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Assessment Report On Geological, Geochemical, Geophysical & Diamond Drilling Work On The Following Claims

Clone 1-2, 3-4 321440-1, 340012-13 Port 17-21....324516-324520 Red 12, 17....323646, 323649 Edwardio 10...341272 Sut 2-3...34095-96 White 1-3...341097-99 Gulag 1-4....342017-020

(Part of the "Clone" property)

Statements Of Exploration #3111578

located

20 Km Southeast Of Stewart, British Columbia Skeena Mining Division

55 degrees 48 minutes latitude 129 degrees 47 minutes longitude

N.T.S. 103P/13W

Project Period: July 10 to Oct. 1, 1997

On Behalf Of Teuton Resources Corp. Vancouver, B.C.

Report By

E.R. Kruchkowski, B.Sc., P. Geol. January, 1998



JAN 1 9 1998 Gold Commissioner's Office VANCOUVER, B.C.

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SUMMARY

The Clone property, owned by Teuton Resources Corp. and Minvita Enterprises Ltd. is located about 20 kilometers southeast of Stewart, British Columbia in the Skeena Mining Division. The property covers an area of Hazelton pyroclastic volcanic and sedimentary rocks in the vicinity of a variety of intrusive plutons associated with the main Coast Range Batholith.

The property is underlain by a homoclinal sequence of volcanic and sedimentary strata that has been intruded by diortic rocks and subsequently, sheared in a northwest direction. Gold-cobalt bearing mineralization has been deposited along these shear zones that have been traced for a distance of approximately 7 kilometers.

In the period August to October 1997, an exploration program was conducted on the property as follows:

- 1. A total of 2128.43 m of NQ2 size diamond drilling in 17 separate holes.
- 2. A total of 139.5 m of trenching in 17 separate trenches (124 m in 15 trenches on Clone North and Anderson Zone; 15.5 m in 2 trenches on Sutton Zone).
- 3. A total of 371 samples taken in the course of a geochemical program along grid lines on the Port 21 and Clone 2 claim
- A total of 14.2 lone kilometers of IP survey on three separate grids (7.175 kilometers on the Main Grid, 6.575 kilometers on the C-1 Grid and 0.45 kilometers on the Camp Grid). Total field magnetometer readings were taken on the same lines as the IP survey on the C-1 Grid.

In the course of the programs, a total of 524 surface and 1649 core samples were collected and analyzed for metal content by ICP analysis (29 element package) and for gold using atomic absorption methods. Any anomalous gold, silver, copper, arsenic and cobalt (greater than 1000 ppb, 30 ppm for the first two and greater than 10,000 ppm for the copper and arsenic and greater than several hundred ppm for the cobalt were assayed.

Results of the trenching indicate low gold values for the trenching on the Sutton, Anderson and the Clone North Zone with the exception of trench 228 (2 m of 0.43 opt Au).

The results of the geochemistry program indicated anomalous gold and copper values associated with a NE trending shear system on the Port 21 Claim. Highest values obtained indicated 0.056 opt Au and 0.11% Cu. Geochemical values were low in the areas of the Clone 2 claim.

Results of the IP survey indicate seven areas of potential H-Zone mineralization (low changeability, high resistivity) and six zones of potential S-Zone mineralization (high changeability, low resistivity) on the main grid. Two zones of possible hematite and three zones of possible sulfide mineralization were identitied on the C-1 Grid. The lines on the camp grid were too short for a meaningful interpretation.

The drilling on the various shear zones indicates numerous gold bearing intersections. The best results in the 1997 program include 5.2 m of 0.223 opt Au in DDH 127, 9.5 m of 0.212 opt Au in DDH 128, 17.81 m of 0.116 opt Au in DDH 131, 8.3 m of 0.13 opt Au and 3 m of 0.334 opt Au in DDH 135 and 1.45 m of 1.08 opt Au and 4.77 m of 0.276 opt Au in DDH 137.

Drilling has also indicated that post mineralization pyroxene porphyry dykes have replaced sections of the H-1 Zone. These dykes are generally narrow and have intruded at right angles to the mineralized zones. Drilling down these dykes results in failure to hit the intended target. As a result, drilling at oblique angles to the zones generally indicates gold values even when intersecting these dykes. Drilling also indicates that gold values appear to be concentrated in the zones in the vicinity of northeast trending cross-faults.

The property has an excellent potential for increasing the reserves outlined in 1996, particularly at depth and along strike of the presently defined mineral zones. Additional drilling in all likelihood will not only increase the tonnage but will also increase the grade. The recommended program would include the following:

- 1. Drilling on down plunge extensions intersected in 1996 and 1997 to see if some of the gold bearing zones extend to depth.
- 2. Drilling of deep holes to check beneath the high angle reverse faults for possible extensions of the H and S-2 A zones, to the north of the 1996 and 1997 drilling.
- 3. Further geochemical surveys to expand on areas of known mineralization.

Estimated cost of the program is approximately \$ 1,000,000.

INTRODUCTION

An exploration program designed to expand on the gold-cobalt bearing potential of the Clone property was conducted during the period August to October 1997. The work expanded on 1995 - 1996 drilling and trench results obtained in 1995, as well as testing the Anderson zone

Work was conducted by Teuton personnel accommodated in a permanent camp facility erected on the Clone 1 claim. All trenching was carried out by M. Moorman with trench sampling conducted by V. Veljkovic and M. Moorman. Trench locations, co-ordination and overall supervision was provided by E.R. Kruchkowski. Drilling was conducted by J.T. Thomas utilizing a JT 2000 drill to complete NQ2 size core. Drill hole locations, angles and azimuths were determined by Teuton personnel under the direction of Dino Cremonese, President of Teuton Resource Corp. The IP survey was completed by Scott Geophysics Ltd. of Vancouver, B.C.

All rock geochemical and assay samples were analyzed by Echo-Tech Laboratories in Kamploops, B.C. or by Pioneer Labs in Vancouver, B.C. Vancouver Island Helicopters provided a Bell 206 as well as a Hughes 500 D in order to provide access and fly in supplies.

Location and Access

The Clone 1 claim is located about 20 kilometers southeast of Stewart, British Columbia. The claim area is approximately 55 degrees 48 minutes latitude and 129 degrees 47 minutes longitude on NTS sheet 103P/13W.

Access to the claim at the present time is by helicopter from Stewart. Nearest road to the area is a non-maintained logging road running east along the south side of the Marmot River to a point about 9 km northwest of the property. Total length of the road from tidewater to its termination point is approximately 4 km.

Physiography and Topography

The Clone 1 claim is situated southeast of Treble Mountain at the head of Sutton and Kshwan Glacier. The claim is part of a roughly 4 km square nunatak with much of the southern sections only recently exposed by rapidly retreating ice (southern ice edge is up to 200 m further south in places than that depicted on government topographic and claim maps). Elevations vary from approximately 1, 150 metres ASL on the icefield in the southern portion of the Port 21 claim to about 1,700 metres ASL on the height of land in the northern portion of the Port 20 claim. Except for the portions of the claims covered by permanent snow or ice, most of the upper ground is outcrop or talus cover with little vegetation. Snow tends to accumulate in the gullies formed by structures and vein systems. Just above the glaciers, thick morainal debris obscures the underlying geology. Small ponds occupy depressions in a relatively flat area along the south edge of the Port 21 claim. The surface exploration is restricted to late summer and early fall.



Most of the nunatak can be traversed safely on foot although local areas contain occasional bluffs.

Small patches of tag spruce are present along the lower slopes of the nunatak, particularly the south facing edge. Alpine grasses, heather and arctic willows grow in patches along the talus, moraine and outcrops.

Personnel and Operations

Personnel involved during the exploration program are listed below:

E.R. Kruchkowski	 Consulting Geologist	August - October, 1997
D. Cremonese	 President, Teuton Resources	August - October, 1997
V. Veljkovic	 Geologist	August - October, 1997
M. Moorman	 Prospector/Geophysical	August - October, 1997
	Technician/Blaster	
S. Searle	 Cook	August - October, 1997
D. Roberts	 Core splitter	August - October, 1997
C. Moehling	 Carpenter	August - October, 1997
D. Sloan	 Laborer	August - October, 1997

Personnel in the program mobilized to the Stewart area via vehicle or scheduled air flights (Smithers or Terrace). Casual laborers were hired in Stewart on a "as need" basis. All expediting services were provided by J Fillion out of Stewart, B.C.

All personnel involved in the program, while on site were accommodated in the exploration camp located on the Clone 1 claim. While in Stewart, crews were accommodated either in a local hotel or rented house, provided by Teuton.

Supplies and materials for the job were purchased in Stewart and ferried in via helicopter.

Property Ownership

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The area surveyed is part of a larger project known as the Clone project. Some of the claims surveyed consist of 148 units in 18 separate but contiguous single unit claims as well as modified grid claims. Relevant claim information is summarized below:

Name	Tenure	No. of Units	Expiry Date
Red 12	323646	20	31 January 1998
Red 16	323648	20	31 January 1998
Red 17	323649	16	01 February 1998



Report on Clone Property							
Port 17	324516	20	23 March 1998				
Port 18	324517	20	23 March 1998				
Port 19	324518	20	23 March 1998				
Port 20	324519	20	23 March 1998				
Port 21	324520	16	22 March 1998				
Clone 1	321440	4	05 October 1998				
Clone 2	331440	3	05 October 1998				
Clone 3	340012	6	04 September 1999				
Clone 4	340013	18	04 September 1999				
Sut 2	340495	1	17 September 1999				
Sut 3	340496	1	17 September 1999				
White 1	341097	1	01 October 1999				
White 2	341098	1	01 October 1999				
White 3	341099	1	01 October 1999				
White 4	341100	1	01 October 1999				
Edwardio	341272	7	10 October 1998				
Gulag 1	342017	8	29 October 1999				
Gulag 2	342018	8	29 October 1999				
Gulag 3	342019	6	29 October 1999				
Gulag 4	342020	6	29 October 1999				

Teuton Resources Corp. • Skeena Mining Division • Stewart, British Columbia

The author did not examine the claim posts and cannot verify the quality and accuracy of the staking. However, the claims have been surveyed in the immediate area of the Clone 1 claim.

