



Chevron Canada Resources Limited
Minerals Staff

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Earl D. Dodson
Manager, Minerals Staff

May 6, 1987

Manager,
Exploration British Columbia,
Mineral Resources Division,
Ministry of Energy, Mines and Petroleum Resources,
Parliament Buildings,
Victoria, B. C.
V8V 1X4

Dear Sir:

Enclosed please find an application by Chevron Canada Resources Limited to compete for funds within the Mineral Exploration Incentive Program.

If successful, we plan to utilize the funds towards a drilling programme which will explore the down-depth and on-strike continuation of the previously-exploited auriferous vein system, as well as newly-discovered targets, at the Wayside deposit, Lillooet Mining Division.

Our surface exploration programme is currently underway. Financial assistance through the MEIP would allow us to extend our present surface programme and, in particular, allow us to carry out a drilling programme this year, further enhancing our chances for early discovery.

Respectfully submitted,

CHEVRON CANADA RESOURCES LIMITED

L. A. DICK
Staff Geologist

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Manager, Minerals Staff

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The Wayside property contains a past-producing vein-hosted gold deposit and a volcanic-hosted massive sulphide occurrence in the Bralorne-Pioneer gold mining camp. The property is located 3 km north of the town of Gold Bridge, adjacent to, and covering the southwestern end of Carpenter Lake, in the Lillooet Mining Division. Access is by all-weather road from Lillobet or Gold Bridge (Fig. 1). The property consists of: 1 mineral lease; 29 reverted crown grants; 18 located claims (Fig. 2). The availability of access, power and a mining-oriented population center make infrastructure ideal for this project. The property has been optioned by Chevron Canada Resources Limited from Amazon Petroleum Ltd. and Carpenter Lake Resources Ltd., two Vancouver-based junior companies. Chevron has the right to earn 51% interest in the property by expending \$2 million over five years.

Chevron's main objectives are two fold: to explore for extensions at depth and on-strike of the known, previously-exploited NW-SE-trending auriferous veins; and to discover, through detailed geological, geochemical and geophysical prospecting, additional auriferous vein systems of the Bralorne-type, using the nearby past-producing, major deposits at Bralorne and Pioneer as geologic and exploration models.

The Wayside vein gold deposit produced about 5,000 oz. Au during intermittent production/exploration phases, mainly between the years 1914 to 1937. Minor exploration was carried out between 1946 and 1953. Recently, a number of junior companies have carried out intermittent, cursory exploration of the auriferous veins.

Production at Wayside was from a shear zone-hosted vein, very similar in texture and mineralogy to the Bralorne and Pioneer veins (ribbon-banded with free gold) which is hosted by a body of structurally-competent Bralorne diorite. The main Wayside vein (± 1 m-wide) was explored/exploited to shallow (± 500 feet below Carpenter Lake level) depths with nine production/exploration levels. Grades were locally high-grade and economic and mining was selective within high-grade lenses. Ore grade gold values in the lowermost (ninth) level were recorded when underground exploration ceased.

In addition to the main, Wayside vein, two other auriferous veins are known on the property. These have received only cursory exploration, consisting of shallow drilling and trenching. Since 1980, most attention was directed towards a volcanic-hosted massive-sulphide showing which was discovered on the property.

Regional and property geology

The geologic setting of the Wayside vein system is nearly identical to that of the two principal gold deposits of the camp: the Pioneer and Bralorne deposits (with combined production in excess of 4 million ounces Au from quartz veins which yielded ore grading an average 0.52 oz. Au/ton). The main ore-related structures and lithologies at Bralorne and Pioneer trend north onto the Wayside property (Fig. 3 and 4). As a group, these deposits show many geological similarities to the Mother Lode deposits of northern California.

The two major past-producers in the Bralorne camp consist of systems of quartz veins hosted by structurally-competent greenstone (Pioneer greenstone) and diorite (Bralorne intrusions) and extended to great depths (the Bralorne veins were mined to a depth of 6,000 feet and were still averaging greater than 0.5 oz/ton). The veins at Bralorne fill tension fractures which splay from two major parallel-trending faults - the Fergusson and Cadwallader faults. The two most important criteria for ore formation, therefore, appear to be proximity to a major structure and a competent host rock.

