

ARIS SUMMARY SHEET

District Geologist, Victoria

Off Confidential: 90.04.21

ASSESSMENT REPORT 18819

MINING DIVISION: Alberni

PROPERTY: Morning  
LOCATION: LAT 49 19 00 LONG 125 15 30  
UTM 10 5464893 335870  
NTS 092F06W

CAMP: 025 Tofino - Kennedy River Area

CLAIM(S): Morning, Morning 1-2, Apex, Apex Fr.  
OPERATOR(S): Goldsmith, L.B.  
AUTHOR(S): Goldsmith, L.B.  
REPORT YEAR: 1989, 19 Pages  
COMMODITIES  
SEARCHED FOR: Gold  
KEYWORDS: Triassic, Karmutsen Formation, Andesite, Basalt, Quartz veins, Pyrite  
Chalcopyrite, Gold

WORK  
DONE: Prospecting  
PROS 12.0 ha  
Map(s) - 1; Scale(s) - 1:2000

RELATED  
REPORTS: 17420  
MAP FILE: 092F 119, 092F 212

LOG NO: 0609	RD.
ACTION:	
FILE NO:	

**GEOLOGY AND GEOCHEMISTRY**  
**MORNING AND APEX CLAIM GROUP**  
**TAYLOR RIVER-SPROAT LAKE AREA**  
**ALBERNI MINING DIVISION**  
**PORT ALBERNI, B.C.**  
**NTS 92 F/6 W**  
**LATITUDE 49°19'N, LONGITUDE 125°15'W**

Prepared for  
**PATRICK V. NORMOYLE**

<b>SUB-RECORDER</b> RECEIVED  JUN 6 1989 M.R. # ..... \$..... VANCOUVER, B.C.
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FILMED

**ARCTEX ENGINEERING SERVICES**

**Locke B. Goldsmith, P.Eng.**  
**Consulting Geologist**

MAY 7, 1989  
 AND CLAIM REPORT

18,819

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Geology, Rock, and Soil Geochemistry, 1:2000 Scale	

**GEOLOGY AND GEOCHEMISTRY  
MORNING AND APEX CLAIM GROUP  
TAYLOR RIVER-SPROAT LAKE AREA  
ALBERNI MINING DIVISION  
PORT ALBERNI, B.C.**

**SUMMARY**

The Morning-Apex mineral claim group consists of six reverted crown-granted claims totalling approximately 83.76 hectares. Location is in west-central Vancouver Island on the north side of Highway 4 near Sproat Lake. At least five northeast-trending quartz-pyrite-(± gold) veins are hosted in intermediate volcanics of the Triassic Karmutsen Formation. Exploration in 1988 discovered galena-bearing quartz float with content of 0.320 oz/ton Au. An outcrop at the edge of an overburden-filled depression contains sheared andesite with quartz-pyrite-chalcopyrite mineralization and a gold content of 80 ppb. The site is uphill in the same drainage which contains the quartz-galena-gold float. A target for trenching and possibly drilling is present beneath shallow overburden. A budget of \$104,400 is recommended for the next Phase; a total of \$254,400 may be required in the next two Phases.

## PROPERTY, LOCATION, ACCESS

The Morning-Apex mineral claims are located 4.8 km west of Sproat Lake, immediately north of Taylor River on west-central Vancouver Island, B.C. The claims lie within the Alberni Mining Division, NTS map sheet 92 F/6 W, latitude 49°19' north, longitude 125°15' west. Elevation of the property ranges from 75 m at Taylor River to 800 m on the upper Apex claim.

