PRELIMINARY EVALUATION
OF THE
DUCKLING CLAIM
INCLUDING
PROSPECTING, SOIL GEOCHEMISTRY,
ROCK GEOCHEMISTRY

OMINECA MINING DIVISION

N.T.S. MAP SHEET 93N/14

LATITUDE 55°50'N
LONGITUDE 125°19'W

OWNER/OPERATOR:
DIMAC RESOURCE CORP.

REPORT BY:
P.A. RONNING

DATE OF REPORT:
AUGUST 21, 1981

Table of Contents

Maps

1. INTRODUCTION

The Duckling Claim is located about 40km west of Germansen Landing in north central British Columbia. It is about 5km north of the Omineca River and immediately east of Duckling Creek, straddling a ridge with a height of 1,769 meters. The topography is variable from gentle hillsides to steep talus slopes. Treeline is at about 1,550 meters elevation. Timber and underbrush vary from thin on the ridge to dense towards the west in the valley of Duckling Creek.

The Omineca Mining Road passes about 5km east of the property. There is an old 4 wheel drive trail from the road to the claim, but at present it is impassable due to windfalls and washouts. For the present examination the property was reached by helicopter.

Initial work on this property was done by Donna Mines beginning in 1970. Their work included geochemical soil survey, extensive trenching and at least two diamond drill holes. They were looking at the Duckling area primarily as a copper prospect. Assays as high as 2.7% Cu, 0.7 oz/ton Ag and 0.01 oz/ton Au over an 8 foot width were reported from the Discovery Showing, and a grab sample in another area apparently assayed 0.12 oz/ton Au and 0.2 oz/ton Ag.

In March, 1981 Dimac Resource Corp. staked the Duckling Claim with the intention of re-evaluating the property as a gold prospect. The writer visited the claim from August 6th to 10th, 1981 to examine the area and do a brief sampling program to determine whether interesting gold values are present. Thirteen rock chip samples were collected from outcrops and old trenches and 58 soil samples were collected from the areas of the two main showings.

SCALE

Km 100 0 100 200 300 400 Km

Miles 100 50 0 100 200 Miles

DIMAC RESOURCE CORP.
VANCOUVER, B C

LOCATION MAP

DUCKLING CLAIM

DATE Aug 1981

DWG NUMBER 1

2. General Geology

The Duckling Claim is located on a contact zone between Upper Triassic to Jurassic volcanics of the Takla Group and rocks of the Upper Jurassic to Lower Cretaceous Hogem Batholith. On a regional scale the Takla Group consists of andesitic flows and breccias with minor basalt, pyroclastics and sediments. Rocks of the Hogem Batholith are primarily granodiorites and granites with lesser amounts of diorite, monzonite, syenite and minor mafic to ultra mafic rocks.

The present work on the claim did not include any comprehensive geological mapping, but from the prospecting and sampling it is apparent that Takla Group rocks are primarily basaltic here while the intrusions are dominantly monzonitic to syenitic. In the contact zone is a dark hybrid rock (mentioned by Chisholm in Assessment Report No. 3537) that is difficult to classify as to intrusive or extrusive origin, though its composition would be generally dioritic.

Volcanics on the Duckling Claim contain abundant though erratic epidote in the form of veinlets, stringers, pods and patchy replacement of the original minerals. Potassic alteration, in the form of pink feldspar, is widespread but minor within the volcanics. With the exception of the showings themselves, sulphides are rare, though minor pyrite may accompany the epidote.

In restricted areas within the hybrid rocks or the intrusions themselves, potassic alteration is intense. The largest such area is near the highest peak on the property in the center of the claim, where a zone of hybrid rock in a contact zone about 30 meters wide contains about 50% pink potassic feldspar as veins and envelopes several centimeters wide around fractures. There is a small malachite/azurite/neotocite

showing within the altered zone (sample 71869 B; for location see inset map on Sheet A) but otherwise mineralization is conspicuously absent.

3. Mineralization

There are two main areas of mineralization, the Disvovery Zone and the Timber Showing.

The Discovery Zone (see Sheet A) is situated near the south edge of the claim, on the south-facing slope of a saddle between the main peak on the north and a smaller one on the south. The saddle is formed by an east-west trending topographic depression.

