NEW DISCOVERY GAINING INTEREST

Louis Bernoilles has a lot to smile about these days.

The affable prospector is gearing up for his next phase of exploration at his promising Skinner prospect 100 kilometres southwest of Williams Lake.

The Skinner intrusive-hosted mesothermal vein prospect was discovered in June 1990 by Bernoilles, president of Ottarasko Mines Ltd. The area is a new mineral locality and may represent a northern extension of the "Taseko" (Chilcotin) mineral belt, according to Tom Schroeter and Bob Lane of the provincial Ministry of Energy, Mines and Petroleum Resources.

Schroeter and Lane included a report on the property in the EMPR's British Columbia 1991 exploration review.

The Skinner property is located on the southwest flank of Mount Skinner in the northern part of the rugged Chilcotin ranges.

The Skinner property originally consisted of seven two-post claims, later surrounded by conventionally staked claims. The main showing, the Victoria vein, was the target of exploration in 1990 and was exposed by hand trenching. The property was optioned to Northair Mines Ltd. in 1991. Northair

INDUSTRY LEADERS TO SPEAK AT MINERAL ECONOMICS SYMPOSIUM DURING Roundup

The Honourable Jake Epp, Dr. Norman Keevil and Harry Conger are just a few of the notable speakers to address the many issues impacting the mining industry at "Mining in North America — Facing the Issues Head On." This one-day event, sponsored by the Mineral Economics Society - Western Section of the Canadian Institute of Mining, Metallurgy and Petroleum, will examine land use policy, environmental initiatives, labour issues and international competitiveness of the North American mining industry. The symposium will be held in the Hotel Vancouver on January 25, 1993, a day prior to the 1993 Cordilleran Roundup. The CIM Mineral Economics Society plans its most important event annually at this time to make it very convenient for delegates planning to attend the Roundup.

PHOTO: W. BRUNET

Hotel Vancouver

Three years ago, the Mineral Economics Society embarked on an important long-term goal — to establish a seat for mineral economics at a Canadian university. Canadian universities have fine technical programs in mining, but these programs pay scant attention to economics. If the Canadian mining industry hopes to compete, it must always be mindful of the economic implications of the decisions made. The society is getting very close to achieving its goal. Proceeds from the symposium will go towards establishment of this chair.

The Honourable Jake Epp, minister of energy, mines and resources, and Dr. Norman Keevil, president and chairman of Teck Corporation, form the panel on international competitiveness, while Harry Conger, chairman & CEO of Homestake Mining Company, presents his views on North American mining as the keynote speaker. Other speakers include:

- Stephen Owen, chairman, Commission on Resources and Environment, and David Johnston, vice-president, Cominco Metals (land use policy panel);
- Howard Harowitz, The Coopers and Lybrand Consulting Group, and Harlan Meade, vice-president, Westmin Resources Limited (environmental panel);
- Ken Georgetti, president, B.C. Federation of Labour, and Duncan Wilkins, vice-president, Business Council of British Columbia (labour panel).

Plan to attend this important event and hear first-hand from the leaders shaping the future in our industry. A substantial discount applies for delegates registering before December 1, 1992. Contact Mr. Richard Mazur, symposium chairman, at (telephone) (604) 681-0622 or 681-1008, (fax) (604) 681-2627. □

focused on the Victoria vein and immediate area and work included the completion of a grid, preliminary bedrock mapping and prospecting, electromagnetic and magnetic surveys, construction of a four-kilometre access road, mechanized trenching and diamond drilling.

Schroeter and Lane reported that the Victoria vein was exposed intermittently over a strike of 130 metres. Covered by talus to the west, it appeared to feather out to the east. Vein width was variable, but it reached a maximum of 1.4 metres.

Grades were variable along the length of the vein. A composite of chip samples taken by Northair across the vein — according to the EMPR report — averaged 28.7 grams per tonne gold over a 1.05-metre width and strike length of 59 metres.

In October 1991, a six-hole diamond drilling program totalling 260 metres was completed. All holes intersected the shear zone that hosts the vein.

The best intersections are in holes 91-3 and 91-4 (0.9 m at 20.85 g/t Au and 1.0 m at 62.40 g/t Au, respectively).

