |
| 32341 | 207 | --- | < 0.01 | 0.002 |

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Project : YELLOWSTONE
Comments: ATTN: DAVID NELLES


Date : 28-FEB-87
Invoice # : I-8711596
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32394 | 207 | 219 | 0.01 | 0.002 |
| 32395 | 207 | 219 | 0.01 | < 0.002 |

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Project : YELLOWSTONE
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Page No. :1
Tot. Pages: 2
Date :28-FEB-87
Invoice # :I-8711596
P.O. # :NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32288 | 207 | --- | < 0.01 | < 0.002 |
| 32289 | 207 | --- | < 0.01 | < 0.002 |
| 32290 | 207 | --- | < 0.01 | < 0.002 |
| 32291 | 207 | --- | < 0.01 | < 0.002 |
| 32292 | 207 | --- | < 0.01 | 0.002 |
| 32293 | 207 | --- | < 0.01 | < 0.002 |
| 32294 | 207 | --- | < 0.01 | < 0.002 |
| 32295 | 207 | --- | 0.01 | 0.004 |
| 32296 | 207 | --- | 0.01 | < 0.002 |
| 32297 | 207 | --- | < 0.01 | 0.002 |
| 32298 | 207 | --- | < 0.01 | < 0.002 |
| 32299 | 207 | --- | < 0.01 | 0.002 |
| 32300 | 207 | --- | < 0.01 | < 0.002 |
| 32320 | 207 | --- | < 0.01 | < 0.002 |
| 32367 | 207 | 219 | 0.04 | 0.072 |
| 32368 | 207 | 219 | 0.09 | 0.170 |
| 32370 | 207 | 219 | < 0.01 | 0.016 |
| 32371 | 207 | 219 | < 0.01 | 0.010 |
| 32372 | 207 | 219 | < 0.01 | 0.014 |
| 32373 | 207 | 219 | < 0.01 | 0.022 |
| 32374 | 207 | 219 | < 0.01 | 0.012 |
| 32375 | 207 | 219 | < 0.01 | 0.048 |
| 32376 | 207 | 219 | < 0.01 | 0.022 |
| 32377 | 207 | 219 | < 0.01 | 0.020 |
| 32378 | 207 | 219 | 0.02 | 0.098 |
| 32379 | 207 | 219 | 0.03 | 0.048 |
| 32380 | 207 | 219 | 0.01 | 0.022 |
| 32381 | 207 | 219 | 0.03 | 0.136 |
| 32382 | 207 | 219 | < 0.01 | 0.030 |
| 32383 | 207 | 219 | < 0.01 | 0.016 |
| 32384 | 207 | 219 | < 0.01 | 0.002 |
| 32385 | 207 | 219 | < 0.01 | < 0.002 |
| 32386 | 207 | 219 | < 0.01 | 0.002 |
| 32387 | 207 | 219 | 0.01 | < 0.002 |
| 32388 | 207 | 219 | 0.04 | 0.004 |
| 32389 | 207 | 219 | 0.02 | < 0.002 |
| 32390 | 207 | 219 | < 0.01 | 0.002 |
| 32391 | 207 | 219 | < 0.01 | < 0.002 |
| 32392 | 207 | 219 | < 0.01 | < 0.002 |
| 32393 | 207 | 219 | < 0.01 | < 0.002 |

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Project : YELLOW STONE
Comments:


Date :28-FEB-87
Invoice # :I-8711656
P.O. # :NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 23598 | 207 | 219 | < 0.01 | 0.002 |
| 23599 | 207 | 219 | < 0.01 | < 0.002 |
| 23600 | 207 | 219 | < 0.01 | < 0.002 |
| 32301 | 207 | --- | 0.02 | < 0.002 |
| 32302 | 207 | --- | < 0.01 | 0.002 |
| 32303 | 207 | --- | < 0.01 | 0.004 |
| 32304 | 207 | --- | < 0.01 | 0.002 |
| 32305 | 207 | --- | 0.03 | 0.008 |
| 32306 | 207 | --- | 0.01 | 0.002 |
| 32307 | 207 | --- | < 0.01 | 0.006 |
| 32308 | 207 | --- | < 0.01 | 0.008 |
| 32321 | 207 | --- | < 0.01 | < 0.002 |
| 32322 | 207 | --- | < 0.01 | < 0.002 |
| 32323 | 207 | --- | < 0.01 | < 0.002 |
| 32324 | 207 | --- | < 0.01 | 0.014 |
| 32325 | 207 | --- | < 0.01 | 0.042 |
| 32326 | 207 | --- | 0.01 | 0.004 |
| 32327 | 207 | --- | < 0.01 | < 0.002 |
| 32328 | 207 | --- | < 0.01 | < 0.002 |
| 32396 | 207 | 219 | < 0.01 | < 0.002 |
| 32397 | 207 | 219 | < 0.01 | 0.002 |
| 32398 | 207 | 219 | 0.02 | 0.056 |
| 32399 | 207 | 219 | 0.02 | 0.014 |
| 32400 | 207 | 219 | < 0.01 | 0.010 |

