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# GEOLOGICAL AND GEOCHEMICAL REPORT

# ON THE

# ASCOT MINERAL CLAIM GROUP

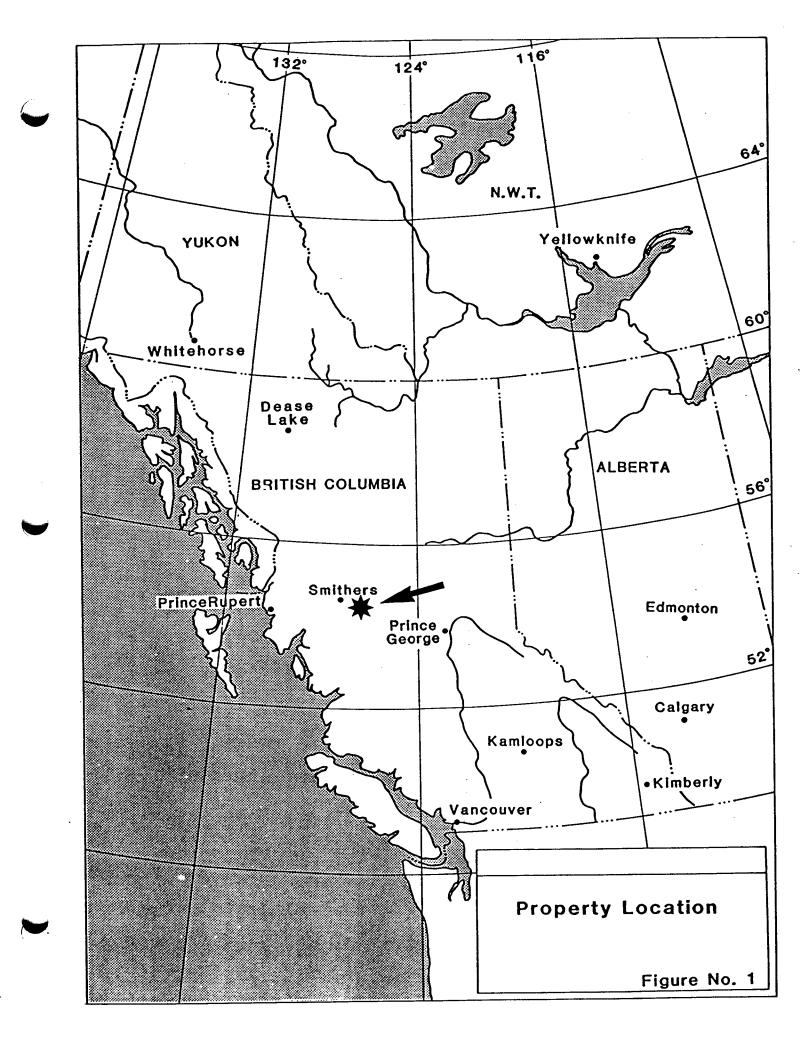
for	
THE DOME MOUNTAIN JOINT VENTURE PR	oze
TEESHIN RESOURCES LTD.	
and	a a
CANADIAN-UNITED MINERALS, INC	
owners and operators	
	I S S C
NTS 93L/15E	
Omineca Mining Division	

Longitude 1260 43'E

Robert Holland, B.Sc., F.G.A.C. Holland Geoservices Ltd.

Latitude 540 46'N

November 27, 1989



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#### SUMMARY

The Ascot claim group, located in the Dome Mountain area near Smithers, B.C., is host to stratigraphically-controlled lead-zinc-barite mineralization within altered intermediate volcanic flows. The claims are owned by Canadian-United Minerals, Inc. and Teeshin Resources Ltd. as part of their Dome Mountain Joint Venture. Previous work on the property has been largely reconnaissance in nature and a number of targets exist which have not been fully evaluated. Work in 1989 included grid soil geochemistry and limited detailed geological mapping.

