

GEOLOGY AND GEOCHEMISTRY

RUMPLESTILTSKIN #1-5, CEASAR, NOT ALL THERE
WILLY'S FIRST Mineral Claims

NTS 103 F/8W

Latitude $53^{\circ}21'N$, Longitude $132^{\circ}20'W$

OWNER: Gordon G. Richards
OPERATOR: Prism Resources Ltd.
CONTRACTOR: JMT Services Corp.
WRITTEN BY: Gordon G. Richards, P.Eng.
James S. Christie, Ph.D

MINERAL RESOURCES BRANCH ASSESSMENT REPORT 8011 NO. _____

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INTRODUCTION

The claims cover an extension of a west north-west trending mineralized belt that has been traced for over 10 km from Gospel Point on Rennel Sound to the Courte Sb-Au Prospect on Upper Riley Creek. Reconnaissance geochem sampling in 1978 provided anomalous Au-As-Hg geochem from base of slope silts within the claims. A subsequent programme completed in August 1979 consisted of grid soil sampling, geological mapping and rock chip sampling. That programme located an anomalous geochem pattern some 2000 m long in the southeast portion of the claims. The current programme was undertaken to provide more detailed geochemical and geological information on which to base possible drill targets.

Surveys on a scale of 1:1000 were done utilizing hipchain, compass and barometer. Geochem lines were spaced 50 metres apart with samples collected at 25 metre intervals. Soil samples were collected by auger at depths up to 1 m beneath surface and rock chip samples were taken from all of the mineralized outcrops found.

Results of the work programme have indicated a zone 400 metres long by 100 - 175 metres wide of strong alteration and anomalous arsenic and weak gold geochem. This zone may extend northwest another 150 metres under a swamp. The zone almost certainly extends southeast another 500 metres across a swampy hillside based on several preliminary soils. A few checks were made by another analytical laboratory on gold soil samples and indicate a possible error in gold results shown on figure 1.

LOCATION AND ACCESS

The property is located on a hill south of the headwaters of Riley Creek and the upper drainage of Phantom Creek northwest of Yakoun Lake, Graham Island, Queen Charlotte Islands.

The property is readily accessible by all weather private logging roads connecting Queen Charlotte City and Rennel Sound. These roads are open to the general public after working hours and on weekends or by special arrangement. The anomalous zone described below crosses the road at an oblique angle and is nowhere more than 400 metres from the road.

TOPOGRAPHY AND VEGETATION

Elevations on the claim group range from 900 ft above sea level along the upper drainage of Phantom Creek to 1900 ft on the hill to the northwest. Valley bottoms and ridge top are covered in mixed cypress-pine swamps and mature hemlock-spruce forest. Hill slopes are heavily timbered with hemlock-spruce-cedar. Overburden is relatively thin, generally less than 5 metres except in the valley bottom where depths of as much as 30 metres are estimated. Outcrop is rare on the ridges and sparse on the valley floor occurring only along some sections of the larger creeks. Nearly continuous exposure of bedrock exists in the numerous creeks draining the hill slopes up to an elevation of about 1400 ft. Above this elevation creeks have not developed and outcrops are few.