The Wayside property encompasses two bodies of Bralorne diorite as well as an area underlain by the Pioneer greenstone, both potential host rocks for Bralorne-type veins. A north-trending offset segment of the ultramafic-hosting Cadwallader fault passes through the property and is spatially related to the known Wayside vein.

Recent mapping by the B.C. Geological Survey Branch (Church, 1987) interprets the vein-hosting diorite at Wayside as a northern, displaced portion of the main body of diorite, offset from the main body by an E-W fault. If correct, the main body of diorite at Wayside, south of the offset is a prime exploration target for the southeasterly strike continuation of the known vein (refer to Church and MacLean, Map 1978-11 and Fig. 4). Old reports indicate anomalous gold values in soil where the projected continuation of the vein should occur.

The similarity in the geologic setting of the Wayside veins to Bralorne and Pioneer permit us to utilize the latter deposits as an exploration model. This comparison is enhanced by the similarity in mineralogy and texture of the veins in all three deposits, and to a striking similarity in Au/Ag ratios (Bralorne and Pioneer 4.0 - 5.4, Wayside 6.4) compared to nearby antimony-rich gold occurrences hosted by Bridge River group which have lower Au/Ag ratios (e.g. Minto 0.35; Congress 2.0; Lucky Strike 0.45). We also expect that, as at the Bralorne and Pioneer, the Wayside veins have the potential for great depth extent owing to their competent host rock.

As shown in Figure 5, a comparative longitudinal section through Bralorne, Pioneer and Wayside, the area of stoping at Wayside is small compared to the vertical extent of ore shoots at the two larger deposits. Given the irregular morphology of the high grade shoots at Bralorne, the presence of gold-bearing vein material within the volume of explored ground at Wayside indicates that a thorough investigation of the Wayside system at depth is warranted. A significant intersection reported by Amazon Petroleum (DDH 80-10) of 2.63 oz/ton Au across 3 m., of what is indicated to be the down-dip continuation of the same vein, 30 m. below the lowermost workings, indicates that the Wayside deposit is open down-plunge to depth. (Two successive holes drilled to a similar depth failed to intersect similar-grade mineralization although they appear to have penetrated the same shear zone. The ore-grade 1980 intersection was located and resampled recently by Chevron and we obtained a value of 1.09 oz/ton Au across a 1 m-wide portion of the interval consisting of clay-rich fault gouge and broken, banded quartz vein.) Thus, the Wayside vein represents a very attractive target which requires more drilling to delimit the down-plunge continuation of ore. In addition to the depth potential, the NE extent of mineralization has not been adequately explored by diamond drilling or other exploration techniques. A high-priority target would be, using the past-producers as models, where the Wayside shear intersects the faulted western margin of the diorite.

Exploration Approach

The potential of this property lies in its geologic setting, location, and presence of a known Au occurrence similar in appearance to the banded Bralorne veins, and of which there is demonstrated potential for depth extension. Our approach will be to initially evaluate the potential of the entire property for hosting additional veins (including the possible offset continuation of the presently known main vein), with a programme (already in progress) of detailed surface geology, geochemistry and applicable geophysics (ground magnetics and VLF). Surface targets generated from surface prospecting, including other known veins on the property, will be stripped and, if warranted, drill tested. Down-plunge and on-strike extensions to known mineralization will be drill tested only after the property structure is more thoroughly understood, keeping in mind that mesothermal deposits, such as Bralorne and those of the Mother Lode, can extend to great depths, and that the ore shoots can have an irregular distribution. Detailed mapping of the accessible parts of the underground workings will be essential to understanding ore-hosting structural controls.

Much of the property, especially on the south side of Carpenter Lake, has not been explored, and we are initially concentrating on mapping and sampling the entire property, paying particular attention to areas of Bralorne diorite and Pioneer greenstone. Gullies trending NW-SE are particularly important as these may reflect surface expressions of vein-hosting shears. As our knowledge of the property, and of the critical controls to known mineralization, matures, we will progress later in the field season to a trenching and drilling phase to test new discoveries and expand the known vein system.