The property is underlain by various volcanic and sedimentary units of the Smithers and Nilkitkwa formations, intruded by small dioritic bodies, likely of similar age and origin. Rock types show a high degree of variability within the claims, however, nine lithological subdivisions were delineated within the areas of mapping.

in the vicinity of the Ascot Creek Showings has Work confirmed their stratigraphic nature. The mineralized horizon has been traced on surface for a distance of at least 250 meters, This horizon is open with variable widths to several meters. along strike and to depth. Preliminary results show significant lead-zinc concentrations, with elevated silver-gold, occur along the entire structure. Values to 3.37% lead and 4.72% zinc were obtained by limited sampling. Mineralization consists of Α sphalerite-galena-pyrite-smithsonite-hydrozincite-barite. volcanogenic origin is can not be confirmed at this time and additional work is required to further test the continuity, width and grade of the known structure, and to locate and evaluate possible extensions.

Mapping in other areas failed to locate any new mineral occurrences or sizeable alteration zones. However a number of dioritic intrusive bodies were delineated which could provide a heat source for nearby mineral occurrences.

A total of 385 samples were collected as part of a soil geochemical survey on previously untested portions of the Ascot 4 claim. Results show several overburden covered areas to be significantly anomalous in Ba-Mn-Ag+/-Cu+/-As. The source of these anomalies is uncertain and follow up sampling is required.

Work to date has shown significant lead-zinc mineralization occurs along a structure of considerable strike length potential and continuity. Further work is warranted and required to further assess this prospect and a work program of further geological mapping, sampling, soil geochemistry, geophysics, trenching and drilling is proposed at an estimated cost of \$110,400.

#### INTRODUCTION

In August 1989, an exploration program of geological mapping and soil geochemistry was proposed for the Ascot Claim Group, by Teeshin Resources Ltd. and Canadian-United Minerals, Inc., as part of their ongoing Dome Mountain Joint Venture. This program was designed to test and evaluate of target areas within the property and to carry out assessment work requirements on the claims. Field work was performed during the period August 1 to October 4, 1989, under the supervision of R. Holland, geologist.

# LOCATION AND ACCESS

The Ascot claims are located in north central British Columbia, 32 kilometers due east of the town of Smithers and approximately 700 kilometers north northwest of Vancouver. The claim group lies at the head of the east fork of Canyon Creek, within the Dome Mountain-Mount McKendrick plateau upland area. Elevations range from 1220 to 1600 meters (4000-5250 feet) and the topography consists of rolling hills and broad intervening valleys with moderate to gentle, to locally steep slopes. The lower slopes are well vegetated with moderate stands of balsam fir and lesser pine and spruce. These give way uphill to thick subalpine stunted fir, spruce, juniper and buck brush, with numerous marshy subalpine meadows. Tree line occurs at about 1500 meters.

Access is via the old Dome Babine Road, a rough four-wheel drive track which starts at kilometer 20 of the Babine Lake Road, six kilometers west of the claims. The Dome Babine Road passes through the center of the property on its way to the peak of Dome Mountain and beyond and is truck accessible to the head of Canyon Creek from June to October. Access beyond Canyon Creek is best made by all-terrain vehicle or on foot. The Babine Lake Road is a publicly maintained all-weather route which accesses to Highway 16 just east of Smithers. Helicopter access is also readily available from a number of bases in Smithers.

The town of Smithers is an important government and supply center for the outlying Bulkley Valley region. The area is serviced by major highway and railway routes and lies along important B.C. Hydro power and gas lines. Smithers also boasts an international airport with scheduled twice daily jet flights to Vancouver and other centers.

#### CLAIM STATUS

The Ascot Claim Group is comprised of the following contiguous mineral claims located within the Omineca Mining Division of B.C. Claim locations are shown in figure 2.

