

N/Money Mar 87

Gunsteel reserves up at B.C. Nugget

82F/4W

VANCOUVER — Underground development work and diamond drilling have boosted reserves at Gunsteel Resources' Nugget mine property in southeastern B.C. closer to the desired threshold for production. The company's immediate objective is to block out 100,000 tons of economic reserves for a small milling operation, probably about 75-100 tons per day.

Gunsteel has raised approximately \$1.2 million since going public last July and two-thirds of it has been flow-through. The 1986 program concentrated on the old Nugget mine workings which are located in the central part of the property. Mine workings were rehabilitated, allowing access to several prime targets which had been delineated by previous work and from old mine records.

An exploration tunnel, which was driven east on the No 4 level of the Calhoun vein, encountered one ore zone grading 0.56 oz gold over an average width of 2.7 ft. A drill hole intersected this same vein 100 ft below the working level and the grade was similar, notes President Stan Endersby.

Mine manager Gary Allen says there is generally good vertical continuity to the ore zones and they often extend some 900 ft or more in that plane. But the horizontal extent is usually only a few hundred feet, he adds. So exploring these zones up and down dip in a methodical fashion will be the key to meeting its threshold reserve requirements.

The main exploration thrust at the moment is on the Nugget and Calhoun veins which would be the main source of feed initially. The 100 sub-level now is being advanced in the Nugget vein to the west and Mr Allen claims the high grade material encountered so far has been as "good as expected or better."

Twenty-one samples taken at various intervals in this sub-level drift averaged 1.1 oz gold per ton over an average width of 2.8 ft. Mining widths, of course, would be larger but this still represents a very respectable grade, even when averaged over 4-6 ft. Further exploration is planned at lower levels and also to the east as these workings advance.

The 400 sub-level in the Calhoun vein is also being advanced to test the downdip extension of an ore zone located some 400 ft above. The continuity of this structure will



Photo by The Northern Miner

Ore from Gunsteel's Nugget mine property is hauled out to the portal entrance and dumped in the stockpile.

be tested at various elevations as rehabilitation allows access to old mine workings.

There are several other vein systems which will be evaluated in a similar fashion, including the Fawn No 1 vein which is 1,200 ft north of the Nugget. This structure was developed in the 1930s and was mined to surface but not to depth. Development crews would probably tunnel below the vein and mine upwards. "There is no reason why this couldn't be a paying proposition," says Mr Allen.

Expenditures now are averaging \$60,000-\$70,000 per month and ore grade material is being stockpiled in dump raises for future processing. The company is not able to pull this material because of poor access to lower level ore chutes, but this problem will be alleviated after breakup. One drill is operating at present and he says the company is trying to "maintain an even flow" so that it can utilize its manpower efficiently.

The company has the option to send gold-bearing siliceous ore to Cominco's Trail smelter which could represent a significant source of revenue. In general, the silica credit offsets the smelter charges, then the company is paid for 93% of the gold content in the flux. Mr

Allen confirms Gunsteel will be looking at direct shipment to the smelter this year, but adds they would probably not be interested in custom milling any of their production. Installing a small mill on the property would enable them to return tailings underground as backfill.

Gunsteel has a number of other properties in the Sheep Creek mining camp and elsewhere in B.C. which it will be looking at this year.

82FSW 039, 040

82F SW 040

Gunsteel aims for 100 tpd at its B.C. gold project

by David Duval

Dec 29/86

82F SW 040

Positive results from Fawn vein at Gunsteel bet

VANCOUVER — Positive results have been returned from an underground diamond drilling program on the Fawn vein at Gunsteel Resources' Nugget property near Salmo, B.C.

According to Stan A. Endersby, president, the structure is one of 20 known veins on the property. Located about 1,200 ft north of the Nugget/Calhoun veins, it cuts the same rock units hosting most of the gold ore in the Sheep Creek mining camp, he notes.

The Fawn is a priority target for several reasons including the fact it contains a high grade oreshoot on the lowest working level which is easily accessible from the adjacent Nugget workings. A drill hole cutting the vein 52 ft below the bottom level graded 0.42 oz gold across 2.8 ft and a second hole 165 ft below the level returned five feet of 2.2 oz.

Another three feet of incompletely recovered core graded 0.28 oz. Assay results are not yet available from a hole 325 ft below the level which contains a large proportion of sphalerite and galena. These minerals are typically associated with gold values in the camp.

