

10
0815
ACTION:
FILE NO:

SCUD PROPERTY - 1045
SCUD 4, 5, 6, 7 and 8 CLAIMS
(4848, 4849, 4850, 4851 4852)
LIARD MINING DIVISION
N.T.S. 104-G/6

GEOLOGICAL REPORT

JUNE 1, 1990

OWNER: LACANA EX (1981) INC.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

20,185

Latitude
Longitude

57°21'
131°19'

Darrel Johnson, B.Sc.
Paul W. Jones
CORONA CORPORATION

TABLE OF CONTENTS

	<u>Page No.</u>
1.0 CONCLUSIONS	1
2.0 RECOMMENDATIONS	1
3.0 INTRODUCTION	1
4.0 GEOLOGY	2
4.1 REGIONAL	2
4.2 PROPERTY	3
5.0 GEOCHEMISTRY	5
6.0 STATEMENT OF COSTS	6
7.0 STATEMENT OF QUALIFICATIONS	7
8.0 BIBLIOGRAPHY	9

APPENDICES

- APPENDIX A - GEOCHEMICAL METHODS
- APPENDIX B - SAMPLE DESCRIPTIONS
- APPENDIX C - ANALYTICAL RESULTS

LIST OF FIGURES

- Figure 1 PROPERTY LOCATION MAP After page 2
Figure 2 CLAIM LOCATION MAP After page 3

MAPS

- Figure 4 PROPERTY ROCK GEOCHEMISTRY &
GEOLOGY 1:10,000 In Back

1.0 CONCLUSIONS

Prospecting and geological work during July 1989 on the Scud 4, 5, 6, 7 and 8 claims investigated sediment hosted Fe carbonate shear zones, sediment/volcanic/intrusive contacts and Paleozoic limestones and sediments with diorite intrusions. Although alteration was extensive no major showings were discovered. Intense, extensive alteration was noted and sampled along prominent structures, but no anomalous results were returned. Skarns were found along and within the Paleozoic limestones at their contact with local intrusions, but no anomalous values were returned.

2.0 RECOMMENDATIONS

In conjunction with follow-up field work on adjacent claims a final stream geochemical program utilizing heavy mineral concentrate, silt and moss mat samples would determine whether the claims have any future mineral potential.

3.0 INTRODUCTION

The four Scud claims, Scud 4, (4848) Scud 5 (4849), Scud 6 (4850) and Scud 7 (4851), Scud 8 (4852) totalling 100 units, were staked on July 5, 1988 by a contractor for Lacana Ex (1981) Inc., a subsidiary of Corona Corporation. They are located east of the north-south portion of the Scud Glacier. The claims lie along the contact of the Coast Plutonic Complex and the Intermontane Belt. Access is via helicopter from either the Scud airstrip at the confluence of the Scud and Stikine Rivers or the Galore Creek airstrip located 20 km to the southwest.

The claims cover Permian limestones, tuffaceous siltstones and metamorphosed volcanics/sediments that are thrust over undifferentiated volcanics and sediments of the Triassic Stuhini Group. On the eastern border the middle-late Triassic Hickman Batholith dominates. This intrusive has metamorphosed the Paleozoic rocks on Scud 6 and the eastern portion of Scud 5. An unaltered Upper Triassic Hickman plug intrudes along the thrust fault at the north central boundary of Scud 5.

Intensely bleached, E-W trending Fe-carbonate shear zones on the eastern side of Scud 7 are the most obvious mineralogical target. These shears contain ankerite, siderite and barite mineralization within brecciated zones. Trace amounts of sulphides were found but no anomalous values were returned. Within the massive Permian limestones pyroxene skarn pods were prospected. These skarns are related to structural features controlled by geological contacts. No anomalous values were returned.

The geological mapping performed in July of 1989 was conducted from a base camp on Scud 5. Three geologists and a prospector mapped and sampled the area over a four day period with the aid of helicopter support.

