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REVISED SUMMARY REPORT ON PHASE I
GEOLOGY, GEOCHEMISTRY AND GEOPHYSICS

ON THE

HALL PROPERTY
(Ozn 1 to 4 Claims)

Manaimo Mining Division, B.C.
NTS 92B/13 48°55'N Lat., 123°54'W Long.
for

AVONDALE RESOURCES INC.

June 24, 1988

T.G. Hawkins, P.Geol.

→ revised
from
AR 17351

PROPERTY FILE



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SUMMARY

An integrated exploration program (Phase I) was conducted on the Hall property (Orn 1 to 4 claims) in November and December 1987 by MPH Consulting Limited on behalf of Avondale Resources Inc. The program consisted of prospecting; rock, silt, and soil sampling; geological mapping; and VLF-EM and total field magnetic surveys.

The Hall property is located in the southeast part of the Horne Lake - Cowichan uplift, and is underlain mainly by northwest striking Paleozoic Sicker Group rocks. The southwest corner of the property is underlain by schistose felsic volcanoclastic rocks of the McLaughlin Ridge Formation which hosts massive sulphide deposits on the adjacent Lara property. These rocks are in apparent fault contact with sedimentary rocks of the Cameron River Formation and intercalated Late Triassic(?) gabbro sills. The sedimentary rocks and gabbro sills are folded in the property area. Quartz-diorite stocks, sills and dykes of the Jurassic Island Intrusions crosscut all older rocks.

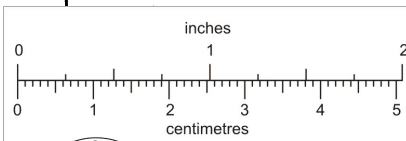
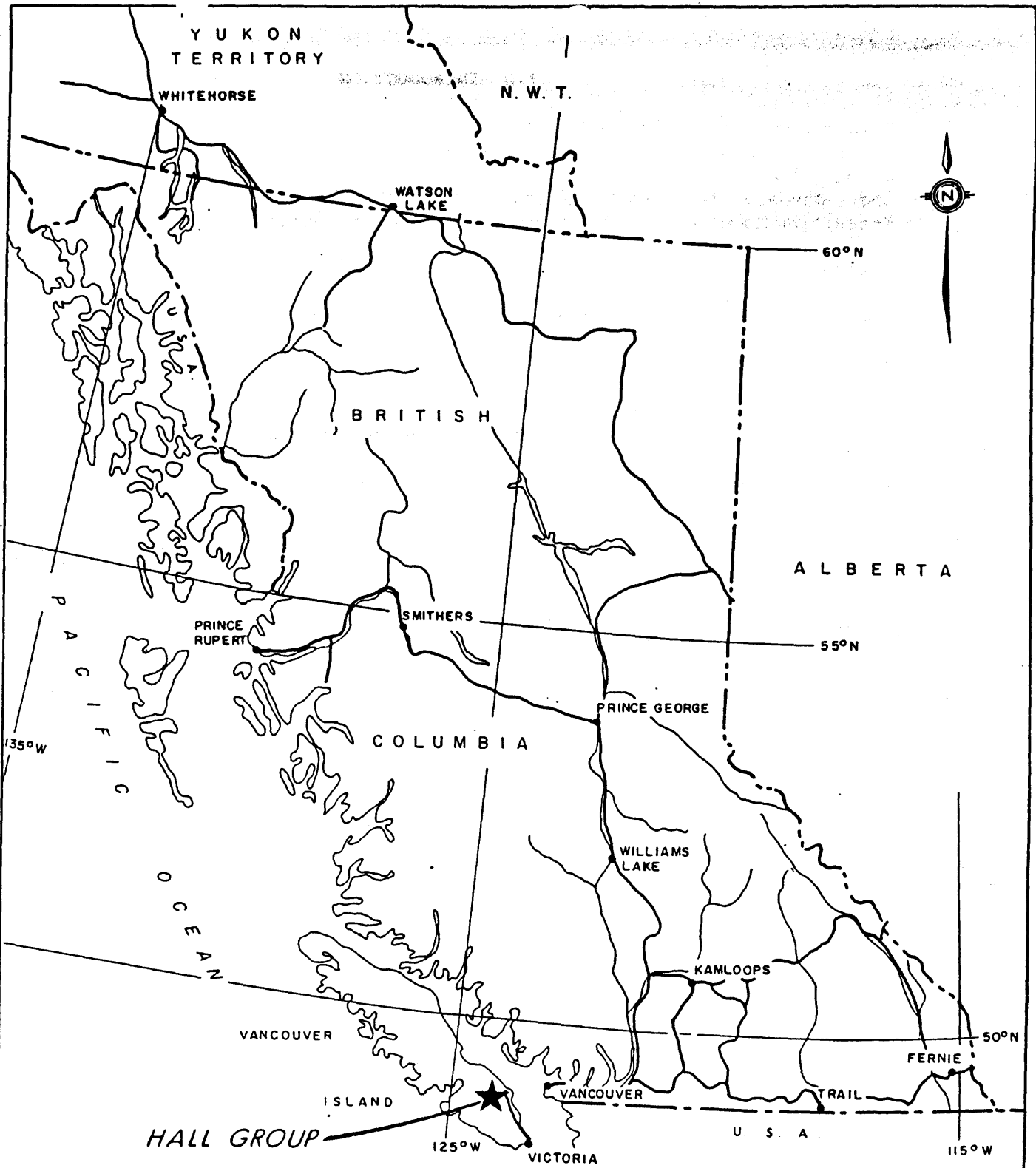
Two grids were established on the property.

Grid A is located on the Orn 1 claim and is partially underlain by felsic pyroclastic rocks of the McLaughlin Ridge Formation. The soil geochemistry survey outlined weak coincident anomalies in copper, silver and zinc. The VLF-EM and magnetic surveys were useful mapping tools in an area with so little bedrock exposure and located VLF-EM conductors coincident with geochemical anomalies and structural features, as well as magnetic anomalies of similar magnitude to those over "iron formation" on the neighbouring Ermelina property. Drilling in 1978 on the Holyoak claims along strike to the southeast and in rocks regionally mapped as Cameron River Formation sediments intersected felsic volcanics containing sulphides and slightly anomalous Au and Ag.

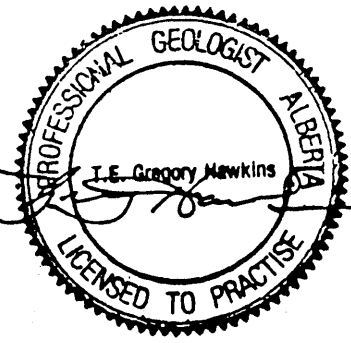
Grid B is located on the Orn 3 claim. The grid area is underlain by gabbro with a 30 m wide magnetite-rich coarse-grained horizon, and by a gently-dipping horizon of siltstone and cherty siltstone (100(+) m wide). The gabbro is cut by shears and quartz veins up to 20 cm wide and mineralized with pyrite, chalcopyrite and anomalous amounts of gold, silver, and copper (up to 340 ppb, 8.5 ppm, and 18,617 ppm, respectively). In two locations, grab samples of gabbro yielded anomalous amounts of gold and palladium (40 ppb Au, 150 ppb Pd; and 130 ppb Au, 180 ppb Pd). The soil geochemistry survey outlined weak copper anomalies, a few of which appear to be correlative with known mineralization. A few, weak conductive zones were outlined in the VLF-EM survey. The magnetic survey outlined the magnetite-bearing, coarse-grained gabbro horizon.