The property includes six reverted crown-granted mineral claims totalling approximately 83.76 hectares (207 acres) as follows:

<i>Claim Name</i>	<i>Lot No.</i>	<i>Record No.</i>	<i>Units</i>	<i>Date of Record</i>
Morning	975	240(7)	1	July 14, 1984
Morning 1	976	190(5)	1	May 1, 1984
Morning 2	977	191(5)	1	"
Apex	978	192(5)	1	"
Apex Fr.3	980	192(5)	<1	"
Apex Fr.	979	193(5)	<1	"

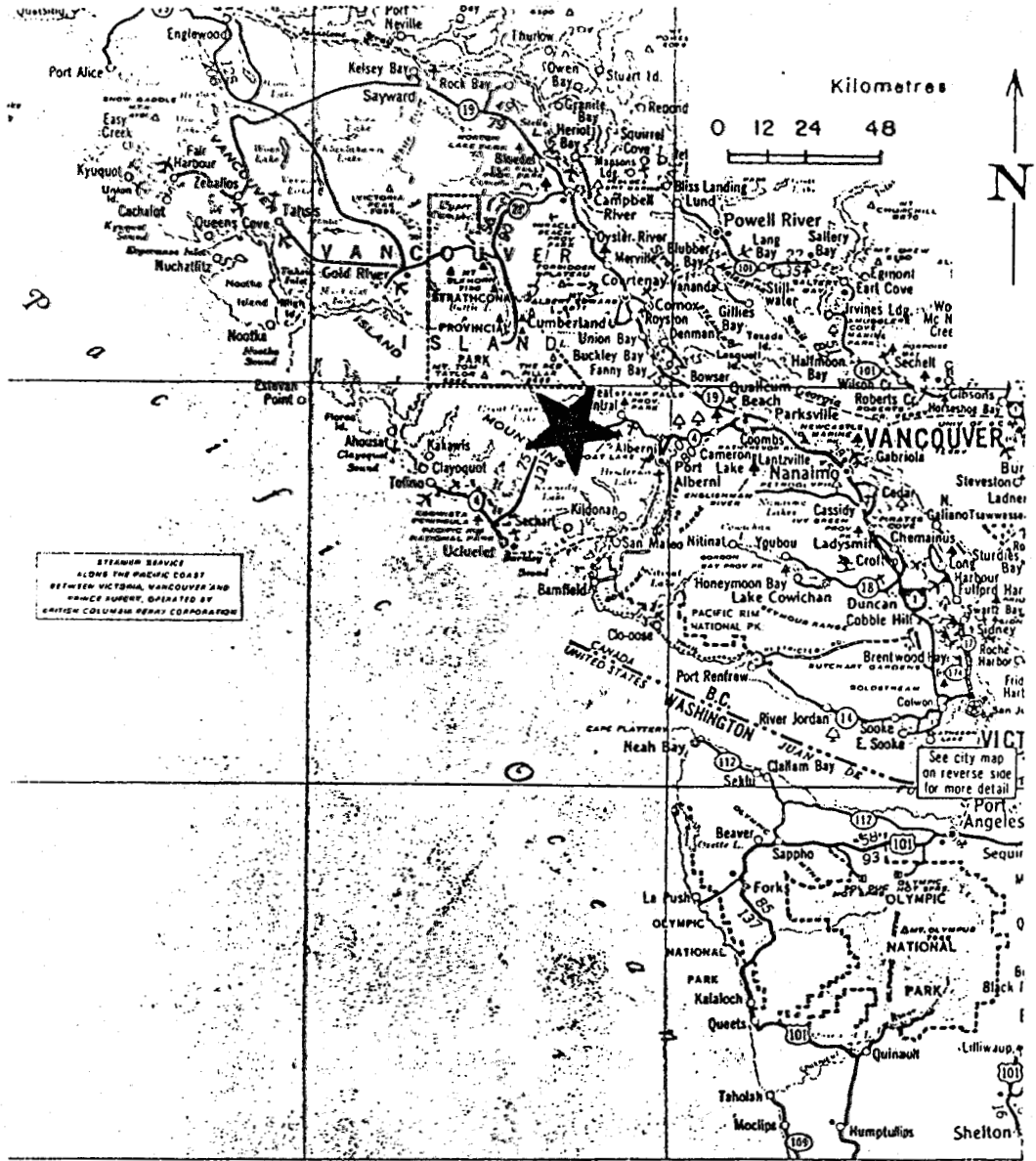
The claims can be reached via the Port Alberni-Tofino Highway 4, some 37 km westerly from Port Alberni. Various logging roads and trails cross the claims a short distance from the highway. A four-wheel drive vehicle is required to get within 100 metres of the lower adit on the Morning claim. Access to the Apex showings was not attempted. A logging road to Doran Lake provides access to the northern end of the claims.