4.0 GEOLOGY

4.1 REGIONAL GEOLOGY

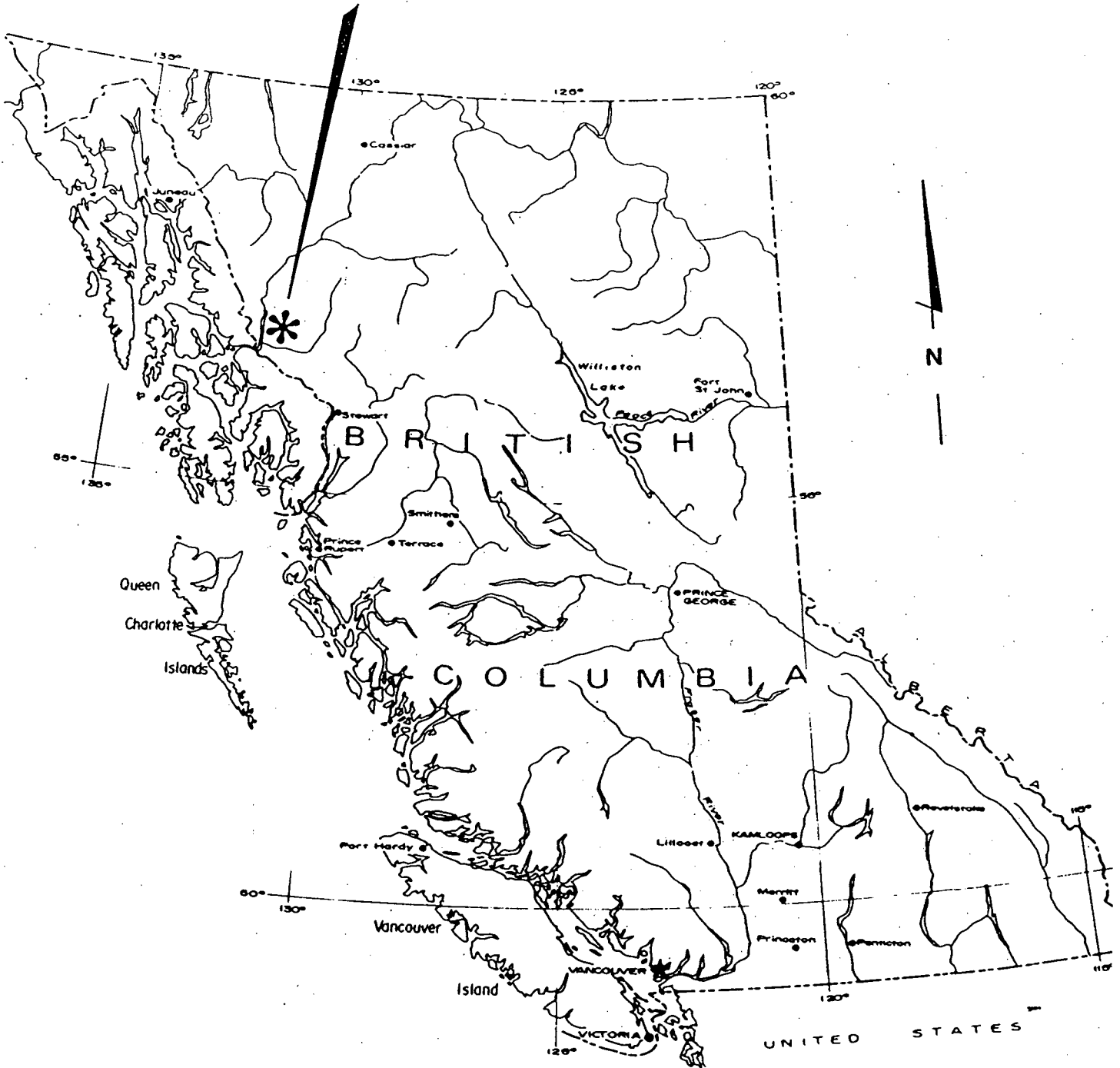
The claim area lies on the western margin of the Intermontane Belt at its contact with the Coast Plutonic Complex. Paleozoic sediments and Mesozoic sediments and volcanics are cut by intrusive bodies of the main Coast Belt and the satellite Hickman and Yeheniko Plutons. General tectonic fabric of the region trends north-northwesterly.

The oldest rocks exposed in the area are Lower Paleozoic clastics including impure quartzites and limestones, overlain by crystalline schists and gneisses. A thick impure limestone unit caps the Paleozoic oceanic sequence.

The lower contact of Mesozoic units is described by F.A. Kerr, G.S.C. Memoir 246 and J.G. Souther, G.S.C. Paper 71-44, as gradational and in places unconformable. Triassic rocks consist of a thick sedimentary sequence overlain by an island arc volcanic assemblage which is in turn capped by volcanic derived sediments.

The Jurassic layered sequence consists of a thick, near shore sedimentary package and later volcanic island arc rocks. Extensive intrusive activity during this period resulted in the emplacement of the multi phased 'Coast Complex' and related

PROPERTY LOCATION



satellite plutons. Alkaline and calc-alkaline members of this suite are closely associated with most of the numerous mineral occurrences in the area. Cretaceous rocks consist mainly of marine sediments with a thin basaltic to rhyolitic component.