Gold-bearing quartz veins and shears, and gold-palladium-bearing coarse-grained gabbro occur on the property. Potential also exists for the occurrence of massive sulphide mineralization in felsic volcanoclastic rocks sparsely exposed on the Orn 1 claim. A probable projection of the Randy North massive sulphide-bearing horizon on the adjacent Lara property passes within 400 m of the southwest corner of the Hall property.

A Phase II exploration program consisting of geological mapping; soil and rock sampling; trenching; and VLF-EM, magnetic and induced polarization surveys is recommended to further explore potential gold/polymetallic stratiform, and gold/base metal vein mineralization on the claims. The estimated cost of this program is \$100,000.



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AVONDALE RESOURCES INC.	
GENERAL LOCATION MAP	
HALL GROUP	
NANAIMO MINING DIVISION	
Project No: V 191	By: T. N.
Scale: 1 : 8 000 000	Drawn: J. S.
Drawing No: FIG. 1	Date: JUNE 1988.
 MPH Consulting Limited	



1.0 INTRODUCTION

This report is a revision, incorporating additional recently available data, of the January 1988 summary of "Report on Phase I Geology, Geochemistry and Geophysics on the Hall Property (Orn 1 to 4 claims) for Avondale Resources Inc. January 31, 1988", by T.G. Hawkins, and has been prepared by MPH Consulting Limited, at the request of Avondale Resources Inc.

Fieldwork for the program was conducted by Gordon J. Allen, P.Geol., and other MPH Consulting Limited staff under the supervision of T.G. Hawkins, P.Geol., between November 5 and December 3, 1987. It consisted of geological mapping at scales of 1:10,000 and 1:2,500; rock, soil and stream sediment sampling; and VLF-EM and total field magnetic surveys.

2.0 LOCATION, ACCESS, TITLE

The Hall property (Orn 1 to 4 claims) is located in the Coronation Mountain area approximately 22 km northwest of the city of Duncan, on Vancouver Island, British Columbia (Figure 1). The property is in the Nanaimo Mining Division, on NTS sheet 92B/13W and centred at approximately 48°55'16"N latitude and 123°53'50"W longitude (Figure 2).

Access to the north and east part of the property (Orn 2, 3, and 4 claims) is via Crown Forest roads from Ladysmith. Access to the Orn 1 claim, in the southwest part of the property, is via MacMillan Bloedel's Copper Canyon Main road which crosses Highway 1 west of the town of Chemainus.

The Hall Group comprises 4 claims totalling 72 units, as summarized below:

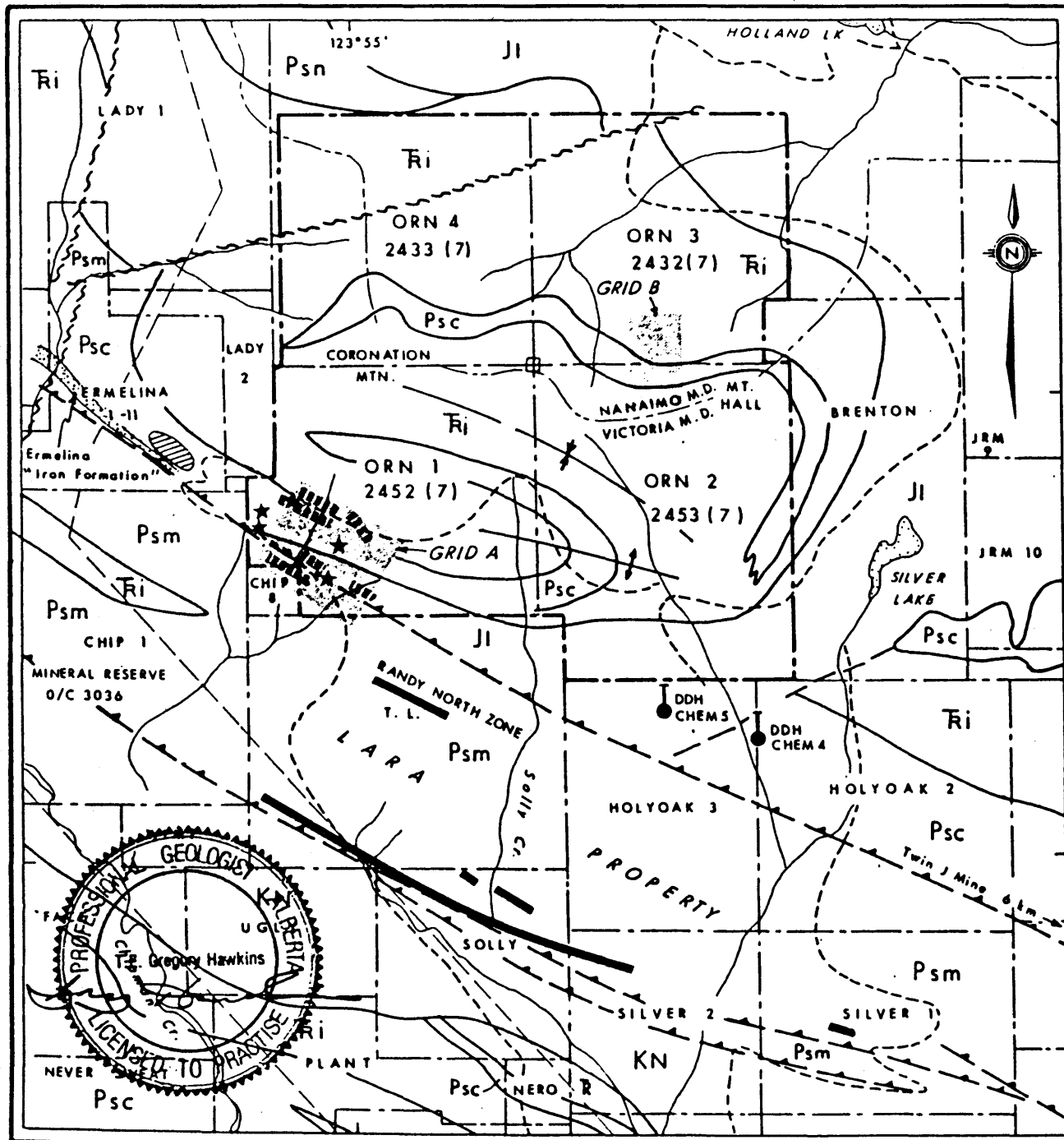
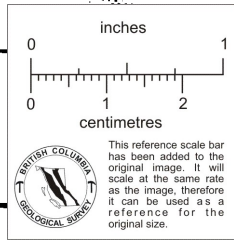
Claim	Record No.	Units	Anniversary Date	Year Recorded
Orn 1	2452(7)	20	July 17, 1993	1986
Orn 2	2453(7)	20	July 17, 1993	1986
Orn 3	2432(7)	16	July 17, 1993	1986
Orn 4	2433(7)	16	July 17, 1993	1986

The Orn 1 to 4 claim were grouped as the Hall Group by a Notice to Group filed on July 17, 1987. All claims in the Hall Group are owned by Avondale Resources Inc. The anniversary date has been updated based on filing of the work reported in Hawkins (1988).