The Discovery Showing is exposed in 3 trenches (sites of samples 71858 B, 71859 B, 71860 B; see Sheet A). The showing consists of highly epidotized and pyritized basalt in a shear zone. The alteration and mineralization appear to follow the shearing in a generally east-west direction. In the first (easternmost) trench the epidote pyrite zone is about 10cm wide in the east wall but in the west wall has thickened to 1m of epidotized, pyritized and fractured rock. There are patches of massive pyrite and overall the rock contains about 10%.

In the next trench, 5 meters west, the pyritized zone is still approximately 1 meter wide, containing about 25% pyrite with minor bornite and covellite in a highly fractured rock.

In the third trench, 7 meters farther west, the poddy, erratic nature of the mineralization is exposed. In the east wall, the pyritized rock occurs in two zones, each about 10cm wide. They are separated by 1.5 meters of poorly mineralized rock.

Yet in the west wall of the same trench is a single pyritized zone about 2.7 meters wide.

Rocks adjacent to the highly pyritized material may be weakly pyritized, but more than a couple of meters away from the main mineralization the total amount of sulphides becomes insignificant. Malachite occurs sporadically as fracture coatings within a meter or two of the main pyrite mineralization. The pyrite probably contains very fine chalcopyrite.

Other trenches in the Discovery Zone and west between the Discovery Zone and Timber Showing encountered no comparable mineralization. Many of them did not expose bedrock. In those which did the rock consists of various types of basalt and occasional andesite. Epidote alteration is common, though its intensity is highly variable. Pink potassic feldspar alteration is widespread but very minor. Specks of pyrite can usually be seen, particularly associated with epdiote, but its overall quantity is insignificant.

The Timber Showing is about 1,000 meters west and slightly north of the Discovery Zone (see Sheet B). It occurs on a steep, heavily timbered west facing slope in a westward extension of the same east-west trending topographic low as the Discovery Zone. Rocks are exposed by a series of 8 interconnected trenches zig-zagging down the hillside.

Mineralization in the Timber Showing is very similar to that in the Discovery Zone. The main showing is in the third trench from the east (sample loc. 71865 B) where there is a 3 meter wide zone of semi-massive sulphides. The overall sulphide content is about 20%, chiefly pyrite but with some chalcopyrite usually present. Selected hand specimens can show up to 50% sulphides with roughly equal amounts of pyrite and chalcopyrite. The gangue is heavily altered basalt with

calcite, epdiote and some argillic material. Malachite may appear coating fractures in rocks within a couple of meters of the main mineralization.

In the next trench upslope (to the east) is a 2 meter wide zone containing about 10% sulphides, as pyrite with minor chalcopyrite. This may correspond to the more massive mineralization in the main part of the showing. Otherwise, the writer saw no other mineralization of interest in the Timber Showing. There is no indication of widespread disseminated mineralization.

The mineralization in both the Timber Showing and the Discovery Zone appears to follow shears, and the two showings probably occur in the same east-west trending shear zone, marked by a topographic low. Both showings appear to be "poddy", pinching and swelling erratically.

Two other minor and unrelated showings were found. One is in a trench on the ridge near the east edge of the claim (sample location 71868 B; see inset map on Sheet A). The trench exposes monzonites within which a 1m side zone contains 10% pyrite. The other is the previously mentioned malachite-azurite-neotocite occurrence within a zone of intense potassic alteration in hybrid contact zone rocks (sample location 71869 B; see inset map on Sheet A). The visible part of this occurrence is 0.5 meters in diameter. The bottom is hidden by talus so its real size is unknown.

4. Rock Geochemistry

Thirteen rock chip samples were collected, 6 from trenches in the Discovery Zone, 4 from trenches on the Timber Showing and the other 3 scattered around the claim. Their locations are shown on Sheets A and B and the claim map inset on Sheet A.

All the samples were analyzed geochemically for gold and silver, and most for copper. Analytical results are tabulated on page 7.

As expected, those samples collected from exposures of the highly epidotized and pyritized rock in the shear zone on the Discovery Showing (71858 B, 71859 B and 71860 B) are copper-rich, all containing greater than 10,000 ppm copper. All three also contain interesting silver values (50.0, 20.0 and 18.6 ppm Ag, respectively). Gold values are poor.

Sample number 71861 B comes from a pyritized boulder, one of several in a trench on the Discovery Zone that contains little rock in place. It contains 850 ppm copper but no interesting gold or silver.

Other samples from the Discovery Zone are uninteresting.