<u>Claim</u>	Record No.	<u>Units</u>	<u>Record Date</u> *
Ascot 1	6089	16	Mar. 14, 1991
Ascot 2	60 <b>90</b>	20	Mar. 14, 1991
Ascot 3	6091	18	Mar. 14, 1991
Ascot 4	6092	20	Mar. 14, 1991
Ascot 5	6093	15	Mar. 14, 1991
MS 2	8033	9	Oct. 21, 1990
		98	

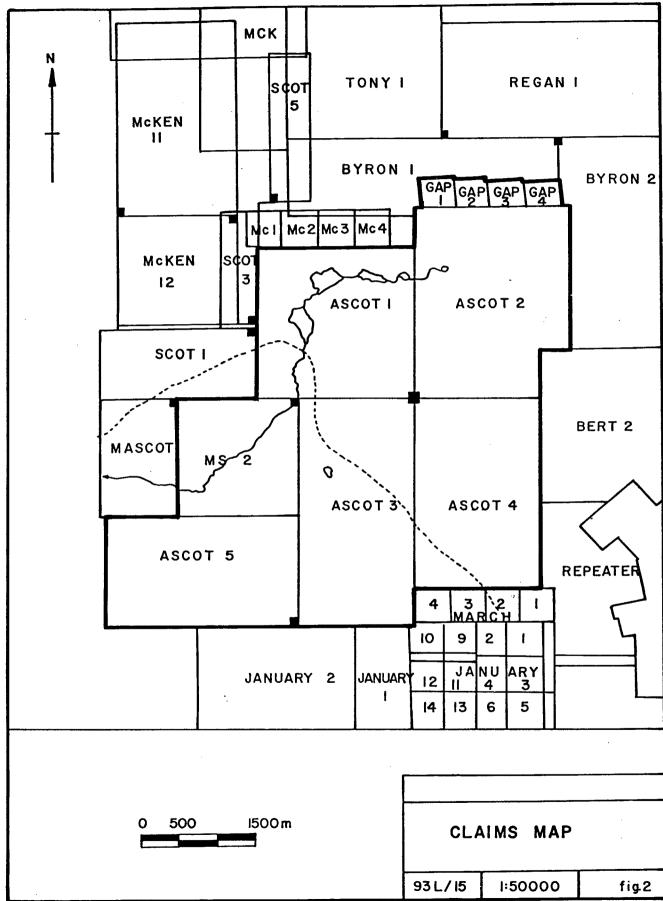
\*Includes application of current work.

The above claims are currently registered under the names of Canadian-United Minerals, Inc. and Barry Price and are held jointly by Teeshin Resources Ltd. and Canadian-United as part of their Dome Mountain Joint Venture.

#### PREVIOUS HISTORY

Mineral exploration in the Dome Mountain area dates back to 1898 with the appearance of the first prospectors in the region. By 1914 several important gold-bearing veins had been discovered. The Dome Mountain gold camp saw considerable surface and 1925, underground exploration and development from 1916 to primarily on the Forks, Cabin, Jane and Ptarmigan Veins. Α second period of development occurred between 1932 and 1935, with focus on the newly discovered Free Gold Veins. In 1940, a а shipment of sorted ore totalling 2235 tonnes was reported from the Free Gold occurrence, however activity was once more halted and the area again lay dormant.

Resurgence of mining exploration in the region during the 1960's led to further evaluation of Dome Mountain and adjoining During the early 1980's, underground development was areas. carried out on the Free Gold showings by Reako Explorations Ltd. and Panther Mines Ltd. By 1984 a small portable mill had been set up nearby and a reported 7931 grams (255 oz.) gold and 14,617 (470 oz.) silver had been recovered. In 1984, Noranda grams Exploration Co. Ltd. consolidated the many holdings in the area and carried out detailed surface exploration, including diamond The property was subsequently acquired by Canadiandrilling. United Minerals and Teeshin Resources who carried out extensive drilling and underground programs on the newly discovered Boulder Creek-Argillite Zone. Published proven and probable ore reserves



to date include 270,989 tonnes, cut and diluted, grading 12.17 g/t gold and 80.66 g/t silver (298,630 tons of 0.355 opt Au & 2.352 opt Ag).