3.0 PREVIOUS WORK

The property has been covered by government-sponsored regional mapping programs conducted by J.E. Muller (1977, 1980a, 1980b) and N.W. Massey (1987, 1988).

A reconnaissance exploration program was conducted on the Hall property by MPH Consulting Limited in 1987 (Neale, 1987). The program consisted of prospecting, geological mapping at a scale of 1:10,000, and rock and stream sediment sampling concentrated mainly in the present Grid B area. Grab samples of mineralized quartz veins cutting magnetite-rich coarse-grained gabbro in the Grid B area yielded the following results:



LEGEND

Geology partly from Massey (OF 1988-08)

- KN** Cretaceous Nanaimo Group
- JI** Jurassic Island Intrusions
- Ri** Triassic diabase/gabbro sills
- Paleozoic Sicker Group**
- Psc** Cameron River Formation (Sediment-Sill Unit)
- Psm** McLaughlin Ridge Formation (Myra Formation)
- Psn** Nitinat Formation

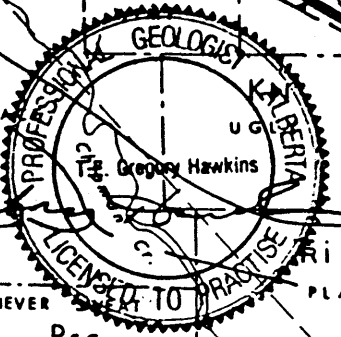
- Geological contact
- Syncline, anticline
- Fault, thrust fault
- Grid location
- Claim boundary
- Ag ± Cu ± Zn soil anomaly
- Area of anomalous Au, Ag, As, Pb, Zn soils with coincident VLF-EM anomalies.
- Magnetic high
- Volcanogenic massive sulphide mineralization

AVONDALE RESOURCES INC.

GENERAL GEOLOGY AND CLAIM MAP
HALL GROUP - ORN 1 TO 4 CLAIMS
NANAIMO MINING DIVISION

Project No. V 1915	By: T.N.
Scale: 1:50000	Drawn: J.S.
Drawing No: FIG. 2	Date: JUNE 1988.

MPH Consulting Limited



NTS 928/13

Sample No.	Au (ppb)	Ag (ppm)	Cu (ppm)
7107 (float)	140	5.8	1.50%
7108	180	2.0	3881
7109	150	5.6	1.16%
7110	90	1.0	1436
7111	340	5.2	8649
7114	40	1.2	1157
17723 (float)	120	8.5	18,617
17724	280	6.3	769

Some weakly anomalous values in Mo (12-39 ppm) and Zn (152-230 ppm) have also been returned from these veins.

In addition, anomalous Au and Pd values were returned from samples of the gabbro without any quartz veining. The gabbro contains trace, to locally 3%, disseminated pyrite. Sample 7117 returned 40 ppb Au (reanalysis - 46 ppb Au, 180 ppb Pd, 20 ppb Pt) and sample 17711 contained 130 ppb Au (reanalysis - 50 ppb Au, 150 ppb Pd, <5 ppb Pt).

The rocks upslope from the gabbro, identified by Neale (1987) as Sediment-Sill Unit dacite tuff (with up to 5% disseminated pyrite) and cherty sediments returned the following results:

Sample No.	Results	Sample Description
17716 (float)	28 ppm Mo, 1241 ppm Cu	Pyritic dacite tuff cut by pyritic quartz vein.
17718	40 ppb Au	Pyritic dacite tuff.
17720	21 ppm Mo, 693 ppm Cu	Highly pyritic dacite tuff.

4.0 REGIONAL GEOLOGY

The Hall property is located in the southeastern part of a belt of Paleozoic Sicker Group rocks known as the Horne Lake - Cowichan uplift. Sicker Group volcanic and sedimentary rocks have been intruded by Late Triassic gabbro and Early Jurassic granodiorite to quartz diorite. Flanking Sicker Group rocks to the northeast and southwest are basaltic volcanic rocks and limestone of the Late Triassic Vancouver Group. Early Jurassic rhyolitic to basaltic volcanic rocks of the Bonanza Group also occur to the southwest of the belt of Sicker Group rocks. Collectively these rocks make up part of Wrangellia Terrane on Vancouver Island.

Historically the Sicker Group has been divided into four formations (Muller, 1980a). From oldest to youngest these are: Nitinat Formation, Myra Formation, Sediment-Sill Unit and Buttle Lake Formation. Massey (1987, 1988), who conducted regional mapping programs in the Cowichan and Chemainus River Valleys in 1986 and 1987 (including the Hall property area) has used much of the terminology introduced by recent workers (Sutherland Brown et al, 1986).



The table below correlates the units by Massey with those of Muller.

SICKER GROUP (Upper Silurian to Lower Permian)

(after Massey, 1987)

(after Muller, 1980a)

Buttle Lake Subgroup

Mount Mark Formation

Cameron River Formation

Buttle Lake Formation

Sediment-Sill Unit

Youbou Subgroup

McLaughlin Ridge Formation

Nitinat Formation

Myra Formation

Nitinat Formation

Economic Setting

The Hall Group is partially underlain by rocks of the Sicker Group, a well-known host for various types of subeconomic to economic mineralization. The Coronation deposit and the Twin J Mine, 2 km south and 8 km southeast, respectively, of the Hall Group, are volcanogenic massive sulphide deposits in felsic volcanics of the Sicker Group.

On the Lara property (adjacent to the south of the Hall Group) Abermin Corporation has traced the polymetallic volcanogenic massive sulphide Coronation and Coronation Extension Zones over a strike length of over 2000 m and to depths of 440 m. Drill indicated reserves are reported as 528,900 tonnes grading 4.73 g/t Au, 100.1 g/t Ag, 1.01% Cu, 1.22% Pb, 5.87% Zn (May 31, 1988). Additional parallel mineralized zones occur to the north of the main deposits and may represent fault and/or fold repetitions of the main mineralized zone. The Randy North Zone was located in 1986 and consists of 3 to 6 Zn-rich polymetallic zones within a strike length of about 2.4 km. It is located about 2.1 km north of the Coronation Zone, striking towards the southwest corner of the Hall property. Limited diamond drilling intersected "narrow widths" of mineralization grading up to 4.66% Zn, 0.31% Cu, 0.50% Pb, anomalous Au, Ag. Underground exploration of the Coronation Zone commenced in early June 1988.

At the Twin J Mine two parallel orebodies, each containing pyrite, chalcopyrite, sphalerite and minor galena in a barite-quartz-calcite gangue and chalcopyrite in quartz, occur in schist believed to have been derived from felsic volcanics (McLaughlin Ridge Formation). Total production from 1398 to 1964 was 277,333 t producing 1,384 kg Au, 29,066 kg Ag, 9,569,708 kg Cu and 20,847,567 kg Zn with at least 164,934 kg Pb and 4.5 kg Cd.

Regional mapping by Massey (1988) indicates that the thrust fault associated with the Twin J Mine crosses the southwest corner of the Hall property along a strike length of 850 m. Work on the Lara property indicates that the massive sulphide mineralization was probably deposited in a fault-controlled basin or trough.