L. A. Dick
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Bibliography

A. Published Reports:

Cairnes, C.E. (1937): Geology and Mineral Deposits of the Bridge River Mining Camp, British Columbia, Geological Survey of Canada, Memoir 213, 140 pages.

Church, B.N. (1987): Geology and Mineralization of the Bridge River Mining Camp (92J/15, 920/2, 92J/10), B. C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1986, Paper 1987-1.

Church, B.N. and MacLean, M. (1987): Geology of the Gold Bridge Area (92J/13/W), Open File Map 1987-11, B.C. Ministry of Energy, Mines and Petroleum Resources.

Harrop, J.C. and Sinclair, A.J. (1986): A Re-Evaluation of Production Data, Bridge River-Bralorne Camp (92J), British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1985, Paper 1986-1.

Leitch, C. and Godwin, C.I. (1986): Geology of the Bralorne-Pioneer Gold Camp (92J/15), B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1985, Paper 1986-1, pages 311-316.

McCann, W.S. (1922): Geology and Mineral Deposits of the Bridge River Map Area, British Columbia, Geological Survey of Canada, Memoir 130, 115 pages.

Pearson, D.E. (1975): Mineralization in the Bridge River Camp, B.C. Ministry of Energy, Mines and Petroleum Resources, Geology in British Columbia, 1975, pages G57-G63.

B. Unpublished Reports:

Arik, A. Halim (Nov. 15, 1984): 1984 Assessment Report - Diamond Drill Program, Wayside claims.

Arik, A. Halim (Oct. 17, 1985): Assessment Report, Wayside Project.

Arik, A. Halim (Dec. 13, 1985): Summary Report 1985, The Wayside and Wayside Extension.

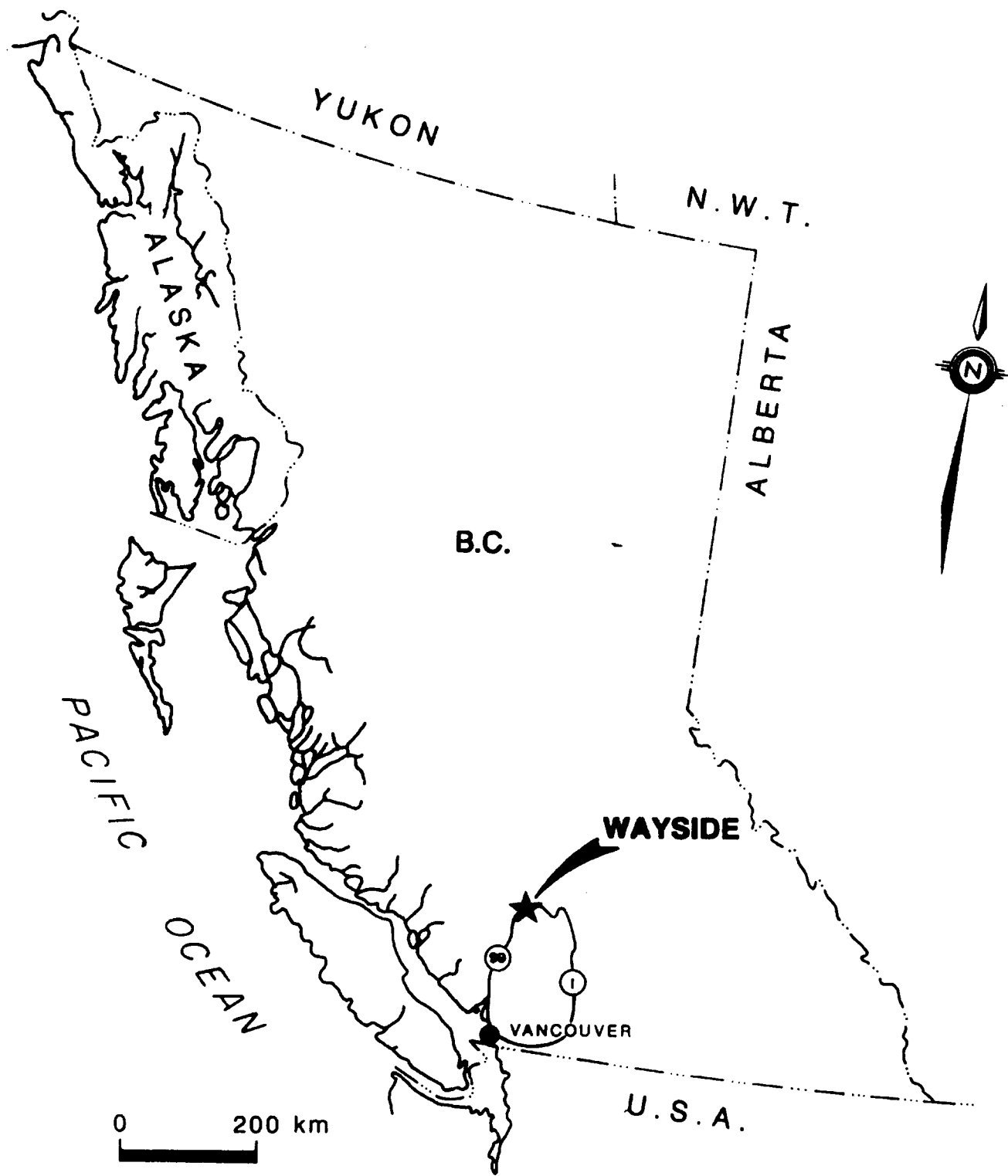
Elwell, J.P. (Sept. 3rd, 1979): Progress Report - Diamond Drilling on Wayside Property.

