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## PAN ISLAND RESOURCE CORP.

(hereinafter called the "Issuer")
1500-609 Granville Street, Vancouver, B.C., V6C 1V5

## OFFERING:

400,000 common shares at \$0.40 per share

and

300,000 units at \$0.45 per unit, each unit consisting of one (1) deposit receipt evidencing the right of the

holder to earn one flow-through share

and two (2) Series "A" share purchase warrants to purchase (non-flow-through) common shares

400,000 common Shares	Price to Public	Commissions	Proceeds to Issuer if all shares are sold
Per Share	\$0.40	\$0.048	\$0.352
Total	\$160,000	\$19,200	\$140,800
300,000			Proceeds to Issuer if
Units	Price to Public	Commissions	all Units are sold
Per Unit	\$0.45	Nil (1)	\$0.45
Total	\$135,000	Nil	\$135,000
TOTALS	\$295,000	\$19,200	\$275,800 (2)

<sup>(1)</sup> The Issuer will pay the Agent, from the Issuer's working capital, \$0.054 per unit sold by the Agent for a total of \$16,200 for sale of all the units.

THERE IS NO MARKET FOR THE SECURITIES OF THE ISSUER. THE PRICE OF THIS OFFERING HAS BEEN DETERMINED BY NEGOTIATION BETWEEN THE ISSUER AND THE AGENT.

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CANARIM INVESTMENT CORPORATION LTD., 2200 - 609 Granville Street, Vancouver, B.C., V7Y 1G5

Effective Date: May 26, 1987

# GEOLOGICAL REPORT AND WORK PROPOSAL

ON THE

# SAN JUAN RIVER PROPERTY

SOUTHERN VANCOUVER ISLAND

FOR

# PAN ISLAND RESOURCE CORP.

N.T.S. 92C/9

VICTORIA M.D.

BY EDWARD W. GROVE, Ph.D., P. Eng.

VICTORIA, B.C.

APRIL 21,1986

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#### SUMMARY

The Pan Island Resource Corp. mineral property lies immediately east of Port Renfrew on southern Vancouver Island. Access from Port Renfrew to the claims, by logging road, is good. The topography is moderate, the climate is generally mild, and exploration can usually proceed during eight to ten months of the year.

Fine placer gold has been known in many of the local streams for years and several gold bearing quartz veins have been discovered in the immediate area. Part of the property has strong geologic similarities to the auriferous Mountain area. In addition, a variety of base metal gold/silver bearing occurrences as well as iron formation have been uncovered along the San Juan River and on the northern side of the river. Thus the property includes two diverse geological environments, one south of the San Juan River corresponding to Valentine Mountain with attributes of a number of Precambrian gold camps, and second, a complex north of the San Juan River with similarities to central and northern Vancouver Island where major massive sulfide porphyry and contact deposits have been or are still being mined.

Work on this property has included a detailed airborne VLF-E.M. and magnetometer survey in 1984 which in conjunction with geochemical surveys in 1984 and 1985 have outlined a number of target areas.

This property presents a situation where easy access, good weather and requisite geological environments suggest and warrant further mineral exploration.

A program including detailed soil geochemistry, stream sampling, geological mapping, trenching and sampling followed by limited core drilling is recommended. The program is estimated to cost \$75,000.00.

## INTRODUCTION

The Pan Island Resource Corp. mineral property on southern Vancouver Island lies immediately east of Port Renfrew along both sides of the San Juan River. The property includes 33 staked, contiguous mineral claims comprising 522 units covering about 13,034 hectares (32,207 ac). This property lies on the boundaries of the EBB, OX, SPANISH, KINSLEY, and SOMBRIO claim groups where gold/quartz veins have been discovered in recent years, and is west of both the Expeditor Resource Group, and Beau Pre Explorations gold properties where high grade gold quartz veins have been under exploration since 1981.

The discovery of placer gold west of Victoria in the Leech River in 1864 led to a major rush in the area which lasted only a few years. Subsequently many of the streams flowing across the rock unit known as the "Leech River Schists" have been panned and shown to contain fine gold or "colours". These streams include at least two thirds of all the known gold placer deposits on Vancouver Island and crudely outline a unique geologic environment.

It was not until 1976 that significant native gold was found in place in narrow quartz veins within the Leech River on Valentine Mountain, about 42 kilometers west of Victoria. Subsequently a detailed stream silt survey accompanied by detailed prospecting during 1981 revealed a large number of gold bearing quartz veins localized within an area about 3000 meters long (E-W) and from 200 to 300 meters wide on the upper east slope of Valentine Mountain. Although there have been a variety of geological surveys and studies in the area it is now obvious that the real geology of the Leech River rocks is far more complex than previously assumed.

Lode gold deposits found at Valentine Mountain since 1976 and more recently at the OX property south of the San Juan River in 1980 and at the RENA property on Loss Creek in 1983 have increased exploration interest in what is still a relatively poorly known and virtually unexplored area.

Mineral exploration in this area which lies partly within the west end of the Leech River metamorphic complex has been basically limited to the main highway and older well developed logging roads and originally concentrated on copper deposits. Recent work by prospectors has shown the area is geologically more complex than suspected and that several types of gold deposits can be expected. Until recently all of the placer gold found in streams on the southern part of Vancouver Island were judged to be derived from reworked glacial deposits. The discovery of free gold in quartz veins within the Leech River complex from Sooke to Port Renfrew refutes this outdated concept.

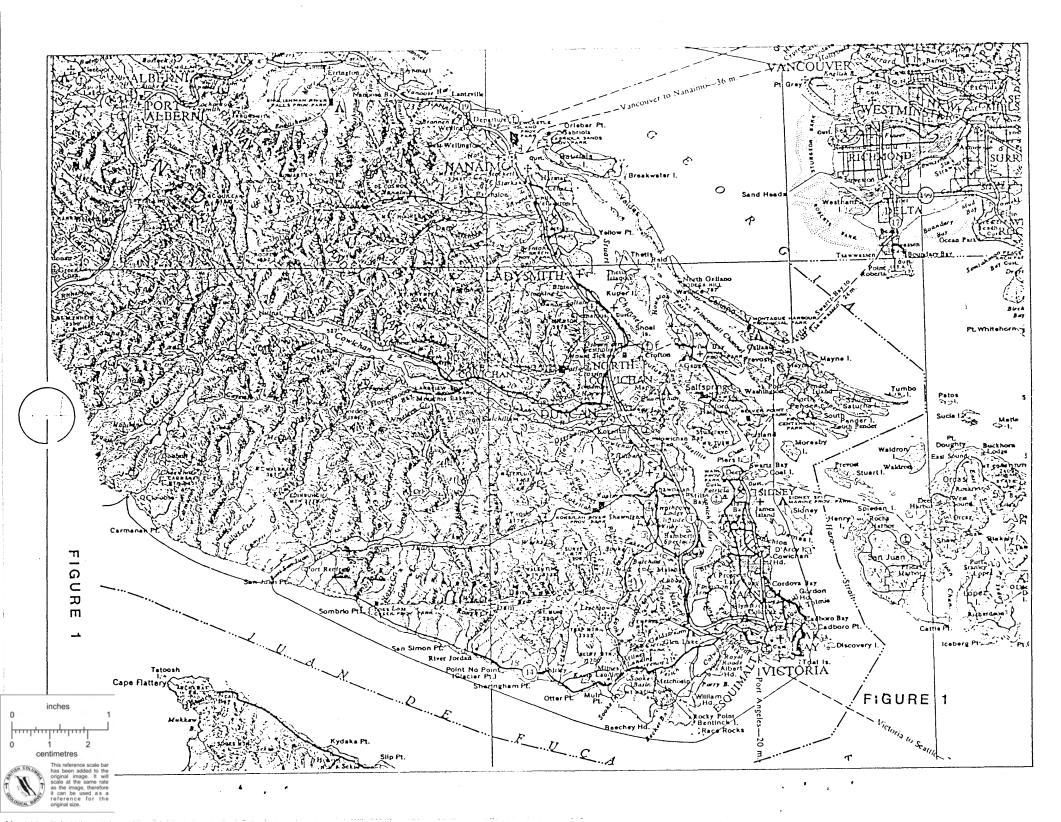
Work on Pan Island Resource Corp.'s San Juan property has so far included preliminary property geology, a detailed airborne VLF-EM survey completed in 1984 comprising 600 line kilometers, reconnaissance soil and silt sampling, follow-up soil and stream sampling in 1984, and detailed soil and silt sampling accompanied by analysis of pan concentrates in 1985.