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# CERTIFICATE OF ANALYSIS A8711491

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Project : YELLOWSTONE
Comments:

Page No. : 1
Tot. Pages: 1
Date : 26-FEB-87
Invoice # : I-8711491
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32275 H | 207 | -- | < 0.01 | 0.006 |
| 32276 H | 207 | -- | < 0.01 | 0.024 |
| 32277 H | 207 | -- | < 0.01 | 0.022 |
| 32278 H | 207 | -- | < 0.01 | 0.018 |
| 32279 H | 207 | -- | < 0.01 | 0.004 |
| 32280 H | 207 | -- | < 0.01 | 0.006 |
| 32281 H | 207 | -- | < 0.01 | 0.006 |
| 32282 H | 207 | -- | < 0.01 | 0.016 |
| 32283 H | 207 | -- | 0.01 | 0.014 |
| 32284 H | 207 | -- | 0.01 | 0.100 |
| 32285 H | 207 | -- | < 0.01 | 0.066 |
| 32286 H | 207 | -- | < 0.01 | 0.002 |
| 32287 H | 207 | -- | < 0.01 | 0.004 |

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Project : YELLOWSTONE
Comments:

Page No. : 1
Tot. Pages: 1
Date : 20-FEB-87
Invoice # : I-8711258
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 32251 | 207 | --- | 0.07 | 0.010 |
| 32252 | 207 | --- | 0.10 | 0.042 |
| 32253 | 207 | --- | 0.12 | 0.020 |
| 32254 | 207 | --- | 0.12 | 0.110 |
| 32255 | 207 | --- | 0.04 | 0.008 |
| 32256 | 207 | --- | 0.02 | 0.002 |
| 32257 | 207 | --- | 0.05 | 0.002 |
| 32258 | 207 | --- | 0.03 | 0.006 |
| 32259 | 207 | --- | 0.03 | 0.028 |
| 32260 | 207 | --- | 0.03 | 0.024 |
| 32261 | 207 | --- | 0.01 | 0.002 |
| 32262 | 207 | --- | 0.01 | 0.008 |
| 32263 | 207 | --- | 0.02 | 0.020 |

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# CERTIFICATE OF ANALYSIS A8710795

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V6C 1A5

Project :
Comments:

Page No. :1
Tot. Pages: 1
Date : 9-FEB-87
Invoice # : I-8710795
P.O. # : NONE

| SAMPLE DESCRIPTION | PREP CODE | | Ag FA oz/T | Au FA oz/T |
|---|---|---|---|---|
| 23563 | 207 | --- | 0.01 | 0.100 |
| 23564 | 207 | --- | 0.03 | 0.080 |
| 23565 | 207 | --- | 0.03 | 0.058 |
| 23566 | 207 | --- | 0.03 | 0.044 |
| 23567 | 207 | --- | 0.01 | 0.030 |
| 23568 | 207 | --- | 0.01 | 0.012 |
| 23569 | 207 | --- | 0.05 | 0.122 |
| 23570 | 207 | --- | 0.03 | 0.126 |
| 23571 | 207 | --- | < 0.01 | 0.022 |
| 23572 | 207 | --- | < 0.01 | 0.028 |
| 23573 | 207 | --- | < 0.01 | 0.030 |
| 23574 | 207 | --- | 0.05 | 0.356 |
| 23575 | 207 | --- | 0.02 | 0.292 |
| 23576 | 207 | --- | 0.06 | 0.252 |
| 23577 | 207 | --- | 0.07 | 0.034 |
| 23578 | 207 | --- | 0.07 | 0.058 |
| 23579 | 207 | --- | 0.05 | 0.024 |
| 23580 | 207 | --- | 0.01 | 0.016 |
| 23581 | 207 | --- | 0.01 | 0.010 |
| 23582 | 207 | --- | < 0.01 | 0.014 |
| 23583 | 207 | --- | 0.02 | 0.008 |
| 23584 | 207 | --- | 0.09 | 0.136 |
| 23585 | 207 | --- | 0.07 | 0.070 |
| 23586 | 207 | --- | 0.07 | 0.076 |
| 23587 | 207 | --- | 0.07 | 0.042 |
| 23588 | 207 | --- | 0.07 | 0.012 |
| 23589 | 207 | --- | 0.05 | 0.102 |
| 23590 | 207 | --- | 0.03 | 0.042 |
| 23591 | 207 | --- | 0.01 | 0.004 |
| 23592 | 207 | --- | 0.01 | 0.002 |
| 23593 | 207 | --- | < 0.01 | 0.058 |
| 23594 | 207 | --- | < 0.01 | 0.046 |
| 23595 | 207 | --- | 0.01 | 0.070 |
| 23596 | 207 | --- | 0.01 | 0.106 |
| 23597 | 207 | --- | 0.03 | 0.106 |