Elwell, J.P. (Jan. 21, 1980): Report on the Exploration of the Wayside Property Goldbridge Area

Elwell, J.P. (Dec. 19, 1980): Report on the Exploration of the Wayside Property Goldbridge Area.

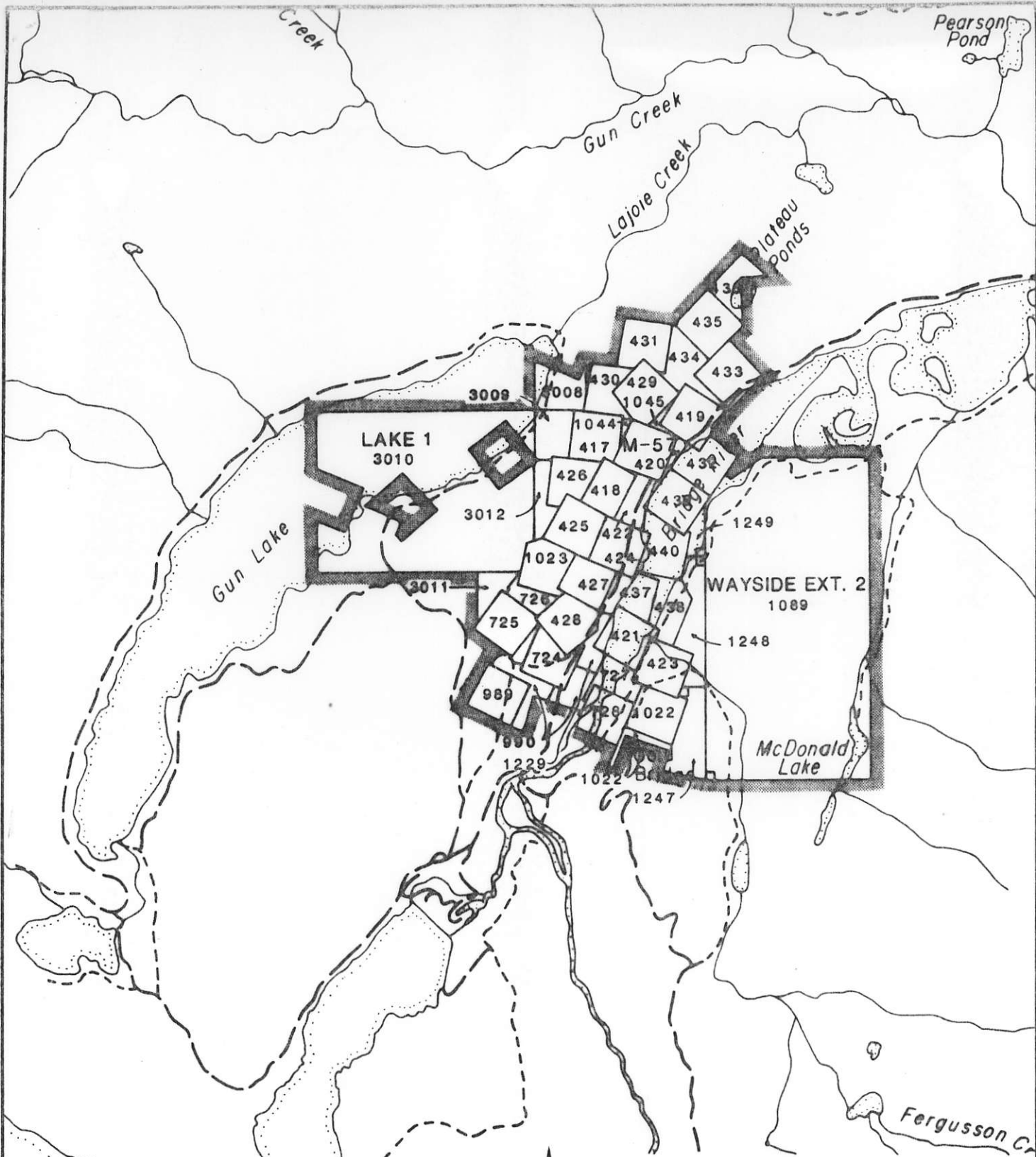
- Elwell, J.P. (Feb. 8, 1982): Exploration Program for the Wayside Mine Property.
- Elwell, J.P. (Feb. 1983): Exploration Program for the Wayside Mine Property.
- Geotronics Surveys Ltd. (Aug. 19, 1985): Induced Polarization - Resistivity Testing, East-side of Carpenter Lake, Wayside Property.
- Kelly, Sherwin F. (Feb. 10, 1982): Report to Dawson Range Mines Ltd. (N.P.L.) on the Wayside Mine Property.
- Lammle, A.R. (1974): Preliminary Geological Report, Wayside Mine Property.
- Mark, D.G. (1984): Report on Seismic Refraction Survey, Wayside Mine Property.
- Mark, D.G. (Oct. 26, 1984): VLF-EM & Soil Geochemistry Surveys, Wayside Property.
- Morris, R. J. (1985): Assessment Report, Wayside Claims.
- Ostensoe, E. and Seraphim, D.H. (Oct. 18, 1983): Progress Report, Wayside Mine Property for Freedom Resources Ltd.
- Ostensoe, E. and Seraphim, R. J. (Jan. 3, 1984): Report to Freedom Resources Ltd. Diamond Drilling - Commodore Vein, Wayside Property.
- Ostensoe, E. (Nov. 30, 1984): Report on Diamond Drilling, Commodore Vein, Wayside.
- Sookchoff, L. (May 28, 1984): Summary Report with Recommendations for Exploration for Amazon Petroleum Corp. Ltd. on the Wayside Property.
- Statement of Material Facts, Dawson Range Mines Ltd. dated 22nd July, 1977.
- White, G.E. (Oct. 30, 1984): Downhole Electromagnetic Logging and Time Domain Electromagnetic Survey, Wayside Project.

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May 5/87*



WAYSIDE PROPERTY LOCATION

FIG. 1



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WAYSIDE CLAIMS

FIGURE No. 2		PROJECT No. M 577	
DATE APR. 1987	REVISIONS	SCALE 1:50,000	
NTS No. 92 J/15		FILE No.	

BRALORNE GOLD CAMP, B.C.