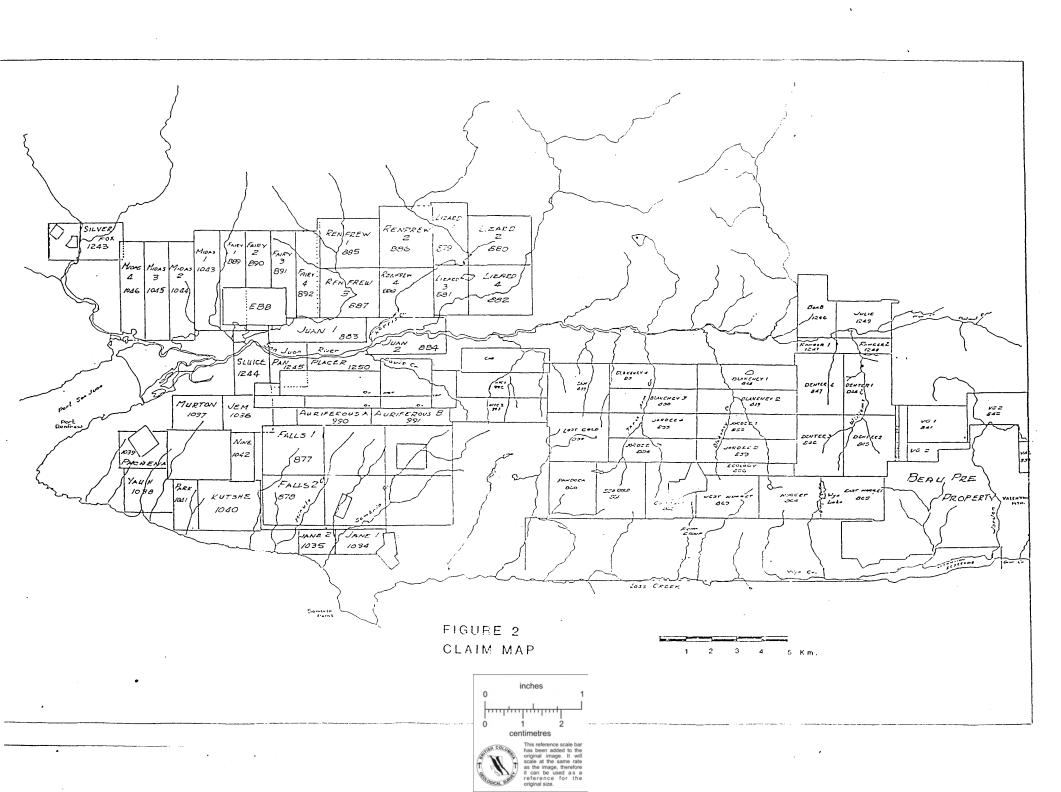
The detailed airborne geophysical survey of the Pan Island property has crudely outlined the broad geologic diversity and structure, and has indicated a number of magnetic

and VLF-EM anomalies of interest along and north of the San Juan River. The VLF-EM data produced numerous conductivity responses many of which can be resolved as geologic faults and shear The geophysical survey over the San Juan Ridge portion zones. property showed an overall uniform magnetic response marked by small anomalies and a number of northeasterly trending VLF-EM axes probably reflecting faults and shears. Preliminary geological studies have shown the presence of a variety of intrusive bodies north of the San Juan River, a complex pillow lava - sediment - iron formation along the San Juan River, and a thick sequence of folded Leech River Assemblage rocks forming the San Juan Ridge. Work in the general area has shown the presence of a variety of mineral deposits including copper, iron, cobalt, nickel, vanadium, and gold associated with a variety of unique geologic conditions. To date, the Tertiary lode gold deposits form the most diverse group occurring in a number of distinct environments. The preliminary geochemical survey work in the general Leech River Block has shown that anomalous aresenic in silts and soils provides a pathfinder to local gold occurrences and deposits. analysis of the 1985 Pan Island data suggests that silver also serves as a pathfinder element.

The writer has been active in the area for a number of years and spent several days on the property in the last year. As a result of regional and detailed studies the writer has introduced a new geological model to relate stratigraphy, deformation, metamorphism, igneous activity and gold mineralization. This model compares favorably with concepts in major gold camps in other parts of the world and can be applied to exploration in the Leech River Block.

This report outlining geological relationships and recommending a work program was written at the direction of Pan Island Resource Corp.





## LOCATION, ACCESS AND GEOGRAPHY

Pan Island Resource Corp.'s mineral claims form an irregular H-shaped property extending along and north of the San Juan River, and along San Juan Ridge just east of Port Renfrew (Figure 1). Port Renfrew lies at the end of a paved highway about 80 kilometers westerly of Victoria, B.C. Most of the property can be reached from Port Renfrew by a number of acless and logging roads by truck or motorbike. Because of the wild climate in the area field work can proceed during eight to ten months of the year depending on the elevation and of course the locally variable snowfall. From the San Juan River at roughly sea level the claims rise to a little over 1000 meters north of the river on the FAIRY 2 claim near the head of Fairy Creek, and about 850 meters on the crest of San Juan Ridge on the SOMBRIO 1 claim. All of the claims are cut by relatively close spaced north and south flowing major streams. Large portions of the mineral property have been logged off exposing scattered rock outcrop. The remaining unlogged areas are covered by a deep overburden and a thick mature forest.

## PROPERTY

The mineral property now held by Pan Island Resource Corp. includes 33 contiguous staked mineral claims comprising 522 units. The property is roughly H-shaped centered on the San Juan River with an overall length of about 19 kilometers and a north-south width of about 15 kilometers (Figure 2).

CLAIM NAME	UNITS	RECORD NO.	ANNI	VERSARY	/ DATE
LIZARD 1	15	879	1 1	APRIL	1986
LIZARD 2	2ø	880	1 1	APRIL	1986
LIZARD 3	12	881	1 1	APRIL	1986
LIZARD 4	2ø	882	1 1	APRIL	1986
JUAN 1	16	883	11	APRIL	1986
JUAN 2	18	884	1 1	APRIL	1986
RENFREW 1	2ø	885	1 1	APRIL	1986
RENFREW 2	2ø	886	1 1	APRIL	1986
RENFREW 3	2Ø	887	1 1	APRIL	1986
RENFREW 4	16	888	1 1	APRIL	1986
FAIRY 1	16	889	1 1	APRIL	1986
FAIRY 2	16	87Ø	·1 1	APRIL	1986
FAIRY 3	14	871	11	APRIL	1986
FAIRY 4	14	872	1 1	APRIL	1986
MIDAS 1	16	1043	19	JULY	1986
MIDAS 2	16 .	1Ø44	19	JULY	1986
MIDAS 3	16	1Ø45	19	JULY	1986
MIDAS 4	16	1046	19	JULY	1986
	-				.cont.'d

...cont.'d

CLAIM NAME	. UNITS	RECORD NO.	ANNI	VERSARY	DATE
SILVER FOX	. 18	1243	Ø5	JUNE	1986
SLUICE	18	1244	Ø5	JUNE	1986
PAN	12	1245	Ø5	JUNE	1986
PLACER	18	1 25Ø	Ø5	JUNE	1986
FALLS 1	20	877	11	APRIL	1986
FALLS 2	2Ø	878	1 1	APRIL	1986
JANE 1	15	1034	19	JULY	1986
JANE 2	12	1 Ø 3 5	19	JULY	1986
JEM	12	1036	19	JULY	1986
MURTON	12	1Ø37	19	JULY	1986
YAUH	16	1038	19	JULY	1986
PACHENA	12	1039	19	JULY	1986
KUITSHE	2Ø	1040	19	JULY	1986
PARK	8	1 Ø 4 1	19	JULY	1986
NINE	8	1042	19	JULY	1986
	522 UNITS				