Cenozoic stratigraphy includes mafic and felsic aerial volcanic units. These rocks are a major component of glacial and fluvial deposits throughout the area. Several active hot springs attest to ongoing hydrothermal activity throughout the Iskut-Stikine region.

Most of the region has been subjected to Quaternary glaciation, resulting in rugged alpine terrain.

4.2 PROPERTY GEOLOGY

The Scud 4, 5, 6, 7, 8 claim group encompasses a mixed package of Paleozoic and Mesozoic volcanics, sediments and metamorphic units intruded by Mesozoic granodiorites.

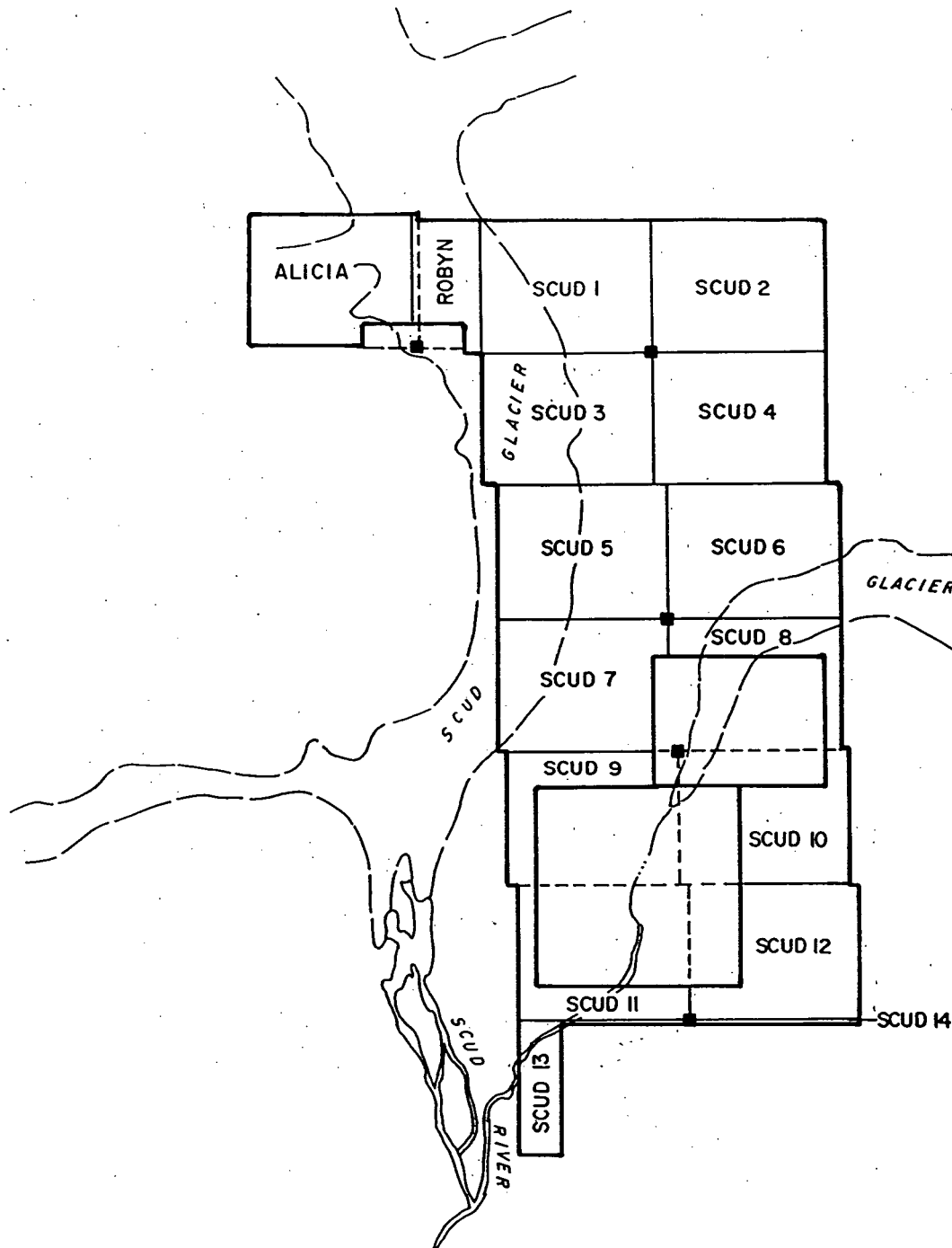
Mesozoic rocks are part of the Stuhini Group and consist of a basal maroon and green epiclastic unit overlain by andesite flows, tuffs and volcanic breccia with minor phyric augite basalt sills and/or flows. Overlying sediments are polymictic conglomerates of augite basalt, volcanics and limestone clasts.