## HISTORY

The history of the property has been summarized by von Rosen (1982) who relies on Fawley (1962) for history prior to 1962. It is as follows:

"Operations to 1962 are described by Allan P. Fawley, P. Eng., in a report to Sileurian Chieftain Mining Company Ltd. dated January, 1962, and are summarized as follows:"

1899	Discovery and staking
1907-1923	Underground work, one adit 345-365 feet and 2 short adits; trenching
1932	B.C. Department of Mines, Bulletin No.1 by G.A. Clothier description of workings and vein structure and mineralization.



**PROPERTY LOCATION MAP**

**MORNING APEX CLAIM GROUP TAYLOR RIVER AREA**  
**ALBERNI MINING DIVISION : N.T.S. 92F/6W : Lat. 49° 19' N, Long. 125° 16' W**

To accompany report by L.B. GOLDSMITH, P.Eng., Consulting Geologist.

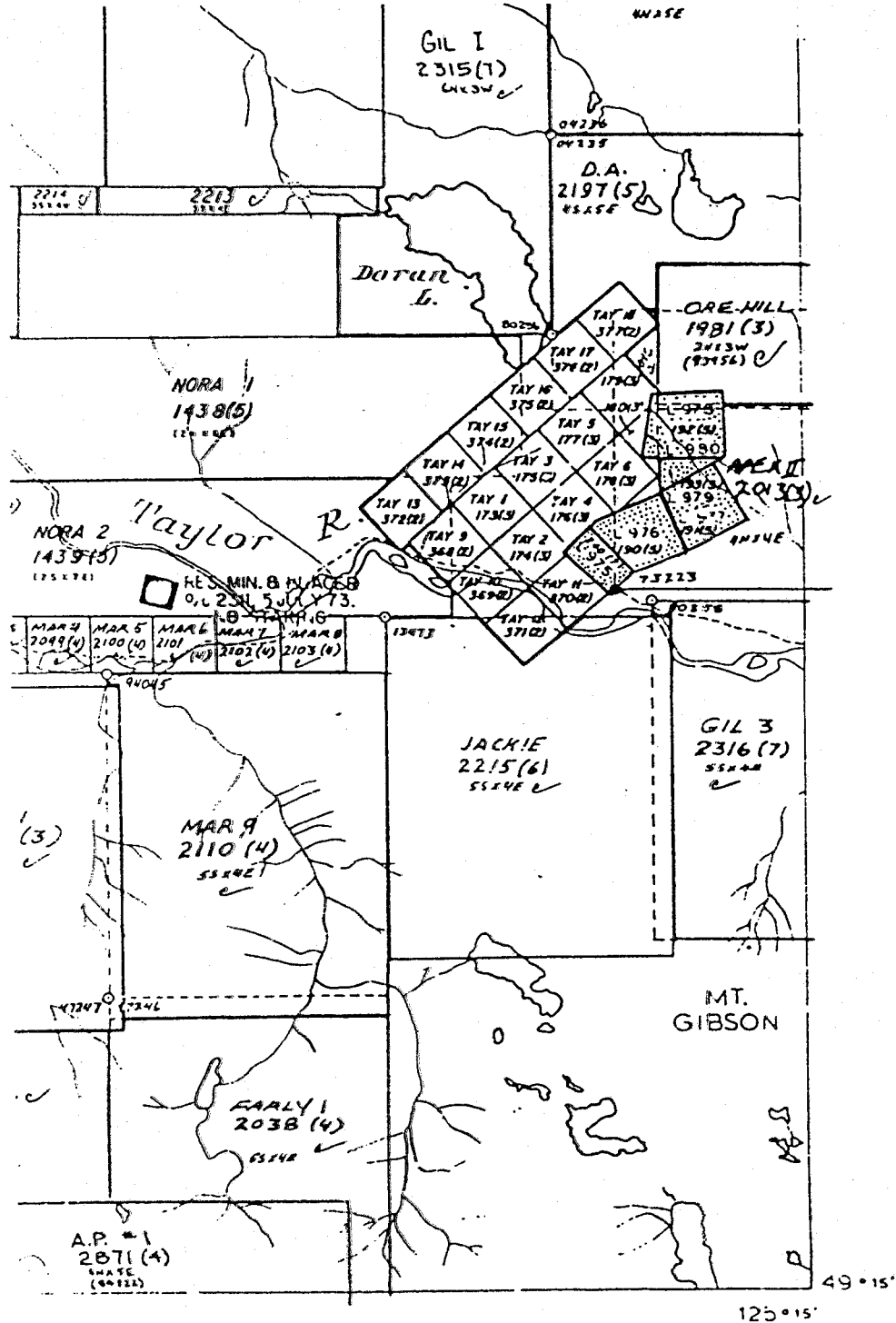
ARCTEX ENGINEERING SERVICES May 7, 1989

# CLAIM MAP

0 500 1000

1:50,000

metres



**MORNING APEX CLAIM GROUP** TAYLOR RIVER AREA  
 ALBERNI MINING DIVISION : N.T.S. 92F/6W : Lat. 49° 19' N, Long. 125° 16' W

To accompany report by L.B. GOLDSMITH, P.Eng., Consulting Geologist.

- 1933 Dickinson and Johnson exploration. Original maps not on hand
- 1959 Report by B.W.W. McDougall, P. Eng. based on examination made in 1945; describes geology and results from 45 samples.
- 1960 Drilling No. 1 Zone Apex vein.
