

ASSESSMENT REPORT
ON
GEOLOGICAL MAPPING

V.P. PROPERTY

PEAVINE CREEK AREA
FORT STEELE MINING DIVISION

REFERENCE MAPS
82G041 & 82G031
UTM 547600N & 578000E

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NOVEMBER 2001

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,716

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1.0 INTRODUCTION

1.10 Location and Access

The V.P. property is located in the Peavine Creek area, approximately 3 kilometers, north of Moyie Lake and 11 kilometers, south of Cranbrook, B.C. The claims are centered around UTM Coordinates, 5476000N and 578000E. The claims are plotted on Reference Maps 82G041 and 82G031. The property is accessible via 4.5 kilometers of gravel road, the Hidden Valley road, that leaves Highway 3A east of the Moyie River Bridge at the north end of the Moyie Lake Provincial Park. (Fig.1)

1.20 Property

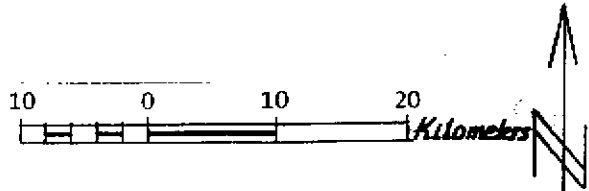
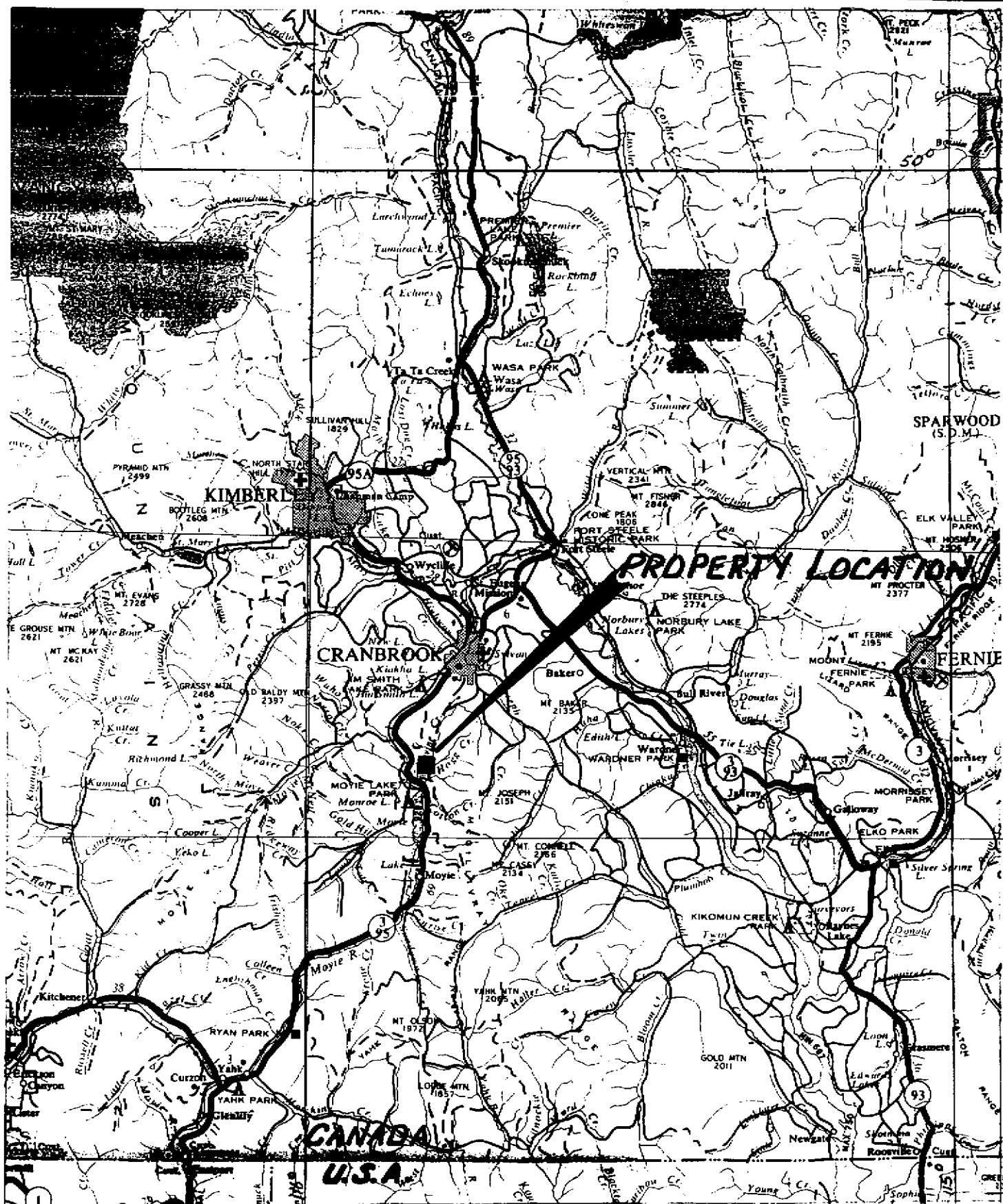
The V.P. Property consists of 20 single unit claims named V.P.1 to V.P.20. (Fig. 2)
The V.P. claims are all owned 100% by Super Group Holdings Ltd.