Exploration carried out in early 1988 on the Ermelina property (Laanela, 1988), adjacent to the Hall property on the NW, located 2 well-defined in-phase VLF-EM conductors coincident with an area of anomalous As (up to 54 ppm), Zn (up to 327 ppm), Pb (up to 24 ppm), Ag (up to 1.9 ppm), and Au (up to 56 ppb) soil geochemistry in the SE part of the property. The anomalous area



occurs in Cameron River Formation rocks overlying a 2 km long, 20-100 m thick jasper-magnetite oxide facies "iron formation" horizon at or near the contact with McLaughlin Ridge Formation rocks. It is open on both ends and trends towards the Orn 1 claim. Anomalous results of up to 295 ppb Au, 1.6 ppm Ag were obtained from quartz veins crosscutting the iron formation, which also trends towards the Orn 1 claim. The iron formation horizon includes the Lady A and Lady C taconite deposits. Limited drilling (594 m) carried out in 1953 on the taconite deposits indicates that the Lady A contains 326,000 tonnes grading 25% Fe and that the Lady C is likely larger than Lady A.

Work by Esso Minerals Canada Ltd. on the VV claim, 3 km northwest of the Hall group, located rhyolitic to basaltic Sicker Group flows and tuffs. A pyrite-pyrrhotite-chalcopyrite skarn breccia intersected in a drillhole assayed 0.117% Cu, 0.03 g/t Au, and 3.08 g/t Ag over 1.68 m.

Diamond drilling by Esso in 1978, on the present Holyoak 3 claim intersected gabbro and cherty argillite underlain by cherty tuff and rhyolite tuff in DDH Chem-4; and mixed tuffs and minor chert underlain by rhyodacite tuff and rhyolite in DDH Chem-5 (Somerville, 1979). Sulphides and slightly anomalous Au and Ag values are contained by the felsic volcanics. Drillhole locations are shown on Figure 2. The occurrence of felsic volcanics in an area presently mapped as Cameron River Formation and/or Island Intrusions is highly significant as it indicates potential for Lara-type massive sulphide zones exists north of the Twin J thrust fault. Drilling in 1986 by Kidd Creek Mines Ltd. on the same property in an area south of the Twin J thrust fault intersected 6.3 m of 1.0% Zn. This intersection is approximately on strike with Abermin's Randy North zone.

While the felsic volcanics of the McLaughlin Ridge Formation (Myra Formation) rocks have historically been regarded as the most favourable in the Sicker Group for hosting economic mineralization, the other formations are proving to be equal or better hosts of economic mineralization. Structurally controlled auriferous quartz veins occur on the Sognidoro claim (12 km NW of the Hall property) in Cameron River Formation rocks (up to 27.9 g/t Au) and on the Mike property (13 km W of the Hall property), also in Cameron River Formation rocks (up to 60.0 g/t Au over 7 cm). Magnetite-bearing jasper horizons, similar to the Ermelina horizon, within the Cameron River Formation have been found to contain gold on the Sognidoro property (up to 0.72 g/t Au) and the Chem property (5 km SW of the Hall property) (up to 4.80 g/t Au). In the Port Alberni area, the Buttle Lake Formation of the Sicker Group hosts gold-bearing quartz veins grading up to 44.6 g/t Au, up to 347 g/t Ag, up to 16.6% Zn, and up to 1.92% Pb (grab samples) on the Fitzwater property. Diamond drilling intersected mineralized quartz veins grading up to 7.58 g/t Au over 0.94 m as well as intensely hydrothermally altered calcareous siltstone zones which grade up to 2.37 g/t Au over 6.59 m. Hematitic chert horizons on the Debbie property contain up to 12.0 g/t Au (R. Walker, MEG talk 88-03-30). Associated structurally controlled gold mineralization on the Debbie property is contained in at least 2 zones of high grade quartz veins and a larger zone of low grade quartz-carbonate alteration. Drilling (30,580 m in 163 holes in 1987/88) has intersected numerous intervals grading up to 139.8 g/t Au over 14.36 m. Underground of the mineralized zones is planned for the 1983 season at an estimated cost of \$5 million. Mafic Sicker Group(?) intrusives on the Kitkat property returned an analysis of 1.65 g/t Pt, 5.31 g/t Pd, 2012 ppm Ni, 6550 ppm Cu, 337 ppm Co, 2.2 ppm Ag, 100 ppb Au from a grab sample.



5.0 1987 PHASE I EXPLORATION PROGRAM

5.1 Work Completed

Fieldwork for Phase I of the exploration on the Hall property (Orn 1 to 4 claims) was performed between November 5 and December 3, 1987.

Geological mapping at a scale of 1:10,000 was conducted over 1800 hectares of the property. Approximately 270 hectares of the Orn 1 and 3 claims were covered by geological mapping at a scale of 1:2500 (Hawkins, 1988). A total of 75 rock samples and 19 stream sediment samples was collected during the mapping programs. Results for all samples of gold and multi-element ICP analyses are included in Hawkins (1988). Extensive thick glacial till cover on the southern part of the property creates difficulties in that very few outcrops (about 5% or less outcrop exposure) occur and geochemical responses are masked.

Two grids were established, one on each of the Orn 1 and Orn 3 claims. A total of 450 soil samples was collected on the two grids. VLF-EM and magnetic surveys were conducted along 10.5 km of grid lines. Figures 3 and 4 are compilation maps showing geology, and selected geochemical and geophysical results on the two grids at a scale of 1:10,000.