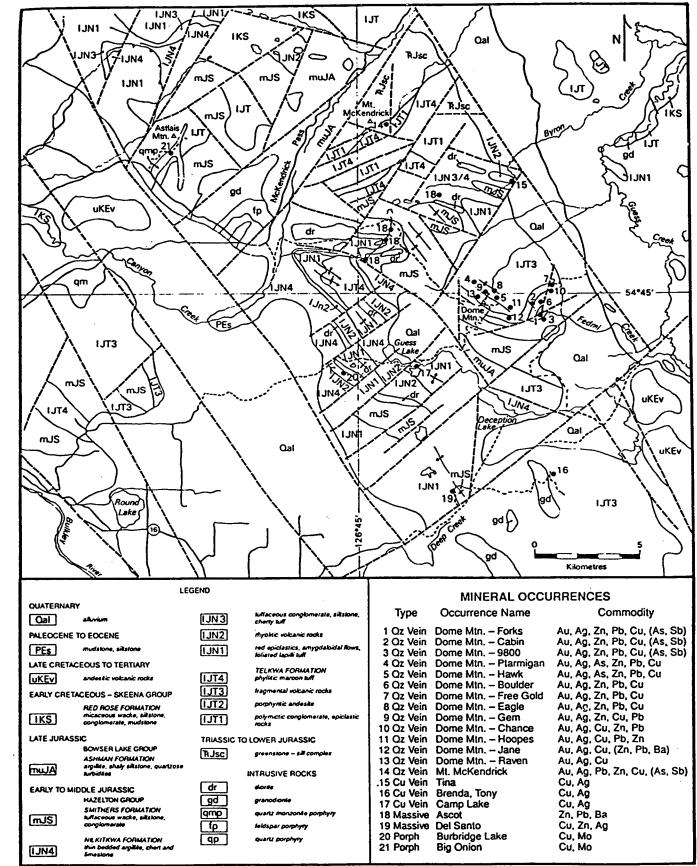
The first known claims in the Ascot area were staked in 1951 by W. Silta, however no work was apparently recorded. In 1967, the area was staked by Texas Gulf Sulphur Company (now Kidd Creek Mines Ltd.) on the basis of anomalous silt geochemistry. Follow up work resulted in the discovery of a number of lead-zinc-barite and copper showings in the Canyon Creek area, several of which were stratigraphically controlled. Texas Gulf carried out considerable work between 1968 and 1973, including reconnaissance and detailed soil geochemistry, airborne magnetic and electromagnetic surveys, geological mapping and three short diamond drill holes. One of these holes intersected disseminated leadzinc mineralization in a limy tuff horizon.

The area was restaked in 1977 and acquired by Petra Gem Exploration, a private company owned by B. Price. Limited work was done, including trail construction, geological mapping and sampling, ground magnetics, and three short packsack drill holes. In 1985 the property was sold to Geostar Mining Corp which carried out extensive soil geochemistry, geological mapping, VLF E.M. and limited back hoe trenching in 1987. In early 1989 the claims were acquired by Canadian-United Minerals, Inc. and later included in their Dome Mountain Joint Venture with Teeshin Resources Ltd.

#### GENERAL GEOLOGY

Much of the following geological description is summarized from MacIntyre (1985). The Dome Mountain-Mount McKendrick area is underlain predominantly by rhyolitic to basaltic volcanics, volcaniclastics and sedimentary rocks of the Hazelton Group. The Hazelton Group is a island-arc assemblage that was deposited in the northwest trending Hazelton trough during early to middle Jurassic time. Three major formations have been recognized in the Smithers area. The oldest, thickest and most extensive is the Telkwa formation which is comprised of subaerial and submarine pyroclastics and flow rocks with lesser intercalated the Dome Mountain area, these rocks form part sediments. Within Shelf facies which separates predominantly of the Babine subaerial volcanics to the west from their submarine equivalents to the east. Conformably to disconformably overlying the Telkwa formation are rocks of the Nilkitkwa formation. To the west, the Nilkitkwa consists largely of red pyroclastics while to the east is represented mainly by marine sedimentary units with it intercalated rhyolitic to basaltic flows. The Smithers formation disconformably overlies the Nilkitkwa and is comprised of fossiliferous sandstone, siltstone and lesser intercalated felsic tuff.