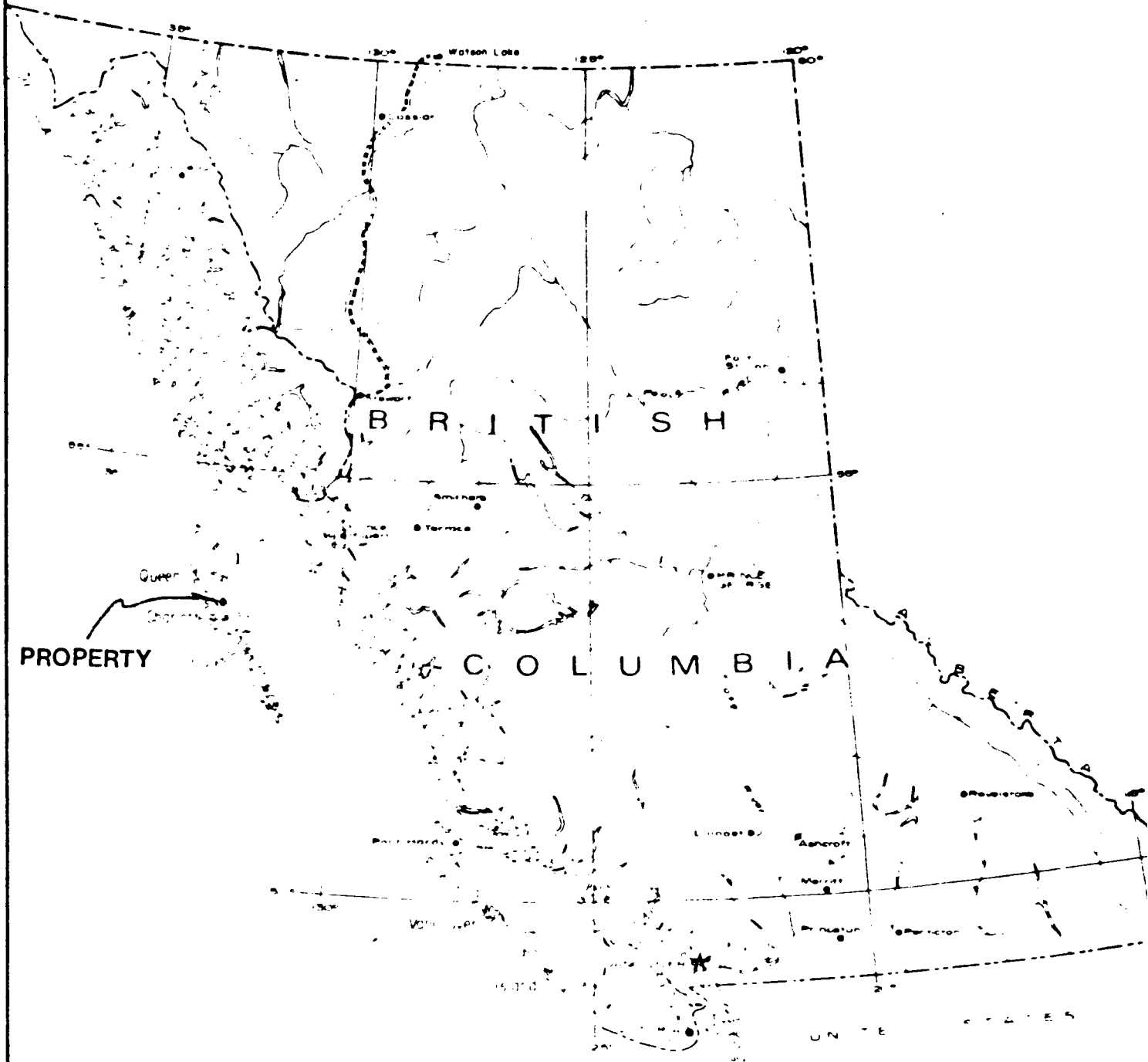


FIGURE 3

PROPERTY LOCATION MAP

Mile 36		SCALE		136 Mile	
Prepared by	Date	NTS MAP AREA		DRAWING NO	
Drawn by	Revised				

MINERAL CLAIMS

The property consists of the eight claims listed below:

<u>CLAIM NAME</u>	<u>RECORD NO.</u>	<u>UNITS</u>
RUMPLESTILTSKIN #1	655 (7)	4
#2	656 (7)	9
#3	657 (7)	4
#4	1184 (3)	8
#5	1185 (3)	6
CEASAR	764 (9)	2
NOT ALL THERE	763 (9)	8
WILLY'S FIRST	617 (6)	<u>4</u>
	TOTAL	41

GEOLOGY

The general geology of the area has been described previously in an assessment report by J.S. Christie and G.G. Richards submitted November 1, 1979. The portion of the claims covered in this report has been mapped in more detail.

Jurrassic Yakoun Formation has been subdivided into three units. The lowermost unit is a mixed argillite, argillaceous tuff with minor andesite and occurs in the southwestern and western parts of the survey. Above this unit is a distinctive looking light to medium grey wispy bedded tuff. The third unit lies above this marker unit and is like the first except that it contains more volcanic detritus and much carbonaceous material including trunks of trees up to 2' in diameter.