1.30 Physiography

The V.P. property is situated immediately north of Moyie Lake within the Moyie Range of the Purcell Mountain System. Topography varies from flat to rolling valley bottoms with rounded ridges with steep rocky slopes. Elevations on the V.P. Property range 946 meters to a maximum of 1377.0 meters. The property is forested by mature and sub-mature Douglas-Fir, Western Larch, Lodgepole Pine and Ponderosa Pine. The V.P. claim block was logged approximately 50 to 60 years ago.

1.40 History

The V.P. claims cover the area once covered by the Vine 1 claim. The Vine 1 Staked, in 1976 by Cominco Ltd., to cover newly discovered float boulder of high grade massive sulphide. The source of the massive sulphide float, the Vine Vein, was discovered by Cominco Ltd. in 1977. Sub-cropping, Sullivan Horizon in the south east corner of the V.P. property, was tested by Cominco in 1977 & 1978. In May of 1989, Kokanee Exploration acquired the property from Cominco Ltd. Kokanee Exploration tested the vine massive sulphide by completing a total of 14368 meters of Diamond drilling. Kokanee reported the following reserves, cut to 2.49 meter mining width, as follows; Proven 240,000 tonnes @ 5.20%pb, 2.24%zn, 67.23g/tAg, 1.92g/tAu, Probable 307,000 tonnes @ 4.22%pb, 2.51%zn, 39.77g/tg, 1.75g/tAu. Possible 820,000 tonnes – no grade given.