At the Timber Showing, the best copper response came not from the semi-massive sulphide mineralization but from an adjacent 2m wide malachite zone (sample 71864 B). Surprisingly, this zone also contains 25 ppm silver. The only sulphide noted in this material was some pyrite associated with seams of black amphibole.

Sample No.	Location	Width	Method	Rock	Cu (p.p.m.)	Au (p.p.b.)	Ag (p.p.m.)
71857 B	cat trail	boulder	chip	monzonite (ep.+, py.)	>10,000	360	29.0
71858 B	Discovery	1m	chip	basalt (ep.+, py.+)	>10,000	470	50.0
71859 B	Discovery	1m	chip	basalt (py.+, bo. co.)	>10,000	480	20.0
71860 B	Discovery	2.7m	grab	basalt (py.+)	>10,000	520	18.6
71861 B	Discovery	boulder	chip	basalt (py.+, cp.)	850	20	1.7
71862 B	Discovery	boulder	chip	argillic alteration		≤10	0.8
71863 B	Discovery	boulder	chip	diorite (py.+)		20	1.7
71864 B	Timber	2m	chip/channel	basalt, (malachite)	>10,000	360	25.0
71865 B	Timber	3m	chip/channel	semi-mass. sulphide	350	10	1.1
71866 B	Timber		1 chip	andesite (py.)		1220	30.0
71867 B	Timber	7m	grab	basalt (ep., py.-)		<10	1.1
71868 B	ridge	1m	chip	monzonite (py.+)		160	1.7
71869 B	peak	0.5m	chip	malachite, azurite	205	<10	0.6

The semi-massive pyrite in the Timber Showing only contains 350 ppm copper with negligible gold and silver (sample 71865 B).

One surprise from the Timber Showing is sample 71866 B which comes from a small trench exposure of andesite. The rock is fresh and not heavily sheared but does contain about 2% pryite. The sample is a single chip and was not analyzed for copper, but did contain 30.0 ppm silver. It is about ½m away from a 2 - 3m side zone that contains about 10% sulphides.

The only other sample of much interest was 71857 B, a chip from a boulder found beside an old cat trail (see Sheet A). The boulder is heavily epidotized and contains about 3% finely dissimenated sulphides. The sulphides were originally identified as pyrite but the analytical result (>10,000 ppm Cu, 29.0 ppm Ag) indicates they must be mostly chalcopyrite.

In general the sample results show that mineralization in the Discovery Zone and Timber Showing contains grades in copper and silver which would be interesting if a sufficiently large tonnage existed with a mineable width. However the known mineralization occurs in "pods" 3m or less wide that pinch and swell erratically. To give the claim any real potential, mineralization that is more widely and regularly distributed is needed.

5. Soil Geochemistry

Donna Mines did an extensive soil geochemistry survey over the Duckling Claims in 1970. However, their samples were not tested for gold. The object of the present survey was to determine whether or not high gold concentrations occur in soils near the Discovery Zone and Timber Showings. It is not intended as a complete survey, merely as a preliminary check. Forty-five samples were collected at 25 meter intervals along an east-west line across the Discovery Zone and thirteen

collected at similar intervals on a line across the Timber Showing, following a 260° azimuth down the fall line.

If the soil horizons were sufficiently well defined, samples were collected from the B horizon. However, many of the samples were collected on rocky hillsides where the soil is unstable and horizons have not developed. Records were kept of the type of soil sampled.

Analytical results are tabulated in appendix 2. Sample locations appear on Sheets A and B in pocket.

As expected, copper concentrations in soils are quite high in the vicinity of the Discovery Zone, in the 100 ppm to 400 ppm range. They are not, however, accompanied by high gold values. Most gold analyses showed less than 10 ppb. In the immediate vicinity of the exposed mineralization in the Discovery Zone one soil sample contained 80 ppb Au and another 20 ppb Au. While anomalous, these can probably be accounted for by the background levels of gold in the semi-massive sulphide mineralization.

Again as expected the Timber Showing has high copper concentrations in soils, ranging as high as 850 ppm. The showing is also marked by a string of five high gold analyses, ranging from 20 to 80 ppb Au. Again these can probably be accounted for by the gold levels in the exposed rocks, one sample of which contained 1,220 ppm.

In view of the high levels of silver found in rocks from both the Disovery Zone and Timber Showing, it would be useful to have the soil samples run for silver.