Cretaceous Longarm Formation outcrops occur in the easternmost part of the survey. Sandstones, siltstones and minor pebble conglomerate occurs in the quarry and adjacent outcrops. Its contact with Yakoun Formation was not seen but is presumed to be an unconformity.

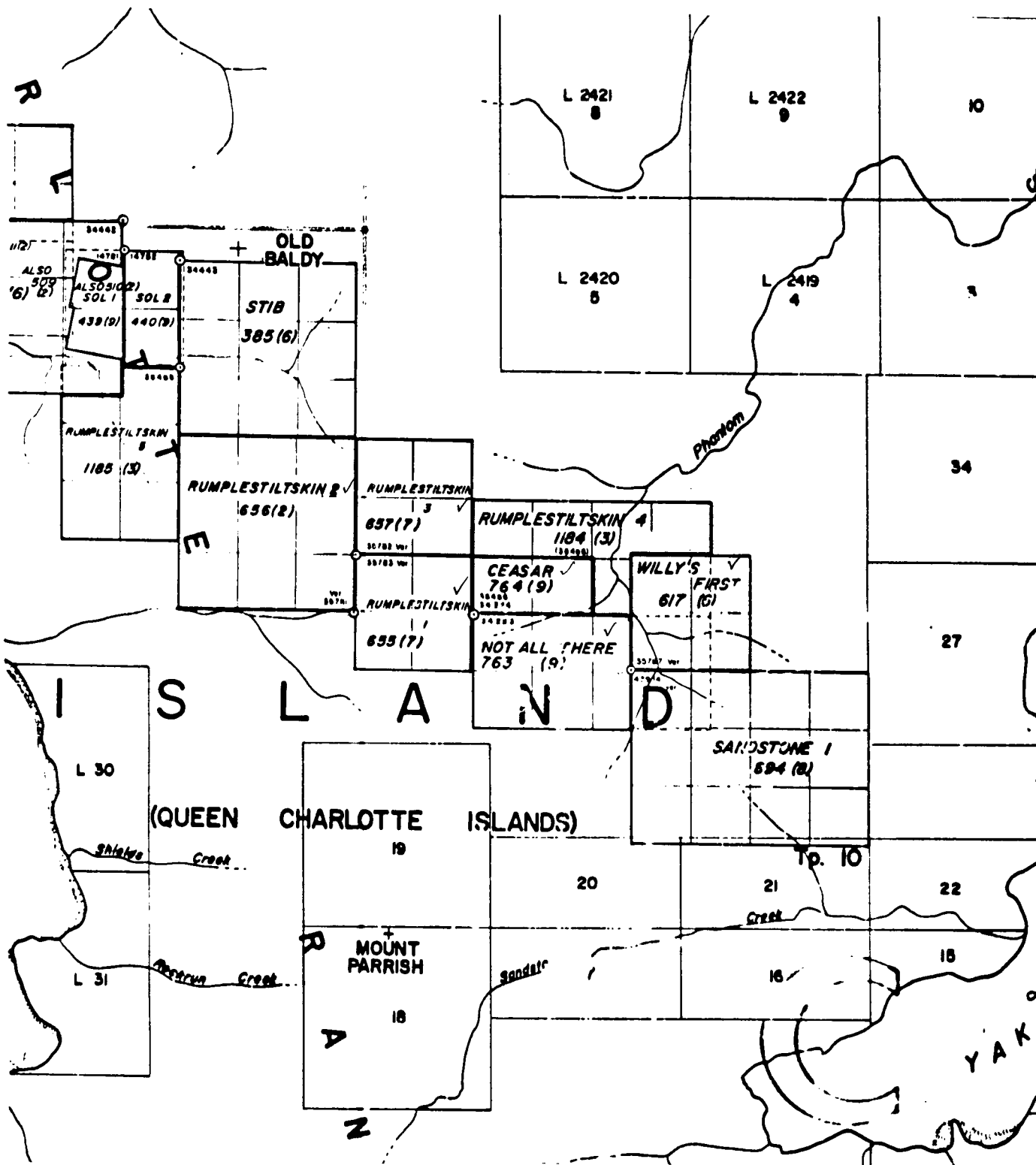


FIGURE 4
CLAIM MAP

Tertiary Masset Formation occurs in the north part of the survey. Typical exposures are a porphyritic feldspar porphyry andesite with phenocrysts up to 2 mm long. This rock type is partly in fault contact with and partly unconformably overlying the Yakoun Formation. A distinctive looking quartz feldspar porphyry forms a 60 metre wide dyke within the Yakoun Formation. This large dyke is subparallel to bedding but has a chilled margin. Similar textured smaller dykes cut obliquely across bedding (i.e. R1829) and are therefore definitely dykes. Their age is uncertain but is tentatively included with the Tertiary Masset Formation. Similar dykes have been recognized at the Courte showing some 4 kilometres to the northwest and beyond.

STRUCTURE

Two faults trending $110^{\circ} \pm$ have been recognized. They appear to control lithologic contacts. The more southerly one has an apparent left lateral offset of the wispy bedded grey tuff (unit 2) of 600 metres. The more northerly one has an apparent north side down movement, preserving Tertiary volcanics along the north side. A 113° trending fault was observed between the two $110^{\circ} \pm$ faults mentioned above. This fault is on strike with the alteration system described below and may be more throughgoing and important than recognized. A fault trending $167^{\circ} \pm$ has an apparent 70 m left lateral movement judging by the offset pattern at the 60 metre dyke

ALTERATION AND MINERALIZATION

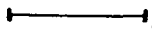
A strong clay-carbonate-silica alteration zone has been mapped in the west half of the survey area. Rocks involved are volcanic sandstones and tuffs with abundant rock fragments, argillaceous sandstones, argillites and argillaceous tuffs. Alteration is

characterized by moderate to intense development of clay with 1/2 to 4% disseminated sulphide. Carbonate is present throughout as fracture fillings and in disseminated form. Veins of chalcedony, small quartz crystals, and opal occur in float and rare outcrops throughout the alteration system. Silica flooding is present in some float and in outcrops at R1905, R1868 and R1924 + T644.