- 1961 V.B. Bjorkman, P. Eng., general description plus logs of D.D. holes 2-5, inclusive in No. 1 Zone. Laid out holes on No. 3 Zone which were mistakenly drilled at the wrong locations and missed the zone. Holes 2 and 3 logged by A.P. Fawley.
- 1961 Holes A-1 to A-6 and A-9 drilled on No. 2 Zone under the supervision of A.P. Fawley for Sileurian Chieftain.
- 1972 One hole (72-1) drilled by M. Zunic for Lou-Mex (No. 2 Zone)
- 1973 Two holes (73-2 and 73-3) drilled by M. Zunic for Lou-Mex (No.2 Zone).
- 1974 July, August holes 74-1 and 74-2 drilled by Highland Mercury (Lou-Mex option) on Zone 2.
- 1975 Hibernian (Lou-Mex option) enlarged and timbered No. 6 adit to 6' x 7', and extended 30'.
- 1976 Highland Mercury (Lou-Mex option) extended drift to 487' and crosscut diamond drill. Harold M. Jones, P. Eng.: Geological Report on AJ Claims: Assessment Report.
- 1978 Acquisition of reverted crown grants by G. von Rosen.
- 1979 G. von Rosen, P. Eng.: Geophysical Report on Apex-Morning Group: Assessment Report.
- 1980 Option of property by International Giant Mining Corporation from Gearex Management Ltd. (G. von Rosen): Physical assessment work.
- 1982 Addendum agreement between International Giant Mining and Gearex. Retained interest sold to Ted Radomski. Agreement between International Giant and International Phasor Telecom.
- 1987, 1988 L.B. Goldsmith and P. Kallock: Geological mapping, rock, and soil geochemistry; for Reginald W. Hunchuk. Filed for assessment work.



