

GEOCHEMICAL REPORT

ON THE

LEVEL AND SQUARE MINERAL CLAIMS
SKEENA MINING DISTRICT

MORESBY ISLAND, QUEEN CHARLOTTE ISLANDS, B.C.

Latitude 52°15' N Longitude 131°7.5' W

NTS 103/B-3E,6E

Owner - J.S. Christie
3921 West 31st Avenue,
Vancouver, B.C.
V6S 1Y4

Operator -

Ventures West Minerals Ltd. #619-475 Howe Street Vancouver B.C.

Contractor -

J.M.T. Services Corp., 8827 Hudson Street, Vancouver, B.C. V6P4N1

by

W.A. Howell, J.M.T. Services Corp. 8827 Hudson Street, Vancouver, B.C. V6P 4N1

Jan.27th 1982.

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SUMMARY

Significant arsenic geochemical values with supporting gold geochemistry from an area underlain by Kunga and Longarm formations are located north of Carpenter Inlet on Moresby Island, Queen Charlotte Islands, B.C.

A program of geological mapping and geochemical sampling is proposed following the aquisition of additional adjacent ground.

INTRODUCTION

Reconnaissance sampling by JMT geologists during the 1979 field season revealed stream sediments anomalous for arsenic at the mouth of a creek on the north side of Carpenter Bay, southeast of Jedway on Moresby Island, Queen Charlotte Islands, B.C.

Subsequent sampling of the creek during the 1980 season confirmed and revealed more arsenic values within the drainage system.

Familiarity with regional geology and the geochemical expressions suggested the possibility of a favourable environment for a bulk tonnage, low grade gold deposit.

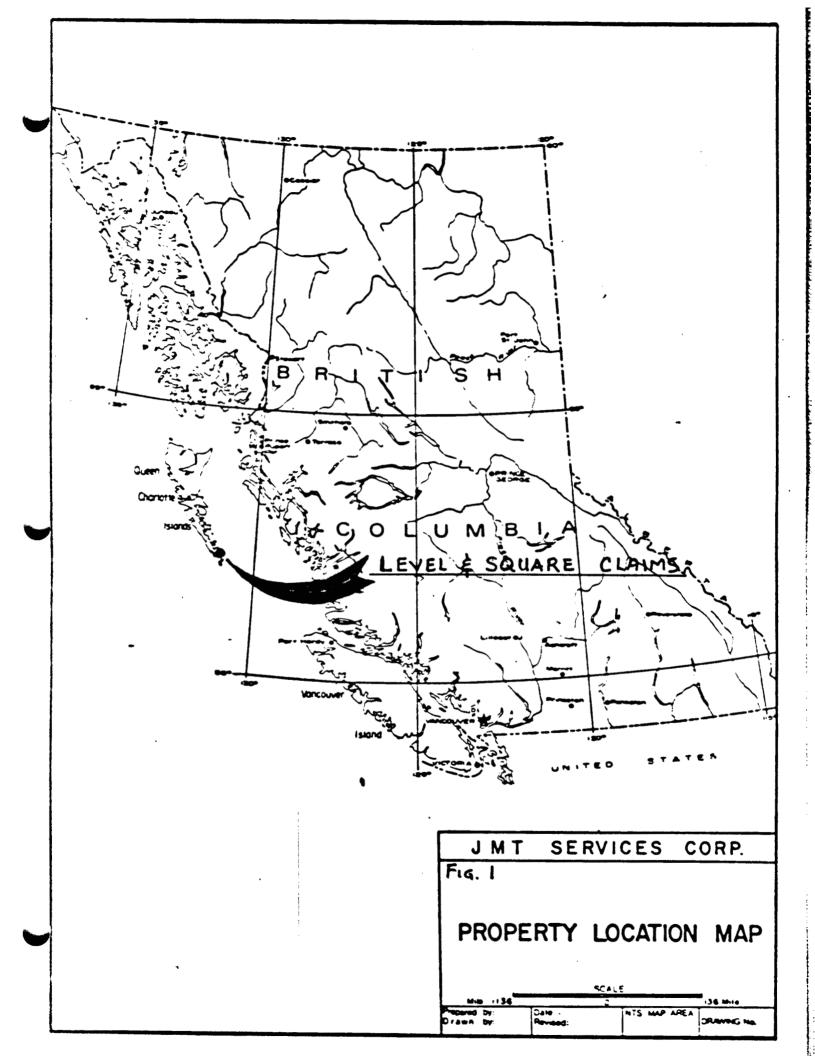
The Level and Square mineral claims were subsequently staked in early November of 1980.