7



REGIONAL GEOLOGY (From D.G. MacIntyre, 1986) Several small elongate plugs and dykes of fine to medium grained diorite or diabase intrude the Hazelton sequence in the area. These mafic rich intrusions, although as yet undated, are possibly Jurassic in age (Topley Intrusions) and are potential feeders to the arc system. Outcrops of altered quartz porphyry and porphyritic quartz monzonite have also been reported.

#### PROPERTY GEOLOGY

The Ascot claims are underlain by a mixed and variable package of assorted andesitic to trachyandesitic tuffs, lesser related flow rocks, and variably calcareous fine grained clastic Mapping by MacIntyre et al.(1987) suggests these sediments. rocks belong to the Smithers formation and upper members of the Nilkitkwa formation. Numerous hypabyssal diorite, diabase and and dykes, often chemically and texturally andesitic plugs similar to the volcanics, passively intrude this sequence. Lithologies, particularly within the tuffaceous horizons, are extremely variable, often over short distances, making correlation of stratigraphy difficult. This is likely further complicated by block and thrust faulting, which previous work in the region has shown to be numerous and of significant displacement. Rock divisions described below are, therefore, based on general lithologies only and no stratigraphic order or Difficulties were also encountered in trying to age is implied. correlate this geology with previous geological interpretation in the area and so this was not done.

Three separate areas received attention during the 1989 work program. Mapping was carried out along a small tributary of Canyon Creek, referred to in this report as Ascot Creek, and its confluence area. This region is host to a number of stratigraphically controlled showings, referred to here as the Ascot Creek Showings (Area 'A'). The second area of interest was the 1989 soil geochem grid area located in the southeastern half of the Ascot 4 claim (Ascot 1 Grid Extension), an area previously unmapped and evaluated. Reconnaissance mapping was also done around a small diorite stock previously partially outlined in the southeast corner of the Ascot 3 claim (Area 'B'). Outcrop exposure within these regions is limited and generally restricted to small knolls and to deeper cut portions of the major creek The geology of the various areas is shown in tributaries. figures 4 to 7.

The following lithological units were recognized. A number of specimens were submitted for petrographic analysis and the locations of these are shown on the above figures. Petrographic descriptions are contained in Appendix 2 of this report. Unit 1 Andesitic Crystal Tuff/Crystal Lapilli Tuff

This maroon, grey or green crystal tuff unit is widespread and typical of the Babine shelf facies on a regional scale. The rocks are generally subaerial to shallow marine and andesitic to, less commonly, dacitic in composition. They generally consist of abundant tuff and/or lapilli tuff fragments (locally to several centimeters) and lesser feldspar crystals in a fine grained clastic matrix of similar composition. The maroon color, caused by minutely disseminated hematite, is very common and typical of Green, grey and mixed varieties are often subaerial phases. intermixed with the maroon, possibly as local iron depleted zones or alteration, or may form sizable bodies unto themselves. Outcrops are often massive but weak to moderate cleavages are also common.

Specimen R89-57A, comes from the contact area between a large exposure of fine grained predominantly maroon tuffs and underlying carbonate-rich sediments. These rocks are brighter green in color, contain significant carbonate and have a very high percentage of altered glass matrix. This horizon is distinguished from maroon varieties in figure 7 as subunit la.

# Unit 2 Near Glassy Trachyandesite? Tuff

Unit 2 rocks are generally rusty weathering, well fractured and light to pale green or grey in color. They are usually fine grained to sandy textured with local bedding. These tuffs are largely matrix dominated and consist primarily of fine tuff to lesser lapilli tuff fragments, in a cryptocrystalline (near glassy) to very fine clastic matrix. Fragments are generally rounded and buff to rusty colored, and are strongly carbonatized. Pervasive carbonate and sericite? alteration also occurs within The clast-poor, near glassy phases are the matrix material. similar in appearance to altered phases of quartz keratophyre 6), while the coarser, more clastic phases appear similar (unit to some of the finer phases of trachyandesite tuff (unit 5) or carbonate altered trachyandesite flows (unit 4).