## GEOLOGY

The Karmutsen Formation of upper Triassic age underlies much of the Morning-Apex claim group. Regionally this formation consists of 6,000 m of tholeiitic volcanics including pillow basalts, breccias and bedded flows. Basalt is host to mineralized veins in the map area.

Middle to late Jurassic Island Intrusions are also present in the claim area. Dykes of diorite or quartz diorite intrude basalt.

Regional faults transect the vicinity in a northwesterly direction. However, a strong system of northeasterly faults is most important at the claims. The Apex and No. 6 Vein structures are coincident with these northeast-trending shear zones. Approximately 10 km to the west in the Kennedy River area northeast-trending veinlet zones which contain appreciable quantities of gold were explored in 1987 by Kerr Addison Mines.

## MINERALIZATION

In addition to the main vein which has been explored by two adits, four other quartz-pyrite- ( $\pm$  chalcopyrite) veins have been located (Goldsmith and Kallock, 1988). A boulder of float located in a drainage to the northwest of the veins was found to contain 0.320 oz/ton Au. A source for this mineralization was sought in the 1989 investigations. Approximately 130 metres northeasterly and uphill from the float on the western edge of the same drainage a shear zone with quartz-pyrite-chalcopyrite mineralization is exposed for a width of 0.25 metres before being concealed by overburden. A value of 80 ppb Au was obtained from a chip sample across the shear. This occurrence may be on the margin of a vein system.

## SOIL GEOCHEMISTRY

A long narrow spade was used to collect samples from 30-40 cm below organic debris (C horizon). Material is sandy grit, rusty, with coarse basaltic fragments.

Samples were collected uphill from the mineralized float in the same drainage. No appreciable gold values were obtained.

## CONCLUSIONS

Source of the quartz-galena-gold float may be concealed beneath shallow overburden in the same drainage. Shearing on the margin of the depression suggests that a mineralized structure is

present. Six parallel northeasterly trending structures with mineralization occur across a zone which is some 140 metres in width.

## RECOMMENDATIONS

Detailed geological mapping and sampling of the claim group should be completed. An IP survey to enhance targets for trenching and drilling should be conducted over the Morning and Morning No. 1 claims where gold + sulphide mineralization is known to occur. Dozer and backhoe trenching in the vicinity of 6+25N 4+20E where quartz-pyrite-galena-gold float is located should be commenced. Preliminary drilling of targets which may be developed by trenching and geophysics should be considered. A subsequent programme of diamond drilling could be required.

## COST ESTIMATE

### Phase 1

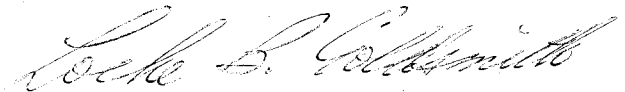
Geological mapping	\$ 5,000	
Lithochemical survey	2,000	
IP Survey	20,000	
Dozer/backhoe trenching; drill site preparation	10,000	
Diamond drilling, 250 m at \$100/m	25,000	
Supervision	10,000	
Analyses	6,000	
Transportation, travel expenses	3,000	
Food, lodging	2,000	
Report	<u>4,000</u>	
	87,000	
Contingencies @ 20%	<u>17,400</u>	
Total Phase 1	\$104,400	\$104,400

**Phase 2**

Diamond drilling if warranted, allow	\$150,000	<u>150,000</u>
	Total Phases 1 and 2	\$254,000

Results of each Phase should be compiled into an Engineering Report; continuance to the subsequent Phase should be contingent upon favourable conclusions and recommendations from an Engineer.

Respectfully submitted



Locke B. Goldsmith, P. Eng.  
Consulting Geologist

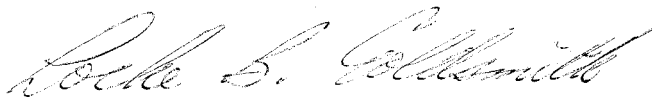
Vancouver, B.C.