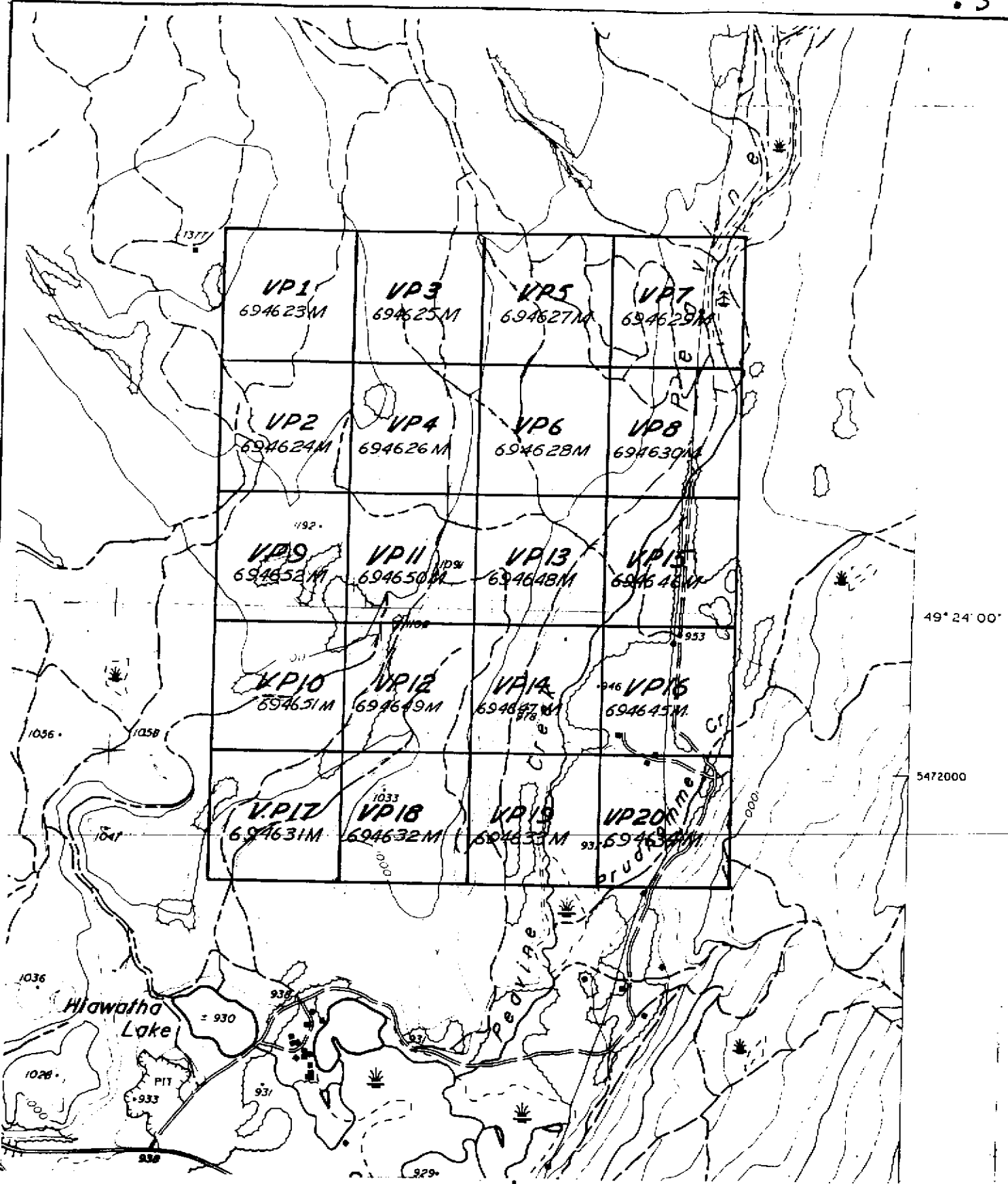


K.P. PROPERTY

LOCATION MAP

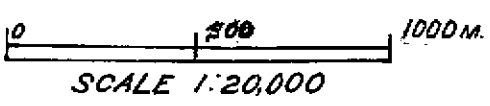
SCALE: 1:600,000

FIG. 1.



49° 24' 00"

5472000



V.P. PROPERTY	
CLAIM MAP	
FIG. 2.	
SCALE: 1:20,000	MAP REF. 82604, 828031

1.50 Program Objective

Geological mapping on the V.P. Property in 2001 was focused on locating and identifying Middle Aldridge Stratigraphic marker beds and thus establish the vertical depth from surface to Sullivan time.

2.00 Geology

2.10 Regional Geology

The area of the V.P. property has been recently mapped by Hoy and Diakow (1982): the property is underlain by the Mesoproterozoic Purcell Supergroup, a thick succession of fine-grained terrigenous clastic, carbonate, and very minor volcanic rocks exposed in the core of the Purcell Anticlinorium in southeastern British Columbia. The Purcell basin was formed by block faulting in an intracratonic setting on the western margin of the ancient North American Craton.

The basal member of the Purcell Supergroup is the Aldridge Formation, a thick sequence (~4000 meters) of fine-grained siliciclastic rocks deposited largely by turbidity currents. Reesor (1958) has divided the Aldridge Formation in the Purcell Mountains into three informal units: rusty weathering siltstone quartzitic wacke and Argillite of the lower Aldridge Formation; grey weathering quartz wacke and siltstone of the middle Aldridge Formation; and laminated argillite of the upper Aldridge Formation.

The base of the lower Aldridge Formation is not exposed; within southeastern British Columbia this unit is about 1500 meters thick; the middle Aldridge is about 2500 meters thick and includes periodic inter-turbidite intervals of thin bedded, rusty-weathering argillites some of which form finely laminated marker beds that are time stratigraphic units and which can be correlated over great distances within the Aldridge basin and equivalent stratigraphy in the United States. The upper Aldridge Formation is about 300 meters thick. The lower and middle units of the Aldridge Formation are host to a proliferation of gabbroic to dioritic composition Moyie Intrusions, predominantly as sills. These intrusions are interpreted to be penecontemporaneous with deposition of their host sediments (Hoy, 1989).

The Aldridge Formation is gradationally overlain by shallower-water deltaic clastics of the Creston Formation. The Creston Formation is in turn overlain by predominantly dolomitic siltstones of the Kitchener Formation.