Claim location is illustrated on Figure 2 showing both surveyed and un-surveyed claims copied after available government NTS maps. Ownership is presently divided equally between Teuton Resources Corp. (50%) and Minvita Enterprises Ltd. (50%) of Vancouver, British Columbia. Teuton Resources Corp. is the operator of the project.

P<u>revious Work</u>

The area of the Clone mineralization is located in a region that has seen sporadic mineral exploration from the late 1890's to present. In all likelihood, the area of mineralization was covered with glacial ice until recently. The earliest recorded work in the area appears to be geological mapping by the B.C. Department of Mines, Energy and Petroleum Resources in the 1970's. E.W. Grove mapped the general area in preparing Bulletin 63, B.C.M.E.M.P.R. The area was also mapped by C. Greig et al in 1993 during preparation of G.S.C. open file 2931.

During July to October 1994, an exploration program conducted by Teuton in the area of the present Clone property (Port 21 claims), consisted of reconnaissance geochemical rock and silt sampling in conjunction with prospecting and reconnaissance geological mapping. Based on this work additional claims were acquired in the general area, namely the Clone 1-2 claims.

This work resulted in the discovery of gold-copper-cobalt bearing, narrow shear zones trending in a northeast direction. Results of the geochemical survey indicated anomalous Au, Ag, Cu, As, Mo, W, Bi and Co values in the area of the Port 21 claim.

During the period July to December 1995, Teuton conducted a follow-up program consisting of reconnaissance geochemical rock sampling, trenching and geological mapping on the Port 21 claim. This work led to the discovery of high grade gold values in parallel shears on the adjoining Clone 1 claim. In the period September to December 1995, work on the new discovery consisted of reconnaissance geochemical rock sampling, geological mapping, trenching, VLF and magnetometer surveys, diamond drilling, petrographic studies and further staking.

Results of this work indicated the presence of several northwest trending gold bearing shear zones that were traces over a strike length of 500 m. Results of the trenching indicated wide zones of very significant gold and gold/cobalt values associated with hematite and sulfide bearing zones respectively. Diamond drilling of 1070 m in 13 holes confirmed the down dip extension of the hematite mineralization below the highest trench value (3.59 opt Au across 5.5 m).

During the period May 17 to 19, 1996, an airborne geophysical survey (VLF EM and magnetic) was flown over two areas (a smaller close spaced survey inside a larger more widely spaced survey). A total of 72.3 kilometers and 524.5 line kilometers were surveyed in Zone 1 and Zone 2 respectively. The survey lines were orientated in a NE-SW direction, approximately at right angles to the overall NW geological trend for the Stewart area.

In the period June to October 1996, an extensive exploration program was conducted on the property including:

- 1. A total of 11, 487.14 m of diamond drilling (7652.44 m of BTW size and 3834.7 m of NQ2 size).
- 2. A total of 1312.85 m of trenching in 141 separate trenches, as well as extensions to 1995 trenches (121.4 m in 8 trenches on Sutton zone, 1191.45 m in 133 trenches on main Clone zone)
- 3. A total of 392 samples taken in the course of a regional geochemical program.
- 4. Gridding and location of a permanent base line. A total of 65.3 line kilometers of grid was established with crosslines every 25 m and stations located 25 m along each line.

- 5. Surveying of all drill holes and trenches to provide accuracy control as well as elevation control.
- 6. A magnetometer survey over the established grid.
- Geological mapping of the nunatak hosting the Clone gold occurrence at a scale of 1:2,000, as well as mapping the immediate area of the gold showings at a scale of 1:500.
 Preliminary mapping of the Sutton zone was also completed.
- 8. Downhole IP surveys in 5 separate drill holes, to test for extensions of mineralization encountered in the holes or nearby areas.
- 9. Petrographic studies on sulfide mineralization, both in drill holes and surface trenches.
- 10. Structural study in the immediate area of the S. and H. mineralized zones.
- 11. Saw-cut sampling to confirm 1995 trench results as well as check sulfide-hematite rich zones in immediate vicinity of camp.

Based on the 1996 work, nimerous new mineralized zones were located, namely, Sutton, H-3, Stringer and Anderson. In addition, the trenching and drilling enabled a resource calculation for the property. Using a gold grade cut-off that is equal to 1 gpt Au across 1 m, a resource calculation was completed for the Clone project. Based on trenches and drill holes to date, a total of 149, 895 tons of drill indicated reserves at a grade of 7.89 gpt Au(0.23 opt) are indicated for the S-1 zone. In the H-zones (including H-2), a total of 115,612 drill indicated tons at a grade of 9.78 gpt Au (0.285 opt) and 88,221 geologically inferred tons at a grade of 7.6 gpt Au (0.22 opt) are indicated. For the S-2 A zone, a total of 96, 918 drill indicated tons grading 7.96 gpt (0.23 opt) and 73, 917 geologically inferred tons grading 11.58 gpt (0.34 opt) are calculated. The S-2B zone has a drill indicated 20,357 tons averaging 7.09 gpt Au (0.21 opt). In total, for all zones and all categories, 544, 920 tons grading 8.69 gpt (0.25 opt) are indicated.

GEOLOGICAL SURVEYS

Regional Geology

The Clone 1 property lies in the Stewart area, east of the Coast Crystalline Complex and within the western boundary of the Bowser Basin. Rocks in the area belong to the Mesozoic Stuhini Group, Hazelton Group and Bowser Lake Group that have been intruded by plugs of both Cenozoic and Mesozoic age.

According to C.F. Greig, in G.S.C. Open File 2931, portions of the general Stewart area as well as the northern portion of the property are underlain by Triassic age Stuhini Group. The Stuhini Group rocks are either underlying or in fault contact with the Hazelton Group. These Triassic age rocks consist of dark gray, laminated to thickly bedded silty mudstone and fine to medium grained and locally coarse grained sandstone. Local heterolitic pebble to cobble conglomerate, massive tuffaceous mudstone and thick bedded sedimentary breccia and conglomerate also form part of the Stuhini Group.

At the base of the Hazelton Group is the lower Lower Jurassic Marine (submergent) and nonmarine (emergent) volcaniclastic Unuk River Formation. This is overlain at steep discordant angles by a second, lithologically similar, middle Lower Jurassic volcanic cycle (Betty Creek Formation), in turn overlain by an upper Lower Jurassic tuff horizon (Mt. Dilworth Formation). Middle Jurassic non-marine sediments with minor volcanics of the Salmon River Formation unconformably overlie the above sequence.

The lower Lower Jurassic Unuk River Formation forms a north-northwesterly trending belt extending from Alice Arm to the Iskut River. It consists of green, red and purple volcanic breccia, volcanic conglomerate, sandstone and siltstone with minor crystal and lithic tuff, limestone, chert and coal. Also included in the sequence are pillow lavas and volcanic flows.

In the property area the Unuk River Formation is unconformably overlain by middle Lower Jurassic rocks from the Betty Creek Formation. The Betty Creek Formation is another cycle of troughfilling sub-marine pillow lavas, broken pillow breccias, andesitic and basaltic flows, green, red, purple and black volcanic breccia, with self erosional conglomerate, sandstone and siltstone and minor crystal and lithic tuffs, chert, limestone and lava.

The upper Lower Jurassic Mt. Dilworth Formation consists of a thin sequence varying from black carbonaceous tuffs to siliceous massive tuffs and felsic ash flows. Minor sediments and limestone are present in the sequence. Locally pyritic varieties form strong gossans.

The Middle Jurassic Salmon River Formation is a late to post volcanic episode of banded, predominantly dark colored siltstone, greywacke, sandstone, intercalated clarinet, minor limestone, argillite, conglomerate, littoral deposits, volcanic sediments and minor flows.

Overlying the above sequences are the Upper Jurassic Bowser Lake Group rocks. These rocks mark the western edge of the Bowser Basin and are also located as remnants on mountain tops in



the Stewart area. These rocks consist of dark gray to black clastic rocks including silty mudstone and thick beds of massive, dark green to dark gray, fine to medium grained arkosic litharenite.

According to E.W. Grove, the majority of the rocks from the Hazelton Group were derived from the erosion of andesitic volcanoes subsequently deposited as overlapping lenticular beds varying laterally in grain size from breccia to siltstone (Figure 3).

D. Aldrick's work to the north of Stewart has shown several volcanic centers in the surveyed area. Lower Jurassic volcanic centers in the Unuk River Formation are located in the Big Missouri Premier area and in the Brucejack Lake area. Volcanic centers within the Lower Jurassic Betty Creek Formation are in the Mitchell Glacier and Knipple Glacier areas.