May 7, 1989

**ENGINEER'S CERTIFICATE**  
**LOCKE B. GOLDSMITH**

1. I, Locke B. Goldsmith, am a registered Professional Engineer in the Province of Ontario and the Northwest Territories, and a Registered Professional Geologist in the State of Oregon. My address is 301, 1855 Balsam Street, Vancouver, B.C.
2. I have a B.Sc. (Honours) degree in Geology from Michigan Technological University, a M.Sc. degree in Geology from the University of British Columbia, and have done postgraduate study in Geology at Michigan Tech and the University of Nevada. I am a graduate of the Haileybury School of Mines, and am a Certified Mining Technician. I am a Member of the Society of Economic Geologists, the AIME, and the Australasian Institute of Mining and Metallurgy, and a Fellow of the Geological Association of Canada.
3. I have been engaged in mining exploration for the past 30 years.
4. I have authored the report entitled, "Geology and Geochemistry, Morning and Apex Claim Group, Taylor River-Sproat Lake Area, Alberni Mining Division, Port Alberni, B.C.", dated May 7, 1989. The report is based upon fieldwork and research supervised by the author.
5. I have no ownership in the property
6. I consent to the use of this report in a prospectus, or in a statement of material facts related to the raising of funds.

Respectfully submitted,



Locke B. Goldsmith, P.Eng.  
Consulting Geologist

Vancouver, B.C.

May 7, 1989

## COST STATEMENT, 1989 PROGRAMME

### Personnel

L.B. Goldsmith, April 18, 1/4 19,  
total 1-1/4 days @ \$440/day \$ 550.00

### Accommodation, Food

98.62 divided by 1.25 = \$78.90/man/day 98.62

### Transportation

4x4 truck, 1 day at \$45/day	45.00	
304 km at \$.30/km	91.20	
Gas	14.00	
Ferry	<u>43.50</u>	
	197.20	197.20

### Analyses

4 soils at \$8.00	32.00	
1 rock at \$10.75	<u>10.75</u>	
	42.75	42.75

### Report

Drafting, prints, word processing,  
photocopying, report materials 197.45

TOTAL \$1,086.02

## REFERENCES

- Fawley, A.P. 1962. Report to Sileurian Chieftain Mining Company.
- Goldsmith, L.B. and Kallock, P. 1987. Geochemical and Geological Investigation, Morning and Apex Claim Group, Taylor River-Sproat Lake Area, Alberni Mining Division, Port Alberni, B.C. Report for Reginald W. Hunchuk.
- Goldsmith, L.B. and Kallock, P. 1988. Geological and Rock Geochemical Investigation, Morning and Apex Claim Group, Taylor River-Sproat Lake Area, Alberni Mining Division, Port Alberni, B.C. Private report for Reginald W. Hunchuk.
- McIntyre, J.F. 1980. Summary Engineering Report, Taylor River Gold Property, Sproat Lake, B.C. Report for International Giant Mining Corporation.
- Muller, J.E. 1977. Geology of Vancouver Island. GSC Open File 463.
- von Rosen, G. 1982. Recommendation Report, Apex-Morning Gold Property, Taylor River, B.C. Report for International Phasor Telecom Ltd.

**APPENDIX**

## ROCK SAMPLE DESCRIPTION

NOR-2 Chips across 0.25 m of northeasterly trending shear zone. Mineralized with quartz, pyrite, and chalcopyrite. Weakly sheared, decreasing in intensity to northwest. On northwest edge of a linear depression; shearing appears to continue across the zone to the southeast beneath overburden.





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,  
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To: GOLDSMITH, MR. L. B.

301 - 1855 BALSAM ST.  
VANCOUVER, B.C.  
V6K 3M3

A8914658

Comments: ATTN: L. B. GOLDSMITH

**CERTIFICATE A8914658**

GOLDSMITH, MR. L. B.