A deeper hole is planned to test the vein between the 400- and 500-ft horizon, says Mr Endersby. Consideration is also being given to extending a tunnel 1,200 ft northward from the No 5 level on the Nugget vein to intersect the Fawn 500 ft below the lowest existing working. The tunnel will cut at least two more untested veins including the O'Donnell which is stronger than the Nugget and Calhoun veins. Recent work on the property has primarily involved these two vein structures and also the Motherlode.

Geochemical survey work is under way on other parts of the property and an access road has been completed to the No 10 Motherlode portal which will be rehabilitated to provide access to deeper levels. Negotiations are also taking place for a \$1-million flow-through offering to speed up exploration.

Reserves now stand at 73,400 tons grading 0.45 oz without including the deeper holes on the Fawn vein. The gross value of the gold is about \$20 million.

11 Dec 86

GUNSTEEL RESOURCES INC. (GUM-V) has reported the exploration drift on the No.4 level of the Calhoun vein at the Nugget mine at Sheep Creek, Salmo, B.C., is being advanced in ore. Preliminary analysis by geochemical atomic absorption technique indicates ore grade gold values over a width of four feet. Assay results obtained by standard techniques will be reported when received. A second exploration drift at a lower level on the adjacent Nugget vein is now underway and should enter the most favourable structure within the next 50 feet. Ore which was mined from this vein on the levels above averaged about 1.3 ounces of gold per ton and the present work is planned to intersect the down dip extension of this zone.

The underground diamond drill program is underway to test sections of the Nugget, Calhoun, O'Donnell, North Motherlode, Ridge & Motherlode veins from old workings down to depths of 800 feet below the Nugget No.4 level.

SALMO, B.C. — Despite its name the Nugget Vein at Gunsteel Resources' gold property seven miles southeast of here contains little or no visible gold. So it's safe to assume the vein was named by someone who thought it would contain gold in nugget form. The reason for this probably relates to the fact the vein averaged 0.56 oz gold over its 57,500-ton production history — well above the industry average today.

Gunsteel has mounted one of the most ambitious programs in the Sheep Creek mining camp which incidentally ranks sixth in the province in terms of gross gold production — 727,000 oz from 1.7 million tons of ore. Vein systems in the camp are generally narrow which is probably why most majors have tended to shy away from the area.

But for small operators these type deposits represent a realizable source of cash flow and a chance to expand production incrementally to more economic levels as funds become available. That's one fact that Gunsteel management understands and is aiming for a 75-100-ton-per-day mill rate which, at 0.5 oz or better, would represent a significant amount of gold production. It would probably take 75,000-100,000 tons of reserves to justify a production decision and this could easily be blocked out this year.

Gunsteel will be spending \$350,000 on its Nugget mine property in the 1986 tax year which for flow-through funded programs ends in late February. And should all its warrants be exercised as expected the company stands to raise another \$700,000 in mid-January which should carry the program through the upcoming calendar year. According to Stan A. Endersby, president, the Nugget

vein system will be the prime target although several others exist including the Calhoun vein which also has considerable potential, will also be checked.

Each of these veins was mined previously but there is still great potential on the down dip, he states, noting that Gunsteel's present effort is being directed towards defining reserves to depth. Drifting is now under way on the No 4 level and a diamond drill is testing for extensions from a sub-level some 200 ft below that horizon.

Historical mine widths were as low as three feet and grades were often higher over narrow widths; but conversely they were sometimes better across wider widths, the Reno vein being a classic example. This was one of the larger, more productive veins in the region and it averaged 0.56 oz gold for 261,500 tons of production. Typically, the vertical continuity of the veins was greater than it was laterally.

At the time of our visit the exploration heading on the No 4 vein was in ore grade material and sample results from the first two drift rounds included 4.1 ft of 0.36 oz gold and 4.2 ft of 0.41 oz. These results are from atomic absorption analysis and are subject to confirmation by conventional fire assay techniques. This zone is the down-dip extension of an ore zone on the No 3 level where 0.38 oz gold was reported across 2.8 ft for a length of 290 ft. In addition, the company is drifting on the adjacent Nugget vein which "appears to be coming into ore grade material," he says.

At least 20 veins are known to exist on the property but the Reno, Nugget and Motherlode were the most prolific. Up to 427,000 tons of ore containing 230,000 oz gold was produced from these veins prior to 1941 or about 32% of the recorded gold output in the Sheep Creek camp.