## HISTORY

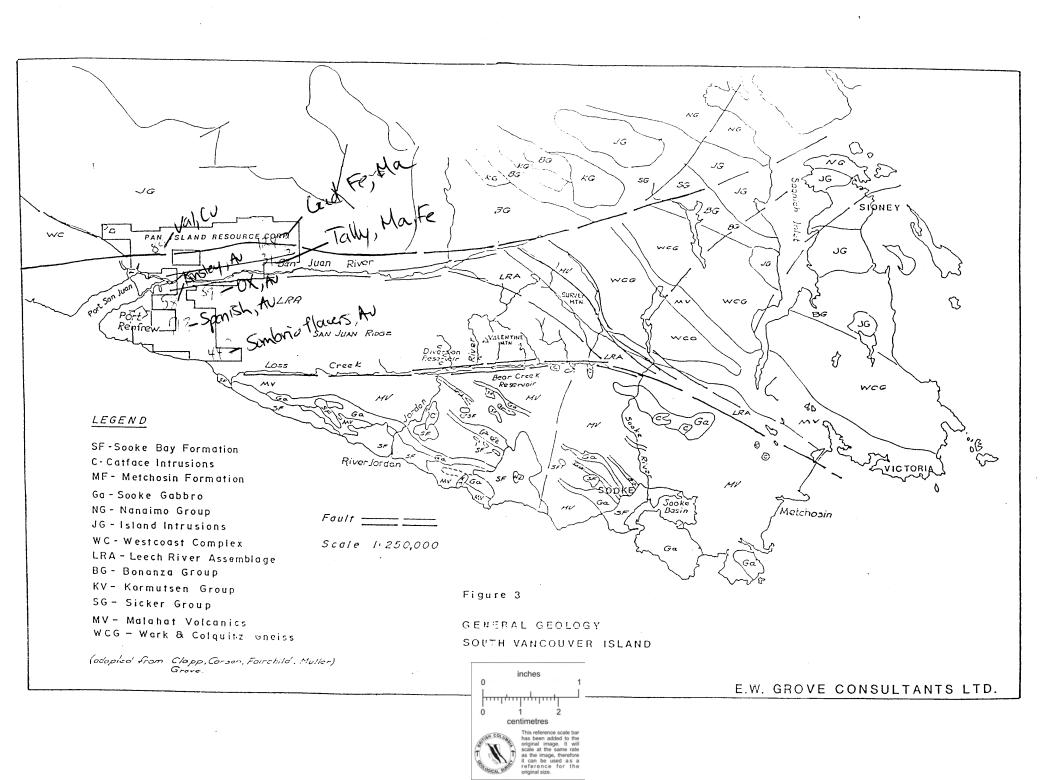
Available historical records show that placer gold was first found in southern Vancouver Island by Lieutenant David Leech and party on the Leach River in 1864. Although rumours persist that Spaniards had mined placer gold on the San Juan River and Loss Creek at an earlier date no records survived. In more recent years placer gold has been recovered along portions of the San Juan, Jordan, Sooke, and Leech rivers, Loss Creek, Clapp Creek, Old Wolf Creek and other small unnamed creeks that cut across rocks of the San Juan Ridge.

More recently detailed exploration in the area east of Walker Creek has shown significant placer gold in the Jordan River and Valentine Creek which has been shown to be related to the gold bearing quartz veins localized within metasediments on Valentine Mountain.

Detailed prospecting on the Beau Pre property led to the discovery in 1976 of the 'A' vein, a narrow quartz vein with visible bright yellow gold similar to the placer gold recovered from local creeks. Since 1980 when the writer examined the property and determined the nature and structure of the mineralization a total of 85 gold bearing veins have been discovered in an east-west trending zone about 300 meters wide by 2000 meters long. Drilling has also shown the continuity of the vein systems over a depth of at least 125 meters.

In 1982 another free gold in quartz discovery was made by prospector Ted Archibald at the OX property located east of Port Renfrew on the south side of the San Juan River. Previous





work on this property has shown significant gold values in arsenopyrite-bearing dioritic dikes. In 1983 an auriferous quartz vein - quartz stockwork system was discovered by geochemical surveys west of Valentine Mountain near the head of Loss Creek on the RENA property.

In addition to the gold potential of the Leech River Block metasediments, recen prospecting efforts on the GAD property located east of Port Renfrew along the south side of the San Juan River has disclosed an extensive 'iron formation' unit with significant cobalt, nickel, and vanadium content. The gold potential of this formation which appears to extend west into the SLUICE claim remains to be explored. Gold occurrences have also been noted in the Baird Creek area now covered by the SILVER FOX claim.

Base metal mineralization has also been located just north of the San Juan River in an area marked by geological complexity involving Paleozoic and younger country rocks and Mesozoic intrusives. Mineralization discovered to date includes contact and strata bound deposits with pyrite, magnetite and chalcopyrite with some gold and silver values. The Pan Island claims cover a significant area along the San Juan River which remains to be explored for base metal deposits.

## GENERAL GEOLOGY

This portion of southern Vancouver Island is marked by the strong east-west trending San Juan and Leech River fault zones (Figure 3). Rocks north of the San Juan River fault are generally considered to include a variety of Mesozoic and older country rocks intruded by the Mesozoic Island Intrusions. The segment lying between the two major faults is known as the Leech River Block and includes a variety of folded volcanic and sedimentary units altered by regional metamorphism and cut by scattered swarms of Tertiary intrusives.

The general geology of Vancouver Island was first studied by George M. Dawson (1887) who made a reconnaissance of the Leech River area in 1876 and examined the newly discovered Leech River placer gold deposits. Subsequently a more detailed study of Southern Vancouver Island by Charles H. Clapp (1912) resulted in the basic geological framework which persists today. The most recent general geology of southern Vancouver Island has been produced by J.E. Muller (1975, 1977). Detailed geology of the Survey Mountain area by L.H. Fairchild (1979) and of the adjacent Valentine Mountain area by Edward W. Grove (1982) provide the only current descriptions of the rocks comprising the Leech River Block, the structural framework, and the gold bearing quartz veins.

Generally, all of the rock units forming the Leech River Block (San Juan Ridge) were called Leech River formation by Dawson and Clapp who considered these units to be the oldest on Vancouver Island. Muller (1975) subsequently suggested the country rocks represented mainly turbiditic greywacke-argillite sequences latterly metamorphosed to schist and slate and were of possible Triassic-Jurassic age.

All of the published reports restrict the Leech River schists to a unique structural block between the apparently simple throughgoing San Juan fault on the north, and the equally simple, parallel Leech River fault on the south margin (Figure 3). Fairchild (1979) showed that the easterly end of the Block included a variably metamorphosed sequence which included both metavolcanics and metasediments forming a large gently easterly plunging antiform. He also suggested that the San Juan and Leech River faults now outline an allochthonous microplate pushed into position during the Tertiary.

Geological studies in various parts of this area since 1976 have completely revised concepts regarding the lithology, structure, and mineral potential of the Leech River Block. So far detailed geological mapping near Port Renfrew, and in the east half of the block from Walker Creek to Survey Mountain shows that rocks forming the Leech River Block are dominated by thick sequences of metasandstone with intercalated metapelites, quartzites, metavolcanics, 'iron formation', and This assemblage has been folded by compressive limestone. forces into relatively simple, large, open, easterly plunging The fold geometry is controlled by the competent thick metasandstone units which express cylindrical fold geometry. Recognition series of unique metavolcanic members of a (amphibolites) within this pile by the writer as marker horizons has allowed the interpretation of the regional and detailed rock structures and has led to recognition and interpretation of metamorphism and mineralization.

Rocks forming the Leech River Assemblage have undergone two well defined but overlapping periods of metamorphism in part followed by Eocene intrusion along the strong east-west fold The combination of regional metamorphism and late intrusive activity has culminated in upper amphibolite grade mineral assemblages. In the metapelites (mudstone) the rocks staurolite-andalusite garnet-biotite mireral assemblages. Andalusite represents the early high temperature phase and is unstable, and staurolite represents the lower temperature second phase metamorphic event. In the altered rocks metamorphism is marked by lower grade actinolite-chlorite to higher grade hornblende-biotite material in which magnetite, epidote, calcite and sphene are common and

amphibolite alteration. marks upper Because tourmaline which dominate the rock assemblage rarely metasandstones indicate metamorphic grade, intercalated schists which fairly common are the best local guides. Andalusite remnants, known as shimmer aggregates, marking the overall high grade nature of the rocks have now been identified through most of the block. Late stage faulting and shearing along the San Juan and Leech River structural zones and the related conjugate shears have resulted in extensive retrograde metamorphism masking earlier minerals and textures. Faulting and cataclasis of the Eocene intrusive rocks as well as the associated pegmatites and latest significant gold-quartz vein systems represent the , geological event in the Leech River Block.

The north side of the San Juan River is not yet as well known as the Leech River Block which has now benefitted from detailed geological studies related to the gold deposits. As shown in Figure 3 the bulk of the mapped units north of the San Juan River include metamorphics of the West Coast Complex and Island Intrusions with scattered areas of country rock. The preliminary mapping of this portion of the Pan Island property shows a considerable complexity which is not apparent on the published regional geological map.

## PROPERTY GEOLOGY

Preliminary geological mapping and some prospecting of the Pan Island Resource Corp. property show that the claims encompass a variety of sedimentary, volcanic, metamorphic and intrusive rocks marked by major faulting, shearing, and folding. Three apparently distinct geologic systems are separated by the major east-west trending San Juan Fault zone, and by the east-west trending Leech River Fault zone forming the central Leech River Block and southerly Metchosin Block (Figure 3). The preliminary geological study has shown that the property encompasses a number of the main lithological and structural features known so far to favour the localization of gold, base metal and iron mineralization.

The portion of the mineral property north of the San Juan Fault includes a variety of sedimentary and volcanic rocks, altered correlatives and extensive intrusive bodies. At the northwest end of the property on the SILVER FOX claim the underlying rocks include a wide northwest trending zone of Paleozoic sediments including limestone cut by dioritic and quartz diorite Island Intrusions. North of Fairy Lake (FAIRY claims) quartz monzonite and granodiorite intrusives enclose extensive pendants and inclusions of altered and deformed volcanic and sedimentary rocks. The eastern portion of these claims comprises mainly Island Intrusions and scattered country



rock inclusions. Relatively little rock is exposed within the San Juan Fault zone in the lower valley. These few exposures include massive sedimentary rocks, some volcanics and phyllites.