6. Summary and Conclusion

The Duckling Claim is staked in a contact zone where dioritic to syenitic intrusions of the Hogem Batholith intrude basaltic volcanics of the Takla Group. There is widespread but sporadic alteration of intrusive rocks and volcanics near the contact, with epidote being the most common alteration mineral. Potassic alteration in the form of pink feldspar is generally weak but locally very intense. There is very little sulphide mineralization associated with the potassic alteration.

Two main showings, the Discovery Zone and the Timber Showing, occur within an east-west shear zone that trends across the southern edge of the property. The showings consist of pods of semi-massive sulphides, primarily pyrite with some chalcopyrite, bornite and covellite. These pods follow the shear zone, pinching and swelling erratically. They may be up to 3 meters wide but do not appear to persist for more than about 20 meters in length.

There is no significant "halo" of disseminated mineralization in either of the showings. They do not have enough size or continuity to have much economic potential.

Geochemical analyses of rocks show predictably high concentrations of copper in the semi-massive mineralization or adjacent malachite-rich rocks. Unfortunately gold concentrations are low and the property appears to have little potential as a gold prospect. Silver concentrations, however, are quite high, with 5 results in the 20 ppm to 50 ppm range.

Even with these high silver concentrations, the known showings are too restricted in size to have much potential. However it would be useful to test the soil samples for silver and to do some further soil sampling on the property. A sample grid

should be laid out to cover the area from the Discovery Zone to the Timber Showing, including about 500m north and 500m south of the showings. Samples should be tested for copper, gold and silver.

If soil sample results suugest the presence of silver in zones other than the known Discovery and Timber showings, then more exploration work would be called for. If the silver appears to be restricted to the known showings, then it is not extensive enough to justify more work.

A P P E N D I X 1

Results of Soil Sampling

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212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: (604)984-0221
TELEX: 043-52597

CERTIFICATE OF ANALYSIS

TO : DIMAC RESOURCES CORP.
701 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5

CERT. # : A8113300-001-A
INVOICE # : I8113300
DATE : 25-AUG-81
P.O. # : NONE
HB

Duckling.

Sample description	Prep code	Cu ppm	Au -(AA) ppb				
0W	201	23	30	--	--	--	--
50W	201	55	<10	--	--	--	--
75W	201	36	<10	--	--	--	--
125W	201	137	<10	--	--	--	--
150W	201	102	<10	--	--	--	--
175W	201	55	<10	--	--	--	--
200W	201	76	<10	--	--	--	--
225W	201	53	<10	--	--	--	--
250W	201	40	20	--	--	--	--
275W	201	62	<10	--	--	--	--
300W	201	19	20	--	--	--	--
325W	201	23	10	--	--	--	--
350W	201	21	<10	--	--	--	--
375W	201	26	<10	--	--	--	--
400W	201	44	<10	--	--	--	--
425W	201	22	<10	--	--	--	--
450W	201	36	<10	--	--	--	--
475W	201	55	<10	--	--	--	--
500W	201	30	<10	--	--	--	--
525W	201	127	<10	--	--	--	--
550W	201	93	<10	--	--	--	--
575W	201	44	<10	--	--	--	--
600W	201	61	<10	--	--	--	--
625W	201	112	<10	--	--	--	--
650W	201	220	<10	--	--	--	--
675W	201	350	<10	--	--	--	--
700W	201	270	<10	--	--	--	--
725W	201	109	<10	--	--	--	--
750W	201	265	20	--	--	--	--
775W	201	380	<10	--	--	--	--
800W	201	141	<10	--	--	--	--
825W	201	76	80	--	--	--	--
850W	201	97	20	--	--	--	--
875W	201	385	<10	--	--	--	--
900W	201	270	<10	--	--	--	--
925W	201	102	<10	--	--	--	--
950W	201	141	<10	--	--	--	--
975W	201	113	<10	--	--	--	--
1000W	201	184	<10	--	--	--	--
1025W	201	47	20	--	--	--	--

Certified by .[illegible signature].

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V6C 1A5

CERT. # : A8113300-002-A
INVOICE # : I8113300
DATE : 25-AUG-81
P.O. # : NONE
HB

Sample description	Prep code	Cu ppm	Au -(AA) ppb				
1050W	201	62	<10	--	--	--	--
1075W	201	163	<10	--	--	--	--
1100W	201	71	<10	--	--	--	--
1125W	201	41	<10	--	--	--	--
1175W	201	106	<10	--	--	--	--
1725W	201	105	20	--	--	--	--
1750W	201	119	<10	--	--	--	--
1775W	201	270	60	--	--	--	--
1800W	201	850	40	--	--	--	--
1825W	201	500	80	--	--	--	--
1850W	201	360	20	--	--	--	--
1875W	201	245	40	--	--	--	--
1900W	201	290	<10	--	--	--	--
1925W	201	215	<10	--	--	--	--
1950W	201	410	<10	--	--	--	--
1975W	201	159	<10	--	--	--	--
2000W	201	171	<10	--	--	--	--
2025W	201	95	<10	--	--	--	--

Certified by .....