There are various intrusives in the area. The granodiorites of the Coast Plutonic Complex largely engulf the Mesozoic volcanic terrain to the west. East of these (in the property area), smaller intrusive plugs range from quartz monzonite to granite to highly felsic. Some are likely related to the late phase offshoots of the Coast plutonism, other are synvolcanic and tertiary. Double plunging, northwesterly - trending synclinal folds of the Salmon River and underlying Betty Creek Formations dominate the structural setting of the area. These folds are locally disrupted by small east-overthrusts on strikes parallel to the major fold axis, cross-axis steep wrench faults which locally turn beds, selective tectonization of tuff units and major northwest faults which turn beds. Figure 4 shows the regional geology of the Stewart area (Greig 1994).

Local Geology(Nunatak)

This section on local geology is excerpted from the I996 assessment report (Kruchkowski 1996). The geology of the nunatak was mapped by Rob McLeod, Keith Patterson and Andrew Kaip; geologists for Homestake in 1996.. This section excerpted from the above report was described by Kaip (1996) as follows:

"The geology underlying the Clone nunatak forms a homoclinal sequence of volcanic and sedimentary strata which strikes southeast, is subvertical and youngs to the southwest. From northeast to southwest the succession includes: a dominantly sedimentary sequence with lesser intercalated andesitic volcanics cut by a large diorite to gabbroic intrusion; a heterolitic sequence including a basal maroon volcanic breccia overlain by basaltic to andesitic breccias and siltstones and intruded by a series of hbl-bi porphyry sill like bodies; and, a dominantly volcanic package comprising mafic flows, sills and breccias. The strata are assigned to the Lower to Middle Jurassic Hazelton Group (Greig, 1995), and likely form part of the Pliensbachian Betty Creek Formation based on regional correlations's. The basal sedimentary sequence may be part of the underlying Stuhini Group.

A pyroxene and hornblende bearing porphyry is probably the deepest stratigraphic unit, partially covered by ice at the north end of the property. This unit may be an intrusive source for the thick pile of overlying mafic volcanic rocks. A package of siltstones, sandstones and rare conglomerates and limestones intercalated with andesitic ash, crystal and lapilli tuffs, underlies



the zone geology. Volcanic conglomerates and debris flows, both homolithic and heterolithic, occur as extensive continual units within the sequence. The green and maroon heterolithic volcanic breccia that bounds the lower portion of the zone sequence is almost two kilometers in strike, but pinches out to the northeast; this unit is thickest where it dives under the Cambria Icefield on the western side of the nunatak. The stratigraphic rocks exhibit varying degrees of pervasive carbonate, sericite and K-spar alteration; argillites near the summit of the Clone nunatak often have up to 15% disseminated pyrite, otherwise sulphide mineralization is sparse. Continuous sill like bodies of a fine grained dark green mafics intrude the sediments and volcanics. These rocks exhibit strong chlorite alteration and weak pervasive magnetism. Cumulate subhedral plagioclase phenocrysts are locally observed.

Near the northwest margin of the nunatak, two irregular bodies of fine to medium grained monzonite to quartz monzonite occur. This unit is locally siliceous, and weakly carbonate altered; sericite or potassium feldspar alteration is not observed, and only local weak chlorite fracture filling. The Sutton West intrusive is lithologically similar, and occurs directly across the Sutton Icefield.

A right lateral fault, dipping north at 45 degrees bounds the mineralized zone volcanics from the overlying mafic volcanics. Since this structure parallels stratigraphy, and no cross-cutting structures observed, offset is unknown. An augite megacrystic package of massive amygdaloidal flows and volcanic conglomerates is footwall to the fault. Irregular subhedral feldspar phenocrysts are commonly observed. Irregular vesicles are filled with quartz, calcite and sericite; pervasive chlorite and patchy epidote increases in intensity towards the base. Strong pervasive magnetism occurs throughout. Discontinuous irregular medium grained diorite dykes commonly crosscut this unit. This unit appears fresh, but the fine grained porphyritic nature implies Jurassic origin.

The uppermost unit is a thick sequence of basalts and or andesitic basalts. Pillows and massive flows are intercalated with rare, thin tuffaceous sections, and narrow pyroxene porphyritic feeder dykes. Alteration consists of dominantly strong pervasive and fracture filling chlorite; moderate pervasive magnetism occurs throughout.

There are at least three episodes of Tertiary intrusion on the Clone property. The most significant is a coarse grained hornblende and biotite porphyritic granodiorite. This porphyry intrudes along most of the contact between the augite megacrystic volcanics and the overlying basalts and thickens dramatically at the Southwestern end of the property. A fine grained felsic dyke, possibly part of the Portland Canal Dyke Swarm cross cuts the nunatak, and continues trending northwest on the western side of the Sutton Glacier. Irregular north-to-south trending fine grained magnetic mafic dykes span the property, cross-cutting most units."

Zone Geology

ash tuffs. Siltstones at the base of the sequence typically contain iron carbonate altered volcanic fragments derived from the underlying volcanics. In drill core the contact between the tuffs and siltstones is strongly foliated with the sediments exhibiting a maroon color likely from the addition of biotite, whereas the tuffs are pervasively sericite altered. Often the contact is diffuse with irregular pods of sericite altered volcanics within the sedimentary package, and the interleaving of this unit may impart be structural.

Limestone within the upper sedimentary sequence forms thin, discontinuous beds which are recrystallized and commonly re-mobilized along faults. Within the sedimentary strata, several discrete zones of coarse calcite are present. These zones exhibit irregular contacts and are interpreted to be secondary in origin.

Intrusive Rocks

Hornblende-Biotite Porphyry

The main portion of the hbl-bi porphyry forms a northwest elongate body which thins to the northwest and separates the megabreccia from the overlying tuff sequence. Cross cutting relationships between the megabreccia and the identification of dykes of the hbl-bi porphyry within the overlying andesitic to basaltic tuffs indicate that the hbl-bi porphyry forms a sill intrusive into the volcanic sequence. In outcrop, the hbl-bi porphyry is typically massive, fine grained and weathers white and contains up to 20 percent euhedral hornblende (< 4mm) and locally up to 10 percent euhedral biotite (< 3mm) within a groundmass of fine grained plagioclase. Between the trace of the H-1 zone and the megabreccia, and south of L21+00 N, the hbl-bi porphyry is commonly brecciated and contains fracture controlled and disseminated hematite which impart a red to pink color to the porphyry with the intensity of hematite greatest adjacent to the H-1 zone. Brecciation within the porphyry commonly form discrete zones of milled fragments and crackle breccias within a matrix of hematite and are interpreted to be primary textures. Volumetrically the most abundant style of brecciation within the hbl-bi porphyry are pseudobreccias formed from fracture controlled hematite alteration.

Pyroxene Diorite

In the center of the map area there is an irregular shaped intrusive unit which cuts both the andesitic to basaltic tuff unit and upper sedimentary unit. The intrusion is fine grained, massive and contains (> 2mm) euhedral pyroxene crystals within a groundmass of plagioclase. With the exception of the mafic phase, the pyroxene porphyry is texturally similar to the hbl-bi porphyry".

Narrow diabase dykes, generally less than 1m occur along fracture zones at right angles to the prevailing geology. The dykes which weather a distinct brown, consist of feldspar phenocrysts in a fine grained groundmass. These dykes are post-mineralization and tend to pinch and swell along strike.

A more complete description is located in the 1996 assessment report, particularly the alteration and structure.

Mineralization

Based on1996-1997 work, two main types of gold bearing structures have been identified on the Clone project. The two styles of mineralization include zones of iron oxides - gold - minor copper and iron sulfides (which include hematite, magnetite, specularite, native gold, minor chalcopyrite and pyrite, rare bornite, minor malachite on surface and fractures and traces tennantite) as well as sulfide - gold mineralization. The latter style includes pyrite, arsenopyrite, minor magnetite, and chalcopyrite, as well as a local massive hematite. Erytherite (pink cobalt bloom) has been noted in a number of trenches along the S-zones. The oxide bearing mineralization on the Clone 1 claim are labeled H-zones while the sulfide rich zones are labeled S-zones Strong chlorite alteration is associated with both mineralization types while K-spar alteration appears to be only associated with the H-type.. Detailed drilling as well as trenching has indicated that although there is two contrasting styles of mineralization the two different types commonly occur together, particularly in zones between the above. The S-style of mineralization is predominately along the western - north western edge of a zone up to 75m wide while the H-style is primarily along the eastern-south eastern edge. It appears that the S-type of mineralization is later and has overprinted some portions of the H-type of mineralization. It is possible that the H-1 zone mineralization grades into S-type mineralization at depth as evidenced in holes 130-131. In these holes, the H- zone is represented by minor hematite in sulfide/chlorite zones.

Based on the gold-arsenic-cobalt geochemistry of the S-type of mineralization, anomalous values have been obtained along strike with the above style for a distance of at least 5.5km. The H style of mineralization has been traced for a strike length of at least 500m. Detailed descriptions of the various zones arelocated in the 1996 report.

TRENCHING

Trenching was conducted on all zones of sulfide in the area of the Clone North and northern Anderson Zone. Most trench locations were outlined by M. Moorman. A total of 139.5m of trenching was completed in 17 trenches; 15.5m in 2 trenches (S-9-10) on the Sutton zone and 124m in 15 trenches (218-232) in the CloneNorth and Anderson Zone. These were excavated using a rock drill, explosives and hand tools, Figure 7-9 show the locations for the trenches, relative to grid lines and/or topographical features on the Port 21 claim.