The alteration system has been followed to the northwest where it involves Tertiary feldspar porphyry of the Masset Formation. The system weakens near T636. To the southeast, the system extends another 600 metres to a large creek flowing northwest. Three traverses across this 600 metres has demonstrated a similar style of alteration and geochemistry to that shown on figure 1.

GEOCHEMISTRY

The property was staked in 1978 in the belief that the mineralized Riley Fault System extended on to this ground. Subsequently silt samples were collected along the base of slopes on the claim-group yielding Au-As and Hg anomalies. A previous survey outlined a large area of anomalous Au-As geochemistry in the area of this present survey and beyond to the southeast.

The current programme collected 391 soils and rock chips on lines spaced 50 metres apart with sample sites spaced 25 metres apart. Most rock chip samples were made up from three to ten rock chips, were small enough to fit into standard kraft sample bags and are therefore only preliminary in nature. Rock chips marked with a bar, , were collected in plastic bags and weighed 1 to 3 kilograms. Soil samples were collected from the B horizon which occurred from 1 cm to 10 cm beneath the A horizon except in some areas on the ridges and valley floor. Here samples were made up from mixed A and B horizons and some from just A horizon.

All geochemical analyses were done on the minus 80 mesh fraction by Bondar Clegg & Co. Ltd., 1500 Pemberton Ave., North Vancouver, using the following standard procedures:

Arsenic: Perchloric Nitric - Colermetric

Gold: Fire Assay and Hot Aqua Regia - Atomic Absorption

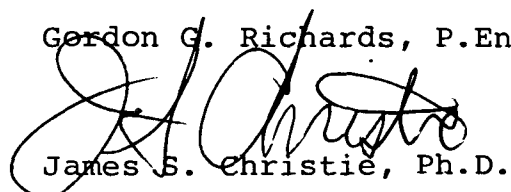
The alteration zone described above contains anomalous arsenic geochemistry. Spot highs for arsenic occur elsewhere in the survey area. Gold is low, with a few 10 and 20 ppb values and one 80 ppb Au in rock at R1909. The Au results were so low in comparison with the previous survey some 30 samples were checked at Chemex Labs (results not included). The results show a marked increase from <5 ppb Au to a background of 10 ppb Au (only a few were <5 ppb Au) with several 20 - 40 ppb Au. As a result all pulps will be reanalyzed for Au.