Rightly so, the company feels the possibility of locating another one of these good tonnage, high grade, vein deposits is excellent; but it recognizes the development intensive nature of exploration and mining in this type geological environment which can be expensive. Thus adequate financing will be an ongoing priority.

Gold-quartz veins with minor sulphides occur in northeasterly-trending faults where they intersect certain stratigraphic units near the crest of a western anticline and the western limb of an eastern anticline. The gold is very fine and would likely come out in a flotation concentrate followed by conventional cyanidation.

There is some highly siliceous flux material on the property that has been sold to Cominco's Trail smelter over the years. And about half (10,000 tons) of the total has been shipped since 1975, says Mr Endersby. The silica credit generally offsets the smelter charges and the company is paid for 93% of the gold content in the flux. For lower grade material, he says this method is more competitive than milling. The Trail smelter is about 35 miles away, two-thirds of it on paved road, and it's likely that Cominco will continue to provide this service because so many small operators in the region depend on it.

Proven and probable reserves are estimated to be around 21,400 tons grading 0.37 oz and there are 23,000 tons at a similar grade in the possible category. These reserves are readily mineable, the company notes. Additional reserves are available in the higher categories but access is difficult and the economics aren't quite as good.

There is good infrastructure in the area and miners who are experienced in narrow vein systems which will be important should the operation produce on a sustained basis. Gold values are erratic, which is quite typical for a vein type system, and visual control is generally poor. Thinking small is often difficult for mining people but the Nugget mine potential certainly falls into this category at the moment.

Gunsteel looks to restart nugget gold production

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VANCOUVER — Gunsteel Resources — says the underground exploration program at its Nugget gold property near Salmo, B.C., is progressing with very positive results. The present work is being concentrated in the area of the Nugget/Calhoun vein system where underground work can be carried on throughout the winter.

Sample results from the Calhoun vein on the No 4 level ranged from 0.02 oz gold over 1.9 ft to 1.8 oz across 1 ft. Other values included 1.5 ft of 0.94 oz; 3 ft grading 0.74 oz; 4.2 ft of 0.41 oz and 3 ft averaging 0.34 oz. Results from the Nugget vein at the 100 sub-level were also impressive. They ranged from 0.06 oz over 3.3 ft to 0.75 oz across 3.3 ft. Additional samples included 0.54 oz over 3.3 ft; 0.48 oz across 2.6 ft and 3 ft of 0.41 oz.

The ore zone on the No 4 level of the Calhoun vein is 160 ft below an existing ore zone on the No 3 level which averages 0.38 oz gold over a width of 2.8 ft and a length of 290 ft. Another drift is planned

shortly on the Calhoun vein some 425 ft below the one now being driven on the No 4 level. Access to the Calhoun vein at these levels is relatively easy from existing workings, the company states.

Ore grade material is being encountered on the 100 sub-level sooner than expected. This area appears to represent a downward projection of an ore zone which was mined previously on the No 4 level about 100 ft above.

Expenditures on the Nugget property since last July have totalled about \$300,000. Ore reserves at the start of the program were estimated at 38,000 tons grading 0.38 oz gold per ton with another 20,000 tons grading 0.2 to 0.41 oz available on other parts of the property.

Gunsteel says that with the excellent ore grades being encountered on the Nugget/Calhoun vein systems and with 20 other known veins on the property, "the opportunity to increase reserves sufficiently to put the property back into production is excellent."

18 FEB 87 GUNSTEEL RESOURCES INC. (GUN-V) GINL 34
SAMPLING ALONG 86 FEET OF TUNNELING - Stan A. Endersby,
ASSAYED 1.141 OZ.GOLD/T OVER 2.8' FT. P.Eng., president
of Gunsteel

82F/4W

Resources Inc., reports that the underground exploration program at the Gunsteel/Nugget property at Sheep Creek near Salmo in SE B.C., continues to come up with very positive results. Twenty one samples taken along 86 feet of the tunnel being driven along the Nugget vein on the 100 sub-level averaged 1.141 oz.gold/ton across 2.34 feet. In those 21 samples, the assays ranged from 0.62 to 4.975 oz.gold/t, both across 3.3 feet.