PROJECT :

P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 30-APR-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
205	1	Rock Geochem: Crush,split,ring

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	1	Au ppb: Fuse 10 g sample	FA-AAS	5	10000



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301 - 1855 BALSAM ST.  
VANCOUVER, B.C.  
V6K 3M3

A8914657

Comments: ATTN: L. B. GOLDSMITH

CERTIFICATE A8914657

GOLDSMITH, MR. L. B.

PROJECT :

P.O.# : NONE

Samples submitted to our lab in Vancouver, BC.  
This report was printed on 27-APR-89.

## SAMPLE PREPARATION

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION
201	4	Dry, sieve -80 mesh; soil, sed.

## ANALYTICAL PROCEDURES

CHEMEX CODE	NUMBER SAMPLES	DESCRIPTION	METHOD	DETECTION LIMIT	UPPER LIMIT
100	4	Au ppb: Fuse 10 g sample	FA-AAS	5	10000



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Project :

Comments: ATTN: L.B. GOLDSMITH

Page No. : 1

Tot. Pages: 1

Date : 30-APR-89

Invoice # : I-8914658

P.O. # : NONE

## CERTIFICATE OF ANALYSIS A8914658

SAMPLE DESCRIPTION	PREP CODE	—	Au ppb FA+AA									
MOR 2	205	—	80									

CERTIFICATION :



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
212 BROOKSBANK AVE., NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1  
PHONE (604) 984-0221

To: GOLDSMITH, MR. L. B.

301 - 1855 BALSAM ST.  
VANCOUVER, B.C.  
V6K 3M3

Project :

Comments: ATTN: L. B. GOLDSMITH

Page No. : 1  
Tot. Pages: 1  
Date : 27-APR-89  
Invoice # : I-8914657  
P.O. # : NONE

## CERTIFICATE OF ANALYSIS A8914657

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA																		
MOR 1	201	--	< 15																	
MOR 3	201	--	5																	
MOR 4	201	--	5																	
MOR 5	201	--	5																	

CERTIFICATION : *Jack Vank*

TAY claims of DALMATIAN RESOURCES  
 AREA OF CURRENT DIAMOND DRILLING ACTIVITY AND RECENT GEOPHYSICAL (IP) SURVEY

Approximate location of N83°E 75°N trending 2.5 m. wide zone of QUARTZ-PYRITE VEINS WITH BRECCIATION AND SHEARING, HOSTED IN ANDESITE AND PORPHYRITIC ANDESITE

NUMEROUS ANDESITE AND LESSER DIORITE OUTCROPS between Morning No. 1 claim and area of drilling at Tay claims

SAMPLING OF QUARTZ/PYRITE VEINS

5+65N 4+26E	0.35 m.	8000
5+45N 4+30E	0.17 m.	2350
5+35N 4+38E	1.70 m.	3200
5+35N 4+26E	0.50 m.	1650
5+25N 4+26E	0.15 m.	1050

KEY

AREA OF UNDETERMINED THICKNESS OF OVERBURDEN. Other areas near veins show exposures of intermediate to mafic volcanic rocks.

ROCK SAMPLE LOCATION, \* showing sample number, true width, and p.p.b. Au

SOIL SAMPLING GRID (1987) Au values <5 p.p.b. not shown.