Bernoilles has made a preliminary resource estimate for the Victoria vein of 11 300 tonnes grading 20.23 grams per tonne gold. ►

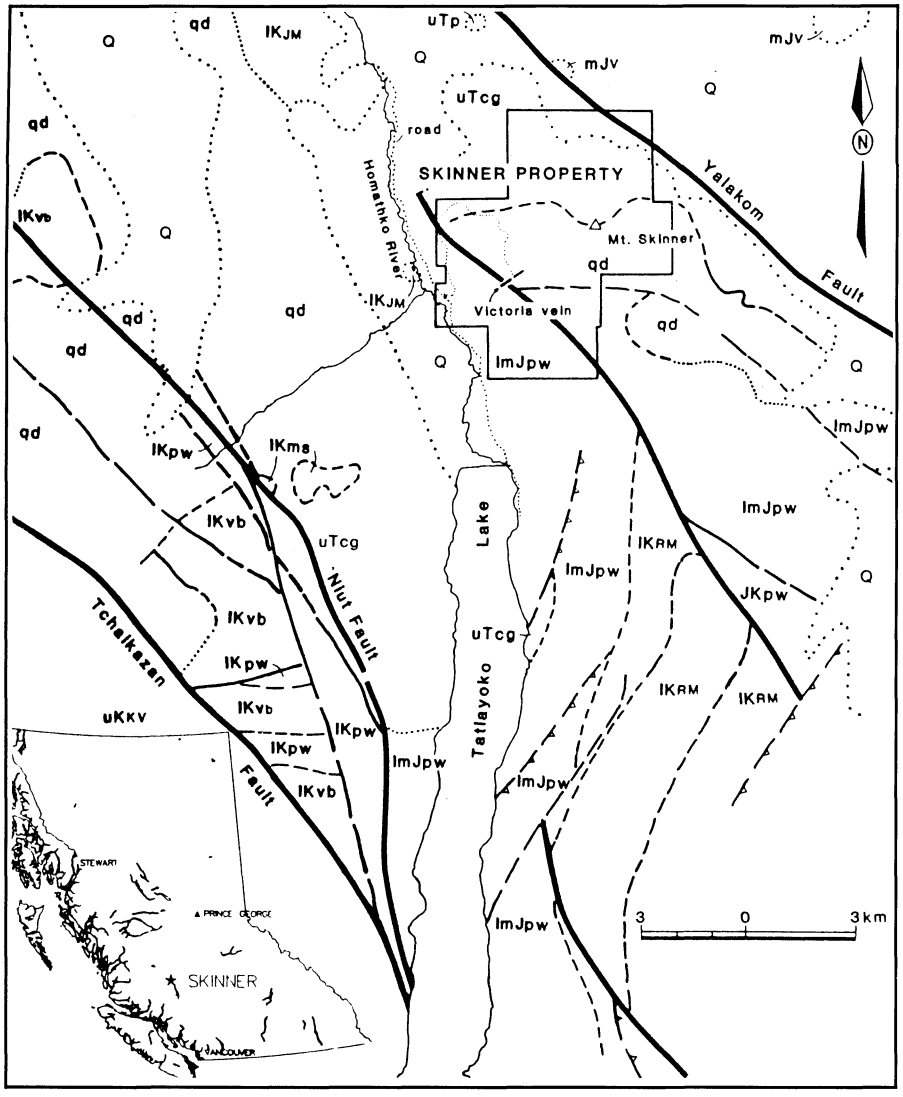

Figure B-8-1. Location of the Skinner property (inset) and regional geology of the Mount Skinner area (after Roddick and Tipper, 1985).

LEGEND

QUATERNARY
- Q — Till, gravel, sand and alluvium

UPPER CRETACEOUS
- uKKv — Kingsvale Group; Andesitic and basaltic breccia and tuff

LOWER CRETACEOUS
- IKJM — Jackass Mountain Group; Greywacke, siltstone and conglomerate
- IKvb — Andesitic and basaltic breccia and tuff
- IKpw — siltstone, greywacke and conglomerate, breccia, quartz sandstone and limestone
- IKms — Metasediments and migmatite
- IKRM — Relay Mountain Group; Arkose, conglomerate, greywacke, siltstone, coquinoid limestone

JURASSIC AND CRETACEOUS
- JKpw — Siltstone, greywacke, conglomerate and arkose

UPPER JURASSIC
- uJcg — Conglomerate, shale, arkose, greywacke and tuff.