On the Calhoun Vein, the new ore zone on No.4 level averaged 0.56 oz.gold/t over an average width of 2.7 feet. Diamond drill hole 87-3 was designed to intersect the projected extension of the ore zone about 100 feet below No.4 level. It intersected similar grade material, so another tunnel has been started to test the Calhoun vein on the 400 sub-level, which is 425 feet below No.4 level. The face of this lower tunnel has now been advanced about 18 feet and the average of 6 samples across the vein at equal intervals along it is 0.24 oz. gold/t across 2.2 feet. Mr. Endersby says, "This is very encouraging as it was expected that we would have to drift some distance along the vein before hitting ore."

The Fawn No.1 vein is one of 4 now exposed in No.5 level of the Fawn mine. It lies 1400 feet north of the Calhoun vein along the same favorable quartzite structure. A short high grade ore zone is exposed on this vein in the No.5 level workings. Diamond drilling to intersect the vein about 75 feet below the level produced drill core cuttings grading 0.88 oz.gold/t over a 5-foot interval, and a partially recovered core grading 0.42 oz.gold/t over a recovered 2.4 feet of core. Another hole has now been put down east of the first on the same vein and has intersected similar well mineralized material. Assays are awaited.

82FSW 039, 040

GUNSTEEL RESOURCES INC.
BLOCKING OUT ^{Apr 87}
GOLD RESERVES ^{VMR}

Mr. Stan Endersby reports that underground development work and diamond drilling are continuing at the Nugget Mine, a former gold producer, located in the Sheep Creek mining camp of southeastern British Columbia, Canada. Up to 1941 this property had produced 230,590 ounces of gold from 430,000 tons of ore for an average grade of .54 oz. per ton and 200,000 ounces of silver.

An exploration tunnel on the Calhoun vein encountered an ore body grading .56 oz. of gold per ton over an average width of 2.7 feet. A drill hole intersected this same vein 100 feet below the working level.

Twenty-one samples taken from the 100 sub-drift of the adjacent Nugget vein averaged 1.141 oz. of gold per ton over an average width of 2.8 feet. Further exploration work is planned at the lower levels and also to the east as these workings advance.

There are several other vein systems which will be evaluated in a similar fashion. Two mining crews, a timbering crew and a diamond drill crew are presently working on the property. (VSE:GUN). For further information contact: Mr. Stan Endersby President, 501-850 West Hastings Street, Vancouver, Canada, V6C 1E1, (604) 681-0194.

WIN MAY 87
GUNSTEEL RESOURCES INC.
(VSE-GUN)

Gunsteel Resources Inc. continues to come up with positive results from its underground exploration program on the Gunsteel/Nugget property at Sheep Creek, near Salmo, British Columbia.

Assay results from the Nugget Vein on the 100 sub-level exploration drift have averaged 1.141 ounces of gold per ton over a width of 2.84 feet from 26 feet to 112 feet along the vein.

The new ore zone at the Calhoun Vein on the No. 4 level averaged 0.56 ounces of gold per ton over an average width of 2.7 feet. Diamond drill hole #87-3 was drilled to intersect the projected extension of the ore zone about 100 feet below the No. 4 level where it encountered similar-grade material. In view of this favorable indication that the ore zone is extending down dip, another tunnel has been started to test the Calhoun Vein on the 400 sub-level, located 425 feet below the No. 4 level.

The face of this tunnel on the lower level is advancing. At the 18-foot point, six samples across the vein at equal intervals graded 0.24 ounces of gold per ton across 2.2 feet. Stan A. Endersby, P.Eng., president, says these results are viewed as very encouraging as it was expected that further drifting along the vein would be necessary before encountering ore-grade material.

Another diamond drill hole has been completed to intersect the Fawn No. 1 Vein that lies 1,400 feet north of the Calhoun along the same favorable quartzite structure. Core cuttings grading 0.88 ounces of gold per ton over a 5-foot interval and a partially recovered core grading 0.42 ounces of gold per ton were recovered over a 2.4-foot length of core. The company reports that another drill hole has now been put down to the east of the first on the same vein and has intersected similar well-mineralized material. Assay results on this last diamond drill hole are not yet available.

The Gunsteel/Nugget property is a former operating mine with a recorded production totalling 435,000 tons averaging 0.54 ounces of gold per ton for a total recovery of 233,000 ounces.

^{82F/4W}
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For more information please circle reader service number 188 on page 60.

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