Results of the trenching indicate low gold values over widths and lengths for the trenching on the Port 21 claim. The significant results for each trench (>0.03 opt Au) are tabulated below and any values greater than 0.1 opt are in bold as follows:

Table: Compiled Port 21 Claim Area Trench Results







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Trench No.	Zone Type	Width (m)	Gold (opt)	Cobalt (%)
228	S-type	2	0.43	_
229	S-type	1	0.032	-
230	S-type	1	0.032	-
231	S-type	1	0.029	-
S-10	S-type	1	0.063	-

In the area of the Clone North and northern Anderson zones, a large intrusive plug may have deflected the main gold bearing shears (pers. comm. D Aldrick, geologist, B.C.D.E.M.P.R.). Also the shears are within graphitic argillites which are too ductile to form any large dilation zones compatible for wide mineralized sections. Due to the steepness in the northern edge of the Clone nunatak, trenching did not test all possible targets. Further work is recommended in this area in order to check all shearing and sulfide mineralization.

GEOCHEMICAL SURVEYS

Introduction

Reconnaissance rock geochemical were taken from grid lines in the area of the IP survey on the Port 21 and Clone 2 claim. Sample location index maps are shown in figures 10-11, prepared at a scale of 1:1000. Samples were taken at 25 m spacing on lines 50 m apart. In areas of anomalous results, follow-up sampling was carried out on 5 m spacing. Altogether 377 rock samples were taken in the course of the survey. Location for the samples were fixed in the field by reference to the grid lines.

Field Procedure and Laboratory Technique

Rock samples were taken in the field with a prospector's pick and collected in standard plastic sample bag. These samples consisted generally of three to ten representative pieces with total sample weight ranging between 0.5 to 2.0 kgs.

All rock samples were analyzed at the Eco-Tech facilities in Kamloops, British Columbia and Pioneer Labs in Vancouver, British Columbia. Rock samples were first crushed to minus 10 mesh using jaw and cone crushers. Then 250 grams of the minus 10 mesh material was pulverized to minus 140 mesh using a ring pulverizer. For the gold analysis a 10.0 gram portion of the minus 140 mesh material was used. After concentrating the gold through standard fire assay methods, the resulting bead was then dissolved in aqua regia for 2 hrs at 95 degrees Celsius. The resulting solution was then analyzed by atomic absorption. The analytical results were then compared to prepared standards for the determination of the absolute amounts. For the determination of the remaining trace and major elements Inductively Coupled Argon Plasma (ICP) was used. In this procedure a 1.00 gram portion of the minus 140 mesh material is

digested with aqua regia for 2 hours at 95 degrees Celsius and made up to a volume of 20 mls prior to the actual analysis in the plasma. Again the absolute amounts were determined by comparing the analytical results to those of prepared standards.

Specific samples were subjected to further analysis where the Au, Ag, Cu, As and Co values obtained exceeded certain threshold levels (Greater than 1000 ppb for Au and greater than 30 ppm for Ag and greater than 10,000 ppm for the next 2 metals and greater than 100 ppm for cobalt). Wet chemistry methods and AA were used for follow-up analysis of base metals and silver (where values were too high for quantitative measurement by ICP). Appendix I gives the results of all analyses.

Statistical Treatment

A cumulative frequency plot to determine background and threshold values (greater than threshold is considered anomalous) was not conducted for the results. Gold values greater than 100 ppb gold, silver values greater than 3.2 ppm, arsenic values greater than 110 ppm, copper values greater than 360 ppm and cobalt values greater than 100 ppm, were considered anomalous based on previous surveys. Figures 10-11 show the location plots for all sampling conducted with the values for Au and Cu marked beside the location site.

Anomalous Zones

Geochemical samples results indicate anomalous gold and copper results associated with a northeast trending shear system at the southwest corner of the Port 21 claim. Highest value obtained indicated a 0.056 opt Au and 0.11 % Cu. The results indicate a high copper background for the surveyed area of the Port 21 claim. This may indicate the potential for porphyry style mineralization for the Clone nunatak.

Geochemical values were low in the surveyed area on the Clone 2 claim.

GEOPHYSICAL SURVEYS

The section on geophysical surveys is excerpted from a report by Scott Geophysical as follows:

"Induced Polarization/Resistivity surveys were performed on two grids, Main and C-1, on the Clone Project, near Stewart, B.C. by Scott Geophysics Ltd. on behalf of Teuton Resources Corp. Three short lines were also surveyed on what has been designated the "Camp" grid. A total Field Magnetometer survey was performed on the same lines as the IP on the C-1 grid. The field work was done within the period August 14 to September 1, 1997. This report describes the instrumentation and procedures, and discusses the results of the survey.

The numbers of the anomalous zones described in this section are from the Geophysical Interpretation Maps accompanying this report. The stacked Chargeability/Resistivity pseudosections should also be referred to for this section.

Seven areas of potential H zone mineralization were detected from the IP survey, all trending northwest-southeast. Zone 1 stretches from L2750N / 2050E to L3000N / 1950E, and is characterized by a near surface (n=1) very low chargeability, moderately high resistivity anomaly. A Teuton Resources 1996 magnetic survey shows a coincident magnetic high on the north end of this zone. Beneath this zone of potential hematite mineralization, however, is an area (n=3 to 5) of high chargeability and low resistivity representing potential sulphide mineralization; an S zone underlying an H zone. Zone 2 is a moderate chargeability, moderate resistivity, n=1 to 2 anomaly that extends from L2650N / 1975E to L2750N / 1925E. Zone 3 is a broader (50 - 75 meters wide) anomaly with low chargeability and moderate resistivity with good depth extent (n=1 to 5), extending from L2650N / 1850E to L2800N / 1775E, where it becomes less distinct. Zone 4 stretches from L2750N / 1700E to L2850N / 1675E, and may extend further off-grid to the northwest. It is characterized by a low chargeability, moderate resistivity anomaly of moderate depth extent (n=1 to 2).

Zone 5, although on strike with Zone 3, is similar in character to Zone 2, and may represent a fault displaced extension. The zone is found from L2400N / 1950E to L2600N / 1900E, broadening to the north. Zone 6 is a shallow (n=1), low chargeability, high resistivity area on L2600N at 1725E, but does not appear to extend to adjacent lines. Zone 7, covering the southwest corner of the grid, is an area of low chargeability and high resistivity, but may represent a rock type change as opposed to a discrete anomalous zone. The area is shallow in the north (n=1 to 2), deepening to n=1 to 5 in the south.

Six zones of potential S Zone mineralization were identified on the Main Grid. Zone 1 in the northeast is more an area very high chargeability and very low resistivity than a discrete anomaly, and may represent an area of graphitic rock type. Zone 2 is a broad zone, up to 150 meters wide, of high chargeabilities and low resistivities, with good depth extent (n=1 to 5), that stretches from approximately L2700N / 2050E to L3000N / 1900E, and may extend further off-grid to both the northwest and southeast. This zone is overlain in part on the north end by the potentially hematitic Zone 1, discussed previously. Zone 3 is a shallow n=3 area on L2800N, between 1725E and 1750E of high chargeability and low resistivity.

The narrow, well defined Zone 4 anomaly of moderate to high chargeabilities and low resistivities may, in fact, be a continuation of the broader Zone 6 anomaly; the combined zones running from L2500N / 1725E to L2800N / 1600E. These zones may also continue off grid to the northwest and to the southeast, in to an area of snow cover. Most of these zones have good depth extent of n=1 to 5. Zone 5 extends from approximately L2400N / 1850E to L2600N / 1850E to L200N / 1850E to L200N

1825E and is characterized by moderate charabilities and low resistivities, and good depth extent (n=1 to 5).

The Induced Polarization survey on the C-1 grid produced far fewer and less distinct anomalies that that on the Main grid. Two zones of possible hematitic mineralization were identified extending from L1050E / 2800N to L850E / 2800N (Zone 1), and from L1050E / 2675N to L850E / 2600N (Zone 2). In both cases the high resistivity anomalies are better defined that the chargeability anomalies. There is no apparent coincident magnetic anomaly.

Possible sulphide mineralization was identified in three zones. Zone 1, extending from L1550E / 2600N to L1500E / 2625N, has moderate chargeabilities and resistivities from n=1 to 5. Zone 2 is characterized by moderate chargeability and resistivity anomalies and runs from L1050E / 2300N to L850E / 2375N. The zone is deeper on the ends (n=3 to 5) and shallower in the middle (n=1 to 3). Zone 3 is the most distinct anomaly, with high chargeabilities and moderate resitivities, extending through to n=1, and stretching from L950E / 2225N to L850E / 2225N.

One further anomaly that has not been given a identifying number is located at L750E / 2725N, and may have a poorly defined extendsion to the east and west. This anomaly is characterized by a higher than background chargeability and a high resistivity. This anomaly could be due to sulphide mineralization, with silicification to explain the high resistivity values.

Further more subtle interpretation may be possible of the C-1 grid geophysical surveys with the help of detailed geological and/or geochemical information".

DIAMOND DRILLING

A total of 2128.3 m of NQ2 size diamond drilling was completed in 17 holes utilizing a modified J.K. Smit 300 drill provided by J.T. Thomas Drilling. The drilling mainly tested the H-1, S, S-2A and Anderson zone. Figures 11 and 12 shows the location of all the drill holes relative to the gold bearing mineralized structures. All hole collars were surveyed relative to the grid established on the property. All holes holes were logged by E. Kruchkowski. Core recovery was in excess of 95 % and all core is presently stored on the property in the immediate area of the camp site. Table 2 shows the drill hole locations, azimuths, inclinations and zones tested.