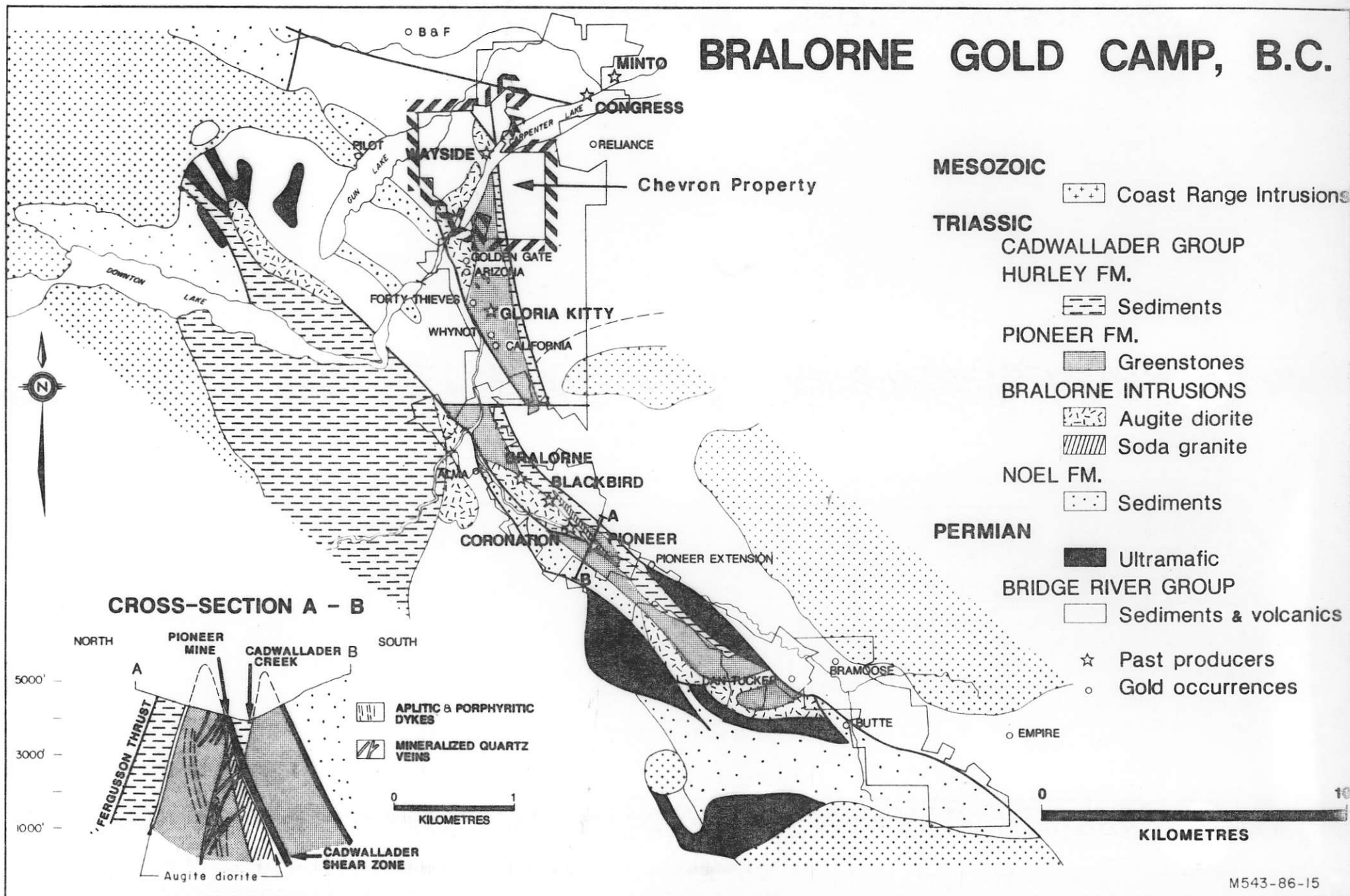
