

9695

GEOCHEMISTRY REPORT

RUMPLESTILTSKIN #1-5, CEASAR, NOT ALL THERE

WILLY'S FIRST MINERAL CLAIMS  
SKEENA MINING DIVISION  
NTS 103 F/8W

LATITUDE 53° 21'N LONGITUDE 132° 20'W

DATES OF WORK: July 7, 1981 to July 18, 1981

OWNER	Gordon G. Richards
OPERATOR	JMT Services Corp.
WRITTEN BY	Gordon G. Richards, P.Eng. James S. Christie, Ph.D.

October 26, 1981



## 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 Rennell 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. A follow-up programme was undertaken to provide more detailed geochemical and geological information on which to base possible drill targets (assessment report dated November 1980).

Results of the follow-up programme indicated a zone 400 metres long by 100 - 175 metres wide of strong alteration and anomalous arsenic and weak gold geochem, which 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. The current programme extended the reconnaissance geochemical sampling over portions of Rumpelstiltskin #2 and #5 mineral claims where no previous work had been done.

## 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 Rennell 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. Access to the northern part of the property is easily made via the Riley Creek road system.

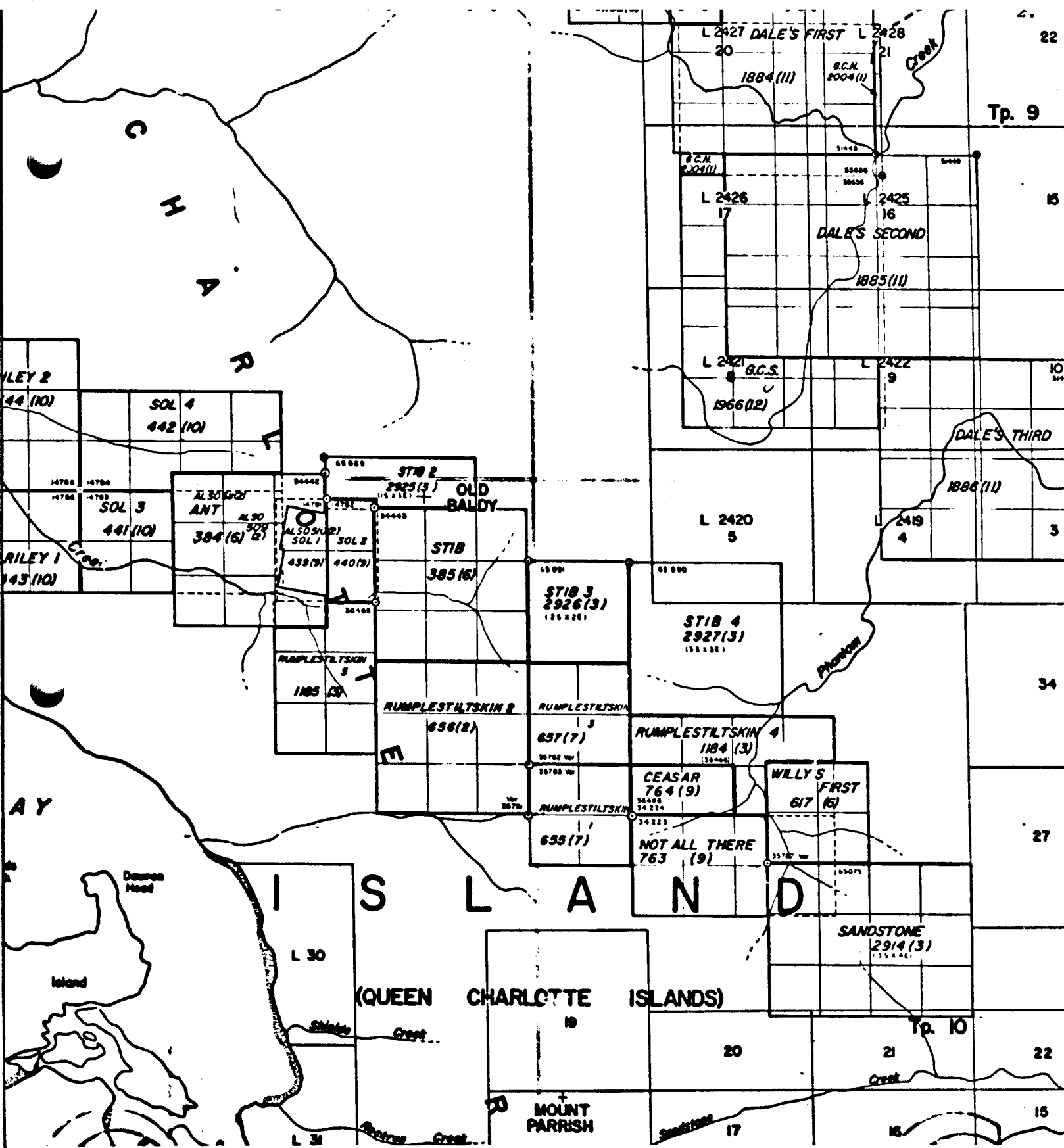
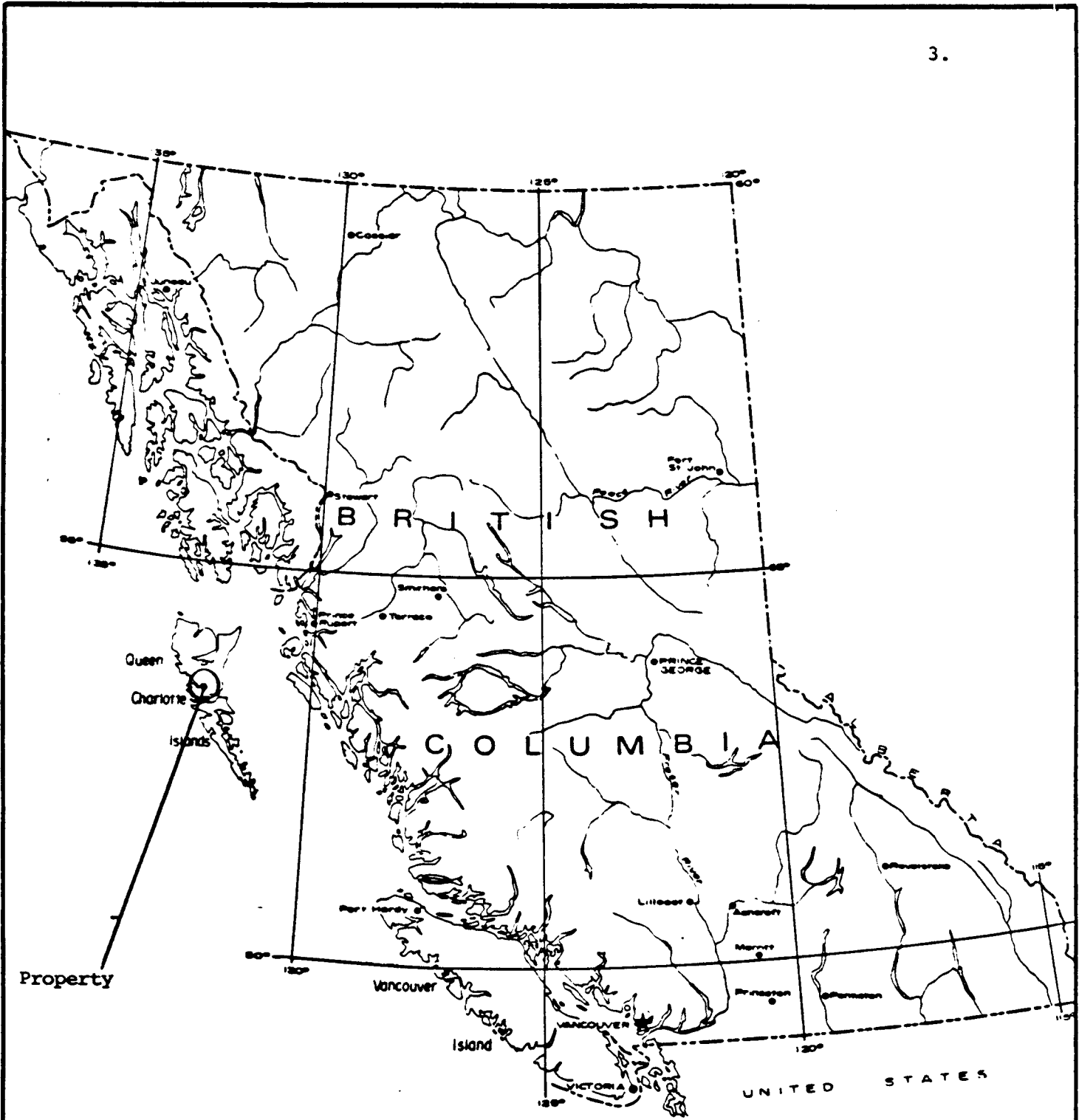