The geology of the Leech River Block portion of the Pan Island mineral property comprises a thick sequence of open folded meta-sandstone with intercalated altered siltstone, minor limestone and some amphibolite. The metamorphic grade is generally middle to upper amphibolite as expressed by the presence of garnet and andalusite. These units have been cut by swarms of east-west trending diorite and feldspar porphyry dikes and by east-west and northwest-southeast shear zones and faults. The nature and extent of the strata in this assemblage can be readily seen by traversing the well exposed sections along Minute Creek and the Sombrio River.

The San Juan Fault zone is the dominant geologic structure affecting the continuity of geologic units in the general area and as indicated appears to separate the Leech River Block rocks from the more extensive Vancouver Island Group units. The San Juan Fault is not a single fault line but a complex zone of shearing involving a wide diversity of rocks along the zone now recognizable as phyllites and semi-schists. In addition to the main fault zone the rock units of the Leech River Block have been cut by hundreds of narrow southeasterly trending shears, many of which appear to extend into the Leech River Fault zone forming a complex conjugate fault system. In addition to cutting and offsetting the rock units of all ages, these faults and shears have transected most of the known mineral deposits. In the instance of the Tertiary gold quartz vein systems this crushing appears to have played a major role in releasing free gold to eluvial materials which have since been concentrated by the many streams as placer gold deposits.

#### MINERALIZATION

Information on the occurrence and controls of gold mineralization in the Leech River Block comes primarily from the detailed geologic studes made at Valentine Mountain, on the Beau Pre property, along Loss Creek on the Gator Resources property, and near Port Renfrew on the OX and GAD claims. From these the most useful data comes from the detailed mapping, drilling, and sampling program completed by Beau Pre Explorations Ltd.

Detailed geologic mapping, trenching, sampling, core drilling and prospecting on the Beau Pre property has shown that free gold occurs in a multitude of quartz veins in several areas. The Discovery Zone on which most of the work has been done has a length of at least 2000 meters and an exposed width of 200 meters and has been drilled to a 125 meter depth. The

detailed geology/petrology studies on this zone have shown that the gold mineralization is localized in late fracture controlled quartz veins in both the hanging wall and footwall portions of amphibolites showing the high temperature mineral assemblage tourmaline, hornblende, calcite, biotite-magnetite-epidote. This strong correlation of structural, metamorphic and lithologic features provides a geologic model for local exploration. This type of occurrence is well known in the major gold camps of Ontario and Kolar, India.

At Loss Creek on the RENA claims significant gold values have been found in a 60 meter wide quartz vein- stockwork system in which pyrite and arsenopyrite are abundant. Here the host rocks are intimately intercalated metasandstone, and alusite schist, and amphibolite cut by thin sill-like granodiorite dikes. This gold bearing zone which cuts across all the rocks including the granitic dikes shows a similar fracture control and fracture orientation to Beau Pre's Discovery Zone.

On the OX claims near Port Renfrew gold was first discovered associated with arsenopyrite bearing narrow diorite and aplite dikes in schist. Subsequent work has shown that these dikes include aplite, felsite, and diorite types and can be traced along zones up to 8 kilometers long within a complex schist, volcanic rock, chert sequence found along the San Juan River. In addition late free gold bearing fracture controlled quartz veins were found on the OX property in 1982 and it has been suggested that the complex lithology has the potential for stratabound gold deposits.

Recent work on the GAD claims has shown the presence of an extensive pillow lava, schist, chert, phyllite, magnetite (iron formation) complex that parallels the regional  $080^{\circ}-090^{\circ}$ trend and appears to lie within the south edge of the San Juan structural zone. On the basis of location this sequence appears to form part of the extensive zone found southwest on the OX and south on the adjacent HTC claims. The GAD mineralization has been prospected for magnetite and accessory cobalt, nickel, copper and vanadium. The potential for stratabound and vein gold mineralization has only recently been realized. mineralization has been recognized in and mined from iron formation units for many years in Ontario (Geraldton example); and extensive new discoveries in the Joutel area of northwestern Quebec in similar complex lithologies have sparked a new Hemlo-size gold rush.

Although gold mineralization has been the main driving force behind almost all the exploration in the general area in recent years, the potential for base metal contact metamorphic, massive sulfide, and porphyry deposits with associated gold and



silver exists. The area along and north of the San Juan River with the wide variety of sedimentary and volcanic rocks, and extensive plutons presents the requisite geological conditions for such deposits.

Even at this preliminary stage it is apparent that the Pan Island mineral property presents the requisite geological conditions in two very diverse environments for the concentration of gold as well as copper, 'iron ore', cobalt, nickel and vanadium.

## WORK ON THE PROPERTY

To date exploration work on the Pan Island Resource Corp. property has included an airborne geophysical survey, reconnaissance and detailed geochemical surveys and a preliminary geological assessment. The latter has been summarized in the preceding sections.

## GEOPHYSICAL SURVEY

A total of about 600 line kilometers of helicopter borne magnetometer VLF-EM system spaced at 300 meters were flown in 1984 in a north-south direction over the claim group. The VLF-EM conductors show numerous strong east-west and north-easterly trends and less prominent northwesterly trends. These features suggest a number of intersecting faults and possibly rock contacts. The two major magnetic lows follow the San Juan and Leech River structural zones and phyllitic zones developed in the adjacent Leech River Block. Four of these anomalies located near roads north of the San Juan River were tested by detailed geochemical soil-silt surveys in 1984.

## GEOCHEMISTRY

Soil and silt samples were taken during 1984 and 1985 in easily accessible portions of the geophysical survey block to test certain anomalies. Abundant soil and silt sampling in the Leech River Block has shown the strong correlation of trace arsenic with the known gold and gold/silver mineral deposits. So far, stream silt sampling with follow-up soil sampling has resulted in both indicating and outlining this mineralization in most parts of the Leech River Block. Used in conjunction with detailed geology and geophysics, geochemical sampling provides a cost effective method for prospecting and exploring property in this general area.

Results of an orientation study of the Pan Island geochemical data by Harris (1986) have reinforced the concept

that soil geochemistry coupled with prospecting for lode gold and sulfide mineralization remains a prime exploration tool in the Port Renfrew area. Harris has also confirmed that the B-horizon is a satisfactory medium for sampling and has suggested that both arsenic and silver should be used jointly as pathfinders. In addition gold should be analysed in soils for all anomalous areas. Harris also advocated the continued use of silt sampling as a reconnaissance method.

## CONCLUSION

The Pan Island Resource Corp. mineral property at Port Renfrew involves two diverse geologic systems separated by a major fault system along the San Juan River. The claims north of the San Juan Fault zone include a variety of Paleozoic and Mesozoic sedimentary and volcanic rocks cut by the extensive Intrusives. Known mineralization in the area includes auriferous bearing contact copper deposits, cupriferous and 'volcanogenic' massive sulfides, volcanics, as well as extensive magnetite deposits. The detailed geology of this particular part of the property is not well known and, as bγ geophysical results suggested the and preliminary geochemistry, is far more complex than suggested by the regional work.

The Leech River Block portion of the property has an apparent stratigraphy and structure fairly typical of the better known portions of this area. A number of gold quartz veins and vein systems comparable to the Beau Pre deposits have already been discovered in the Port Renfrew end of the Leech River Block adjacent to the Pan Island claims. In addition, it appears that the main iron formation unit outlined on the GAD property should extend into the JUAN claims and may include massive sulfide material such as located on the EBB.

The strongly anomalous (Au) pan concentrates from the southwest corner of the MURTON claim (Murton Creek) and from the MIDAS #2 claim should be explored in more detail. Both the above where gold-quartz anomalies ' are located in areas gold-stockwork quartz vein systems have been previously located on adjoining properties. Anomalous soil results (As, Sn, Cu, Ni; Co, Cr) on the KUITSHE (DBB 43-52), NINE (DBB 53-69), and JANE 1 (DBB 204-208) also indicate areas where quartz veins have The rocks in these claim areas are dominantly been identified. massive metasandstone with thinly intercalated andalusite schist and occasional amphibolite. Anomalous As in silts, soils and rocks is still considered the major pathfinder for gold in this area.



The continuous series of anomalous soils on the MURTON claim (JAB 39-95) outline an area with apparently anomalous As, Pb, W and Sb. Country rocks in this general area also include massive metasandstone, schist and minor amphibolite but are cut by an extensive E-W trending diorite (ic) dike swarm. Along the San Juan River this rock sequence in contact with an extensive massive sulfide bearing pillow lava, cherty siltstone sequence that has also been metamorphosed to upper amphibolite grade equivalents.