TRENCH

VEIN showing attitude

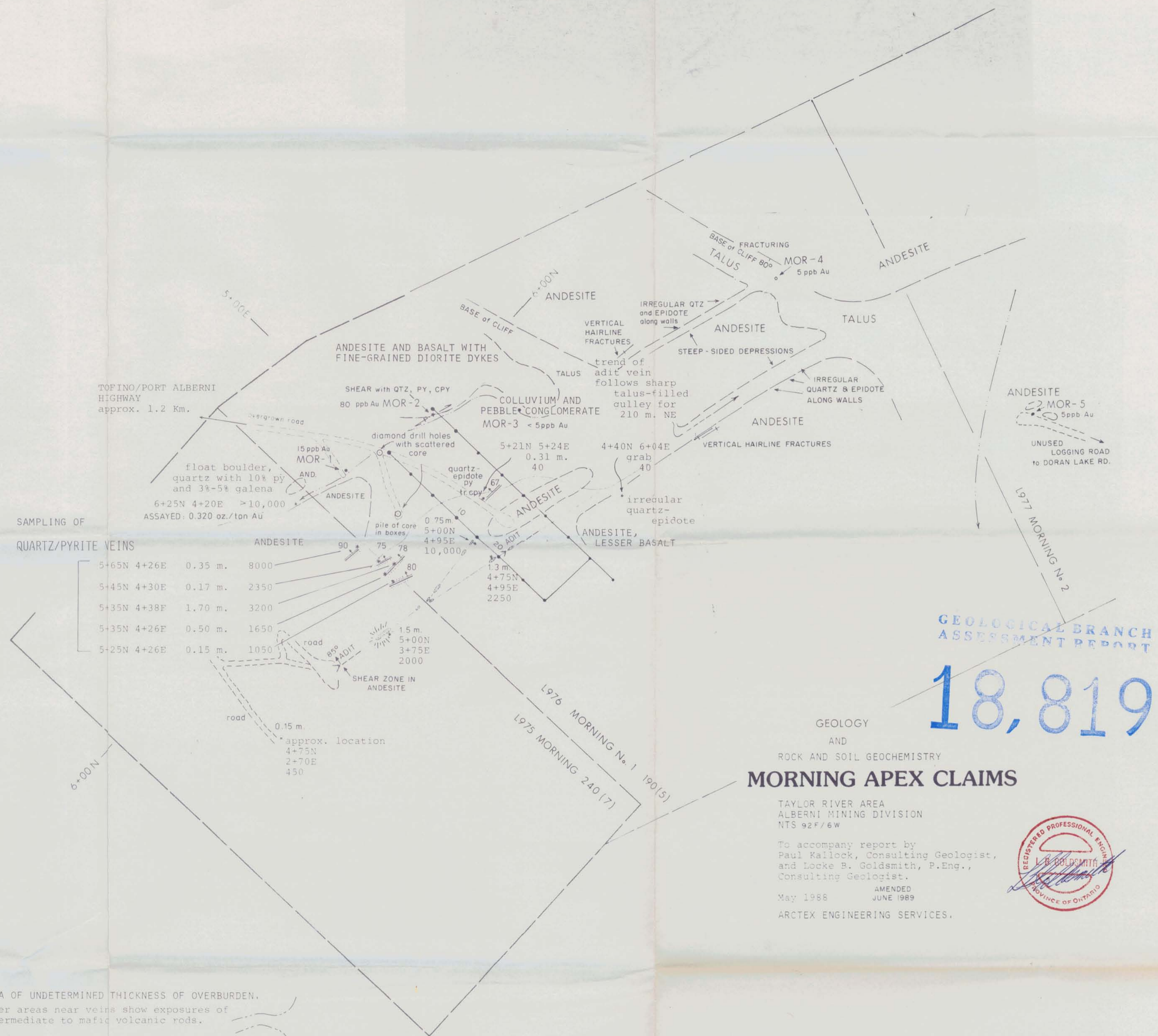


SCALE

1 : 2000

0 20 40 100

1 cm. = 20 m.



GEOLOGICAL BRANCH ASSESSMENT REPORT

18,819

GEOLOGY AND ROCK AND SOIL GEOCHEMISTRY  
**MORNING APEX CLAIMS**

TAYLOR RIVER AREA  
 ALBERNI MINING DIVISION  
 NTS 92F/6W

To accompany report by Paul Kalleck, Consulting Geologist, and Locke B. Goldsmith, P.Eng., Consulting Geologist.

May 1988 AMENDED JUNE 1989

ARCTEX ENGINEERING SERVICES.