A P P E N D I X 2

Analytical Procedures

GEOCHEMICAL PROCEDURES

1. Geochemical samples (soils, silts) are dried at 80°C for a period of 12 to 24 hours. The dried sample is sieved to -80 mesh fraction through a nylon and stainless steel sieve. Rock geochemical materials are crushed, dried and pulverized to -100 mesh.

2. A 1.00 gram portion of the sample is weighed into a calibrated test tube. The sample is digested using hot 70% $HClO_4$ and concentrated HNO_3. Digestion time = 2 hours.

3. Sample volume is adjusted to 25 mls. using demineralized water. Sample solutions are homogenized and allowed to settle before being analysed to atomic absorption procedures.

4. Detection limits using Techtron A.A.5 atomic absorption unit.

	Copper	- 1 ppm
	Molybdenum	- 1 ppm
	Zinc	- 1 ppm
*	Silver	- 0.2 ppm
*	Lead	- 1 ppm

* Ag & Pb are corrected for background absorption.

5. Elements present in concentrations below the detection limits are reported as one half the detection limit. i.e. Ag - 0.1 ppm.

TUNGSTEN:

0.50 gm sample is fused with potassium bisulfate and leached with hydrochloric acid. The reduced form of tungsten is complexed with toluene 3,4 dithiol and extracted into an organic phase. The resulting color is visually compared to similarly prepared standards.
Detection limit - 2 PPM

Rock chips - Samples are crushed, split in a Jones riffler and pulverized in a puck and ring pulverizer. Coarse reject is discarded. A pulp of approximately 100 gm is retained.

F.A. - A.A. GOLD COMBO METHOD

For low grade samples and geochemical materials 10 gram samples are fused with the addition of 10 mg of Au-free Ag metal and cupelled. The silver bead is parted with dilute HNO_3 and then treated with aqua regia. The salts are dissolved in dilute HCl and analyzed for Au on an atomic absorption spectrophotometer to a detection of 5 ppb.

COST STATEMENT

Wages:	
G. Stewart - August 4 to August 8, 1981	
(includes travel time) 4½ days @ $80.00/day	$ 360.00
P. Ronning - August 4 to August 10, 1981	
(includes travel time) 7 days @ $120.00/day	840.00
Room & Board:	
Motel - August 4, 2 men	27.56
Restaurant - August 4, August 5, 1981	25.10
Groceries (pro-rated by days spent on claim)	156.00
Transporation:	
Truck - August 4 to August 10, 1981	
7 days @ $25.00/day	175.00
420 km @ $.12/km	50.40
Gas	40.00
Helicopter	1,479.00
Analyses:	
Soil Samples - 58 samples for Cu, Au, @ $6.85	397.30
Rock Samples - 8 samples for Cu, Au, Ag @ $9.00	72.00
5 samples for Au, Ag @ $8.25	41.25
Report Preparation:	
Writing and drafting - P. Ronning	
2 days @ $120.00/day	240.00
Typing	100.00
TOTAL	$4,003.61