## RECOMMENDATION

A program comprising both detailed work to evaluate current anomalies plus continued exploration of the claim block by geochemistry surveys and prospecting is recommended. Results of Stage I should be evaluated before proceeding with Stage II. The cost of the two stage program is estimated at about \$75,000.

1986 MINERAL EXPLORATION PROPOSAL FOR THE PAN ISLAND RESOURCE CORP. PROPERTY IN THE PORT RENFREW AREA, SOUTHERN VANCOUVER ISLAND

## STAGE I

1.	Prospecting, Sampling, 2 men @ \$125/man/day Room and board Transportation Assays and analysis Sundries Report, drafting & data		3	\$6,000 2,000 1,400 4,400 500 1,500	\$15,800
2.	Geochemical Surveys 2 Men @ \$125/man/day Room and board Transportation Analyses Sundries Report, drafting & data	processing		7,000 2,400 1,700 4,600 600 2,000	18,300
з.	Geological mapping follow-up including sam	pling, repo	ort		8,000
4.	Supervision & documenta	tion			2,500
5.	Sundries, freight, etc.	-			400
		SUB-TOTAL	STAGE	I	\$45,000



## STAGE II

 Trenching & sampling (including rentals, fuel, etc)

\$5,000

Core drilling
 340 meters 0 \$44/meter (all found)

15,000

3. Core logging, geological mapping

3,ØØØ

4. Supervision & documentation

~ 2,500

SUB-TOTAL STAGE II

\$25,500

TOTAL STAGE I + STAGE II

\$7Ø,5ØØ

CONTINGENCIES

4,500

PROPOSED BUDGET \$75,000

## REFERENCES

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  - (1984): Geological Report and Work Proposal on the RENA Claims for Gator Resources Corporation, January 23, 1984.
  - (1984): Geological Report and Work Proposal on the Expeditor Fisource Group Ltd. Property in the San Juan R ver Area, Southern Vancouver Island, January 29, 1984.
  - (1984): Geological Report and Work Proposal on the Valentine Mountain Property for Beau Pre Exp. Ltd., February 28, 1984.
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#### CERTIFICATE

I, Edward W. Grove, of the Municipality of Central Saanich, do hereby certify that:

- 1. I am a consulting geologist with an office at 6751 Barbara Drive, Victoria, British Columbia.
- 2. I am a graduate of the University of British Columbia (1955) with a Master's degree, Honours Geology (M.Sc. Hon. Geol.) and a graduate of McGill University (1973) with a doctorate in Geological Sciences (Ph.D.).
- 3. I have practiced my profession continuously since graduation while being employed by such companies as the Consolidated Mining and Smelting Co. of Canada Ltd., British Yukon Exploration Ltd., the Quebec Dept. of Natural Resources, and the British Columbia Ministry of Energy, Mines and Petroleum Resources. I have been in corporate consulting practice since January 1981.
- 4. I have no direct, indirect or contingent interest in Pan Island Resource Corp. or any of its properties nor do I expect to acquire any such interest.
- 5. I consent to the use of this report in connection with a prospectus or statement of material fact.
- 6. I am a member in good standing of the Association of Professional Engineers of the Province of British Columbia.

April 20, 1986

Victoria, B.C.

Edward W. Grove, Ph.D., P.Eng.

REPORT ON THE

LABERGE TOWNSHIP PROPERTY

CASA-BERARDI AREA, QUEBEC

## FOR

PAN ISLAND RESOURCE CORP.
Ste. 1500-609 Granville St.
P.O. Box 10362
Stock Exchange Tower
Vancouver, B.C.
V7Y 1G5

BY

J. PAUL SORBARA, M.Sc., F.G.A.C.
J.P. Sorbara and Associates
6703 Nicholson Road
Delta, B.C.
V4E 2T2

JULY 21, 1936

A. Paul Salum

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# **APPENDICES**

Appendix I: Estimated Cost of Proposed Programs
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# LIST OF ILLUSTRATIONS

Figure	1:	Location Map; Casa-Berardi Gold Area,
		Quebec
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-		Laberge Township area: 1:50 000

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## SUMMARY

A block of 175 contiguous and unpatented mineral claims are held by Pan Island Resource Corp. in Laberge Township, northwestern Quebec. The property is located approximately 65 kilometres north of La Sarre, Quebec, from which the property may be reached by the Selbaie mine and on the west side of the Wawagosic River. The property is also about 65 kilometres due west of Joutel, a small mining town serving the Agnico Eagle gold mine.

The Pan Island claims are situated in the Abitibi subprovince within the same volcanic-sedimentary belt which hosts the recently discovered polymetallic massive sulfide deposit of Golden Hope Resources - Teck Corporation and the Golden Pond gold deposits of Inco-Golden Knight Resources Inc. The geology of the area is interpreted from government aeromagnetic and airborne electromagnetic maps. Outcrops are scarce because the area is flat and covered by extensive glacial overburden, swamp and muskeg.

No previous exploration activity is known to have been done on the Pan Island Resource Corp. claims. The regional (1:250,000 scale) geological map published by Quebec government indicates that about 75% of the claim group is underlain by metavolcanic rocks of the Archean Abitibi greenstone belt, while the remaining 25% is underlain by a mafic intrusive body (figure 3). This map also notes a pyrite and pyrrhotite showing located on the western edge of the Pan Island claims.

Regional airborne geophysical work has delineated a northwest trending EM (Input) conductor running parallel to the west flank of the Pan Island claims. This conductor curves and trends north-northeast just north of the Pan Island claims and joins the main productive horizon of the Teck-Golden Hope and Inco-Golden Knight deposits.

A two-phase exploration program is recommended to test the Pan Island claims. Phase I should include a detailed, low-level, airborne EM and magnetometer survey in connection with geochemistry, prospecting and mapping in the area of the intrusive contact.

Phase II, contingent on the results of Phase I, would comprise reverse circulation overburden drilling of significant geophysical anomalies. If results warrant further work, the second part of Phase II would include diamond drilling.

## INTRODUCTION

This evaluation of the Laberge Township property was requested by Mr. M. Bell, President of Pan Island Resource Corp. The main purpose is to determine the potential of the property for hosting contact-related or stratabound gold and massive sulfide mineralization, and to formulate a program to test that potential.

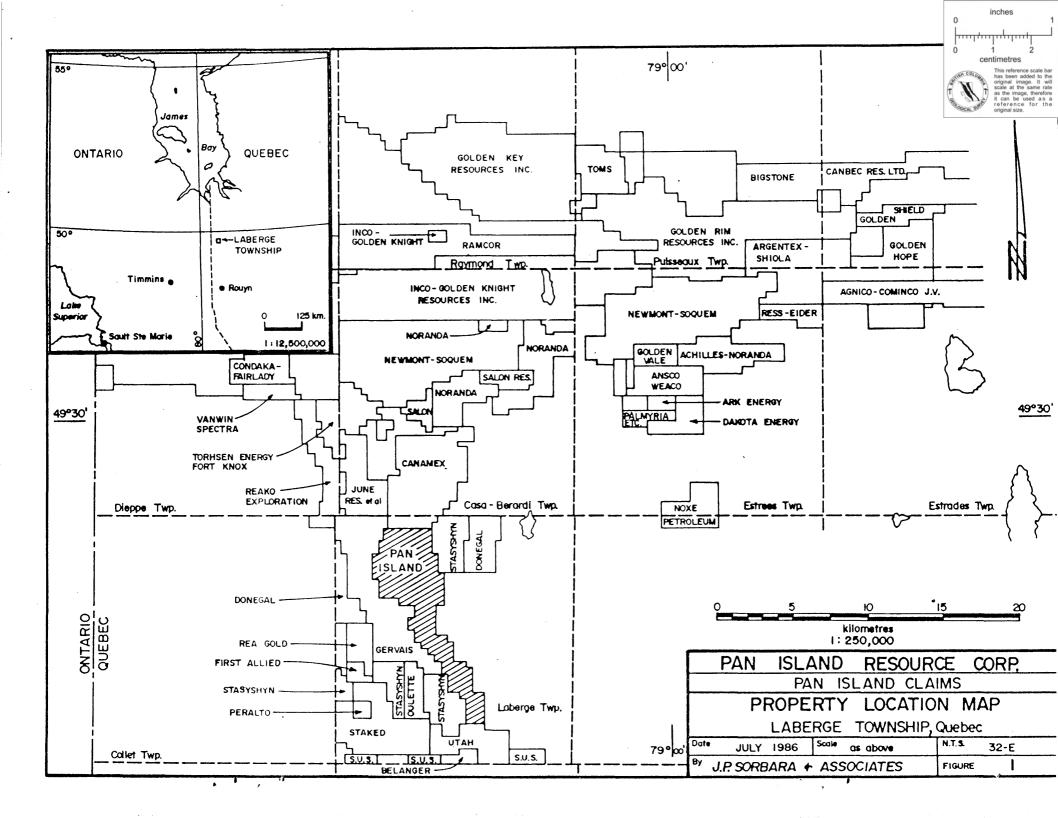
This evaluation is based on published Federal and Provincial geological, aeromagnetic and Input electromagnetic maps, together with available reports on the Casa-Berardi Joutel area and numerous properties located in this section of the Abitibi volcanic sub-province.