5.2 Geological Mapping and Sampling

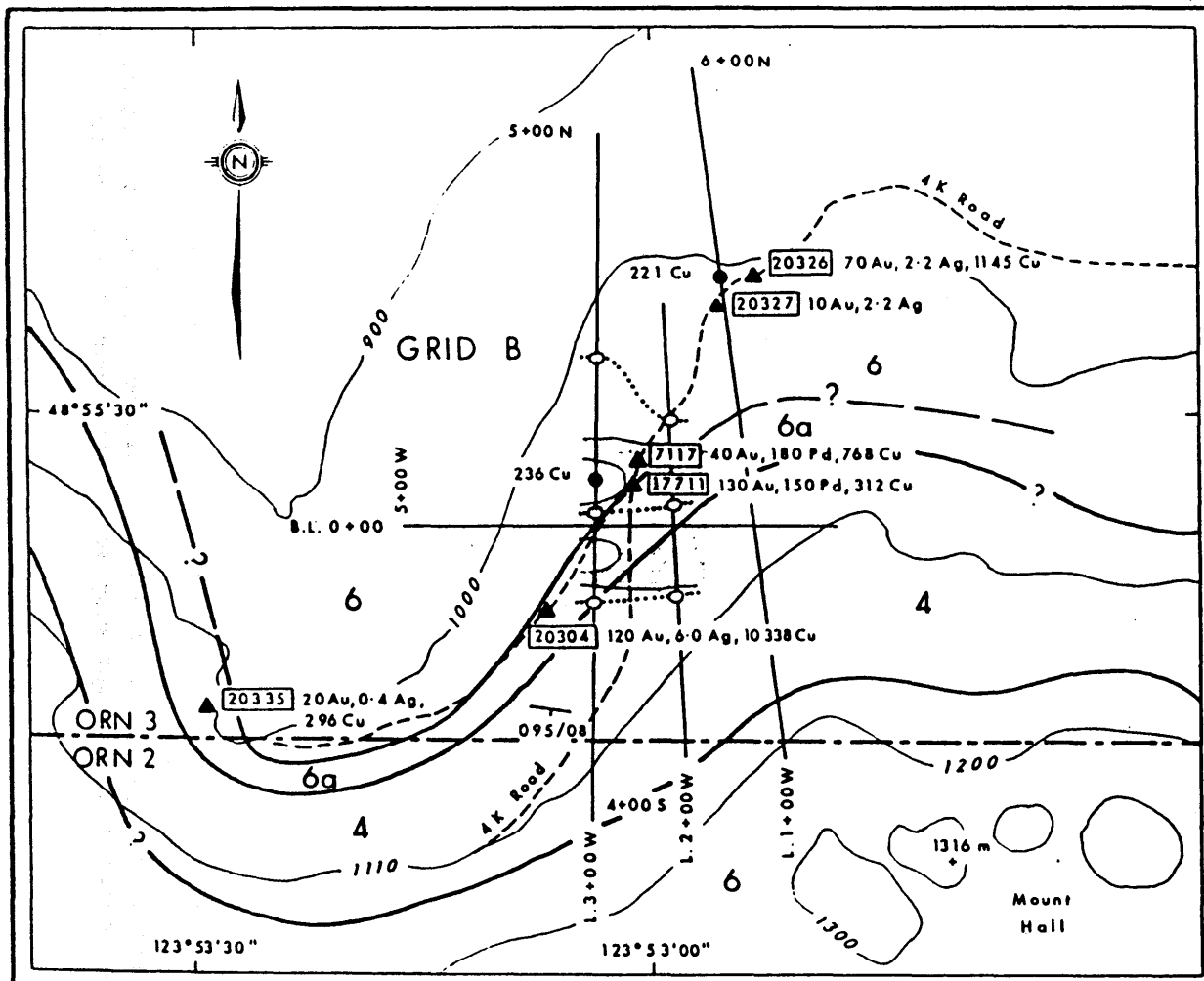
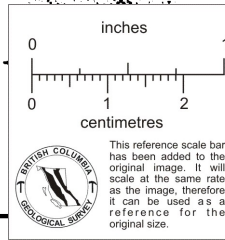
The southwest corner of the property (Grid A) is underlain by a northwest striking, steeply northeast dipping sequence of sericitic schist of the McLaughlin Ridge Formation. These rocks, which host the Lara massive sulphide deposits to the south, were probably originally felsic pyroclastics and volcanics.

Northeast of the McLaughlin Ridge Formation rocks the property is underlain by siltstone, chert, sandstone and argillite of the Cameron River Formation. These sedimentary rocks occur in 100 to 300 m thick horizons between gabbroic sills up to at least 400 m thick. Gabbroic intrusive rocks in this area are presumed to be coeval with basaltic rocks of the Late Triassic Karmutsen Formation. Cameron River Formation sedimentary rocks and gabbroic sills appear to have been folded together as a package.

Massey (1988) indicates that the volcanoclastics of the McLaughlin Ridge Formation are in fault (northeast-dipping thrust) contact with the younger Cameron River Formation sediments. Near this fault the rocks appear to be foliated and isoclinally folded.

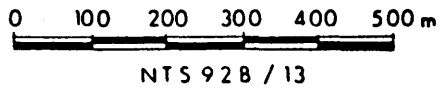
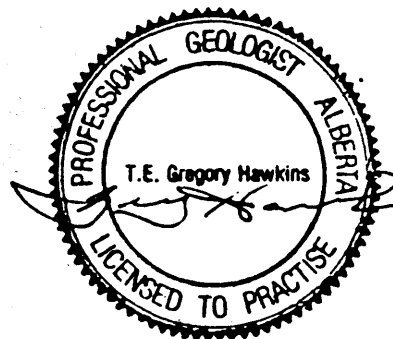
Structural repetition of McLaughlin Ridge Formation lithologies is known to occur on the Lara property (Bailes et al, 1987), thus the potential exists for a repetition of one of the Lara mineralized zones to occur in the area underlain by McLaughlin Ridge rocks. Additional McLaughlin Ridge rocks may be present below the Twin J thrust fault as well. Abernethy has determined that dips on the Fulford thrust fault, a parallel structure, are as low as 30° (Bailes, et al, 1987).

Quartz diorite to granodiorite of the Jurassic Island Intrusions underlie parts of the northeast, southeast and part of the southwest quadrants of the property. These rocks appear to have been intruded parallel to stratigraphy and follow the gabbro-sediment sequence around the nose of a large syncline.



LEGEND

- MESOZOIC**
JURASSIC
 9 Island Intrusions - quartz diorite, granodiorite.
- TRIASSIC**
 6 Karmutsen Formation (?) - sill-like bodies of gabbro, diabase. 6a) coarse-grained magnetite-rich gabbro.
- PALEOZOIC**
 Sicker Group
 4 Cameron River Formation (Sediment-Sill Unit) - siltstone, chert, sandstone, argillite.
 2 McLaughlin Ridge Formation (Myra Formation) - felsic metavolcanics and volcanoclastics.
- Geological contact
 — 1000 — Topographical contour (m)
 ● 221 Cu Grid with soil geochem anomaly
 ▲ 2304 Rock sample results: Au, Pd in ppb, others in ppm
 - - - - - Magnetic highs (≥ 58 000 nT)
 0 VLF-EM conductor - weak

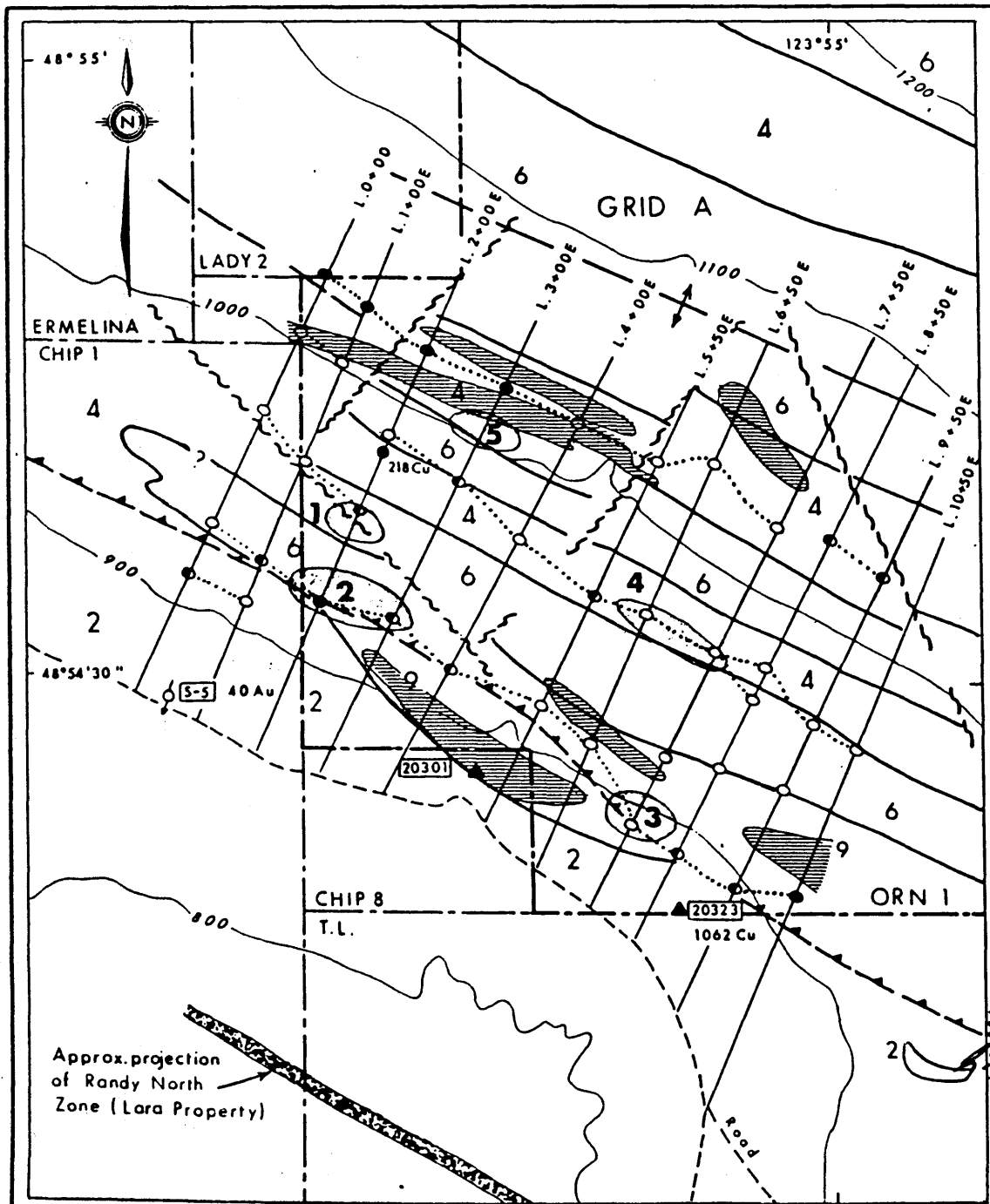
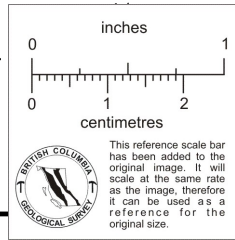