The Paleozoic Stikine assemblage as mapped in the area of the Scud Glacier, (B.C. MEMPR Open File 1989-7), consists of Permian and older rocks. The Pre-Permian rocks are recrystallized limestones overlain by quartz-biotite schists, mixed siliceous siltstones, and rhyolitic volcanics.

The assumed base of Permian strata is a distinctive rusty argillite. This is overlain by a thick limestone unit, a mixed sedimentary/volcanic package and an upper limestone.

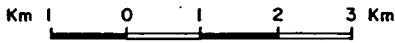


131° 20'



57° 15'

57° 15'



131° 20'

 **CORONA CORPORATION**

SCUD PROPERTY CLAIM MAP

DATE: JUNE / 1990 SCALE: 1:100,000 DRAWING No.

The dominant structural feature within the claim group is a major N-S trending, easterly dipping thrust immediately east of the Scud Glacier which has placed Permian limestone over mixed Triassic volcanics. High angle faults consist of both major E-W and lesser N-S features.

The western edge of the claim group is comprised of a felsic volcanic/sedimentary sequence. This unit has been correlated with other similar Triassic sequences (personal communication Derek Brown, B.C.G.S.). The observed base is a massive dacitic flow? which is covered by a volcanic derived sediment, greywacke. Interbedded at the top of the sediments is an argillite unit and a banded cherty non-fossiliferous limestone. Above this limestone a thrust fault places the older Paleozoic metamorphic rocks on top of the Triassic sequence. Along the footwall of the contact are silicified breccia zones. The thrust is marked by a 1 cm to 10 cm thick gouge unit.

The overlying Permian rocks include a thick basal limestone unit covered by metamorphosed volcanics and sediments. The limestone is buff grey and massive with no evidence of macro fossils. Within this limestone is a black, locally graphitic argillite unit. The overlying rocks include both volcanics and sediments, generally metamorphosed to greenschist facies. Prominent parallel east/west structures cut the Permian sediments and are distinctly marked by pervasive Fe-carbonate alteration. Minor amounts of pyrite, chalcopyrite and mariposite were detected but no anomalous assays were returned.

The extensive Hickman Pluton of quartz monzonite composition dominates the eastern boundary of the claim group. Along the thrust fault on the northern boundary of Scud 5 is a plug of fresh quartz monzonite that is most likely of late Triassic age. A porphyritic mafic, diorite, intrusion with 1% pyrrhotite was sampled within the thick Permian limestone. An increase in sulphides is associated with these isolated plugs.

5.0 GEOCHEMISTRY

During the mapping program 32 rock samples were collected and sent to Acme Analytical Laboratories in Vancouver for geochemical analysis for copper, lead, zinc, silver and gold. Analytical techniques are described in Appendix A, sample descriptions in Appendix B and the results are given in Appendix C.

6.0

STATEMENT OF COSTS**GEOLOGY - SCUD 4, 5, 6, 7****Period: July 22, 1989 - July 13, 1990****Geology**

16 man days @ \$250/man day 4,000.00

Food & Accommodation

16 man days @ \$30/man day 480.00

Sample Analysis & Shipping

32 Samples @ \$25/sample 800.00

Helicopter

5.1 hrs @ \$725/hr. 3,797.50

Mobilization-Demobilization

(Aircraft Charter) 735.00

Equipment & Supplies

125.00

Report Preparation500.00**\$ 10,437.50**

Statement Filed July 13, 1990

10,000.00

To Corona P.A.C. Account (290675)

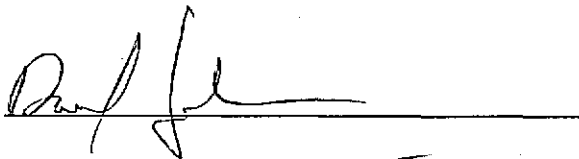
437.00

STATEMENT OF QUALIFICATIONS

DARREL L. JOHNSON

I, Darrel L. Johnson, resident of the District of Coquitlam, B.C. declare that:

1. I hold a B.Sc. degree in geology, granted by the University of British Columbia in 1970;
2. I have worked as a geologist in all phases of exploration work throughout British Columbia since 1970;
3. I have been employed by Corona Corporation as a Senior Geologist since 1988;
4. Work described in this report was conducted by Paul Jones under my overall supervision;
5. I co-authored this report based on published information for the area, extensive discussion with Paul Jones and visits to the area during the programmes described.