<u>Table 2</u>
Drill Hole Locations, Azimuths, Inclinations, Depths and Zones Tested

Dríll	Location	True		Depth	Zones
<u>Hole No.</u>	(Grid Location)	<u>Azimuth</u>	Inclination	<u>(m)</u>	Tested
127	19+17N, 19+96E	160 deg.	-45 deg.	114	H-1, S-Zone
128	19+17N, 19+96E	160 deg.	-50 deg.	131.06	H-1, S-Zone
129	19+92N, 19+96E	165 deg.	-60 deg.	76.2	H-1, S-Zone

130 20+33N, 20+22E 245 deg. -65 deg. 167.64 H-1, H-2, S-131 131 20+33N, 20+22E 245 deg. -62 deg. 131.06 H-1, H-2, S-132 132 20+33N, 20+22E 230 deg. -65 deg. 143.26 H-1, H-2, S-133 133 20+33N, 20+22E 230 deg. -62 deg. 128.02 H-1, H-2, S-134 134 19+75N, 19+94E 185 deg. -60 deg. 173.74 S-Zone 135 20+04N, 20+04E 185 deg. -55 deg. 161.39 H-1, S-Zone 136 20+04N, 20+04E 185 deg. -50 deg. 137.16 H-1, S-Zone	
13020+33N, 20+22E245 deg65 deg.167.64H-1, H-2, S-13120+33N, 20+22E245 deg62 deg.131.06H-1, H-2, S-13220+33N, 20+22E230 deg65 deg.143.26H-1, H-2, S-13320+33N, 20+22E230 deg62 deg.128.02H-1, H-2, S-13419+75N, 19+94E185 deg60 deg.173.74S-Zone13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	
13120+33N, 20+22E245 deg62 deg.131.06H-1, H-2, S-13220+33N, 20+22E230 deg65 deg.143.26H-1, H-2, S-13320+33N, 20+22E230 deg62 deg.128.02H-1, H-2, S-13419+75N, 19+94E185 deg60 deg.173.74S-Zone13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	·2a
13220+33N, 20+22E230 deg65 deg.143.26H-1, H-2 S-213320+33N, 20+22E230 deg62 deg.128.02H-1, H-2, S-213419+75N, 19+94E185 deg60 deg.173.74S-Zone13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	·2a
13320+33N, 20+22E230 deg62 deg.128.02H-1, H-2, S-13419+75N, 19+94E185 deg60 deg.173.74S-Zone13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	2a
13419+75N, 19+94E185 deg60 deg.173.74S-Zone13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	2a
13520+04N, 20+04E185 deg55 deg.161.39H-1, S-Zone13620+04N, 20+04E185 deg50 deg.137.16H-1, S-Zone	
136 20+04N, 20+04E 185 deg50 deg. 137.16 H-1, S-Zone	;
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137 20+04N, 20+04E 185 deg65 deg. 155.14 H-1, S-Zone	
138 22+55N, 19+50E 45 deg45 deg. 92.66 H-1, S-2a	
139 22+55N, 19+50E 45 deg55 deg. 105.81 H-1, S-2a	
140 30+00N, 17+06E 10 deg45 deg. 143.13 Anderson	
141 30+00N, 17+05E 10 deg55 deg. 161.54 Anderson	
142 19+55N, 20+00E 160 deg45 deg. 122.83 H-1	
143 19+55N, 20+00E 160 deg55 deg. 106.68 H-1	

The 1997 drill program was carried out in order to further delineate the structures containing the high grade gold and gold/cobalt mineralization outlined in late 1996. Drilling was basically concentrated in the area of the 1996 work (a zone 75m wide by approximately 400m long). In addition, two holes were drilled to test the Anderson zone. In addition to intersecting the various gold bearing structures, namely H-1, H-2, S and S-2a, the holes encountered five main and a lesser rock type. The first and generally main rock type encountered in the drilling was a hornblende/biotite porphyry. The rock is usually light grey, typically massive, fine grained with up to 20-25% euhedral to subhedral hornblende (< 4mm) and locally contains up to 10 percent euhedral biotite (< 3mm). The unit is locally auto-brecciated with strong "chlorite streaming" in the fractured rock. Calcite veinlets form a weak to strong pervasive irregular stockwork and fracture filling. Near the H-1 zone and the hematite rich megabreccia, the intrusive is a mottled red to green unit with varying amounts of hematite and chlorite. Where hematite is fracture controlled, pseudo-liesegang rings have formed. The H-1 zone appears to occur along or near the megabreccia (least of the hornblende porphyry) and hornblende porphyry contact. The hornblende porphyry unit appears to occur as a sill-like intrusion along the contact of the above megabreccia and andesite to basaltic tuffs overlying the breccia.

The second most abundant unit encountered in the drilling was an andesitic to basaltic tuff sequence labeled hornblende feldspar breccia in the drill logs. In many of the drill hole intersections, it is difficult to discern the auto-brecciated porphyry from the breccia. Clasts of the hornblende porphyry commonly occur within the volcanic sequence. In drill core, the rock which is generally light grey has clasts that are matrix supported, ranging in size from 1 to 5 cm. The unit has been variably chlorite and locally sericite altered with generally strong calcite veinlets and fracture fillings near sulfide bearing shears. The unit appears to be overlain by a very thin ash tuff that is extensively sericite altered.

Drilling encountered irregular dykes and possible sills of a pyroxene porphyry identified as pyroxene diorite in surface mapping. The unit is generally dark grey, homogeneous to massive

and contains euhedral (< 2mm) pyroxene crystals within a groundmass of plagioclase. It appears that the unit may be post mineralization as it appears to displace mineralized zones particularly below the area of DDH-95-1-6 and DDH-97-136. The unit has little if any calcite veining or fracture filling.

Along the west side of the main drilled area (area of 1996 drilling) and in the area of the Anderson zone, holes encountered a black argillite/mudstone unit. The rock consists of a thinly banded, foliated unit that contains lenses of sericite altered tuff. The rock contains weak pyrite occurring as fine disseminations or as fine laminations parallel to banding and/or foliation.

In the area of drill holes 140 and 141 on the Anderson zone, drilling encountered an andesite lithic tuff. The unit contained clasts up to 4 cm in a finer grained matrix. Clasts formed up to 60% of the rock which contained a quartz/calcite stockwork, local intense k-feldspar alteration and minor wispy pyrite.

The drilling encountered one unit that appears to have limited occurrences. This unit is minor diabase that occurs as dykes that strike at roughly 045° and may be up to 1m wide. In surface exposure, approximately 6-7 of these dykes have been observed over an area 500m long. In drill core, the rock is a homogenous, dark grey, fine grained rock with euhedral to subhedral feldspar phenocrysts in a fine grained groundmass. Feldspar form 50% of the rock which appears devoid of sulfides and any strong fracturing. Very weak, late calcite veinlets form up to 2% of the unit.

DDH-127-128, drilled off the same pad and along the same azimuth were designed to test the downdip extension of trench 81 (9 m of 0.340 opt Au and 0.18% Co). The holes were successful in extending the mineralization beneath the above trench. Figure 14 shows the geology of DDH-127-128.

DDH-127 (azimuth 160 deg., dip -45 deg.) intersected predominantly hornblende feldspar breccia. The section corresponding to the trench 81 mineralization was encountered at 23.1 to 42.8 m. In this section, arsenopyrite stringers as well as coarse bleb pyrite, hematite filled fractures and local coarse magnetite occur at 49 to 50.29, semi massive sulfides were encountered with strong pyrite veining, minor arsenopyrite and traces chalcopyrite being present.

A sulfide-hematite vein carrying ocarse pyrite, minor arsenopyrite and hematite was intersected at 91.5 to 93 m. From 96.7 to 97.85 m, the hole intersected a diabase dyke. At 98.05 to 100.6 m, the hole intersected a zone of blood red hematite veinlets, with local minor magnetite.

DDH-128 (azimuth 160 deg., dip -50 deg.) intersected predominantly hornblende feldspar breccia to the bottom of the hole. The trench 81 mineralization appears as fine pyrite veinlets, hematite/magnetite veinlets as well as minor arsenopyrite veinlets from 34.8 to 55 m. Local sections of the breccia appear autobrecciated as all clasts are the same lithology in a chlorite matrix. From 66.75 to 70.7 m, semi massive hematite zone occurs containing 50% hematite with strong magnetite from 90.5 to 94.49 and 97.9 to 98.02 m, semi massive hematite zones were intersected. A diabase dyke was encountered at 124.4 to 126.4 m.



DDH-129 was drilled off the same pad as DDH-127-128 to test north of trench 81 mineralization. Figure 15 shows the geology of DDH-129.

DDH-129 (azimuth 165 deg., dip -60 deg.) intersected predominantly hornblende feldspar breccia except for hornblende feldspar porphyry from 13.7 to 37.3 m. Strong chlorite "streaming" was present at 8.05 to 9 m.

DDH-130-131 were drilled off the same pad in the same azimuth to test below the area of trench 4 and DDH's 90-95. The holes were collared just east of trench 16. Drilling confirmed the presence of the H-1 zone in both holes. Figure 16 shows the geology of DDH-130-131.

DDH-130 (azimuth 245 deg., dip -65 deg.) intersected a series of mineralized zones within hornblende feldspar breccia as well as mudstone from 164.1 to 167.64 m (end of hole). The hole intersected the H-2 zone from 1.52 to 10 m. The H-2 was a subtle zone of hematite alteration with narrow 5 mm stringers, local specularite and pervasive chlorite and k-feldspar alteration. The hole encountered the H-1 zone from 105.72-108.68 and 120.05-124 m.