LOWER AND MIDDLE JURASSIC
- ImJpw — Siltstone, shale, greywacke, grit and conglomerate
- mJv — Tuff and volcanic breccia; minor conglomerate and shale

UPPER TRIASSIC
- uTp — Shale, siltstone, greywacke, conglomerate, volcanic breccia and tuff.
- uTog — Conglomerate, limestone and greywacke.

COAST PLUTONIC COMPLEX
- qd — quartz diorite

Geologic contact

Fault

Thrust fault

Limit of outcrop

Due to the suspected limited size potential of the vein, Northair terminated its option and turned the property back to the owner.

In mid-1992, a 157-tonne bulk sample produced 208 oz. of gold. Ore was shipped to Westmin's Premier Gold Project. Bernoilles says there was an excellent extraction percentage (99 per cent range).

"The program's wrapped up now," Bernoilles said in a recent interview before heading to Montreal for the winter. "We've had great satisfaction in dealing with Westmin this past summer."

The narrow vein mining consisted of a trench two feet wide and 100 feet long. Bernoilles says it took a lot of careful hand work but the promising results made the blood, sweat and tears worth it.

Ore was taken in a 10-ton truck on the private access road before reaching the already-existing logging roads and then onto Highway 20 to Williams Lake.

Next phase begins in March of 1993 with more bulk sampling and underground work.

"The grades should be better," Bernoilles assures.

As Schroeter and Lane concluded in their '91 exploration review:

"The Skinner mesothermal gold prospect, although small, is an interesting new discovery in a generally poorly known and underexplored area of the province. The intrusive-hosted-shear-controlled vein is a new target in this area of the province." □

Skinner mesothermal vein prospect

Location: UTM Zone: 10U Northing: 5727600 Easting: 404600 (092N/ 09W) Clinton Mining Division, 100 kilometres southwest of Williams Lake, 5 kilometres north of the north end of Tatayoko Lake on the southwest flank of Mount Skinner.

Minfile #: 092n 039

Claims: SK1 - SK7, Skinner 1 - Skinner 7 and Lincoln 1.

Access: 180 kilometres east along Highway 20 from Williams Lake, then south along logging roads for about 30 kilometres, then west for several kilometres to the property via a 4-wheel drive, private access road.

Owner/Operator: Ottarasko Mines Ltd.

SKINNER MESOTHERMAL VEIN PROSPECT

(Fig. B1, No. 8)

By Tom Schroeter and Bob Lane

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ACCESS:	180 kilometres east along Highway 20 from Williams Lake, then south along logging roads for about 30 kilometres, then west for several kilometres to the property via a four-wheel-drive, private access road.
OWNER/OPERATOR:	Ottarasko Mines Ltd.
COMMODITIES:	Gold.

INTRODUCTION

The Skinner intrusive-hosted mesothermal vein prospect was discovered in June 1990 by local prospector Louis Bernoilles (President, Ottarasko Mines Ltd.). The area is a new mineral locality and may represent a northern extension of the "Taseko" (Chilcotin) mineral belt. The Skinner property is located on the southwest flank of Mount Skinner in the northern part of the rugged Chilcotin Ranges, (Figure B-8-1).

RECENT EXPLORATION

The Skinner property originally consisted of seven two-post claims. These were later surrounded by conventionally staked claims. The main showing, the Victoria vein, was the target of exploration in 1990 and was exposed by hand trenching. The property was optioned to Northair Mines Ltd. in 1991. Northair focused on the Victoria vein and immediate area. Work included the completion of a grid over the area, preliminary bedrock mapping and prospecting, electromagnetic and magnetic surveys, construction of a 4-kilometre access road, mechanized trenching and diamond drilling (Bernoilles, 1991).