The writer visted the property between February 27 to March 6, 1986 with geologist James Steel and visited mines throughout the region in 1985. Outcrops were not seen on the property and are rare in the surrounding areas. There is extensive glacial overburden which could be several tens of metres in depth, and the area is relatively flat and swampy.

## LOCATION AND ACCESS

The subject property is located approximately 65 kilometres west of Joutel, Quebec, a small mining town serving the nearby Agnico Eagle gold mine. The claims lie approximately 20 kilometres southwest of the Teck-Golden Hope discovery, and they are situated in the central portion of Laberge Township (Figure 1).

The topography is very flat in the vicinity and relief is no more than a few metres. Glacial debris, muskeg and swamp cover most of the property. Vegetation consists of small stunted spruce and a few poplar trees. Access to the property is excellent and is gained by the Selbaie mine road leading north from La Sarre. A secondary gravel road in excellent condition leads from the Selbaie road into Laberge Township and runs through most of the claim block.



# PROPERTY DATA

All claims are located in Laberge Township (Fig. 2) and are 100% owned by Pan Island Resource Corp. Pertinent data are as follows:

<u>Claim Numbers</u>	Recording Date	Claim Numbers	Recording Date
444614 1 to 3	February 25/86	438485 1 to 5	February 14/86
444619 1 to 5	February 25/86	438484 1 to 5	February 14/86
444609 1 to 5	February 25/86	438490 4 & 5	February 10/86
444620 1 to 5	February 25/86	438120 1 to 5	February 10/86
444630 1 to 5	February 25/86	438111 1 to 5	February 10/86
444623 1 to 5	February 25/86	438491 1 to 5	February 10/86
444629 1 to 5	February 25/86	438492 1 to 5	February 14/86
444608 1 to 5	February 25/86	438121 1 to 5	February 10/86
444701 1 to 5	February 25/86	438112 1 to 5	February 10/86
444702 1 to 5	February 25/86	438487 1 to 5	February 14/86
444627 1 to 5	February 25/86		
444628 1 to 5	February 25/86		
444617 1 to 5	February 25/86		
444618 1 to 5	February 25/86		
444612 1 to 5	February 20/86		
444613 1 to 5	February 20/86		
444621 1 to 5	February 20/86		
444622 1 to 5	February 20/86		
444606 1 to 5	February 20/86		
444607 1 to 5	February 20/86		
444611 1 to 5	February 14/86		
444616 1 to 5	February 14/86		•
444626 1 to 5	February 14/86	•	
445136 1 to 3	February 14/86		
438488 1 to 5	February 14/86		
438489 1 to 2	February 10/86		
438486 1 to 5	February 14/86		

## HISTORY AND PREVIOUS WORK

The earliest known exploration of the Casa-Berardi area was conducted in the late 1920's and 1930's by prospectors attracted to the region by the Horne discoveries in the Rouyn-Noranda area. These early adventurers travelled north to James Bay along the Harricana and Bell-Irvin; rivers. Due to the lack of outcrop in the Casa-Berardi area, these early prospectors found little of interest.

The discovery of the Mattagami Lake massive zinc-copper sulfide deposit in 1956 led to airborne EM surveys of the region by several major companies. Targets were then followed up by ground work and diamond drilling. This methodology led to the discovery of the Joutel and Poirier zinc-copper deposits in 1962 and the Agnico Eagle gold deposit in 1967. The Agnico Eagle is situated within a pyrite-rich assemblage of felsic pyroclastics and sediments and has been in continuous production since 1974.

The discovery of the Selbaie zinc-silver-copper by Selco in 1974 and Amoco's Detour Lake deposit in 1975 by routine follow-up of airborne Input anomalies sparked new interest in the area. These deposits lie just north and northwest of Casa-Berardi and access to the Casa-Berardi area was improved greatly by the construction of all-weather roads from La Sarre and Joutel to the Selbaie mine.

The trend was now set for drill testing airborne geophysical targets especially coincident magnetic and electromagnetic anomalies and, by doing this, in 1983 Inco intersected sub-ore grade gold mineralization in the northwest corner of Casa-Berardi Township.

Based largely on geology interpreted from aeromagnetic maps published by the Geological Survey of Canada in 1960 and the

Quebec Department of Natural Resources in 1974 and 1976, Incostaked 42 kilometres of strike length of the favourable stratigraphy.

The Inco-Golden Knight Resources gold mineralization occurs in a number of stratigraphic horizons related to the transition zone between volcanic and sedimentary packages of rocks (Hinse, 1985). By a 1983 joint venture agreement, Golden Knight Resources Inc. has earned a 40% interest in the Casa-Berardi property by spending \$3,000,000.00. Underground exploration and development work are now in progress on the Golden Pond zone (Golden Knight Annual Report, 1985, p. 4). The Inco-Golden Knight activities sparked considerable staking and exploration in the townships to the east and west of Casa-Berardi in 1984 and 1985.

The most recent discovery in the Casa-Berardi area was made in December, 1985. Working under a joint venture agreement, Teck Corporation and Golden Hope Resources intersected a polymetallic massive sulfide deposit containing economic grades of gold as well as base metals. This discovery hole included 27.9 feet grading 0.241 oz Au/T, 10.34 oz Ag/T, 3.2% Cu and 18.99% Zn, and was responsible for another surge in exploration activity and interest in the area.

Other significant occurrences of gold in the district were also reported in 1985. Anomalous gold values have been obtained by Tandem Resources and its partners from reverse circulating overburden drilling east of Casa-Berardi Township in Montgolfier Township (Northern Miner, April 25, 1985). The ground covers portions of major east-west airborne geophysical conductors. The anomalous gold values were obtained south of the conductor. Coincident gold and arsenic anomalies have been obtained by an overburden drill program on the adjacent ground held jointly by Ltd. and Golden Shield Resources Placer Development Drill cuttings suggest that (Northern Miner, June 13, 1985).

the Golden Shield property is underlain by mafic and felsic volcanic rocks. Alteration reported from parts of the felsic zone consists of carbonate, sericite and silica.

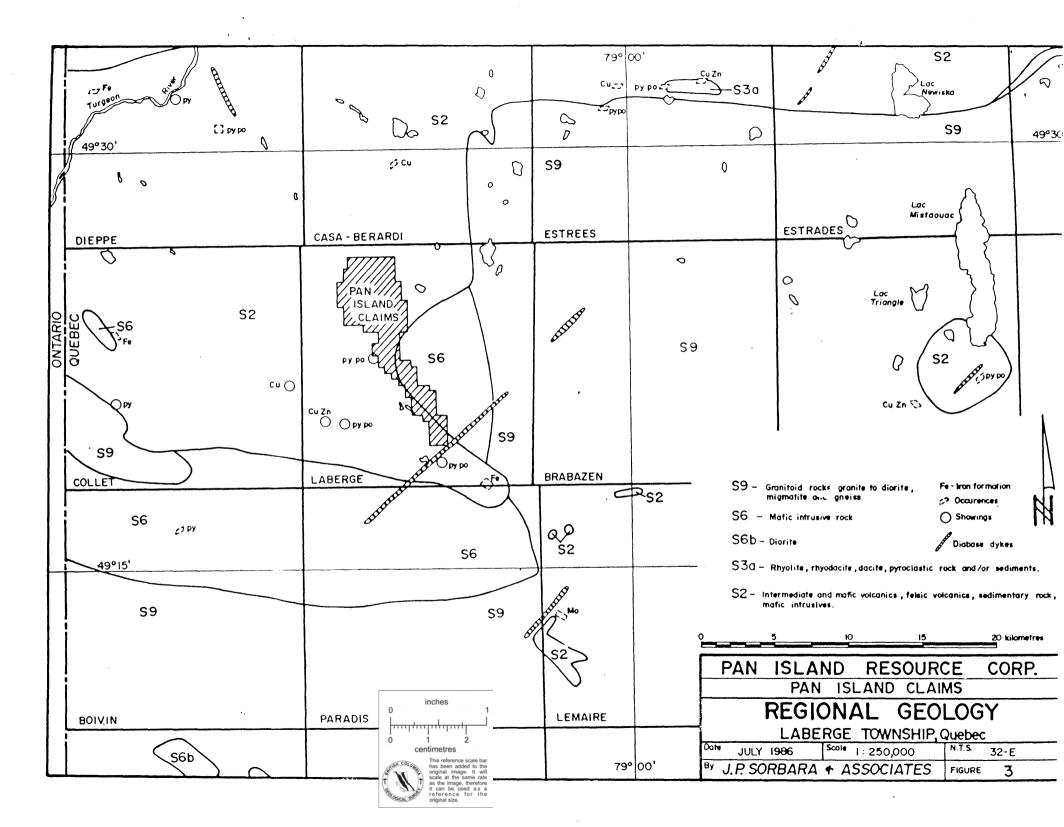
## REGIONAL GEOLOGY AND MINERALIZATION

The Abitibi greenstone belt is the largest and most extensively mineralized of all of the greenstone belts in the Canadian Shield and makes up an economically and geographically significant part of the Superior structural province. Rocks of the Abitibi greenstone belt are of Archean age and comprise volcanic and sedimentary units which are usually quite deformed and are cut by numerous intrusives. The Casa-Berardi area occurs in the central portion of this belt, near the Ontario-Quebec border (Figure 1).