AVONDALE RESOURCES INC.

GRID B COMPILATION MAP
 ORN 3 CLAIM
 HALL PROPERTY
 NANAIMO MINING DIVISION

Project No. V 1915	By: J. S. G.
Scale: 1 : 10 000	Drawn: J. S.
Drawing No: 3	Date: JUNE 1988.

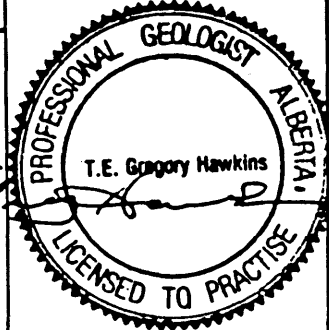
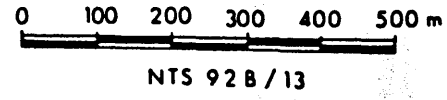
MPH MPH Consulting Limited



LEGEND

- MESOZOIC**
JURASSIC
 9 Island Intrusions - quartz diorite, granodiorite
- TRIASSIC**
 6 Karmutsen Formation (?) - sill-like bodies of gabbro, diabase
- PALEOZOIC**
Sicker Group
 4 Cameron River Formation (Sediment-Sill Unit) - siltstone, chert, sandstone, argillite.
 2 McLaughlin Ridge Formation (Myra Formation) - felsic metavolcanics and volcanoclastics.

- Geological contact
- Fault
- Thrust fault
- Anticline
- Topographical contour (m)
- Areas with multielement soil geochemical anomalies (Cu > 130 ppm, Zn > 120 ppm, Ag > 0.6 ppm)
- Grid with soil geochemical anomaly
- Rock sample results: Au, Pd in ppb, others in ppm.
- Silt sample
- VLF-EM conductors - weak, moderate, strong
- Magnetic highs (≥ 56,500 nT)



AVONDALE RESOURCES INC.

**GRID A COMPILATION MAP
 ORN 1 CLAIM
 HALL PROPERTY
 NANAIMO MINING DIVISION**

Project No.	V 191 S	By	T. N.
Scale	1 : 10 000	Drawn	J. S.
Drawing No.	4	Date	JUNE 1988.

MPH Consulting Limited



Geological mapping of the Grid A area is uncertain, due to the extreme paucity of outcrop, and has been largely interpreted from geophysical data.

The Grid B area is partly underlain by a coarse-grained magnetite-bearing differentiated layer of a gabbro sill which hosts several mineralized quartz veins.

Mineralization

Observed mineralization in the Grid A area is largely restricted to disseminated sulphides in an approximately 150 m thick sandstone-siltstone horizon containing up to 10% fine-grained pyrrhotite and 5% pyrite, exposed west of the property. Samples of this material (24207, 24208) yielded up to 0.8 ppm Ag and 325 ppm Cu. Although only weakly anomalous in Ag and Cu, such sulphide mineralization is considered significant because it could be peripheral to a more massive sulphide horizon.

Some weakly pyritic siltstone and tuff (exposed in a creek crossing the grid) was sampled (20303, 20317, 20318). These samples yielded weakly anomalous amounts of Cu (251 ppm), Co (51 ppm) and Ni (193 ppm). Sampling by Massey (1988) in this area returned values of 70 ppb Au, 270 ppm Cu, 30 ppm Mo from sediments mineralized with disseminated sulphides.

A float sample (20323) of a possibly amygdaloidal volcanic rock contained up to 10% pyrrhotite and traces of chalcopyrite, and yielded 1062 ppm Cu and 32 ppm Co.

Part of the Grid B area is underlain by an approximately 30 m wide horizon of coarse-grained gabbro at the margin of an otherwise medium-grained gabbro sill. This horizon contains up to 15% magnetite, 5% disseminated and fracture-filling pyrite and traces of chalcopyrite and has been traced for 750 m along strike (and is open on both ends). Neale (1987) located coarse-grained magnetite-rich gabbro float on the northern slopes of Mount Hall and in the northwest corner of the property, indicating a possible strike length of at least 4.3 km. Rock samples from within or near this horizon (20329 to 20335) have yielded consistently weakly anomalous Cu values (up to 634 ppm against average gabbroic Cu content of about 70 ppm) and sporadically anomalous Au and Ag values (up to 70 ppb and 0.6 ppm respectively).

Thirty-four samples of gabbroic material (including several from the coarse-grained magnetite rock horizon in the Grid B area) were analyzed for Pt and Pd. Two samples (7117, 17711) of the coarse-grained gabbro horizon yielded anomalous Pd values of 180 ppb and 150 ppb, respectively, significantly above a background of 30 to 40 ppb Pd found in typical gabbro on the property. Gabbro samples collected in future programs should be analysed for Pt and Pd. In addition, these samples contained anomalous Au (40 ppb, 130 ppb, respectively).

Gabbro in the Grid B area is cut by abundant east-southeast to east-northeast-trending pyrite-filled fractures, shear zones and quartz veins. A sample (20327) of a shear zone (20 to 30 cm wide) containing several vuggy quartz stringers up to 1 cm wide yielded values of 90 ppb Au, 2.2 ppm Ag, 1062 ppm Cu, 48 ppm Co, and 25 ppm Bi. A sample (20325) of a quartz vein (10 to 20 cm thick) exposed on 4KC road yielded values of 60 ppb Au, 2.0 ppm Ag, 25 ppm Co



and 768 ppm Bi. A sample of another mineralized quartz vein in the Grid B area (12 to 20 cm thick) (20304) yielded values of 120 ppb Au, 6.0 ppm Ag, 10,338 ppm Cu, 24 ppm Mo and 196 ppm W. Previous sampling of quartz veins in the Grid B area (Neale, 1987) yielded values of up to 340 ppb Au, with up to 8.5 ppm Ag and 18,617 ppm Cu.