CONCLUSIONS AND RECOMMENDATIONS

A coincident zone of hydrothermal alteration and anomalous arsenic geochemistry has been traced for 400 to 600 metres in the present survey and is known to extend another 600 metres southeast to a major drainage. Low gold geochemical results may be the result of faulty laboratory techniques as the results differ markedly from samples collected previously in the same area and a few check samples on pulps from this survey. All pulps are being reanalyzed for gold.

A minimum programme of extending soil sampling over the 600 metres to the southeast of the present survey should be considered. Further plans should be made based upon results from this proposed survey and the checks for gold now being carried out.

Gordon G. Richards, P.Eng.



James S. Christie, Ph.D.

STATEMENT OF COSTSWAGES:

G. Richards	- Nov. 1 - 6,	6 days @ \$150/day	\$ 900.00
T. Oliver	- Nov. 1 - 7,	7 days @ \$ 80/day	560.00
W. Lilies	- Nov. 5,	1 day @ \$ 75/day	75.00
D. James	- Nov. 4,	1 day @ \$200/day	200.00
Truck Rental			241.34
Room, Board & Misc. Expenses			315.56
Field supplies, String, Flagging, Sample Bags, etc.			100.00
Airfare - Vancouver - Sandspit return - 3 @ \$160.00			480.00
Geochem -	3,178.27 + 90.00 =		3,268.27
Report			<u>1,000.00</u>
			<u>\$7,140.17</u>

STATEMENT OF QUALIFICATIONS

I, Gordon G. Richards of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Engineer of the Province of British Columbia, residing at 818 West 68th Ave., Vancouver, B.C., V6P 2V2.
2. I am a graduate of the University of British Columbia B.A.Sc. 1968, M.A.Sc. 1974.
3. I have practised my profession as a mining exploration geologist, continuously since 1968.
4. This report is based on my personal knowledge of the district, and mapping of the geology at the property.