FIGURE 2 CLAIM MAP  
 RUMPLESTILTSKIN PROPERTY  
 SCALE 1:50,000



J M T SERVICES CORP.

RUMPLESTILTSKIN MINERAL CLAIMS

PROPERTY LOCATION MAP

FIGURE 1

SCALE

Mile 136 0 136 Mile

Prepared by:  
Drawn by:

Date:  
Revised:

NTS MAP AREA  
93 - E

DRAWING No.

## TOPOGRAPHY AND VEGETATION

Elevations on the claim group range from 900 feet above sea level along the upper drainage of Phantom Creek to 1900 feet 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 feet. Above this elevation creeks have not developed and outcrops are few.

## MINERAL CLAIMS

The property consists of the eight claims listed below:

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

## GEOLOGY

General - The geology is very much as described by Sutherland-Brown in B. C. Dept. of Mines Bulletin #54. Rocks of the Yakoun Formation of Jurassic age outcrop on the hill between the headwaters of Riley and Phantom Creeks. They are divisible into three mappable units. The lowermost unit is 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.

South of the headwaters of Phantom Creek rocks of the Longarm Formation of Cretaceous age outcrop down to the road or possibly as far as the east flowing tributary to Phantom Creek. They are calcareous siltstones and sandstones recognized in a few outcrops by the characteristic fossil *Inoceramus*.

The 2200 foot high hill at the east end of the property is underlain by porphyritic andesite of the Tertiary Masset Formation. Float of similar material is abundant on the hill south of the road above the area underlain by Longarm Formation. The east end of the hill north of the road is underlain by porphyritic andesite that also may be Masset Formation.

Small quartz feldspar porphyry dykes, not mapped, occur in the sedimentary part of the Yakoun Formation in two altered zones -- one by the road and the other at the northwest end of the property.

1. Structure - Two faults have been mapped on the property that roughly parallel the major Riley Fault System. The Longarm Formation is probably in contact with the Yakoun Formation along a major east-west or west northwest trending fault. The alteration pattern in this area also appears to be affected by such a fault that may be a control of mineralization. Bedding attitudes are steep, have a general northwest trend but change to a more northerly attitude in the Longarm Formation.
2. Alteration and Mineralization - Two clay-carbonate-silica alteration zones with accompanying disseminated and fracture pyrite occur on the property. Both zones contain a few quartz feldspar porphyry dykes. One zone, occurring along the northern boundary of the claims in a tuff-sediment sequence, is 300 metres wide by 800 metres long. The other zone, along the road in the southern part of the claims, occurs in a similar tuffaceous sedimentary package but also occurs in calcareous siltstone of the Longarm Formation. This zone has local tourmalinization and contains more pronounced zones of silicification. Carbonate has been destroyed in the silica zones.

This second alteration zone is 100 to 200 metres wide and 2000 metres long. The zone may be open to the west but weakens to the east.