Outside of Grid Areas

A 5 cm wide quartz vein is hosted in a 10 cm wide shear zone trending 009/80SE in medium-grained gabbro on Solly Creek. A grab sample of this material yielded values of 70 ppb Au, 16.4 ppm Ag, 4187 ppm Cu, 130 ppm Zn and 63 ppm Bi.

5.3 Stream Sediment Geochemistry Survey

Nineteen stream sediment samples were collected from the property.

Sample S-5 was collected at 0+00, 0+60E on Grid A. It yielded 40 ppb Au, 20 ppm Pb, and 195 ppm Ba. The drainage basin is believed to be partially underlain by felsic pyroclastics of the McLaughlin Ridge Formation.

Sample S-10 was taken 380 m upstream from S-1, apparently above rocks of the McLaughlin Ridge Formation, and yielded 125 ppm Pb and 228 ppm Ba.

Sample S-14 was collected on Solly Creek, east of Grid A, and yielded 123 ppm Zn. The sample site is approximately 200 m south of an exposure of a mineralized quartz vein (20341) with slightly anomalous amounts of Zn.

Sample LN 30-SILT 1, collected near the eastern boundary of the Orn 2 claim, yielded 50 ppb Au, 137 ppm Cu, and 154 ppm Pb. The drainage basin from which the sample was collected is underlain by siltstone of the Cameron River Formation and gabbro. No mineralization was noted in the area.

5.4 Soil Geochemical Surveys

A total of 450 soil samples was collected on two grids on the Hall property. Samples were taken at 25 m intervals on lines generally 100 m apart. Soil geochemical anomalies on Grid A are generally weak. Peak values for Cu, Ag, and Zn are 239, 2.5, and 195 ppm, respectively. Previous work on nearby properties, most notably the Lara, indicates that soil geochemical anomalies tend to be subtle and weak, due to the extensive clay-rich glacial till cover in the area. On the Lara property, the A horizon humus was determined to give the best results, and a plot of Cu x Zn values was used to outline anomalous zones (values >5000 considered anomalous). VLF-EM and IP anomalies were subsequently outlined coincident with the geochemical anomalies over mineralized zones (R. Bailes, MEG talk 86-03-24). Soil geochemical anomalies identified on Figure 4 were outlined on the following basis. All anomalies consist of at least 2 sample sites with at least 2 of Cu, Zn, and Ag present in anomalous concentrations. Anomalous limits were determined by statistical analysis of the results to be 130 ppm for Cu and 120 ppm for Zn. The anomalous limit for Ag was chosen as 0.6 ppm.



A total of 5 anomalies occur. They are spotty and small but are interpreted as valid indications of possible underlying polymetallic mineralized zones.

Anomaly	No. of Samples	Peak Values (ppm)		
		Cu	Zn	Ag
1	2	144	151	1.5
2	4	(121)	144	1.2
3	2	200	(115)	1.0
4	2	134	(86)	0.9
5	2	136	(97)	1.3

Anomalies 1, 2, and 3 all occur over thrust(?) faults and are coincident with moderate to strong VLF-EM conductors and weak magnetic lows. Anomaly 4 occurs on the northern flank of a weak VLF-EM conductor in an area believed to be underlain by Cameron River Formation siltstone and chert. Anomaly 5 is coincident with a magnetic high in an area believed to be underlain by Cameron River Formation siltstone.

In the Grid B area, copper appears to be the only metal with significantly anomalous levels in soil. Copper anomalies in Grid B may be related to gabbroic bedrock. Values over 200 ppm are shown in Figure 3, although larger areas of values over 100 ppm Cu occur. The grid coverage to date is insufficient to allow meaningful analysis of the results.

5.5 VLF-EM Surveys

VLF-EM surveys were conducted on 10.5 km of line on Grids A and B. Contoured plots of Fraser Filtered dip angles, and profiles of the VLF-EM data are presented in Hawkins (1988). Conductors defined by the VLF-EM surveys are shown in Figures 3 and 4. Several conductive zones were outlined on Grid A. One zone is a weak to strong conductor which extends across the entire northern part of Grid A (1000 m), and appears to follow a narrow gabbro sill hosted in 30 m wide horizon of lapilli tuff within a thicker unit of phyllitic cherty sandstone. The conductor is locally coincident with moderate magnetic highs. Between lines 8+50E and 9+50E the zone may be outlining a fault zone. A set of VLF-EM conductors in the southern portion of the grid appears to outline the Twin J fault and a branch fault and are coincident with multi-element soil geochemical anomalies. Elsewhere, VLF-EM conductors are interpreted to outline lithologic contacts, but the lack of outcrop prevents definite conclusions as to their cause. The limited extent of the VLF-EM survey on Grid B makes it difficult to outline conductor axes with certainty. Possible conductors are shown in Figure 3. Two of the conductors appear to be related to structures cutting the gabbro.

5.6 Total Field Magnetic Surveys

The total magnetic field strength was measured at 25 m intervals on 10.5 km of grid lines using a Geometrics G-826 portable proton precession magnetometer. The survey was conducted using a closed loop technique with readings corrected to magnetic field strengths measures on a baseline. Corrected data have been plotted and contoured in Hawkins (1988). Zones of moderate magnetic susceptibility (400-700 nT above background) on Grid A have been interpreted to be related to a quartz diorite intrusive and a horizon of phyllitic siltstone and

cherty siltstone (possibly a lapilli tuff unit), based on very limited outcrop. Magnetic contrasts are similar to those located over the "iron formation" horizon on the Ermelina property (Laanela, 1988) along strike to the northwest. The pattern of the magnetic features suggests that the magnetically susceptible rocks have been offset by several NE to NW trending faults. A zone of high magnetic susceptibility (>1500 nT above background) on Grid B is clearly related to the magnetite-rich coarse-grained gabbro horizon. It is shown in Figure 3.

6.0 PROPOSED WORK PROGRAM

6.1 Plan

Two main areas of interest have been identified to date on the Hall property, namely Grid A and Grid B.

On Grid A soil geochemical anomalies coincident with structures and/or geophysical anomalies were located by Phase I work. Exploration targets include volcanogenic polymetallic massive sulphide zone(s) in the McLaughlin Ridge Formation and gold-bearing sulphide-magnetite-jasper "iron formation" horizon(s) in the Cameron River Formation. The occurrence of Jurassic intrusives in the area indicates that skarn mineralization such as that of the VV property (see page 6) may also occur. The proposed Phase II exploration program will utilize IP surveying and trenching to follow up the Phase I anomalies, based on Abermin's successful program of soil geochemistry, VLF-EM, IP, and trenching on their Lara property.

On Grid B Au-Ag-Cu mineralized quartz veins have been discovered in a pyritic magnetite-rich coarse-grained gabbro unit, which has been shown to contain anomalous Au and Pd itself. Anomalous Au values have also been found in pyritic Cameron River Formation rocks in the area. The grid coverage of this area to date is incomplete. The proposed Phase II exploration of this area will include extensions of the existing grid to the west and east; soil sampling, magnetometer, and VLF-EM surveys on the grid extensions; hand trenching of anomalies and/or showings; and geological mapping and prospecting along the projected strike of the coarse-grained gabbro to locate any additional mineralized zones. The grid extensions will cover both the coarse-grained gabbro and the layer of Cameron River Formation rocks as both have returned anomalous gold values from previous sampling.