The Purcell Anticlinorium is transected by a number of steep transverse and longitudinal faults. The transverse faults appear to have been syndepositional (Lis and Price, 1976) and Hoy (1982) suggests a possible genetic link between mineralization and syndepositional faulting.

Longitudinal faults which more closely parallel the direction of basin growth faults may have played a similar role. The Sullivan orebody, which occurs at the upper contact of the lower Aldridge Formation, is part of a NNE oriented structural corridor that hosts extensive evidence of disturbed sedimentation, hydrothermal vent products and the base metal sulfides themselves. This corridor is parallel to longitudinal basin growth faults and is probably related to such a structure.

The Sullivan orebody has associated with it a number of features that are considered an integral part of the genetic process by which it formed and are thus important indicators for discovery of a similar deposit. These include bedded and fracture zinc-lead-silver mineralization (the distal mineralized apron of the Sullivan extends at least 7 km to the southeast of the deposit), massive tourmalinite, tourmalinized and/or sulfide-bearing fragmentals, and albite-chlorite-pyrite alteration. A huge cone-shaped zone of massive tourmalinite underlies the western and central portions of the Sullivan orebody and an extensive zone of strong, brecciated albite-chlorite-pyrite alteration overlies the deposit. Within the sulfide deposit, a central tin enriched zone may be part of the original vent.

Cretaceous felsic intrusives of quartz monzonite to diorite composition have intruded. Stock occurs 5 kilometers north of the V.P. property, within the Cranbrook Fault. The Cranbrook Fault is a major east-west striking transform fault, dipping to the north with north side down, an attitude similar to the Kimberley Fault located on the immediate north side of the Sullivan orebody.

Geological mapping on the V.P. property in 2001 was confined to the V.P. Claim Block (see Plate.3). The work was focused on the location and mapping of Middle Aldridge marker beds. Outcrop on the property is sporadic and forms less than 10% of the total surface area currently covered by the V.P. Claims.

2.21 Structure

The attached Geological map at 1:10,000 scale plate.3 shows the NW trending vine massive sulphide vein, hosted by north east striking lower and middle Aldridge sediments. The map shows a number of NW trending normal faults with west sides down and left lateral displacements of a few tens of meters to a few hundred meters. These normal faults are truncated on the SE by the Moyie fault a major regional thrust fault.

2.22 Stratigraphy

The lower Aldridge which underlies the SE corner of the property is not exposed at surface. However, the lower Aldridge formation can be studied in drill core from a number of drill holes collared in the SE area of the V.P. Property. These old drill holes explored the top 300 meters of lower Aldridge formation. The base of the lower Aldridge formation on the property is unknown.

A siltstone-quartzite unit 150 meters thick occurs approximately 150 meters below the top of the lower Aldridge formation. This unit is basin wide and at the Sullivan Mine it is referred to as the Footwall Quartzites. The clastic sediments which form this unit are generally medium to thick bedded, general graded finding upwards. These sediments are typical Bauma AtoE Turbidite beds.

The dark grey argillite unit that marks the top of the lower Aldridge formation is commonly referred to as the Sullivan Horizon. This argillite unit in the Sullivan area is 20 meters thick. This unit on the V.P. Property 11 to 14 meters thick. The Sullivan Horizon on the V.P. Claims consists of mainly thin to very thin bedded, parallel laminated dark grey pyrrhotiteous argillite with some scattered thin siltstone beds. The bottom two meters of argillite is finely laminated by thin layers of pyrrhotite and sphalerite. This sulphide laminated interval is similar to the Concentrator Hill Horizon east of Kimberley, B.C. which is the distal expression of the Sullivan Horizon.

The middle Aldridge formation rests conformably on the lower Aldridge. The formation consists mainly of medium to thick bedded siltstone and lesser quartzites, with scattered sequences of rusty-weathering thin bedded fine grained siltstone and argillite. The siltstone units are commonly graded fining upwards and are typical Bouma A to E Turbidite beds.

The 2001 geological mapping program targeted middle Aldridge outcrops, since the formation is host to a suite of finely laminated marker beds. These marker beds are time stratigraphic units, which can be correlated over great distances within the Aldridge Basin. The stratigraphic distance between marker beds and the Sullivan Horizon is known. This marker stratigraphy was originally developed by Cominco Ltd., and has been propagated by a select group of former Cominco Geologists (including the writer) who continue to be involved in the search for Sullivan style sedex deposits within the Aldridge Basin.