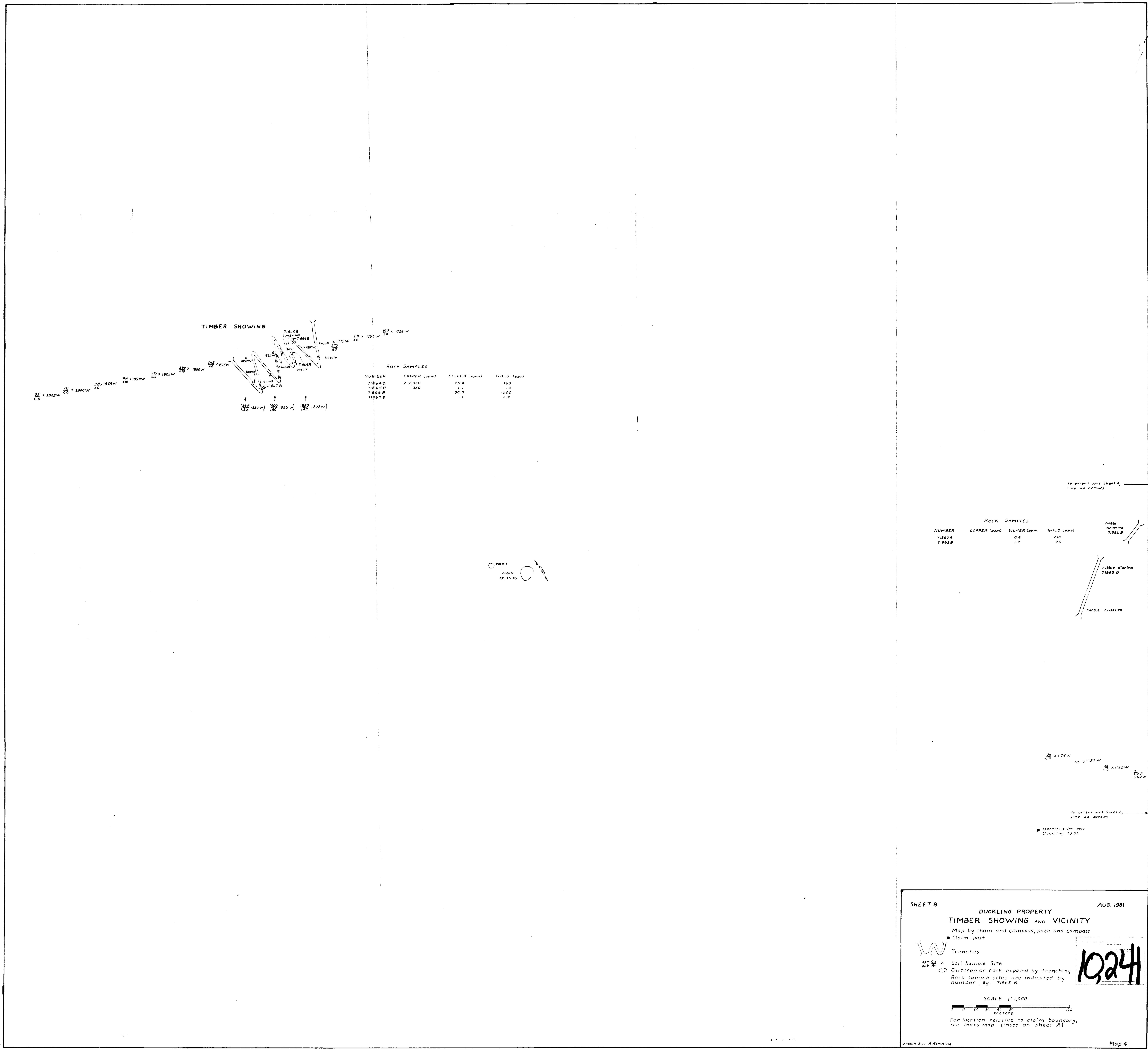
Statement of Qualifications

I, Peter A. Ronning of Sechelt, British Columbia, hereby certify that:

1. I am a graduate of the University of British Columbia, having received the degree of Bachelor of Applied Science in Geological Engineering in 1973.
2. I have worked as a geologist in mineral exploration since 1973.
3. The work described in this report on the Duckling Claim was carried out by myself or under my supervision.
4. I have no direct personal financial interest in the Duckling Claim or in Dimac Resource Corp.

P. Ronning

Peter A. Ronning
10 September, 1981
Kingston, Ontario



ROCK SAMPLES

NUMBER	COPPER (ppm)	SILVER (ppm)	GOLD (ppb)
71864B	>10,000	25.0	360
71865B	350	1.1	10
71866B		30.0	1220
71867B		1.1	<10