#### GEOCHEMISTRY

General - The geochemical sampling described in this report was undertaken to evaluate an area that had not been previously sampled or explored. Soil lines were run 150 - 200 metres apart with a sample interval of 50 metres on lines approximately parallel to the contours. The sample locations are shown on Figures 3. Rock chips were taken where appropriate from outcrops showing signs of mineralization or alteration. In total, 167 soil and silt samples and 5 rock chip samples were collected and analysed for gold, arsenic and mercury. Soil samples were collected using rock hammers and scoops and augers where necessary from the B Horizon where possible, from depths of 1 cm to 50 cm. Stream sediments were collected from active creek beds using stainless steel scoops. Rock chip samples were made from 3 - 10 rock chips small enough to fit into standard gusset kraft sample bags. Gold, arsenic and mercury geochemical analyses were done on the -80 mesh fraction by Vangeochem Labs Ltd., 1521 Pemberton Avenue, North Vancouver, B.C. using the following procedures:

GOLD - Aqua Regia - ion exchange - Atomic Absorption

ARSENIC - Perchloric - nitric disolution - Colorimetric

MERCURY - Aqua Regia - flameless Atomic Absorption

The current samples 81-G-(364-443) and 81-JM-(125-214) have been added to Figure 3 which accompanied a previous report. These new samples are all located in the top left (northwest) corner of the map area on Rumplestiltskin 2 and 5 mineral claims.

Gold - Gold values obtained in the survey range from 1 to 30 ppb Au and averaged 10 ppb. Samples with gold values exceeding 20 ppb gold are considered anomalous. Only 7 samples returned values in the range of 20 - 30 ppb Au and these do not cluster or form a pattern.

Arsenic - Values obtained in the survey ranged from 2 to 60 ppm As, and averaged about 10 ppm. Ten samples with arsenic contents exceeding 20 ppm As are anomalous, but only sample G-415 - 60 ppm As is strongly anomalous. The anomalous values form a spotty inconsistent pattern and there is no apparent correlation with anomalous gold or mercury values.

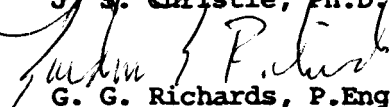
Mercury - Mercury values obtained in the survey range from 30 to 430 ppb Hg and averaged about 100 ppb. None of the values obtained are considered to be significantly anomalous.

#### CONCLUSIONS AND RECOMMENDATIONS

The current geochem sampling programme has failed to indicate an anomalous values of significance in the northwest part of the property on the Rumplestiltskin #2 and #5 mineral claims. The sample density is believed to be adequate to draw a conclusion that the occurrence of commercial gold mineralization within the area sampled is most unlikely. No further work is warranted or recommended in that area. It would be prudent to continue to hold the ground until evaluations of the known anomalies occurring on the southeastern part of the property and on the Courte property to the north have been completed.

Respectively submitted,

  
J. S. Christie, Ph.D.

  
G. G. Richards, P.Eng.

## STATEMENT OF COSTS

RUMPLESTILTSKIN #1,2,3,5 MINERAL CLAIMS (SWAMP GROUP)