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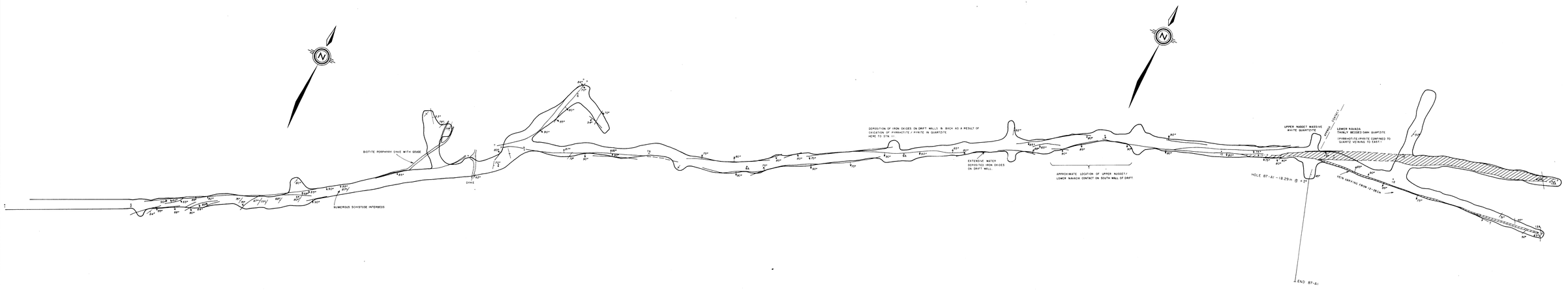



LEGEND

- SURVEY STATION
- FAULT
- BEDDING - Strike and dip
- BIOTITE PORPHYRY DYKE
- PYRITIC QUARTZ VEINING
- THINLY BEDDED GREY-MASSIVE WHITE QUARTZITE

METRES

0 5 10 15 20

GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,861

ARAKIS MINING CORPORATION

YELLOWSTONE PROPERTY

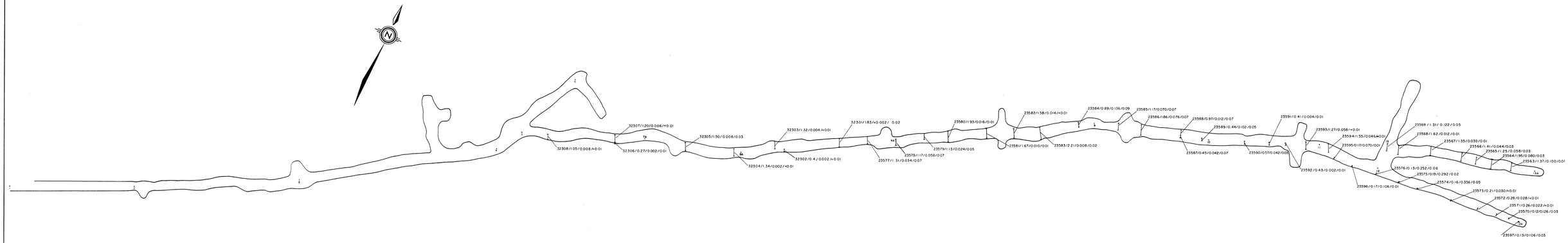
NELSON MINING DIVISION, B.C.

No. 3 LEVEL

GEOLOGY

SEARCHLIGHT RESOURCES INC.

| DATE | SCALE | NTS | FIGURE No. |
|---|---|---|---|
| FEB., 1987 | 1:200 | 82F/3E | 5 |




GEOLOGICAL BRANCH
ASSESSMENT REPORT

16,861

ARAKIS MINING CORPORATION

YELLOWSTONE PROPERTY

NELSON MINING DIVISION, B.C.

No. 3 LEVEL

CHANNEL SAMPLE LOCATION AND RESULTS

SEARCHLIGHT RESOURCES INC.

| DATE: FEB., 1987 | SCALE: 1:200 | N.T.S. 82F/3E | FIGURE No. 6 |
|---|---|---|---|