The Casa-Berardi area has little outcrop and is quite flat with overburden of glacial debris ranging from 10 to 80 metres in thickness. Due to these conditions, most of the geology is inferred from airborne geophysical surveys done by the Geological Survey of Canada and the Quebec government, supplemented with ground geophysics and drilling as reported on properties throughout the region. A regional (1:250,000) geology map showing the various townships is shown in Figure 3.

Volcanic and sedimentary rocks in the area tend to strike east-west with very steep to vertical dips. Geopetal fabrics (cross bedding and flow tops) in predominantly sedimentary rocks at the Agnico Eagle mine in Joutel Township indicate that an east-west syncline may be present with parallel anticlinal axes in predominantly volcanic rocks to the north and south of this structure.

The volcanic assemblages comprise mainly basic to intermediate flows with minor felsic volcanic tuffs and flows and some inter-related sedimentary units. Extensive mapping in many



of the Abitibi greenstone belt by A.M. Goodwin has shown areas that the belt is composed of many coalescing volcanic piles. are predominantly (i.e. 60% to 80%) mafic piles assemblages with smaller amounts of felsic volcanics and pyroclastics occurring towards the end of the volcanic cycles at higher stratigraphic levels and in the proximity of the volcanic The volcanic cyles normally terminate with a period of quiescence during which clastic and chemical sedimentation, such as the deposition of iron formations, occurs. It is also widely believed that volcanogenic massive sulfide deposits are deposited during this interval.

Granitic batholiths tend to surround the Abitibi greenstone belt and smaller bodies and dikes intrude and cross cut the volcanics.

## MINERAL DEPOSITS

The significant precious and base metal mineralization in the Casa-Berardi region appears to be stratabound to strataform in nature and volcanic in origin. The Agnico Eagle deposit, in Joutel Township, located 70 kilometres to the east of the Golden Knight discovery, was visited by the writer in 1985. Precious metal mineralization at this location is hosted by a series of rhyolitic pyroclastics and volcaniclastic sedimentary rocks and occurs a short distance stratigraphically below the volcanic-sedimentary contact. Iron formation, carbonaceous argillites and exhalites are also associated with the ore zone. Silica alteration as well as pyrite, arsenopyrite and pyrrhotite are associated directly with gold mineralization. Uneconomic amounts of copper, lead and zinc are also present. Published reserves are 1.0 MT @ 0.213 oz Au/T.

The Inco-Golden Knight discovery is believed to be similar to Agnico Eagle but without base metals. This deposit is situated in Casa-Berardi Township itself and corprises three

strataform zones (Golden Pond, Golden Pond East and Golden Pond West) occurring over a strike length of 3.7 kilometres. These zones are reported to occur at or near the contact between sedimentary and volcanic units. Reserves for this deposit are reported as follows:

	Probable and	Grade
	Possible Reserves	(oz/T Au)
	•	
Golden Pond	2.7 million tons	0.217
Golden Pond East	3.0 million tons	0.29
Golden Pond West	unpublished	unpublished*

\* A recent hole in the Golden Pond West zone (Northern Mines, January 13, 1986) was reported to return 66.3 feet @ 0.41 oz Au/T.

The Teck-Golden Hope deposit, on the other hand, is relatively base-metal rich and is believed to be a volcanogenic massive sulfide deposit with an abnormally high precious metal content. This deposit is situated in Estrees Township and lies along strike and midway between the Agnico Eagle and Golden Knight deposits. The extent and variety of mineralization styles indicate that this horizon is probably of major economic significance.

The Golden Hope deposit was found in late 1985 by drilling a weak Input EM conductor on the southern flank of a small magnetic high. Tonnage and grade on this deposit, which appears to be a series of sulfide lenses, has not yet been determined but the initial hole into the west zone intersected 27.9 feet @ .241 oz Au/T, 10.34 oz Ag/T, 3.2% Cu and 18.99% Zn.

# PROPERTY GEOLOGY AND GEOPHYSICS

The Pan Island Resource Corp. claims in Laberge township are believed to be predominantly underlain by greenstones of the Abitibi belt. The southern part of the claim group trends northwest and covers the contact between the greenstones and a body of mafic intrusives that flank a large granitic batholith (Figure 3).

Pyrite-pyrrhotite showings occur near the western and southern perimeter of the claim block. These showings are in close proximity to the contact with the mafic intrusives. A small iron formation is also reported to occur in the southeast corner of Laberge township about 3.5 km from the subject claims.

Regional airborne geophysical surveys have delineated a strong trend of 2- to 6- channel Input conductors that runs northwest-southeast through Laberge township (Figure 4). 500 to 1000 metres west of the Pan Island claim trend lies block. the north of the claims this Input trend turns north-northeast and eventually becomes coincident with the main productive target horizon in Casa Berardi township. horizon has been interpreted to comprise graphitic and pyritic tuffs, shales and argillites, and in Estrees township it hosts Teck-Golden Hope deposit. It is therefore a prime exploration target.

In the southeast part of Laberge township the previously referred to iron formation is coincident with the Input conductive horizon. Iron formations are very commonly associated with volcanogenic massive sulfide deposits and this area of Laberge township has been the focus of much exploration activity by Utah Mines. The Input conductors in the area of this iron formation reflect at least two horizons and at least one of these crosses the southern end of the Pan Island claims.

Little is known about the nature of the mafic intrusive body which cuts the subject property. Precious metals, including platinum are sometimes associated with bodies of this type.

## CONCLUSIONS

The Casa Berardi area has been the focus of much exploration activity in recent years and to date has produced at least two new major precious and base metal deposits. These deposits, as well as nearby producing mines, are associated with a linear branching trend of Input EM Conductors in Archean greenstones.

The Pan Island Resource Corp. claims in Laberge township flank a branch of this Input trend along a strike length of about 15 kilometres. In addition, the claims cover about 7 kilometres of the contact between Archean greenstones and mafic intrusives. This contact may host contact-metamorphic or pyro-metasomatic mineralization.

It is believed that the Pan Island Resource claims have the potential to host significant massive sulfide and/or precious metal mineralization. An exploration program designed to test this potential is recommended.

## RECOMMENDATIONS

Conducting a cost-efficient and yet sufficiently thorough first-phase exploration program on an outcrop-poor property which is the size of Pan Island Resource Corporation's holdings in Laberge township is a difficult task. A deep-searching, detailed geophysical survey, such as Pulse-EM conducted on cut-lines, together with geochemical coverage of the entire property would cost on the order of \$300,000. This is quite costly for a preliminary exploration program.

An alternative is to conduct a detailed deep-searching

J.P. Sorbara & Associates

geophysical (EM) survey by airborne means. Questor Surveys Input or the Digem II system are such surveys, and could provide low-level detailed coverage of the property at a much lower cost than ground based Pulse-EM.

In association with the airborne survey, geochemical (humus) sampling on hip-chain lines could be conducted in the area of the mafic intrusive contact to search for related disseminated mineralization that might not be picked up by an EM survey. A program such as this along with ancillary mapping and prospecting would maximize the chances of detecting hidden mineralization while minimizing the costs involved (see Appendix I).

Contingent upon the results of Phase I would be a Phase II program of reverse circulation overburden drilling and diamond drilling any sufficiently promising targets.

Respectfully submitted,

J.P. SORBARA AND ASSOCIATES

Of faul Sorlay

J. Paul Sorbara, M.Sc., F.G.A.C.

## REFERENCES

- Barnett, E.S., Hutchinson, R.W., Adamckik, A. & Barnett, R. 1982: Geology of the Agnico-Eagle Gold Deposit, Quebec; Pre-cambrian Sulphide Deposits, G.A.C. Special Paper 25, p. 403-425.
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- Geological Survey of Canada. 1960: Aeromagnetic Maps; Sheets 5348G, 5349G, 5354G, 5355G, 521G & 522G; 32E/6 to 32E/11; Scale 1:63,360.
- Golden Knight Resources Inc., Annual Report, 1984 and 1985.
- Golden Knight Resources Inc. 1975: Report on Geophyhsical Surveys on Properties of Belmoral Mines Ltd., Laberge (and Collet) Twps., Quebec, G.M. 31840.
- Goodwin, A.M.: Personal Communication.
- Hinse, G.J. 1985: Report on the Orvilliers Property, Northwestern Quebec, for Morgain Minerals Inc. and Golden Shield Resources Inc.