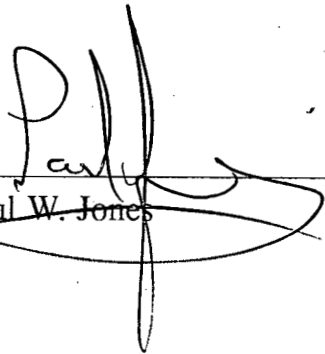


DATED THIS 19TH DAY OF July 1990 AT VANCOUVER,
BRITISH COLUMBIA.

PAUL W. JONES

I, PAUL W. JONES, in the City of Vancouver, B.C. declare that:

1. I have been involved actively in the mining industry in Canada and the United States for 11 years.
2. I have personally performed the work enclosed in this report under the supervision of Corona Corporation's Senior Geologist, Darrel Johnson.


Paul W. Jones

DATED this _____ day of _____ 19__,

at _____, British Columbia.

8.0 BIBLIOGRAPHY

Aldrick, D.J., Drown, T.J., Grove, E.W., Kruckowski, E.R., Nichols, R.F. (1989, January). Iskut -Sulphurets Gold. The Northern Miner Magazine.

Allen, D.G., Pantelegev, A., Armstrong, A.T. (1976). Porphyry Copper Deposits of the Alkalic Suite, Galore Creek. C.I.M. Special 15, Paper 41.

Barr, D.A., Fox, P.E., Northcote, K.E., Preto, V.A. (1976). Porphyry Copper Deposits of the Alkalic Suite, The Alkaline Suite Porphyry Deposits - A Summary. C.I.M. Special 15, Paper 36.

Brown, D., Wojdak, P. (1989, April). K-Feldspar Connection: Relationship of K-Feldspar Intrusions to Cu Porphyries and Au Veins, Stewart Iskut Belt, B.C.; G.A.C. Copper-Gold Porphyry Workshop.

Buddington, A.F. (1929). Geology of Hyder and Vicinity Southeastern Alaska; U.S.G.S. Bulletin 807.

Grove, E.W. (1986). Geology and Mineral Deposits of the Unuk River - Salmon River - Anyox Area. B.C. M.E.M.P.R. Bulletin 63.

Hodgson, C.J. (no date). Recent Advances in the Archean Gold Model, With Implications for Exploration for "Mesothermal-Type" Gold Deposits in the Cordillera; G.A.C. Cordilleran Section Short Course No. 14.

Kerr, G.A. (1948). Lower Stikine and Western Iskut River Areas, British Columbia. G.S.C. Memoir 246.

Lowell, J.D. (1988, January). Gold Mineralization in Porphyry Copper Deposits. Society of Mining Engineering, SME Annual Meeting.

Lowell, J.D., Guilbert, J.M. (1970). Lateral and Vertical Alteration - Mineralization Zoning in Porphyry Ore Deposits. Economic Geology, 65, (4).

Souther, J.G. (1972). Telegraph Creek Map-Area, British Columbia. G.S.C., Paper 71-44.

Souther, J.G., Brew, D.A., Okulitch, A.V. (1979). Iskut River, British Columbia, Alaska. G.S.C., Map 14/8A.

Sutherland Brown, A. (1976). General Aspects of Porphyry Deposits of the Canadian Cordillera; Morphology and Classification. C.I.M. Special 15, Paper 6.

PAC03-1045-0602-010

APPENDIX A
GEOCHEMICAL METHODS

ACME ANALYTICAL LABORATORIES LTD.

Assaying & Trace Analysis

852 E. Hastings St., Vancouver, B.C. V6A 1R6

Telephone : 253 - 3158

ICP - .5 gram sample is digested with 3 ml 3-1-2
HCl-HNO₃-H₂O at 95 deg.C for one hour and is
diluted to 10 ml with water. This leach is
Partial for Mn, Fe, Sr, Ca, P, La, Cr, Mg, Ba,
Ti, B, W and limited for Na, K, Al.

Au* - 10 gram samples are ignited at 600 deg.C,
digested with aqua regia at 95 deg.C for
one hour, 50 ml aliquot is extracted into
10 ml MIBK, analysed by graphite furnace AA.