Mapping on the V.P. Property in 2001 located 9 in place marker beds. Each marker bed was sampled, cut and matched to a diamond drill core marker bed standard, which is part of an extensive reference library stored on the Vine Property near Cranbrook, B.C. All nine marker beds found on the V.P. Claim were matched to a known marker standard (i.e. Sundown etc.). Each marker bed location name and projected trace as shown on Plate 3.

2:30 Intrusive Rocks

Gabbro is found on the property as a sill and as two dykes. The gabbro sill intrudes middle Aldridge sediments near north west corner of the claim block. The sill is approximately 100 meters thick. A large gabbro dyke approximately 75 meters thick cuts through the north east corner of the property. A small and very irregular gabbro dyke follows the Vine, massive sulphide vein.

2:40 Mineralization

The dominant and most conspicuous mineralization on the property is the Vine massive sulphide vein. The vein consists mainly of massive pyrrholite with lesser arsenopyrite, galena and sphalerite. See section on History 1:40, for published reserves. A detailed description of the Vine vein is given in a Report by T.Hoy and D.L.Pighin, published in Geological Fieldwork 1994, Paper 1995-1

2:40 Mineralization

Economically the most significant target on the V.P. Claims is the base metal rich Sullivan Horizon which underlies most of the V.P. Property. Nine diamond drill holes collared on the property traced the Sullivan Horizon in a NE direction for 3 kms. The Sullivan Horizon as described in the previous Section (2.22 stratigraphy) has a 2 meter interval of strongly elevated base metal mineralization. For example in hole KV90-1 averaged 2 meters at 1251 ppm zn and 300 ppm pb.

3:00 Conclusions

.9

Geological Mapping of the V.P. Claims in 2001 focused mainly on middle Aldridge stratigraphic markers. Sufficient marker bed data was gathered to show that the V.P. Property is underlain by the Sullivan Horizon at depths ranging from a few meters to a maximum depth of 1000 meters.

On the V.P. Property the primary economic target is the base metal rich Sullivan Horizon argillites. The type of base metal mineralization and host sediments found in the V.P. Sullivan Horizon is similar to the Concentrator Hill Horizon, east of Kimberley, B.C. which is the distal expression of the Sullivan deposit.

4:00 References

Hoy, T., and Pighin, D.L., Paper 1995-1, Vine-A Middle Proterozoic massive Sulphide Vein Purcell Supergroup, southeastern British Columbia.

Hoy, T., 1993, Geology of the Purcell Supergroup in the Fernie West-half map area, southeastern, British Columbia: B.C. Ministry of Energy, Mines and Petroleum Resources, Bulletin 84, 157p.

Hoy, T., and Diakow, L., 1982, Geology of the Moyie Lake area: B.C. Ministry of Energy, Mines and Petroleum Resources, Preliminary Map 49.

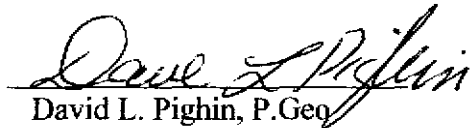
5.00 Statement of Expenditures

7 Days Geological Mapping (7/31/01 to 7/27/01) @ \$300/day	\$2100.00
7 Days Truck @ \$45/day	315.00
And 280 klm @ .45/klm	126.00
1 Day Drafting @ \$200/day	200.00
3 Days Report Writing & Typing @ \$300/day	900.00
Plus from Pac	<u>359.00</u>
 TOTAL EXPENDITURE	 <u>\$4000.00</u>