The upper H-1 section consisted of generally weak k-feldspar alteration with local patches, fracture filling and veinlets of pyrite and weak, wispy hematite with the pyrite. The lower H-1 section was a moderately strong zone of intense black chlorite, massive pyrite veins, wisps and fracture fillings as well as minor wisps of hematite. Trace arsenopyrite and chalcopyrite were also noted. From 153.74 to 155.87, the hole intersected the S-2a zone containing black chlorite with pyrite/arsenopyrite stringers approximately 7%.

DDH-131 (azimuth 245 deg., dip -62 deg.) intersected various mineralized zones within a hornblende feldspar breccia. The hole intersected the H-2 zone at 0.61 to 11 m consisting of narrow 5 mm blood red hematite veinlets, closely spaced quartz/calcite/chlorite veinlets and intense k-feldspar alteration. The hole encountered the H-1 zone at 89-94.49 and 105.3-107.81 m. The upper section was a zone of intense black chlorite, massive sulfide veins (pyrite, minor arsenopyrite and traces chalcopyrite) and strongly magnetic hematite. The lower section was a zone of black chlorite, massive esulfide veins (pyrite and minor arsenopyrite), magnetic hematite as well as quartz/feldspar veins. A weak S-2a zone was intersected at 123.5 to 126.5 m. This zone consisted of pyrite veinlets approximately 7% associated with local black chlorite. From 129 to the bottom of the hole (131.06 m), strong sericite alteration was noted.

DDH-132-133 were drilled off the same pad as 130-131 but at a different azimuth than the last ten holes to test below holes 21-25. Both holes intersected the H-1 zone. Figure 17 shows the geology of DDH-132-133.

DDH-132 (azimuth 230 deg., dip -65 deg.) intersected the various mineralized zones within hornblende fledspar breccia. The hole intersected the H-2 zone at 0.31 to 13 m consisting of narrow blood red, wispy hematite stringers up to 10% in locally very intense k-feldspar alteration. The hole intersected the H-1 zone at 118.42-133.05 m. It consisted of a variable zone

containing intense black chlorite, minor sulfide and patchy hematite. The sulfide consisted of strong local pyrite veins up to 4 cm wide as well as local wispy arsenopyrite with sulfide content approximately 5% overall.

DDH-133 (azimuth 230 deg., dip -62 deg.) intersected various mineralized zones within a hornblende feldspar breccia. The hole encountered the H-2 zone at 1.21 to 13 m consisting of strong hematite alteration and local strong quartz/calcite/chlorite veinlets. At 71.3 to 71.45 m, a massive hematite/weak magnetite stringer up to 2 cm was intersected. The H-1 zone was intersected at 87.48-91 and 115-117.5 m. The upper section consisted of a weak zone of sulfide mineralization and minor hematite in intensely chlorite altered rocks. Sulfides consisted of approximately 5% pyrite, arsenopyrite 1-2% and traces chalcopyrite. The lower section consisted of intense black chlorite with coarse pyrite vein up to 10 cm, minor arsenopyrite and traces chalcopyrite.

DDH-134 was drilled to test for the extension of sulfide mineralization encountered in DDH-18. The hole intersected long sections of intensely k-feldspar altered rocks with narrow arsenopyrite veinlets and wisps. The gold values obtained in DDH-18 were not obtained in DDH-134. Figure 18 shows the geology of DDH-134.

DDH-134 (azimuth 185 deg., dip -60 deg.) intersected various mineralized sections within homblende feldspar breccia. From 37.2-56.87 m, the hole intersected homblende feldspar breccia. The H-1 zone intersected at 1.22 to 13 m was a generally weak section of chlorite, hematite and k-feldspar alteration. A sulfide-hematite vein was intersected at 56.87 to 57.92 m with coarse pyrite stringers up to 2 cm, minor coarse patches of chalcopyrite and abundant local magnetite. From 121.95 to 124.46 m, the hole encountered an S-zone consisting of black chlorite, massive to semi massive pyrite and minor veins and stringers of arsenopyrite. Sulfides are approximately 10% of the zone. From 131.2 to 155.45 m, highly altered k-feldspar contains wispy pyrite and arsenopyrite veinlets with local traces chalcopyrite. Sulfides are approximately 5-7% overall in the above section.

DDH-135-137 were drilled off the same pad and along the same azimuth to test for extensions of the S-zone mineralization in DDH-18 as well as test the H-1 zone in this area. The holes were successful in intersecting both the H-1 and S-zone. Figure 19 shows the geology of DDH-135-137.

DDH-135 (azimuth 185 deg., dip -55 deg.) intersected various mineralized zones within hornblende feldspar breccia. The hole intersected the H-1 zone at 15.84 to 24.75 m consisting of massive to semi massive hematite stringers and veins, black chlorite, strong chalcopyrite mineralization as fracture fillings and disseminations and strong magnetite. Visible gold as fine grains was noted at 16.05, 16.3 and 20.2 m. The S-a zone was intersected at 42.71 to 44.4 m containing abundant black chlorite, hematite veinlets and stringers, minor chalcopyrite and traces malachite in intensely k-feldspar altered rocks. The hole intersected a S-zone at 103.92 to 106 m consisting of strong arsenopyrite/pyrite veining, patches and grains in a highly k-feldspar altered rock. Pyrite and arsenopyrite veinlets occur in a zone extending from 137.16 to 145.5 m.

DDH-136 (azimuth 185 deg., dip -50 deg.) intersected hornblende feldspar breccia to 46.7 m. Within this upper intersection pyroxene porphyry dykes were encountered at 20.8-23.5 m and 29.5-30.6 m. The lower dyke definitely displaces mineralization within the H-1 zone. From 46.7 m to 55.95 m, the hole intersected hornblende fledspar porphyry. From 55.95 m the hole intersected hornblende feldspar porphyry from 88.39 to 106.38 m. From 106.38 m to the end of the hole at 137.16 m, the hole encountered hornblende feldspar breccia. The drill hole intersected the H-1 zone at 13-20.05 m consisting of a weak mineralized section containing intense black chlorite, strong k-feldspar alteration and minor blood red hematite veinlets.

From 25.5 to 25.7 m, the hole interesected a H zone consisting of dark chlorite with massive hematite stringers and chalcopyrite mineralization approximately 1-2% at 37.12 to 42.22 m, the hole encountered a H-zone consisting of semi massive to massive hematite veinlets in strongly chlorite altered rocks. Traces of visible gold were noted in a massive hematite stringer at 37.12-37.6 m. Pyrite veinlets approximately 1 mm wide occur in amounts up to 30% in foliated rock at 46.6 to 46.7 m. Minor arsenopyrite and pyrite as patches and veinlets occur at 85 to 87 m.

DDH-137 (azimuth 185 deg., dip -65 deg.) intersected various mineralized zones within hornblende feldspar breccia. The hole encountered the H-1 zone at 17.2 to 28.05 m consisting of strong chlorite and k-feldspar alteration carrying semi massive to massive hematite. At 18.6 to 19.47 m, minor specularite and traces visible gold were noted in massive hematite veinlets. Pyrite veinlets up to 5 mm wide with associated hematite were noted at 55 to 57 m.

At 116.55 to 117.59, the hole intersected a S-zone consisting of intense chlorite with massive pyrite/arsenopyrite veins up to 15 cm wide. Sulfides form approximately 25% of the zone. At 126.2 to 126.4, approximately 10% pyrite and 2-3% arsenoplyrite were noted associated with strong chlorite. A second S-zone was intersected at 133.5 to 138.27 m. This zone contained intense k-feldspar alteration with associated massive pyrite and arsenopyrite veinlets as well as black chlorite. Minor hematite was noted along the massive sulfide sections.

DDH-138-139 were drilled off the same pad along the same azimuth to test the H-1 mineralization in the areas of DDH-63 and 64 (visible gold in H-1 zone). Both holes encountered the S-2a, the stringer and H-1 zones. Figure 20 shows the geology of DDH-138-139.

DDH-138 (azimuth 45 deg., dip -45 deg.) intersected various mineralized zones within hornblende feldspar porphyry. From 6.1 to 9.6 m, the hole intersected the S-2a zone, consisting of black chlorite, minor pyrite patches and traces arsenopyrite as fracture filling between clasts. At 25.85 to 25.97, the rock is mosaic textured with coarse pyrite patches approximately 10% as well as minor arsenopyrite. The hole intersected the H-1 zone at 59.91 to 61.9 m consisting of massive hematite veins as well as pyrite veinlets. A second H zone consisting of massive hematite and pyrite was intersected at 77.16 to 77.56 m. The hematite section showed strong

magnetism. At 80.7 to 80.95 m, coarse pyrite forms up to 40% of the rock in association with minor hematite.

DDH-139 (azimuth 45 deg., dip -55deg.) intersected various mineralized zones within hornblende feldspar porphyry. The hole intersected the S-2 a zone at 7.8 to 12 m consisting of a weakly mosaic textured rock carrying weak pyrite/trace arsenopyrie as coarse patches up to 5 mm. From 17.55 to 19 m, the hole intersected a S-zone consisting of a mosaic textured rock with weak pyrite/arsenopyrite veinlets up to 5 mm. Sulfides form approximately 5% of the zone. At 54-55.15, the hole encountered the Stringer zone carrying weak arsenopyrite and minor pyrite in amounts up to 15%. From 77.8 to 79 m, the hole intersected the H-1 zone consisting of weak hematite veinlets with minor quartz/calcite/chlorite veinlets. At 91.44 to 95.55 m, the hole intersected a weak H-zone containing weak k-feldspar alteration, minor blood red hematite veinlets and minor coarse pyrite blebs.

DDH-140-141 were drilled off the same pad and along the same azimuths to test the Anderson zone below trenches 145-148. The holes failed to intersect the Anderson zone. Figure 21 shows the gology of DDH-140-141.