## 1981 GEOCHEMICAL PROGRAMME

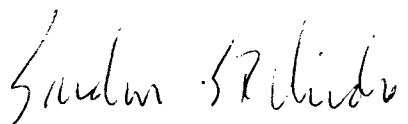
## GEOLOGIST

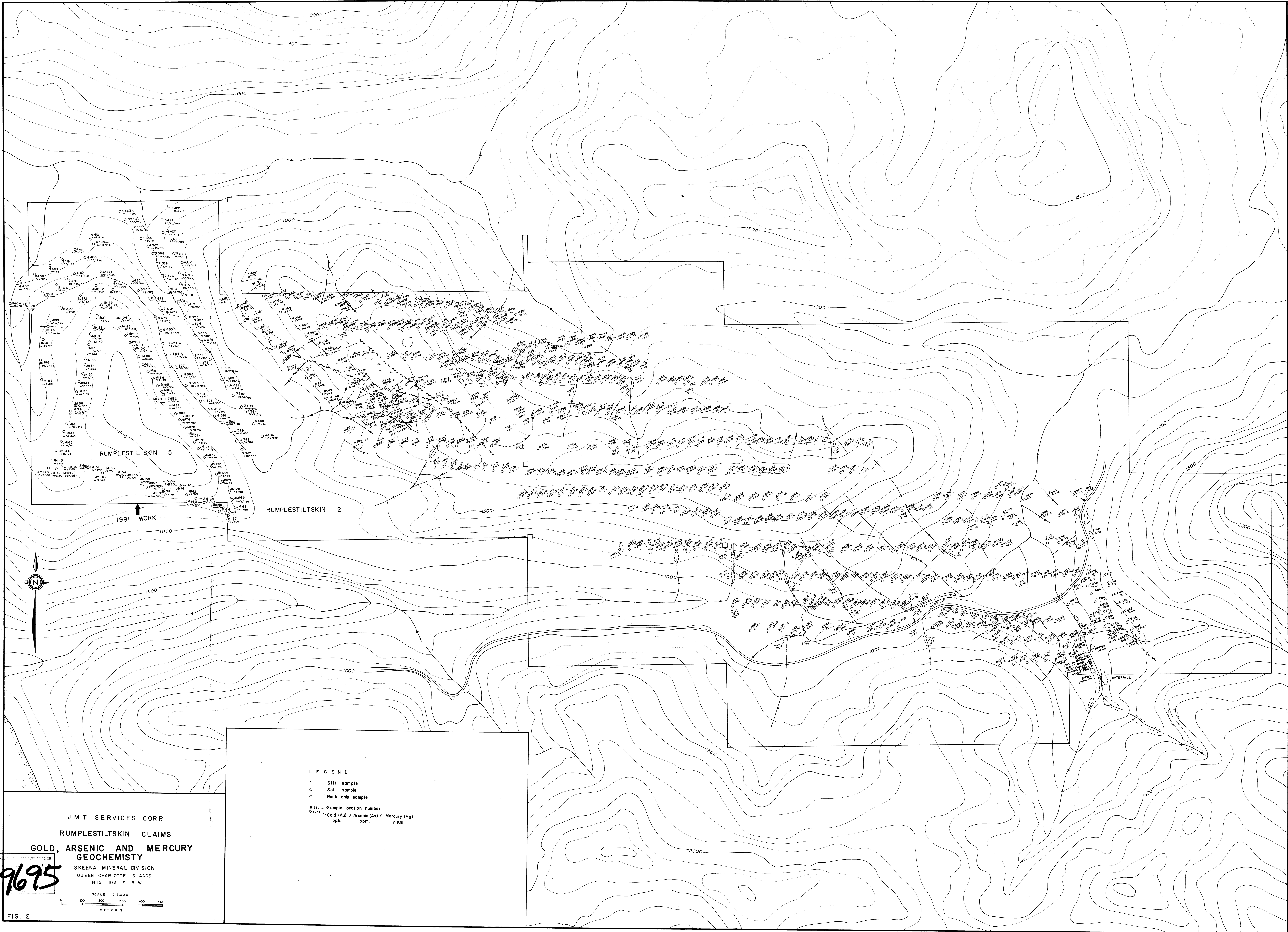
C. Harivel (Supervision)	July 7(½), 19(½)	1 day @ \$200	\$ 200.00
J. Mustard (Technician)	July 7-10	4 days @ \$110	440.00
P. Stuart (Technician)	July 7-10	4 days \$110	440.00
Meals - field -		9 mandays @ \$25	225.00
Motel - 2 rooms - 2 nights			180.00
Truck rental		4 days @\$60	240.00
Camp and field supplies - soil bags, string, flagging,			125.00
Freight - samples and equipment			50.00
Airefares - 2 - lway Vancouver-Sandspit			210.00
Report and drafting			800.00
Geochem - #6483 Vangeochem			<u>1,840.30</u>
			<u>\$4,750.00</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 6195 Lynas Lane, Richmond, B.C., V7C 3K8
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.



LEGEND  
 x Silt sample  
 o Soil sample  
 Δ Rock chip sample  
 R 887 Sample location number  
 O 6 25 Gold (Au) / Arsenic (As) / Mercury (Hg)  
 ppb ppm p.p.m.

JMT SERVICES CORP  
 RUMPLETILSKIN CLAIMS  
**GOLD, ARSENIC AND MERCURY  
 GEOCHEMISTRY**  
 SKEENA MINERAL DIVISION  
 QUEEN CHARLOTTE ISLANDS  
 NTS 103-F 8 W

9695

SCALE 1:5,000  
 0 100 200 300 400 500  
 METERS

FIG. 2