The Victoria vein was exposed intermittently over a strike length of 130 metres. It is covered by talus to the west and appears to feather out to the east. Vein width is variable, but it reaches a maximum of 1.4 metres. Grades are variable along the length of the vein. A composite of chip samples taken by Northair across the vein averaged 28.7 grams per tonne gold over a 1.05-metre width and strike length of 59 metres.

A six-hole diamond drilling program totalling 260 metres was completed in October 1991 (Visagie, 1991a). All holes intersected the shear zone that hosts the vein. The best intersections are in Holes 91-3 and 91-4 (0.9 m at 20.85 g/t Au and 1.0 m at 62.40 g/t Au, respectively). The owner has made a preliminary resource estimate for the Victoria vein of 11 300 tonnes grading 20.23 grams per tonne gold (Bernoilles, personal communication, 1992). Due to the suspected limited size potential of the vein Northair terminated its option and turned the property back to the owner.

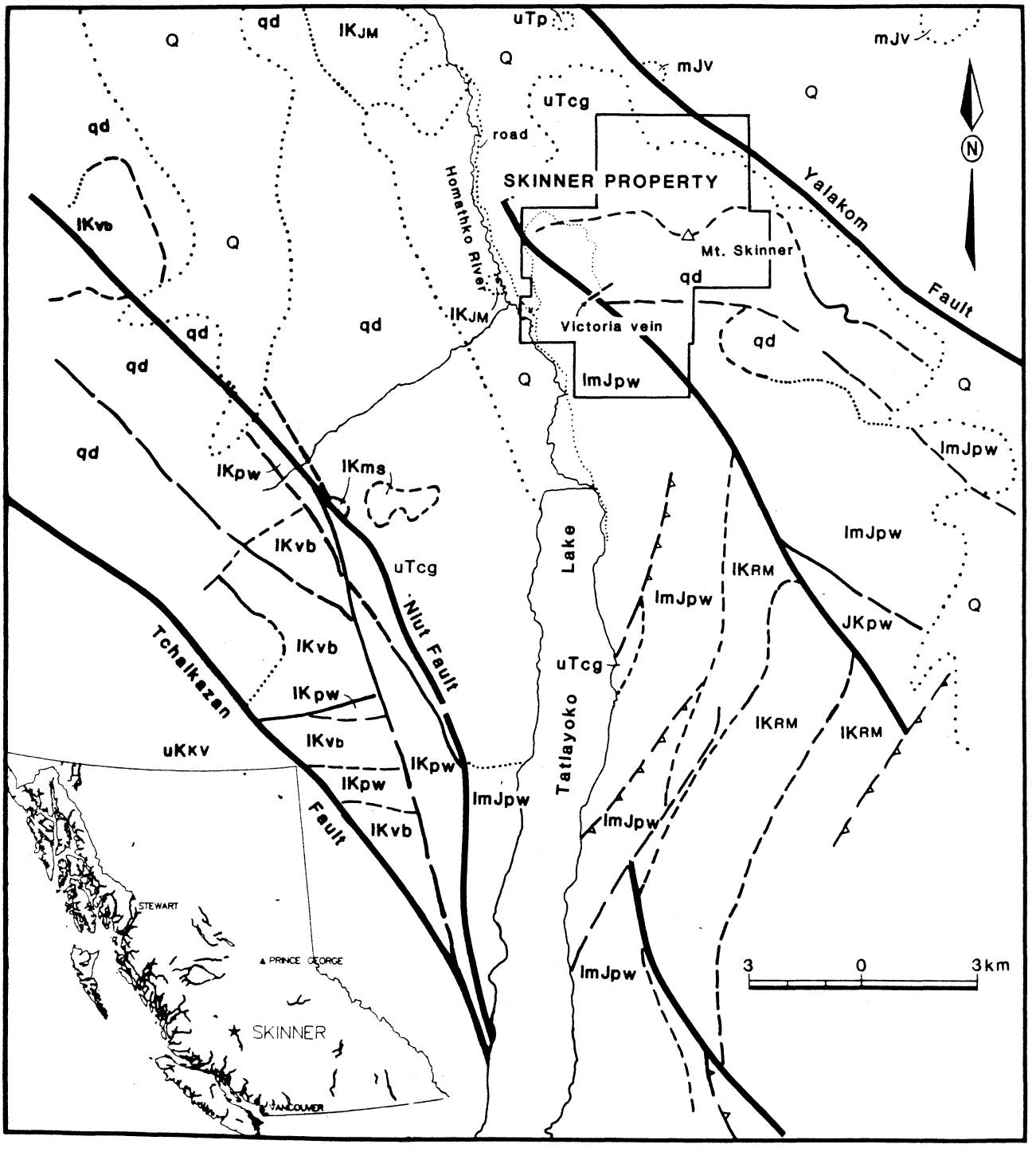
REGIONAL SETTING

The Skinner property is situated in the Cadwallader Terrane of the Coast crystalline belt between the northwest-trending right-lateral transcurrent Yalokom fault to the west and Tchaikazan fault to the east (Figure B-8-1). The Tchaikazan fault is post Early Tertiary and cuts Late Cretaceous Kingsvale Group volcanic rocks and Late Cretaceous to Early Tertiary granitic rocks (Roddick and Tipper, 1985). The Mount Skinner area is underlain by Early Cretaceous to Late Triassic sedimentary rocks that have been dissected by northwest-trending splays from the major fault systems and intruded by Early Tertiary granodiorite and quartz diorite of the Coast Plutonic Complex.

PROPERTY GEOLOGY

The Skinner prospect is hosted by Early Tertiary(?) quartz diorite that intrudes upper Norian conglomerate, limestone and greywacke and Lower to Middle Jurassic (Hettangian(?), Sinemurian, Bajocian and Callovian) siltstone, shale, grit and conglomerate (Roddick and Tipper, 1985).

Veins discovered to date occur in recessive weathering zones that have, in part, been identified as linear features on aerial photographs. Vein outcrop is almost nonexistant on the property and each prospective gold-bearing target must be trenched. The "discovery zone", the Victoria vein, is up to 1.4 metres wide. It has been traced over a strike length of 130 metres. Vein orientation is 055° to 070° with a 70°N dip (Visagie, 1991b). There are