The 1981 exploration program consisted of sampling along selected topographic contours at approximately 50 meter sample spacing. This method affords fairly uniform sample density across the downslope soil/sediment transportation direction. It ensures crossing most of the significant minor drainages and on a reconnaissance sampling program, enables the sampler to make optimum use of existing government published maps for location control. The sampling program yielded 291 soil samples, 72 silt samples and 7 rock chip samples. These samples form the data base for this report.

LOCATION AND ACCESS

The property lies 130 km south-southeast of Sandspit. The claims are located on the north shore of Carpenter Inlet on Moresby Island near its southern extremity.

Pacific Western Airlines provides daily jet service to Sandspit from Vancouver. Alternatively, Sandspit can be reached by flying Canadian



In addition, vehicular access is provided via British Columbia
Ferries from Prince Rubert to Skidegate Landing and inter-island ferry
to Moresby Island and Sandspit. Accommodation is available in Sandspit
at the Moresby Island Hotel.

Access to the property has been provided by Queen Charlotte Helicopters Ltd. from Sandspit.

Vancouver Island Helicopters also maintains base facilities in Sandspit.

Access can also be made by boat, although good protected beach landing sites are not plentiful.

Barge and tug access for heavy equipment is available on the Queen Charlotte Islands through Mitco Towing but often requires a combination of favourable weather and high tides for beaching. The area is exposed to south and south-easterly winds.

TOPOGRAPHY AND VEGETATION

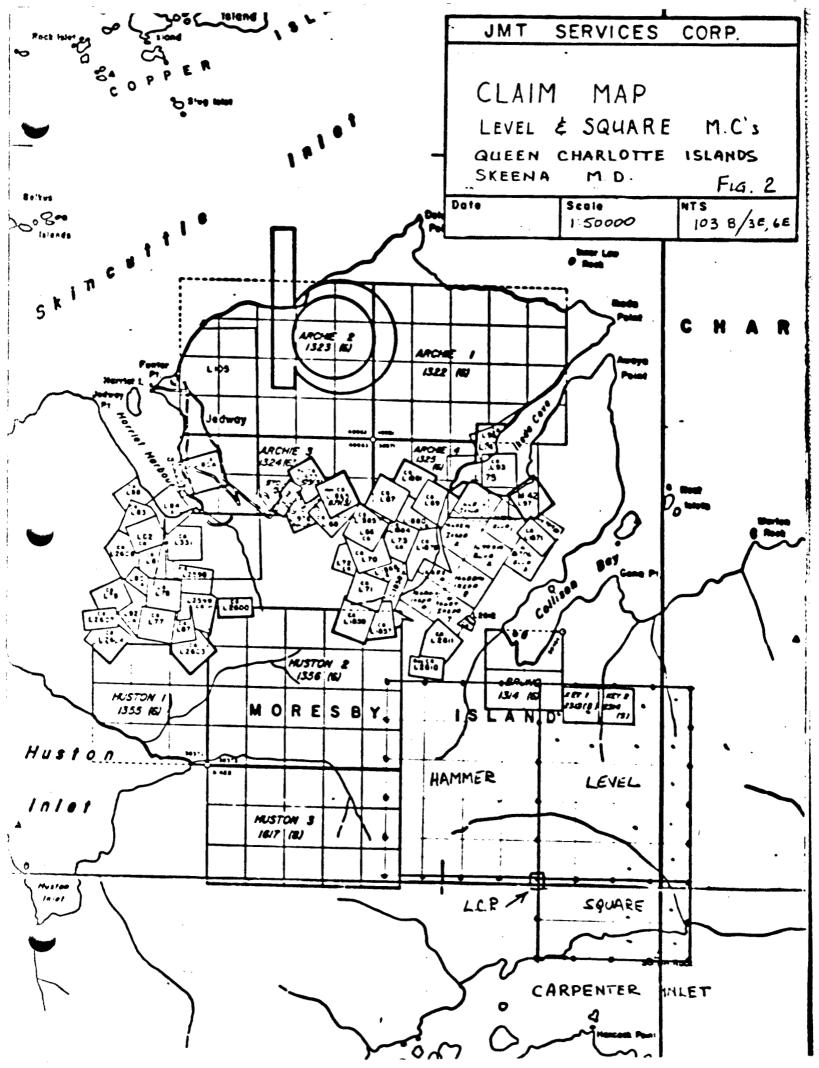
Topography is steep wooded hills from sea level to 1600 feet, (0-500m).