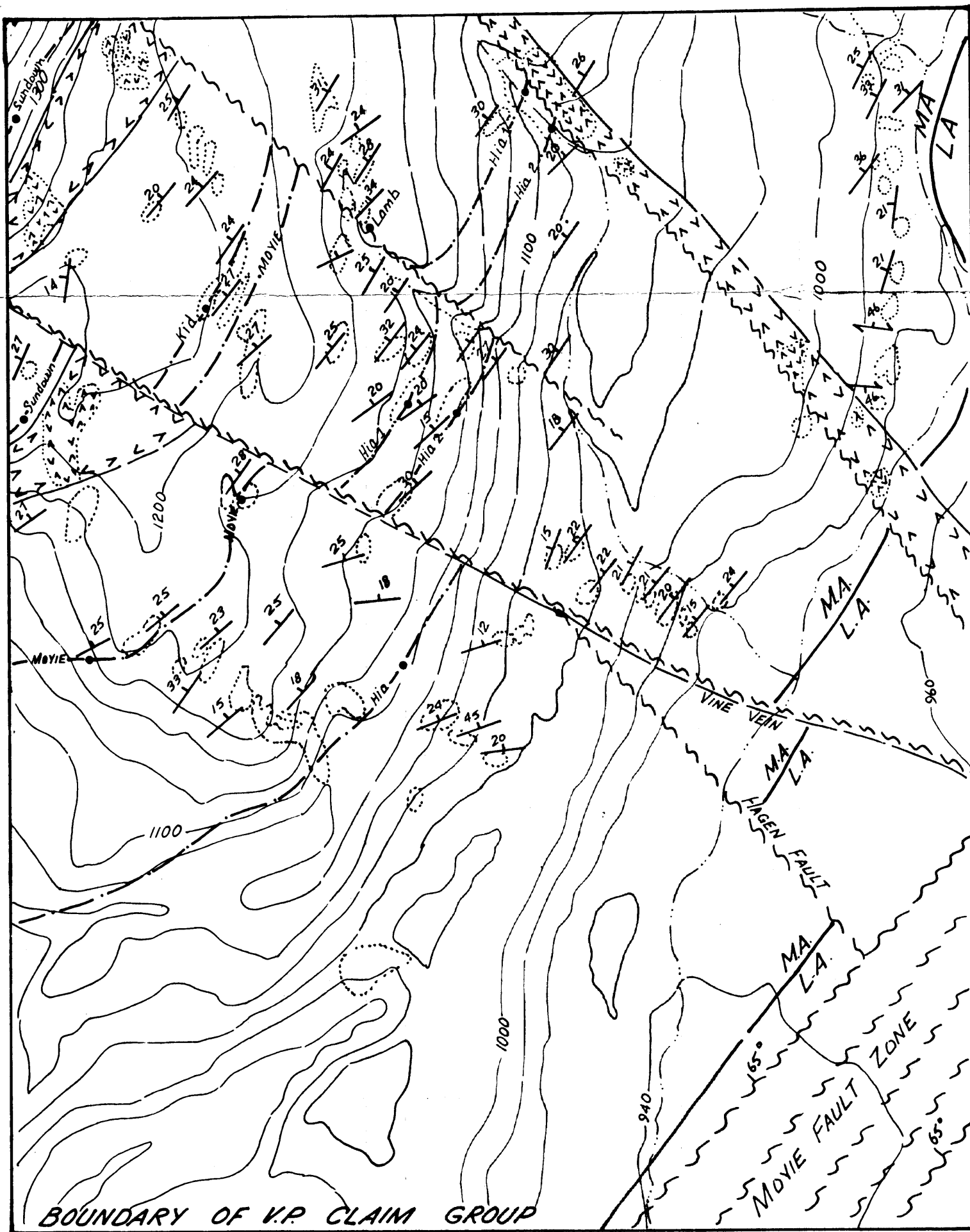
As author of this report I, David L. Pighin, certify that:

1. I am a self employed consulting geologist whose office is at Hidden Valley Road, Cranbrook, B.C. 301-8th Street South, V1P 1P2
2. I am a Member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
3. I have been actively involved in mining and exploration geology, primarily in the Province of British Columbia, for the past 36 years.
4. I was employed by Cominco Ltd. as a prospector, exploration technician and geologist for 24 years and later by numerous junior exploration companies.

Dated at Cranbrook, British Columbia, this *28* day of *November 2001*


David L. Pighin, P. Geo





LEGEND

MIDDLE PROTEROZOIC

M.A. MIDDLE ALDRIDGE;
Siltstone interbedded Argillite, rare
Quartzite. Generally thin to medium
bedded.

L.A. LOWER ALDRIDGE
Rusty weathering Siltstone interbedded
Argillite. Generally medium to very thin
bedded.

>>> **GABBRO;** Sills & Dykes

● Moyie Aldridge marker bed in place

--- Projected trace of marker bed

○ Outcrop

25 Bedding attitude

~ Fault

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BOUNDARY OF V.P. CLAIM GROUP

0 100 200 300 400 500 meters
SCALE 1:10,000



V.P. PROPERTY ①

GEOLOGICAL MAPPING 2001

SCALE: 1:10,000 DRAWN BY DL Pighin DATE Aug 30/01 PLATE NO. 2