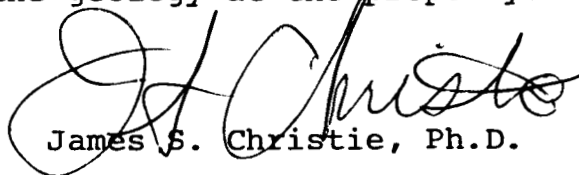


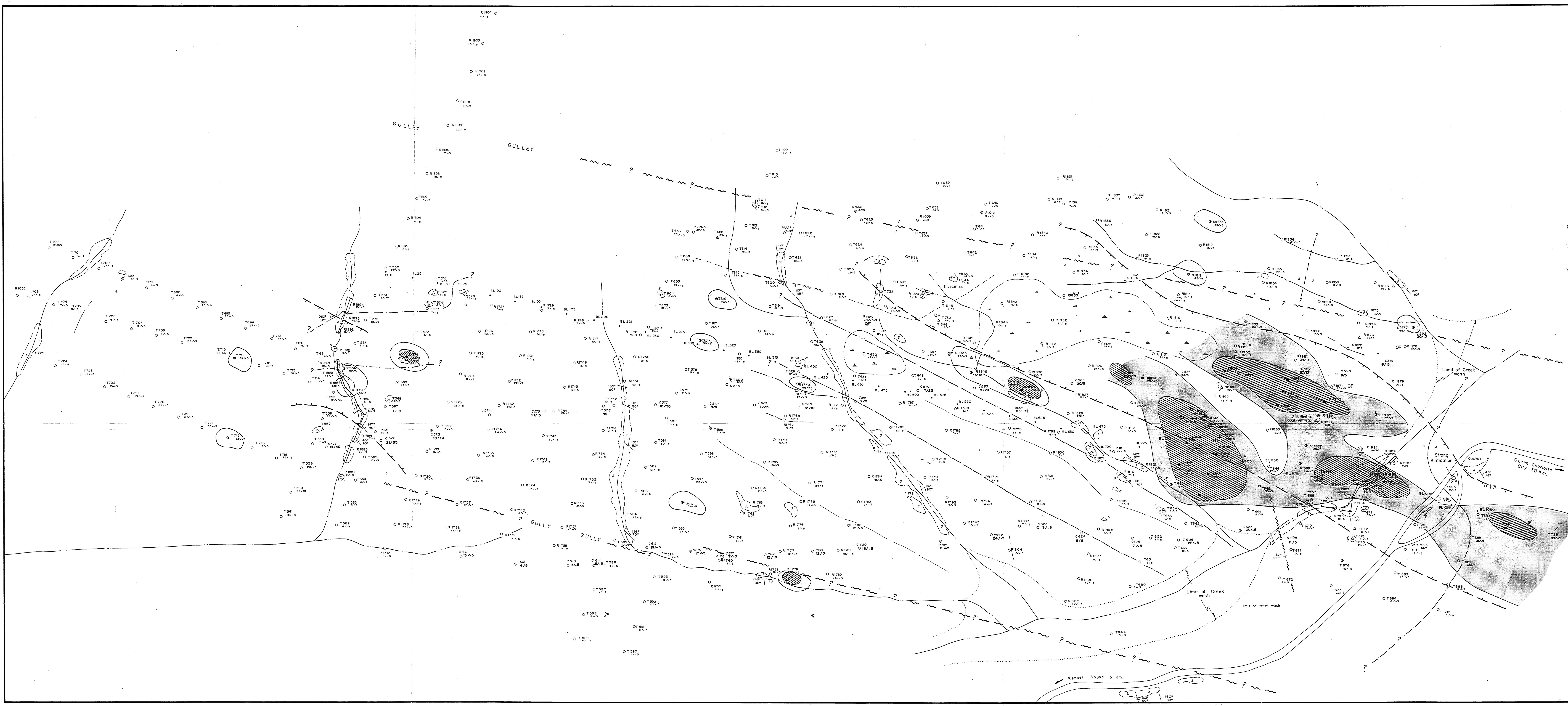
Gordon G. Richards, P.Eng.

STATEMENT OF QUALIFICATIONS

I, James S. Christie of Vancouver, British Columbia do hereby certify that,

1. I am a Professional Geologist residing at 3921 W. 31st Ave., Vancouver, B.C. V6S 1Y4.
2. I am a graduate of the University of British Columbia B.Sc. Honours Geology - 1965, Ph.D. Geology - 1973.
3. I have practiced my profession as a mining exploration geologist, continuously since 1965.
4. I am a Fellow of the Geological Association of Canada.
5. This report is based on my personal knowledge of the district, and mapping of the geology at the property.


James S. Christie, Ph.D.



- LEGEND**
- Quartz Feldspar Porphyry Dykes (minor andesite dykes)
 - Feldspar Porphyry (tuff or flow?) Yakoun Formation?
 - Calcareous Siltstone, sandstone, conglomerate
 - Volcanic sandstone-tuff-argillite (much carbonaceous material)
 - Wispy bedded grey tuff
 - Argillite, tufts minor andesite

- Bedding attitude
- Dyke contact + fault attitude
- Fault
- Ridge
- Geologic contact: definite
- inferred
- Qtz. vein
- Chalcedony, opal + quartz veined float
- Limit of clay-carbonate-silica-sulphide alteration

- GOLD (Au) GEOCHEM. ARSENIC (As) GEOCHEM.**
- Soil
 - Organic soil
 - Silt
 - Rock chip
 - Rock chip
 - Sample location number
 - Arsenic (As) Gold (Au) ppm.
 - Previous Survey
 - Baseline Station in meters
 - 5 p.p.b.
 - 5, <5 p.p.b.
 - > 100 p.p.m.
 - 30-99 p.p.m.
 - < 30 p.p.m.
 - 100 p.p.m.
 - 30-99 p.p.m.

JMT SERVICES CORP.
FOR
PRISM RESOURCES
RUMPELSTILTSKIN PROSPECT

GEOLOGY GEOCHEMISTRY & ALTERATION
GRAHAM ISLAND
SKEENA MINERAL DIVISION
QUEEN CHARLOTTE ISLANDS
NTS 103-F 8 W

SCALE 1:1,000
METERS

8011

FIG. 1