A short major creek crosses the claims and drains into the north side of

Carpenter Bay. Outcrops are common along the creek and steeper slopes.

Gentle slopes and the upper portions of the drainage have sparse to no outcropping bedrock.

Steeper slopes are covered with a mature spruce/hemlock forest and open or sparse underbrush. Ridges and moderately sloped hillsides are covered in a stunted cypress/hemlock forest cover which locally exhibits quite luxurious growth and physical progress while traversing is correspondingly impeded in these areas.



MINERAL CLAIMS

Name	Units	Record #	Record Date	Owner
Level	20	2686	Dec. 2,1980	J.S. Christie
Square	8	2687	Dec. 2,1980	J.S. Christie

GEOLOGY

The area is mapped regionally by A. Sutherland-Brown and illustrated in "Geology of the Queen Charlotte Islands", Fig 5, Bull. 54, published by the B.C. Dept. of Mines and Petroleum Resources, 1968. Dr. Sutherland-Brown shows the claim area to be underlain by rocks of the Kunga and Longarm formations. The Triassic-Jurassic Kunga formation is composed of massive grey limestones, calcareous argillite and flaggy black argillites. The Lower Cretaceous-Longarm formation is composed of calcareous siltstones and fine lithic greywackes, angular fine conglomerate and minor volcanic rocks.

Implicit in the presence of these two units would be their unconformable contact with each other. These lithologies are considered favourable hosts for bulk tonnage, low grade gold deposits. Preliminary geological notes made during the course of the geochemical surveys concur with Dr. Sutherland-Brown's mapping and suggest the Kunga rocks may be restricted to the upper portion of the formation, the flaggy black argillites and the flaggy black limestone.

GEOCHEMISTRY - GENERAL

The 1981 sampling program completed between June 4 and November 25, 1981, was designed to try to locate a source for the anomalies discovered by the earlier reconnaissance sampling and to determine if gold mineralization is associated with any such sources found. Samples were collected along sub-parallel lines using chain and compass techniques with barometer for elevation control. Soil samples were collected from 'B' horizon or the best approximation using a hand pick and stainless steel scoop. Approximately 500g/soil sample was collected from a depth of 10 to 25 cm. and placed in a marked, gussetted kraft sample bag. Silt samples were collected from active silts in the selected drainage, using stainless steel spoons and placed in gussetted kraft sample bags. Rock chip samples consisted of several chips from an outcrop, yielding a sample of 300 to 500 grams, which was placed in a kraft sample bag.

In this fashion, approximately 370 samples were collected and subsequently analysed for gold and arsenic, the values for which are presented on figures 3 and 4 appended to this report.

All analyses were performed by Chemex Labs Ltd., 212 Brooks-bank Avenue, North Vancouver, B.C.

Samples were dried and sieved, in the case of soil and silt samples, and crushed and pulverized in the case of rock samples. In each sample an appropriate quantity of -100 mesh material was used if available or-80 mesh if insufficient -100 mesh material was present.

Gold determinations were performed by a fire assay preconcentration followed by neutron activation analysis. Arsenic determinations were done by using a perchloric-nitric acid digestion and a standard atomic absorption hydride finish.

ARSENIC - GEOCHEMISTRY

Based on experience elsewhere in similar terrain, a value of 30 ppm arsenic was arbitrarily chosen as a threshold anomalous value for Arsenic. At this level of significance five zones of arsenic rich soils were outlined, mostly confined to the westerly and northerly portions of the sampled areas. North of the creek are zones I and II draining southerly. South of the creek are zones III and IV draining northerly and draining into Carpenter Inlet is zone V. (Zone III and V may be contiguous.) These zones are depicted on fig 4 (appended). Zone I and III are separated by only a single line of samples, one of which is included in zone III. The possibility of further detailed sampling linking zone I and III is a distinct possibility. This would yield a strong linear zone up to 1500 meters long by up to 500 meters wide striking northerly along the western claim boundary.

Zones II and IV are smaller zones lying adjacent on either side of the creek. Zone II has dimensions of approximately 400 x 200 meters. Should detailed sampling be able to link the zones a 400 x 600 meter anomalous zone would be outlined.