PAC03-1045-0602-010

APPENDIX B
SAMPLE DESCRIPTIONS

PAC03-1045-0602-010

SAMPLE DESCRIPTIONS

<u>Sample No.</u>	<u>Type</u>	<u>Description</u>
20099	Grab	rusty sediments, faulted.
20100	Grab	rusty sediments, argillite.
20951	Grab	rusty argillite with 1% disseminated pyrite.
20952	Grab	fault zone 10% quartz carbonate <1% pyrite.
20953	Grab	pyroxene skarn, Fe alteration, <1% pyrite disseminated.
20954	Grab	dark sediment near contact with overlying siltstone.
20955	Grab	dirty sediment near contact.
20956	Grab	mafic intrusion with 1% pyrrhotite.
20957	Grab	mafic intrusion strongly oxidized.
20958	Grab	oxidized argillite.
20959	Grab	10 cm quartz zone with 3% disseminated pyrite in thrust zone.
30456	Grab	rusty baked argillite with fissile foliation.
30457	Grab	rusty coarse grained chloritized rock with Fe-carbonate veinlets and trace pyrite.
30458	Grab	rusty bleached altered rock cut by Fe-carbonate veinlets and silica veins up to 1 cm with trace disseminated pyrite.
30459	Grab	rusty fine grained altered argillite cut by stockwork quartz veins with trace pyrite and chalcopyrite.

PAC03-1045-0602-010

<u>Sample No.</u>	<u>Type</u>	<u>Description</u>
30460	Grab	rusty black grey quartzite, massive, trace disseminated pyrite.
30461	Grab	rusty ankerite, chlorite altered rock with trace pyrite and chalcopyrite.
30462	Grab	silicified quartz veined argillite, rusty with trace disseminated pyrite.
20372	Grab	5 m long zone rusty Fe-Mn stained sediments with trace pyrite and calcium carbonate veining.
20373	Grab	east of metasediment/metavolcanic contact, rusty sediments with trace pyrite and calcium veining.
20374	Grab	1 m bleached brecciated rock with minor pyrite, ankerite and quartz.
20375	Grab	1 m white limey brecciated quartzite.
20376	Grab	brecciated limonitic quartzite with mariposite and trace pyrite and chalcopyrite.
20377	Grab	ankerite altered quartz Fe carbonate veins with mariposite 1% disseminated pyrite metavolcanic.
20378	Grab	weathered altered metavolcanic with mariposite, translucent quartz with minor pyrite and chalcopyrite.
20379	Grab	silicified recrystallized brecciated limestone with Fe-carbonate infilling.
20380	Grab	ankerite altered brecciated Fe-oxidized metavolcanic.
20780	Grab	quartz rich rusty aplite dyke.
20781	Grab	smokey grey black quartz veins 10 cm wide.
20782	Talus	ankerite, sericite altered metavolcanics with quartz veining.

PAC03-1045-0602-010

<u>Sample No.</u>	<u>Type</u>	<u>Description</u>
20793	Grab	rusty pyritic metasediment.
20794	Grab	siliceous chert-rhyolite cap.

PAC03-1045-0602-010

APPENDIX C
ANALYTICAL RESULTS

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: JUL 28 1989

Aug. 3/89...

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY... *C. Long* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