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Thrust fault

Limit of outcrop

several parallel vein-bearing structures, but they are relatively narrow. Mineral showings at surface consist of free gold on fractures and within limonitic boxwork. Minor remnant pyrite also occurs. Limonite, hematite and manganese oxide are common fracture coatings, while malachite is rare. At depth gold is associated with pyrite and/or chalcopyrite. Sulphides average less than 1 per cent of the vein material, but locally reach a maximum of 5 per cent.

Wallrock alteration is patchy and generally weak. Where alteration is well developed, chlorite, sericite and clay minerals are common and secondary silica is rare. Sericite occurs in minor amounts as a gangue mineral in the quartz vein.

Fine-grained andesite dikes, typically less than a metre across, are more evident in drill core than in outcrop (Visagie, personal communication, 1991). Dikes are parallel or subparallel to the veins/shears. The relationship between the dikes and the veins is unknown.

EXPLORATION POTENTIAL

The Skinner mesothermal gold prospect, although small, is an interesting new discovery in a generally poorly known and under-explored area of the province. The intrusive-hosted shear-controlled gold vein is a new target in this area of the province.

FUTURE WORK

The owner plans to remove a 200-ton bulk sample for a test mill run in mid-1992. Subsequent underground access may be developed. Interest in the area may increase when results of a B.C. Regional Geochemical Survey for the area (92N) are released in mid-1992.

ACKNOWLEDGMENTS

We would like to thank Dave Visagie of Northair Mines Ltd. and Louis Bernoilles for their invitation and generous hospitality while visiting the property.

REFERENCES

Bernoilles, L.M. (1991): Ottarasko Mines Ltd. Summary Report, 1991.

Roddick, J.A. and Tipper, H.W. (1985): Geology, Mount Waddington (92N) Map Area; *Geological Survey of Canada*, Open File 1163.

Visagie, D. (1991a): Diamond Drilling Report on the Skinner Project; *Northair Mines Ltd.* internal report.

Visagie, D. (1991b): Geochemical Report on the SK Claims; *B.C. Ministry of Energy, Mines and Petroleum Resources*, Assessment Report No. 21, 396.