#### The Northern Miner:

- 1985: Vol. 71, No. 1, March 14, 1985, p. 1. 1985: Vol. 71, No. 7, April 25, 1985, p. 3. 1985: Vol. 71, No. 14, June 13, 1985, p. 3. 1985: Vol. 71, No. 43, January 6, 1986, p. 1. 1985: Vol. 71, No. 44, January 13, 1986, p. 1.
- Quebec Department of Energy and Resources. 1976: Airborne Input MKVI Survey, Geologic Compilation; Joutel-Poirier and Turgeon River Areas, Scale 1:31,680.
- Quebec Department of Energy and Resources. 1979: Gites Mineraux du Quebec, Region de L'Abitibi, Feuille Senneterre, 32E, M-309.
- Thompson, J.R.: Personal Communication.

# APPENDIX I

# ESTIMATED COST OF PROPOSED PROGRAMS

<u>Phase I</u>			
	e EM survey (Input) line kilometres		\$ 40,000.00
<u>Labour</u>			
1 Geologist 2 Technicians	x 30 days x \$200.00/day x 30 days x \$150.00/day		6,000.00
Domicile	90 man days x \$50.00/day		4,500.00
Mobilization and	d Demobilization	•	5,000.00
Geochemistry	1260 samples x \$15.00		18,900.00
Field Supplies			2,000.00
Truck Rental and Fuel 2,500.0			
Report Compilation and Drafting 2,500.0			2,500.00
Office Overheads 3,000.			3,000.00
Contingencies (1			10,000.00
			\$103,400.00
		SAY:	\$105,000.00

# APPENDIX II

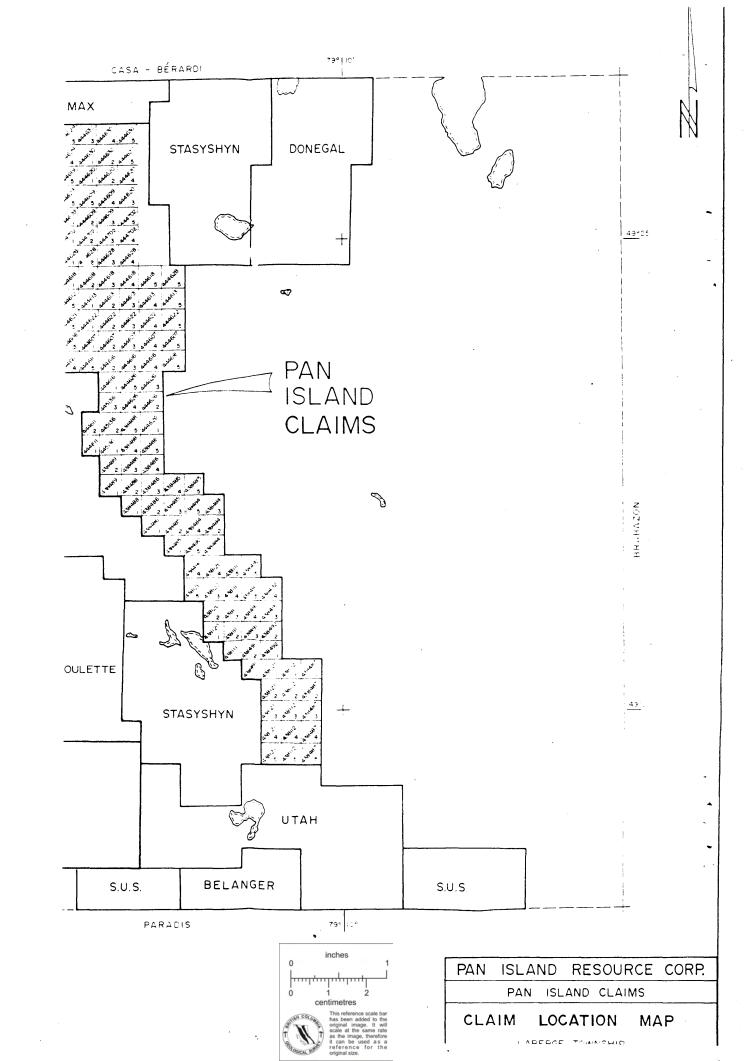
# STATEMENT OF QUALIFICATIONS

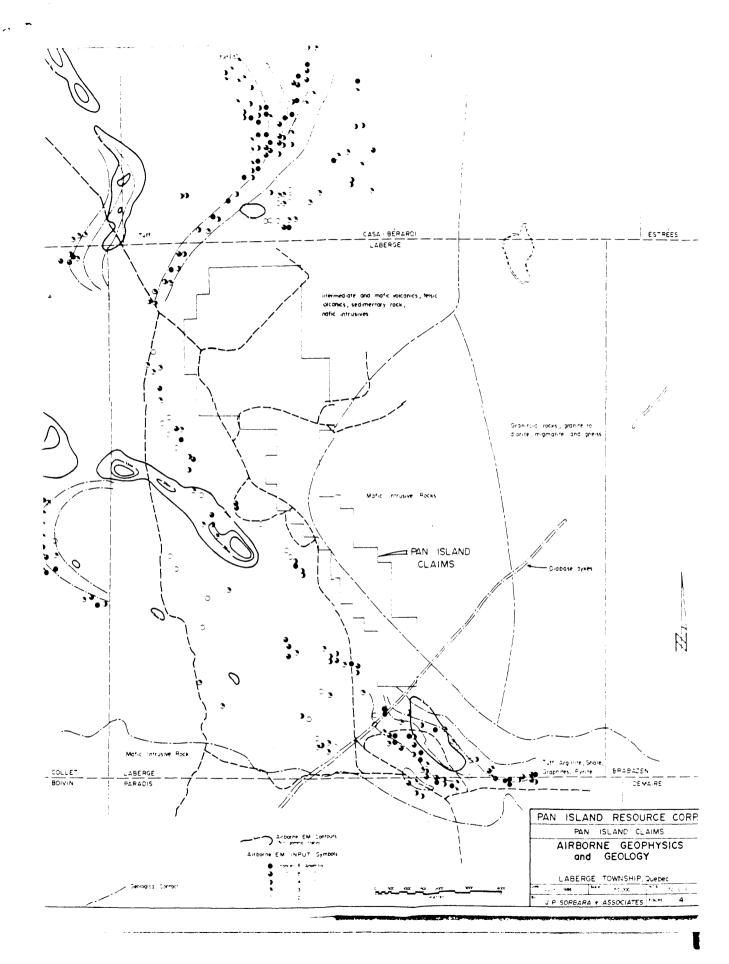
- I, J. PAUL SORBARA, of the Municipality of Delta, in the Province of British Columbia, hereby certify:
- 1. THAT I am a geologist residing at 6703 Nicholson Road, in the Municipality of Delta, in the Province of British Columbia.
- 2. THAT I graduated with a B.Sc. in geology from the University of Toronto, in the City of Toronto, in the Province of Ontario, in 1976, and with a M.Sc. in geology from the University of Toronto in 1979.
- 3. THAT I have practiced geology professionally from 1979 to 1986, including 5 years as an exploration geologist for Cominco Ltd.
- 4. THAT I am a registered Fellow of the Geological Association of Canada.
- 5. THAT I do not have, nor do I expect to receive any material interest in the Pan Island Resource Corp. mineral claims in Laberge township, or any other claims in that area.
- 6. THAT I consent to the use of this report in a Prospectus or Statement of Material Facts for the purpose of private or public financing.

Signed:

J. Paul Sorbara, M.Sc., F.G.A.C.

July 30, 1986





## CERTIFICATES

DATED April 29, 1987

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 (British Columbia), and its regulations.

## PAN ISLAND RESOURCE CORP.

(Signed) J.J. GIBBONS

James Joseph Gibbons

Chief Executive and Financial Officer

## ON BEHALF OF THE BOARD OF DIRECTORS

(Signed) J.J. GIBBONS	(Signed) DAL BRYNELSEN
James Joseph Gibbons	Dal Brynelsen
Director	Director
	PROMOTERS
(Signed) J.M. BELL John Malcolm Bell	(Signed) J.J. GIBBONS James Joseph Gibbons
(Signed) DAL BRYNELSEN	<del></del>
Dal Brynelsen	

## THE AGENT

To the best of our knowledge, information and belief, 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 (British Columbia), and its regulations.

CANARIM INVESTMENT CORPORATION LTD.

By: (Signed) PETER M. BROWN