GOLD GEOCHEMISTRY

Gold does not present as discreet anomalous zones as does arsenic, however, several samples either within or adjacent to the arsenic anomalous zones show significant geochemical quantities of gold.

It is felt on the basis of local and regional experience that the 10 ppb level is a significant threshold response for gold. A silt sample adjacent to both zones I and II responded with 86 ppb Au.

Within zone III another silt sample yielded 145 ppb Au.

On the southwestern margin of the anomaly three other samples responded weakly for gold. A single sample on the eastern nose of the ridge lying south of the creek yielded the highest gold value in the survey, 567 ppb. This value is not supported by any adjacent samples, however, a small area immediately to the south is devoid of samples for about 200 meters.

DISCUSSION AND CONCLUSIONS

The preliminary surveys described in this report have shown arsenic to be geochemically concentrated primarily along the western portion of the claims and erratic and sporadic significant gold values to be spatially related to the arsenic enhanced areas.

Further detailed sampling is required to determine the presence of a single large zone or the multiplicity of small zones.

The presence of gold and the level of response in even a few samples, given their proximal association with arsenic is considered highly significant.

The possibility of this pattern being indicative of a high level or epizonal expression of a bulk low grade tonnage cannot be discounted. Future mapping and sampling must be done with this model in mind.

Even a cursory view of the distribution of geochemical values on the claims will point out the desirability of extending the data base to the west onto the adjacent "Hammer" mineral claim. The acquisition of ground to the west or the amalgamation of the claims under a single management or ownership would be most desirable.

RECOMMENDATIONS

14.

- Acquisition of ground to the west, ie. "Hammer" Mineral
 Claim, thereby putting the claims under one program manager.
- Geological mapping with a particular view to alteration in addition to rock type distribution.
- 3. Detailed geochemical soil and rock chip surveys to provide continuity of data between currently defined areas and to limit geochemical expression to the north and to the west.

STATEMENT OF COSTS

FROM J.M.T. INVOICE # 81-210-075

J.S. Christie July 14	1 day @ 200		100.00	
Geochem Costs - Chemex	#111862	733.90		
	111860	568.35		
	112170	8.95		
	111953	2,226.65	,	
	111959	31.05		
		3,568.90		
Service Charge		356.89	3,925.79	4,025.79
-				•
FROM J.M.T. INVOICE # 81-210	-051			•
	$\frac{1}{2}$), 6 ($\frac{1}{2}$), 7 ($\frac{1}{2}$), $\frac{1}{2}$), 13($\frac{1}{2}$), 14($\frac{1}{2}$), 16, 17.			
total	6 days @ 200	1,200.00		
	1 day @ 200	200.00		
	1 day @ 200	200.00		
	20 7 days @ 125	875.00		
A. Muir June 14-	20 7 days @ 100	700.00	3,175.00	
Meals - field - 21 mand	-	525.00		
Airfares - 2 oneway San	_			
	@ 108	216.00		
SBX-11 rental - 1 week		50.00		
Truck rental - 1 day		50.00		
Camp rental - 1 week		50.00	891.00	4,066.00

DISBURSEMENTS

Queen Charlotte Helicor	oters # 3741 3754	993.93 910.00		
	3755	326.20		
	3776	362.44		
	3781	716.50	3,309.07	
Chemex Labs	111861	10.35	,	
	111863	31.05	41.40	
Hudson Bldg. Supplies			307.82	
T. Oliveric - Drafting			105.00	
P.W.A. Freight	31545	79.17		
	06835	20.70		•
	31851	26.76		
	27324	22.82	149.45	
B.C. Telephone Co.		8.95		
		20.43	29.38	
			3,942.12	
Service Charge			394.21	4,336.33
				-
REPORT				1,000.00
				\$13,428,12

STATEMENT OF QUALIFICATIONS

I, WILLIAM A. HOMELL, do hereby certify that:

- I am a professional geologist working in British Columbia and residing at 10611 Ainsworth Crescent, Richmond, B.C. V7A 3V5
- I am a graduate of the University of British Columbia,
 Bachelor of Science (Geology) 1971
- 3. I have been employed in the mineral exploration industry since 1967 and have practiced my profession as a geologist since 1971.
- 4. I am a member of the Geological Association of Canada.
- This report is based on my personal knowledge of the district and the mapping and sampling done on the property.

William A. Howell