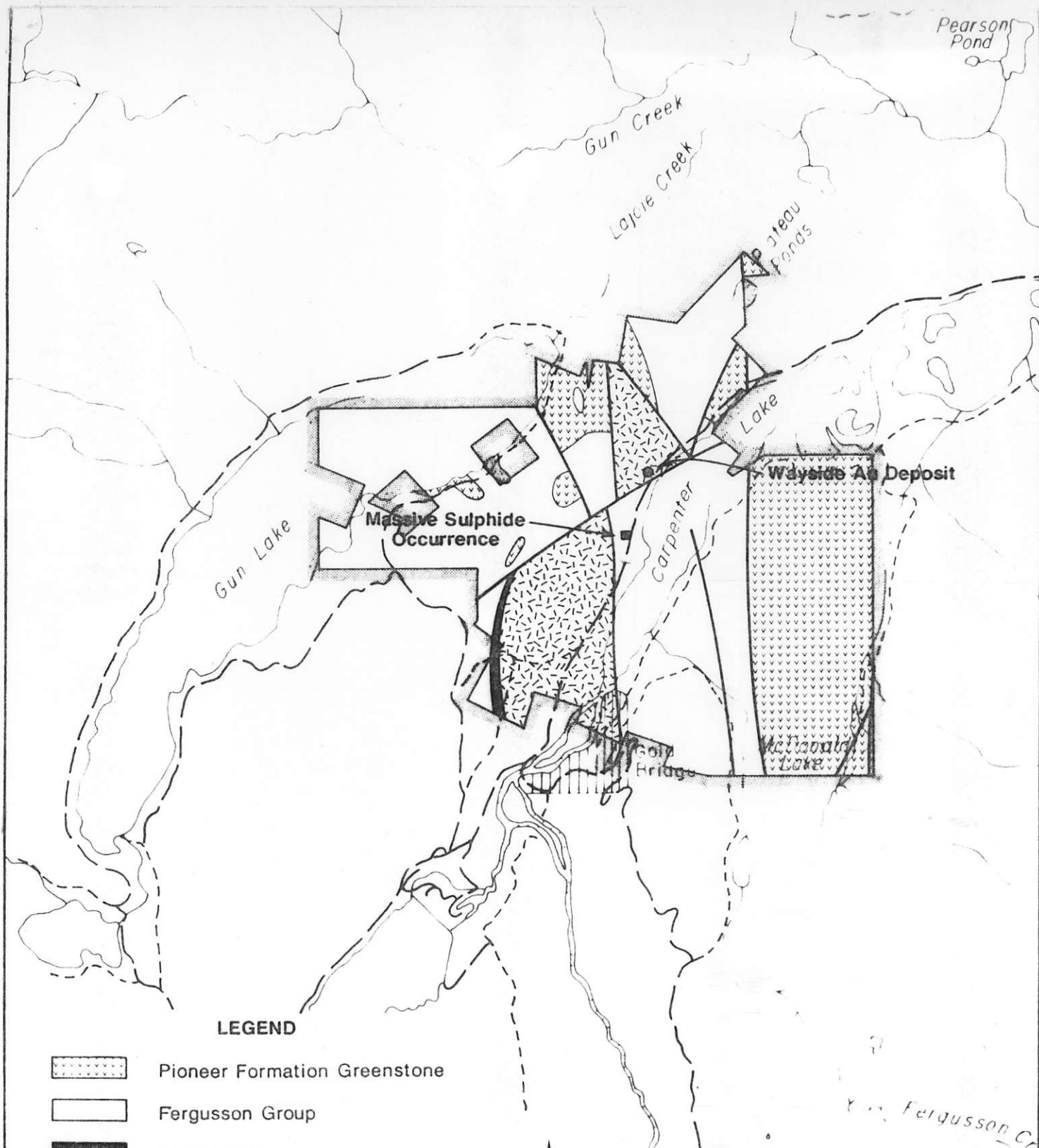