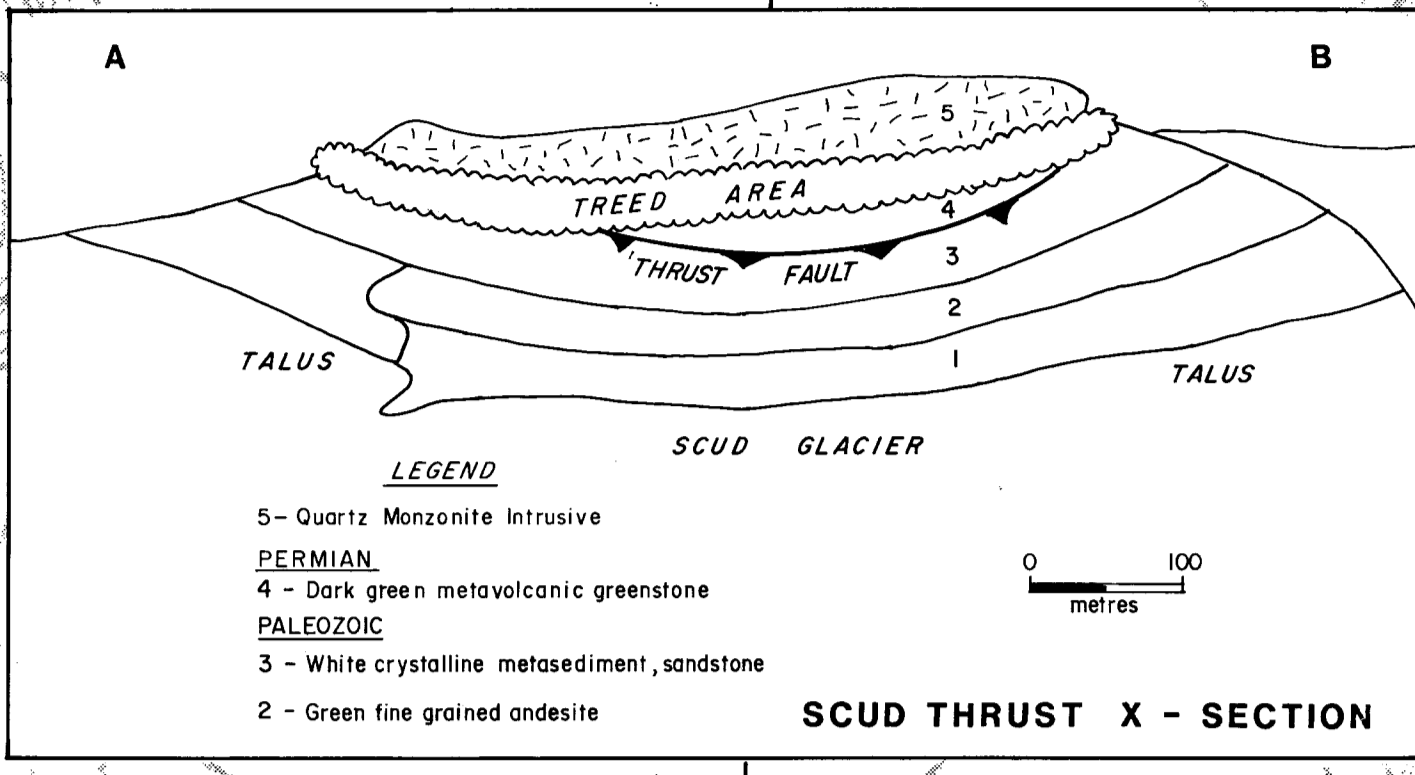
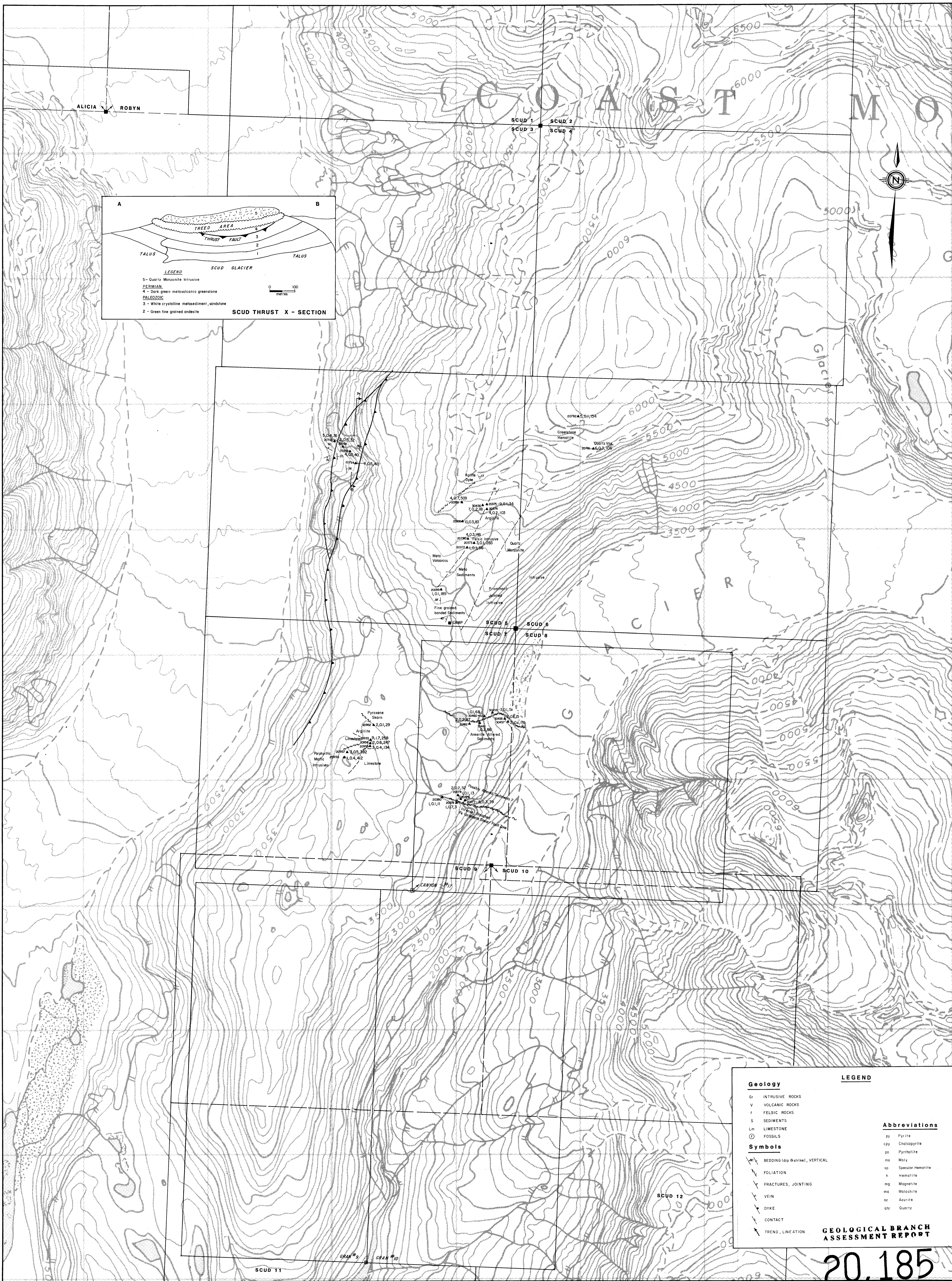
CORONA CORPORATION PROJECT 1040 FILE # 89-2521 Page 1