A third area of interest identified by Phase I is the mineralized quartz vein in Solly Creek.

6.2 Budget

Personnel	\$ 47,000
Truck Rental	4,410
Equipment Rental	6,875
Food and Accommodation	7,865
Analyses	8,243
Backhoe Rental, Mob/Demob	4,500
Miscellaneous (supplies, freight, etc.)	2,480
Report Costs	2,859
Administration (@ 15% on \$18,080)	2,712
Contingency (@ 15%)	13,056
TOTAL	\$100,000

7.0 CONCLUSIONS

1. The Hall property is partly underlain by rocks of the Sicker Group, a well-known host to polymetallic massive sulphide mineralization, as well as other types of mineralization including structurally controlled gold-bearing quartz veins, auriferous magnetite-jasper "iron formation", and metasomatic skarn.
2. Traditional exploration techniques in the Grid A area are greatly hampered by heavy glacial till overburden and limited (less than 5%) outcrop. This results in very limited and unreliable geological control and the need to interpret low magnitude geochemical anomalies.
3. The southwest corner of the property contains the highest priority targets identified by Phase I work on the property and by work carried out by others on nearby properties including the Lara and Ermelina properties. The occurrence of multi-element soil geochemical anomalies and coincident VLF-EM conductive zones over the western extension of the Twin J thrust fault, in an area on strike with the As, Zn, Pb, Ag, Au soil geochemical anomalies and iron formation horizon of the Ermelina property and proximal to the Lara property Randy North zone constitutes a target area for further work. Outcrop in the area is very scarce and additional work is necessary to determine the cause(s) of the anomalies and to test for possible additional anomalies of interest. The area of interest is about 200 m wide by 1200 m long over the probable location of the Twin J thrust, which hosts and/or controls the Ermelina iron formation to the NW and the Twin J massive sulphides to the SE.
4. The presence of felsic volcanics containing anomalous Au and Ag in Esso's 1978 drillholes on the Holyoak claims (directly south of Orn 2) indicates that potential for stratiform mineralization exists north of the Twin J fault, as well as to the south.
5. A zone with a potential strike length of 3.5 km in an area of 1.8 km² occurs on the Hall property in Cameron River Formation rocks between the Ermelina iron formation to the NW and the Holyoak (Esso Resources) felsic volcanoclastics to the SE. The presence of magnetic and VLF-EM anomalies within this area could indicate the occurrence of mineralization.
6. The low magnitude coincident Ag, Cu, and Zn geochemical soil anomalies obtained in B horizon surveys are considered highly significant in areas of glacial overburden in the Sicker Group (B. Smee, Abermin Corp., pers. comm. 1988) especially in conjunction with VLF-EM conductors, magnetic anomalies, and geological projections of structures and lithology.
7. The VLF-EM conductors are similar in magnitude and signature to those over nearby known mineralization at the Abermin Corp. Lara project and the Carlsbad Ventures Inc. Ermelina project. The coincident magnetics may relate in some manner to Twin J thrust fault controlled iron formation and/or other potentially auriferous iron formation horizons known to occur in the Cameron River Formation on neighbouring properties.

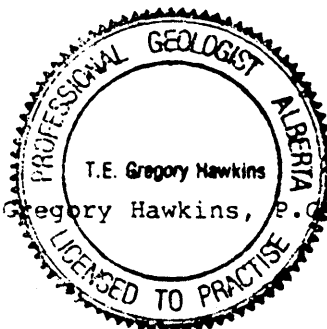
8. Limited phase I work in the Grid B area confirmed the presence of narrow Au-Ag-Cu-bearing quartz veins cutting magnetite-rich, variably pyritic gabbro, which itself hosts minor amounts of Au and PGM elements (up to 130 ppb Au; 180 ppb Pd). Further work is necessary to determine the area of quartz veining, size of individual veins, the tenor of mineralization in the veins, and whether zone(s) of concentration of PGM elements occur.
9. Grid B mineralization is similar to other quartz/sulphide vein systems known to occur throughout the Sicker Group. The additional existence of sulphide phases in the differentiated gabbro that carry anomalous Au and Pd values is significant and requires followup.

8.0 RECOMMENDATIONS

1. It is recommended that Phase II exploration of the Grid A area consisting of IP surveying and backhoe trenching be carried out to determine the cause(s) of the Phase I geochemical and geophysical anomalies and to provide specific targets for future diamond drilling.
2. It is recommended that Phase II exploration of the Grid B area consisting of soil sampling, VLF-EM, and magnetometer surveys over extensions to the present grid; hand trenching; and geological mapping and prospecting be carried out to explore and delineate the zone of Au-Ag-Cu mineralized quartz veins and anomalous Au-Pd in magnetite-rich coarse-grained gabbro.
3. Further reconnaissance and detailed geological mapping, prospecting and rock sampling is recommended to be carried out over the remainder of the property.
4. The above Phase II exploration program is recommended at an estimated cost of \$100,000.

Respectfully submitted,
MPH CONSULTING LIMITED

T. Gregory Hawkins, P. Geol.



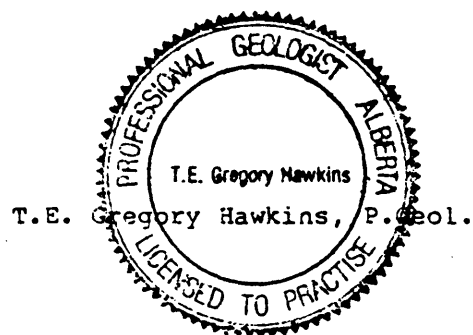
June 24, 1988



CERTIFICATE

I, T.E. Gregory Hawkins, do hereby certify:

1. That I am a Consulting Geologist with business offices at #2406 - 555 West Hastings Street, Vancouver, B.C. V6B 4N5.
2. That I am a graduate in geology of The University of Alberta, Edmonton (B.Sc. 1973), and of McGill University, Montreal, (M.Sc. 1979).
3. That I have practised within the geological profession for the past sixteen years.
4. That I am a Fellow of the Geological Association of Canada and a Professional Geologist registered in the Province of Alberta.
5. That the opinions, conclusions and recommendations contained herein are based on field work conducted on the property from November 5th to December 3rd, 1987, and supervised by me.
6. That I do not own direct, indirect, or contingent interests in the subject property or shares or securities of Avondale Resources Inc. or associated companies.



June 24, 1988

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CERTIFICATE

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by the Securities Act and its regulations.

DATED: AUGUST 3RD 1988

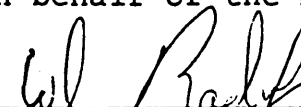


Chief Executive Officer
STEVEN J. RADVAK

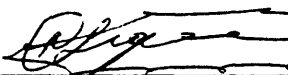


Chief Financial Officer
MINAS MOUSTAKIS

On behalf of the Directors of the Company:



WILLIAM J. RADVAK
- Director



NIKOLAOS SEGOUNIS
- Director



STEVEN J. RADVAK - Promoter



WILLIAM J. RADVAK - Promoter



NIKOLAOS SEGOUNIS - Promoter