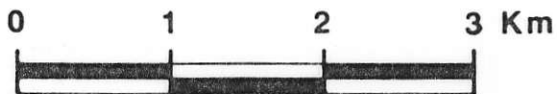
Fig. 3



LEGEND

-  Pioneer Formation Greenstone
-  Fergusson Group
-  Ultramafics
-  Diorite
-  Fault

SCALE



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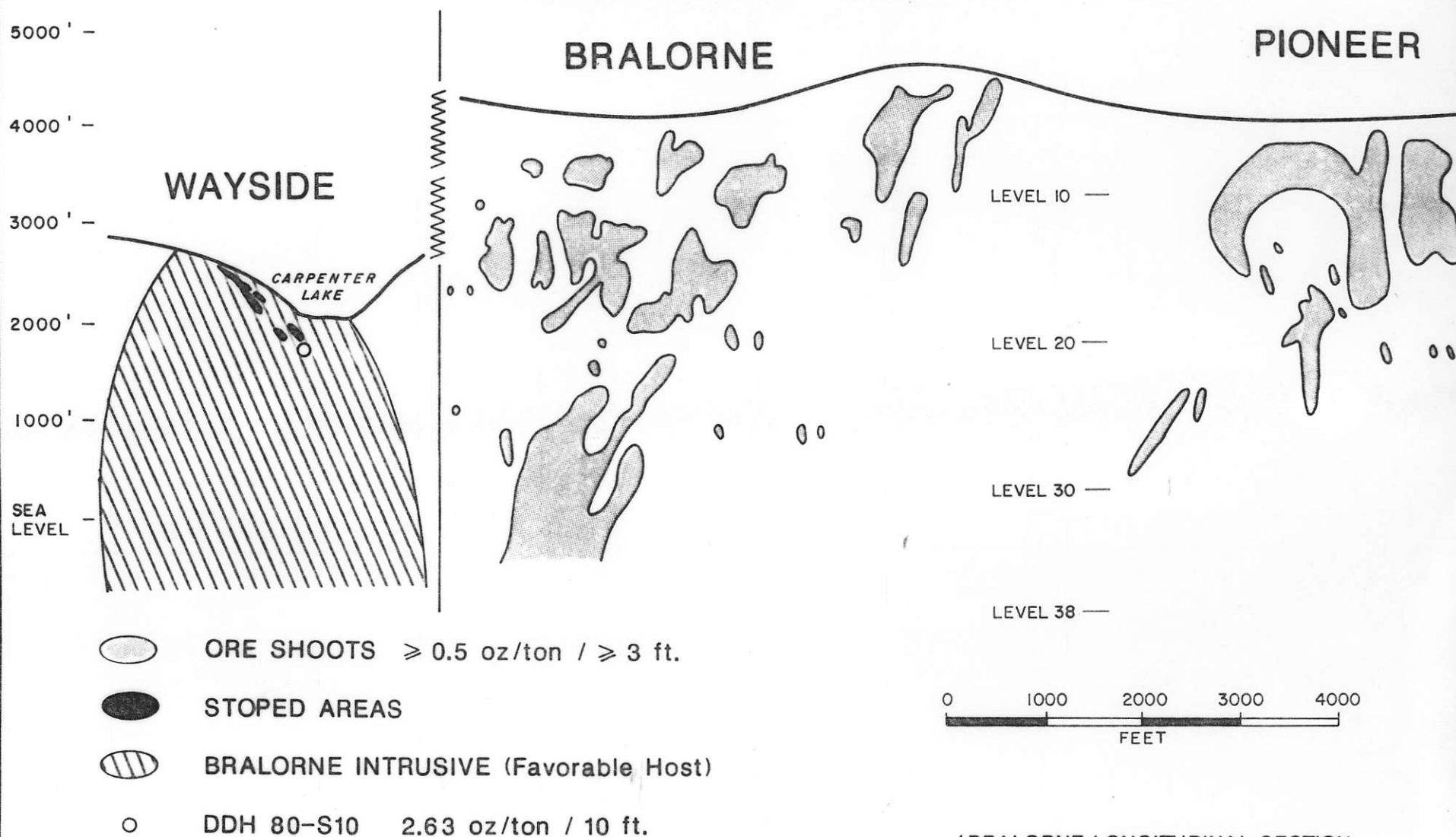
**WAYSIDE CLAIMS
GEOLOGY**

FIGURE No 4		PROJECT No M 577	
DATE APR. 1987	REVISIONS	SCALE 1:50,000	
NTS No 92J/15		FILE No	
COMPILED BY JD			

NW

BRALORNE GOLD CAMP COMPARATIVE LONGITUDINAL SECTION LOOKING NORTHEAST

SE



(BRALORNE LONGITUDINAL SECTION
FROM JAMES AND WEEKS, 1961)

Fig. 5

M543-86-18