DDH-140 (azimuth 010 deg., dip -45 deg.) intersected andesite lithic tuff to 88.2 m, then mudstone to 90.9 m. From 90.9 to 113.5 m, the hole encountered andesite lithic tuff, then a breccia zone from 113.5 to 119 m. The hole intersected andesite lithic tuff from 119 to 128.95 m, then mudstone at 128.95 to 143.13 m. At 26.95 to 97.13 m, the hole intersected semi massive pyrite. From 42.1 to 42.37, this intersection contained 50% coarse cube pyrite in brownish hematite or possibly sphalerite. The breccia zone contained traces of arsenopyrite, chalcopyrite and minor pyrite.

DDH-141 (azimuth 010 deg., dip -55 deg.) intersected andesite lithic tuff from 1.22 to 76.2 m, then mudstone from 76.2 to 104 m, an interbedded mudstone/andesite lithic tuff section from 104 to 111.65 m and andesitic lithic tuff from 111.65 to 137 m. An andesitic tuff was intersected at 137 to 161.54 m. The hole was weakly mineralized with disseminated pyrite.

DDH-142-143 were drilled off the same pad and along the same azimuth to test the H-1 zone above the trench 81 area. The holes hit variably hematite stockworked rocks associated with strong chlorite in the H-1 zone in this area. Figure 22 shows the geology of DDH-142-143.

Ddh-142 (azimuth 160 deg., dip -45 deg.) intersected variously mineralized hematite sections within predominantly hornblende feldspar breccia. From 0.62 to 45.5 m, the hole intersected the above breccia, then intrusive hornblende feldspar porphyry from 45.5 to 122.83 m (end of hole). The H-1 zone is at 5 to 23.5 m and consists of a section containing intense hrmatite stockwrok approximately 40%. Local five pyrite veinlets form less than 1%. Minor specularite is associated with chlorite/calcite veinlets at 11 m. At 87.9 to 89.5 m, narrow coarse pyrite blebs and veinlets up to 2 cm wide are present. From 94.6 to 95.3, semi massive hematite is strongly magnetic and contains minor coarse pyrite. A hematite vein was intersected at 99.1 to 99.12 m (2 cm vein). At 112.78 to 114.61 m, pyrite patches and veinlets form 7% of the rock.

DDH-143 (azimuth 160 deg., dip -55 deg.) intersected hornblende feldspar breccia from 0.91 to 33.6, then intrusive hornblende feldspar porphyry from 33.6 to 106.68 m (end of hole). The hole intersected generally weak hematite alteration in a locally intense k-feldspar zone. At 88.7 to 89.7, the hole intersected wispy hematite veinlets with associated black chlorite.

Appendix I gives the complete geochemical and assay results for all the drill sections sampled. Appendix II shows the compiled drill logs for DDH-97-127-142 including assay intervals and results. For all the holes, the entire holes were assayed with intervals either reflecting lithology or mineralization. The maximum interval analyzed was generally 1.5m in length. Based on the results of the analyses assay results greater than 1 gpt are compiled in Table 2. Figures 23-31 show the compiled assay results with greater than 1 gpt Au. Assay results that show greater than 1 gpt gold and significant cobalt intersections (greater than 0.01%) are compiled in the table below.

TABLE 2

Drill Hole	Azimeth	Dip	Zone	From (m)	To (m)	Width (m)	An (g/t)	Au (opt)	Co%	Au Equivalent (opt)
CL97-127	160	-45	H-1	37.8	51	13.2	2.5	0.074	0.035	0.109
	[([63	67	4	1.68	0.049	[-	0.049
				76	77	1	1	0.031	-	0.031
		{	{	91.5	96.7	5.2	7.6	0.223	0.125	0.348
				103.5	105	1.5	1.5	0.043	· -	0.043
CL97-128	160	-50	H-1	1.22	3.0	1.78	1.34	0.039		0.039
				4.8	6	1.2	2.02	0.059	-	0.059
]	ļ	ļ	42	55	13	1.88	0.055	0.014	0.069
				62.5	64	1.5	1.41	0.041	-	0.041
				64	73.5	9.5	7.27	0 213	0.047	0.260
including	{	ŧ.	ĺ	66 75	70.7	3.95	15.35	0.448	0.081	0.529
Ū.	1			75	76.5	1.5	1.27	0.037	- 1	0.037
	1	1	}	90.5	95.5	5	7.27	0.212	0.125	0.125
including			ļ	90.5	94	3.5	9.97	0.291	0.152	0.443
CL97-129	165	-60	H-1	3	6	3	6.5	0.19	-	0.19
	1			58	59	1	1	0.03	0.03	0.05
CL97-130	245	-65	H-1	50	51.5	1.5	1.23	0.036		0.036
	1		H-2	66.5	69.5	3	2.36	0.069		0.069
			S	121.89	124	2.11	2.33	0.068	-	0.068
	í	ſ	S-2a	155.3	157.89	2.59	1.16	0.034	-	0.034
CL97-131	245	-62	Same	82.93	84	1.07	1 82	0.053	-	0.053
	1		as	90	107.81	17.81	3.97	0.116	0.043	0159
including	1		130	105.3	107.51	2.51	19.09	0 577	0.148	0.725
CL97-132	230	-65	Same	34	35.5	1.5	4.14	0.121	-	0.121
			as 130	118.42	119.75	1.33	2.57	0.075	-	0.075
CL97-133	230	-62	Same	71	72	J	5.48	0.16	-	0.0.16
			as 130	84	85.5	1.5	1.23	0.036	-	0.036
]			86.5	90.63	4.13	1.58	0.046	0.037	0.083
CL97-134	185	-60	S	56.87	58	1.13	12.82	0.374	0.07	0.384
			-	139.5	141	1.5	1.41	0.041		0.041
CL97-135	185	-55	HI	15	23.3	8.3	4.46	0.13		0.13

Compiled Assay Intersections in the Drill Holes

[1		From	To	Width	Au	Au		Au
Drill Hole	Azimuth	Dip	Zone	(m)	(m)	(m)	(g/t)	(opt)	Ca%	Equivalent
	<u> </u>									(opt)
			S-2b	43.5	44.4	0.9	12.2	0.356	0,1	0.456
)	S	49.5	54	4.5	1.3	0.038	0.02	0.058
				97.5	99	1.5	2	0.058	-	0.058
	1	1		104	107	3	11.44	0.334	0.129	0.463
1	1			112.5	114	1.5	2.85	0.083	- 1	0.083
J	J	ļ		139	140		2.4	0.070	ļ -	0.07
		L		157.5	159		1.13	0.033		0.033
CL97-136	185	-50	H-1	39	40	1	1.41	0.041	•	0.041
			S-2b	41	42.27	1.22	1	0.029	-	0.029
			S	80.25	83.5	3	2.02	0.059	-	0.059
Ĺ		[113	113.93	0.93	7	0.204	0.17	0.374
CL97-137	185	-65	H-1	18.6	19.47	0.87	4.08	0.119	-	0.119
		1	S-26	27	28	1	3.46	0.101	-	0.101
i i			S	67	68.5	1.5	1.19	0.035	-	0.035
}	1	}		76.5	78	1.5	1.68	0.049	0.4281	0.477
1				116	117.89	1.45	37.21	1.08	-	1.08
	L			133.5	138.27	4.77	9.46	0.276	0.123	0.399
CL97-138	045	-45	S-2a	6	8	2	2.4	0.07	0.01	0.08
Į	1	ļ	H-1] 11	12	1 1	11.3	0.330	•	0.330
		1		25.5	26.5	1	1	0.029	•	0.029
				27.5	29	1.5	1.58	0.046	-	0.046
1	1			59.91	61.9	1.99	8.65	0.303	0.02	0.323
				77.16	77.66	0.5	32.6	0.951	0.40	1.351
CL97-139	045	-55	5-2a	32	33.5	1.5	1.23	0.036	•	0.036
			H-1	50	51	1	1.92	0.056	-	0.056
				54	55.5	1.5	8.42	0.242	0.173	0.415
	1			95	96	L	2.26	0.066	-	0.066
CL97-140	010	-45	Ander	44	46.5	2.4	1.23	0.036	-	0.036
			-							
		1	son							
CI 07-141	010	-15	Ander	140	141.5	1.5	7.09	0.0207	-	0.207
		1 22	-500		1					
CL 97-142	160	-45	H-1	 	2	5	3	3.83	0.112	0.112
CL97-142					20	21	-	3.19	0.093	0.093
					93.9	97	3.1	3.42	0.100	0.100
ļ	ļ		J]	112	114.5	2.5	2.26	0.066	0.066
	160	- < <	H-1	0.91	1	2.09	2.46	0.072	-	0.072
UL97-143	100		11-1	36	375	15	1.3	0.038	-	0.038
			1	64.5	66	15	1.75	0.051	-	0.051
	1		1	885	on on	1.5	175	0.051	-	0.051
1	1	1	1	00.0	74	1.0			L	

The drill hole intersections of the various gold bearing zones indicates that the structures pinch and swell along strike and dip. In addition, analyses indicate that gold values can be quite variable along the structures ranging from high multi-ounce assays over meters down to hundreds of ppb over narrow intervals. Drilling has indicated that gold value occur along discrete zones within the structures, generally with shallow dips to the NW (based on 1996 drilling).

Overall, the drilling successfully extended Trench 81 as well as the H-1 zone to depth, particularly in the area below DDH-96-25 and 30. It appears that the H-1 zone becomes more sulfide rich and more hematite poor at depth as indicated by holes 97-130-133.