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	AU* PPB
-E✓20099	189	4	58	.7	1
-E✓20100	83	2	72	.3	10
-E✓20372	56	2	123	.1	1
-E✓20373	283	2	111	.1	3
-E✓20374	103	4	125	.2	4
-E✓20375	34	43	101	.1	9
-E✓20376	13	2	34	.1	1
-E✓20377	79	3	67	.3	8
-E✓20378	52	2	44	.2	2
-E✓20379	3	2	3	.1	1
-E✓20380	11	2	18	.1	1
-E✓20780	148	9	9	.3	4
-E✓20781	106	2	5	.3	6
-E✓20782	154	2	66	.1	5
-E✓20793	35	22	110	.4	5
-E✓20794	5	9	27	.1	3
-E✓20951	509	6	48	.7	4
-E✓20952	29	4	5	.1	2
-E✓20953	258	12	8	1.7	9
-E✓20954	247	3	62	.6	2
-E✓20955	134	2	24	.4	3
-E✓20956	412	3	23	.4	1
-E✓20957	392	2	30	.5	5

- 905c...

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	AU* PPB
- E✓20958.	32	7	133	.5	2
- E✓20959.	40	13	171	.5	4
- D✓30456.	118	19	170	.2	7
- D✓30457.	116	8	82	.1	2
- D✓30458.	15	5	64	.1	2
- D✓30459	51	29	137	.1	3
- D✓30460.	68	9	115	.1	1
- D✓30461.	88	2	53	.2	1
- D✓30462.	87	2	51	.2	2

✓ - ASSAY REQUIRED FOR CORRECT RESULT -



Geology

- Gr INTRUSIVE ROCKS
- V VOLCANIC ROCKS
- F FELSIC ROCKS
- S SEDIMENTS
- Lm LIMESTONE
- ⊙ FOSSILS

Symbols

- BEDDING (dip & strike), VERTICAL
- FOLIATION
- FRACTURES, JOINTING
- VEIN
- DYKE
- CONTACT
- TREND, LINEATION

LEGEND

Abbreviations

- py Pyrite
- cpy Chalcopyrite
- po Pyrrhotite
- mo Moly
- sp Specular Hematite
- h Hematite
- mg Magnetite
- ma Malachite
- az Azurite
- qtz Quartz

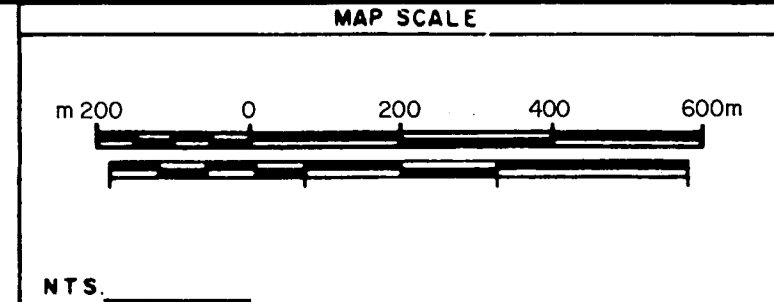
GEOLOGICAL BRANCH ASSESSMENT REPORT

20,185
 SCUD PROPERTY

LEGEND

▲ Rock Chip Sample

z080 - 2,02,52 Sample No - Au ppb, Ag ppm, Cu ppm



No	Date	MADE BY	DESCRIPTION
1			
2			
3			
4			
5			

DATE: MAR / 1990

CORONA CORPORATION

ROCK GEOCHEMISTRY & GEOLOGY

OFFICE	DEPARTMENT	MAP INDEX NUMBER	SCALE	DRAWING NUMBER
		N.T.S. 104676	1:10000	FIG 4