ROCK SAMPLES

NUMBER	COPPER (ppm)	SILVER (ppm	GOLD (ppb)
71862B		0.8	<10
71863B		1.7	20

SHEET B AUG. 1981

DUCKLING PROPERTY

TIMBER SHOWING AND VICINITY

Map by chain and compass, pace and compass

■ Claim post

Trenches

ppm Cu / ppb Au x Soil Sample Site

Outcrop or rock exposed by trenching

Rock sample sites are indicated by number, eg. 71865 B

SCALE 1:1,000

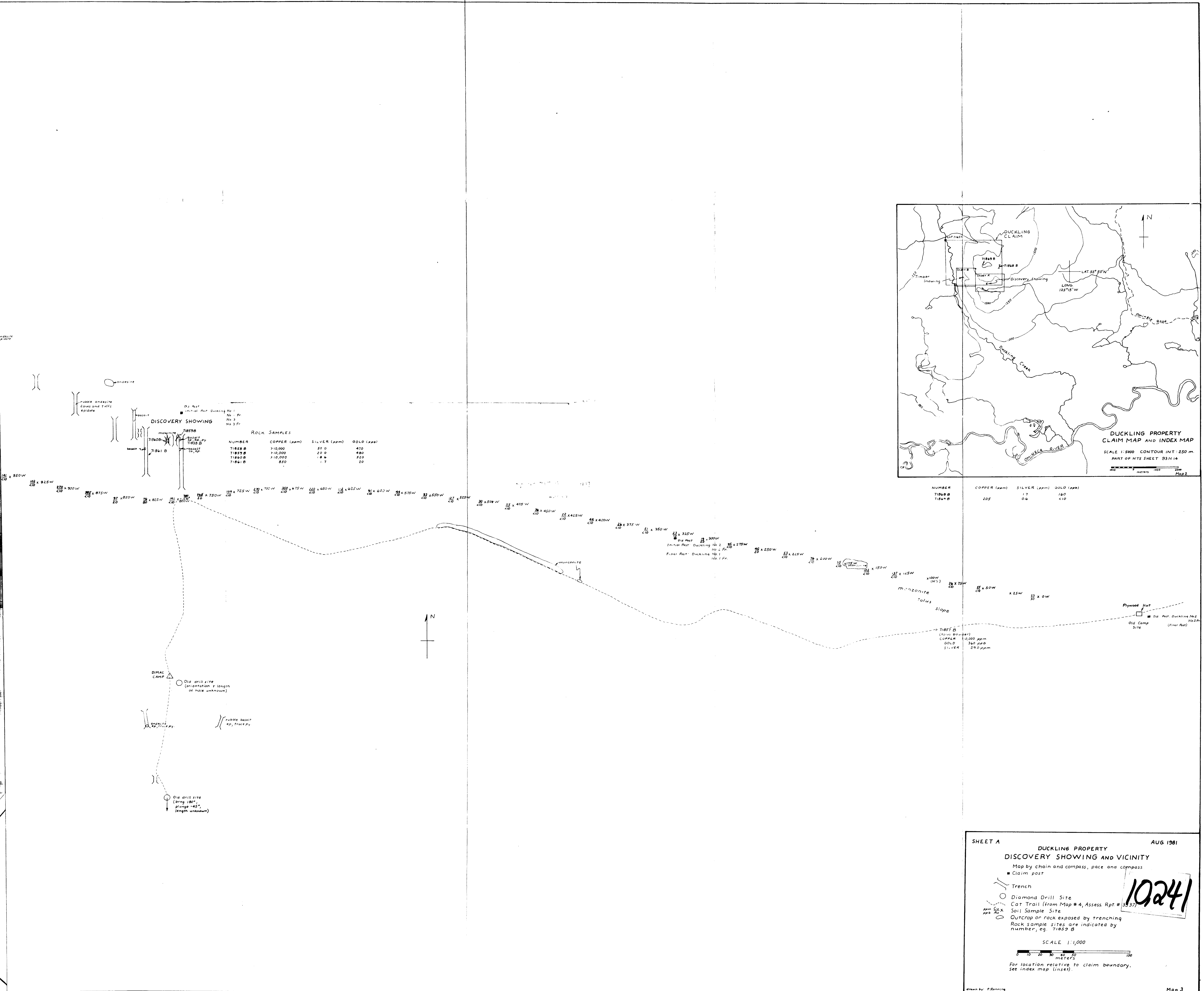
0 10 20 30 40 50 100 meters

For location relative to claim boundary, see index map (inset on Sheet A).

10,241

drawn by: P. Ronning

Map 4



ROCK SAMPLES

NUMBER	COPPER (ppm)	SILVER (ppm)	GOLD (ppb)
71858 B	>10,000	50.0	470
71859 B	>10,000	20.0	480
71860 B	>10,000	18.6	520
71861 B	850	1.7	20

NUMBER	COPPER (ppm)	SILVER (ppm)	GOLD (ppb)
71868 B		1.7	160
71869 B	205	0.6	<10