Drilling in the area south of the trench 14 and 15 area indicated the presence of a strong H-1 zone at depth (holes 135-137).

Drilling also indicated the existence of the stringer zone in DDH-138 and 139 located to the north of trenches 20-23. This stringer zone carries appreciable gold and cobalt values in the above holes.

It is recommended that further drilling be conducted to more adequately define the gold bearing zones within the various structures. A total of 5,000m is required for the area of the main zones with all drilling located in order to intersect the S-zones first and then the H-1 zone at depth. Holes would be drilled at 45 degres to the structures in oreder to test the areas of intersecting vein structures. Drilling would test for depth extension of the H-1 zone along the northern and southern portions of the defined zone. At present drilling has tested the H-1 zone to a depth of approximately 100 m in the area of ddh-96- 90-95 and 120-126 as well as DDH 97-130-133. This program would also test the S and S-2a zone at arelatively shallow depth.

CONCLUSIONS

- 1. The property lies is underlain by a series of NW trending shears that are mineralized with gold and gold-coblat bearing zones that have been traced for 7 km.
- 2. In the period August to October 1997, an extensive exploration program was conducted on the property including

A total of 2,128.43 m of NQ2 size diamond drilling.

A total of 139.5 m of trenching in 17 separate trenches (15.5 m in 2 trenches on Sutton zone and 124 m in 15 trenches on North Clone and Anderson zone)

A total of 377 samples taken in the course of a geochemical program along geophysical grid lines.

An IP survey over 14.2 line kilometers on three separate grids on the Clone 2, Port 21 and Clone 1 claims.

- 3. In the course of the programs, a total of 524 surface and 1649 core samples were collected and analyzed for metal content by ICP analysis (29 element package) and for gold using atomic absorption methods with fire assaying conducted on elements exceeding the upper detection limits of the first two methods.
- 4. Results of the trenching indicated low gold values on the Sutton, Anderson and Clone North zone with the exception of trench 228 (2 m of 0.43 opt Au).

- 5. Results of the geochemical program indicated anomalous gold and copper values associated with NE trending shears on the Port 21 claim. Highest values obtained indicated 0.056 opt Au and 0.11% Cu. Geochemical values were low on the Clone 2 claim.
- 6. Three separate grids were tested using Induced Polarization survey methods. The survey was successful in identifying IP anomalies in two of the grid areas. Results of the IP survey indicate seven areas of potential H-zone mineralization (low changeability, high restistivity) and six zones of potential S-zone mineralization (high changeability, low resistivity) on the main grid. Two zones of possible hematite and three zones of possible sulfide mineralization were identified on the C-1 grid.
- 7. The drilling on the various shear zones indicates numerous gold bearing intersections. The best results in the 1997 program include 5.2 m of 0.223 opt Au in DDH-127, 9.5 m of 0.212 opt Au in DDH-128, 17.81 m of 0.116 opt Au in DDH-131, 8.3 m of 0.13 opt Au and 3 m of 0.334 opt Au in DDH-135 and 1.45 m of 1.88 opt Au and 4.77 m of 0.276 opt Au in DDH-137.
- 8. The property has an excellent potential for increased reserves, particularly at depth and along strike of the presently defined mineral zone. Additional drilling in all likelihood will not only increase the tonnage but will also increase the grade.
- 9. The recommended program would include further trenching, drilling and further geochemistry.
- 10. Estimated cost of the program is approximately \$ 1,000,000.

RECOMMENDATIONS

The recommended program would include the following:

1. Extensive trenching in the southeast area of the property in the area of the H-3 zone.

2.

- 3. Drilling at depth to check for extensions of zones intersected in 1996 and 1997 to see if some of the gold bearing intersections extend to depth. Drilling would be at an oblique angle to the zones in order to get a better representation of the zone as well as check the areas of cross cutting faults.
- 4. Drilling of deep holes to check beneath the high angle reverse faults for possible extensions of the H and S-2 A zones. These holes would be drilled to the east of Trench 195 and test at depths of at least 200m. It is expected that 3 panels of 2 holes each, spaced 100m apart would be required.

5. Expand the geochemical surveys to further evaluate the 1996 and 1997 results. Surveys would concentrate west and east of the Sutton zone as well as in the immediate area of the Clone mineralization, particularly where rapidly melting glaciers expose more bedrock.

Estimated Cost of the Program

1. Diamond Drilling-5,000m at \$100/m		500,000
 Helicopter support-250 hours at \$725/hr 		181,250
3. Accommodation and supplies		50,000
4. Mobilization/demobilization		20,000
5. Trenching, includes dynamite, etc. includes personnel	<u>.</u>	30,000
6. Assaying-2000 samples at \$20/sample		40,000
7. Report costs		10,000
	Total	931,250
	Contingency	68,850
	Grand Total	1,000,000

REFERENCES

- 1. ALLDRICK, D.J. (1984); "Geological Setting of the Precious Metals Deposits in the Stewart Area", Paper 84-1, Geological Fieldwork 1983, B.C.M.E.M.P.R.
- 2. ALLDRICK, D.J. (1985); "Stratigraphy and Petrology of the Steward Mining Camp (104B/1E)", p. 316, Paper 85-1, Geological Fieldwork 1984, B.C.M.E.M.P.R.
- 3. CREMONESE, D. (1995), "Assessment Report on Geochemical Work on the Red 28, 29,30, 31, Cansado 1 and 2 Claims".
- 4. GREIG, C.J., ET AL (1994); "Geology of the Cambria Icefield: Regional Setting for Red Mountain Gold Deport, Northwestern British Columbia", p. 45, Current Research 1994-A, Cordillera and Pacific Margin, Geological Survey of Canada.
- 5. GROVE, E.W. (1971); Bulletin 58, Geology and Mineral Deposits of the Stewart Area. B.C.M.E.M.P.R.
- 6. GROVE, E.W. (1982); "Unuk River, Salmon River, Anyox Map Areas. Ministry of Energy, Mines and Petroleum Resources, B.C.
- 7. GROVE, E.W. (1987); Geology and Mineral Deposits of the Unuk, River-Salmon, River-Anyox, Bulletin 63, B.C.M.E.M.P.R.
- 8. GROVE, E.W. (1996) Private Report on Clone Project.
- 9. HARRISON, I. (1996) Structured Interpretation of the Clone Property.
- 10. HUGGINS, C. (1996) Ore Microscopy of the clone property, North Western, B.C. (Geology 428 Research Paper)
- 11. KAIP, A. (1996) Report on Clone Project (Draft Copy).
- 12. KRUCHKOWSKI, E.R. (1994); Report on Clone Property.
- 13. KRUCHKOWSKI, E.R. (1996); Report on Clone Property
- 14. KRUCHKOWSKI, E.R. (1996); Assessment report on Geochemical Program Clone 1 claim 33149.
- 15. KRUCHKOWKI, E.R. (1996) Assessment Report on Geophysical Program Clone Property.
- 16. KRUCHKOWSKI, E.R., (1997) Assessment Report on Clone Property

1STATEMENT OF EXPENDITURES*

Aircraft (Vancouver Island Helicopters)	\$ 78,061
Assays (Eco-Tech Labs and Pioneer Labs)	44,057
Camp Supplies	92,430
Diamond Drilling (J. Thomas Drilling)	137,695
Geophysical	28,360
Field Personnel (Geologists and Labour) – Period June to October 1996:	116,145
Supplies & Miscellaneous	33,384
Report Costs:	
Report preparation, compilation and research	
E. Kruchkowski, P. Geol.	5,000
Map preparation	1,000
Secretarial / work processing	600
Copies, reports, jackets, data entry etc.	100
<u>Total</u>	549,572
Allocations:	
Statement of Exploration #3111578**	\$7,000

• This report covers the complete 1997 surface program on the Clone property. As such it includes data to be covered by future assessment filings. Costs associated with that report have been deducted from the amounts indicated above.

Please apply the balance remaining as directed by Statements of Exploration to be filed in the future. Also, note that of this balance, the sum of \$ 14,957 was incurred after Ocy. 6, 1997 (\$ 5600 consisting of report costs and \$ 9,357 of assay costs).

CERTIFICATE

I, Edward R. Kruchkowski, geologist, residing at 23 Templeside Bay, N.E., in the City of Calgary, in the Province of Alberta, hereby certify that:

- 1. I received a Bachelor of Science degree in Geology from the University of Alberta in 1972.
- 2. I have been practicing my profession continuously since graduation.
- 3. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta.
- 4. I am a consulting geologist working on behalf of Teuton Resources Corp.
- 5. This report is based on a review of reports, documents, maps and other technical data on the property area and on my experience and knowledge of the area obtained during programs in 1974 1997 and work done by myself on the property.
- 6. I authorize Teuton Resources Corp. to use information in this report or portions of it in any brochures, promotional material or company reports.

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E.R. Kruchkowski, B.Sc.





Sheet 2 Figure 8

Sheet 1 Figure 7







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، مَمَا تَقَبِّرُو بْنُ فِي الوب أحدار بالمَجْعِ برحداً بِهِي بِعِرْجَمَ الْجَبْرُ إِبْنَ بَعَدَ اللَّهُ عَالَ مَا يَوْتَرُا اللَّهُ

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لسيبيد وحرور بصفائه المراجب بتركر فللمترجب فالمتعادية والمتعادية والمتعاد

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<u>LEGEND</u> with Au(ppb)/Cu(ppm) Values SCALE 1:1000 METERS









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GEOLOGICAL SURVEY BRANCH