#### Unit 3 Impure Limestone/Calcareous Sediments

Grey to buff weathering, grey to blue-grey, thin bedded sandy limestone and strongly calcareous sandstone/siltstone horizons occur as several distinct and mappable units within the Ascot claims. Within the mapped areas these are generally found associated with unit 1 lithologies. Minor calc-silicate alteration (skarn) occurs locally along the contacts with these enclosing volcanics.

# Unit 4 Altered Andesite-Trachyandesite Flow

This unit appears to be restricted in distribution, but is significant in its association with the Ascot Creek Showing. It is a massive, green to rusty weathering, highly altered, dark green, volcanic flow horizon, of primarily andesitic composition. This andesitic unit consists largely of close packed aggregates of plagioclase and mafic phenocrysts, totally altered to sericite and chlorite-carbonate respectively. The matrix is comprised of finely intergrown carbonate-chlorite with accessory rutileleucoxene. The crystals are generally weakly trachytic. Sample R89-22B is typical of this unit.

Within this andesitic horizon, are poorly outlined zones or flows of trachyandesite, distinguished by its rusty weathering, pronounced pale lime green to yellowish color and abundance of large, flow elongated, grey carbonate-filled amygdules. These rocks are also characterized by the presence of K-feldspar, the absence of mafics, and its weak sericite-moderate carbonate alteration. This is similar in appearance to the carbonatesericite alteration envelopes at the Boulder Creek Zone on Dome Mountain. In figure 6, this facies is delineated as subunit 4a, and is typified by sample R89-59B.

A third variation of this unit occurs locally, but is not mappable. This is distinguished by its very strongly rusty weathering and pale yellowish grey color. Compositionally it lacks chlorite alteration or mafics and is less altered (sericite-carbonate). It also contains abundant very fine, carbonate filled amygdules. Specimen R89-59C is representative of this facies.

# Unit 5 Trachyandesite Lithic-Crystal Tuff

These rock are widespread and variable within the map areas. They are generally light green to grey in color, fine to medium grained, and are characterized by an abundance of fine lithic and feldspar crystal fragments. The clasts are most commonly subangular to rounded, felsitic, feldspar-rich volcanic fragments and disaggregated plagioclase crystals with minor amounts of chloritic matrix (devitrified glass?). Chloritization is common (10 - 20%) and pervasive carbonate alteration (5 - 20%) occurs in Rocks within this suite range in composition from most areas. mainly trachyandesite to lesser andesite. Rock specimen R89-48 is sample of a latite interbed within this lithology, while R89a 54C represents an strongly chloritic variation.

#### Unit 6 Quartz Keratophyre

This rather unusual rock type is characterized by a green, glassy-looking, felsic appearance. It is generally comprised predominantly of a fine mesh-work of albite, with 10-15% chlorite (after amphibole?) and biotite crystals, and minor quartz and sericite,. These rocks grade locally into large zones of strongly rusty-weakly manganese stained phases in which pervasive carbonate alteration is prevalent, and biotite and chlorite are largely absent. This altered phase, represented by specimen R89-50A, has been termed albitite and where distinguishable is referred to as unit 6a.

### Unit 7 Andesite Tuff

These rocks are characteristically fine grained, massive to locally poorly bedded and dark grey to greenish-grey in color. Compositionally and in outcrop appearance, they are similar to finer grained phases of diabase (unit 9). The fragments, up to 6.3 mm in size, are generally close packed and sub-rounded. They consist largely of very fine plagioclase crystals with lesser chlorite (after pyroxene?). Matrix material is generally minor and is comprised mainly of chloritic vitric ash. Sample R89-47 is a typical example of this lithology.

#### Unit 8 Fine Grained Sediments

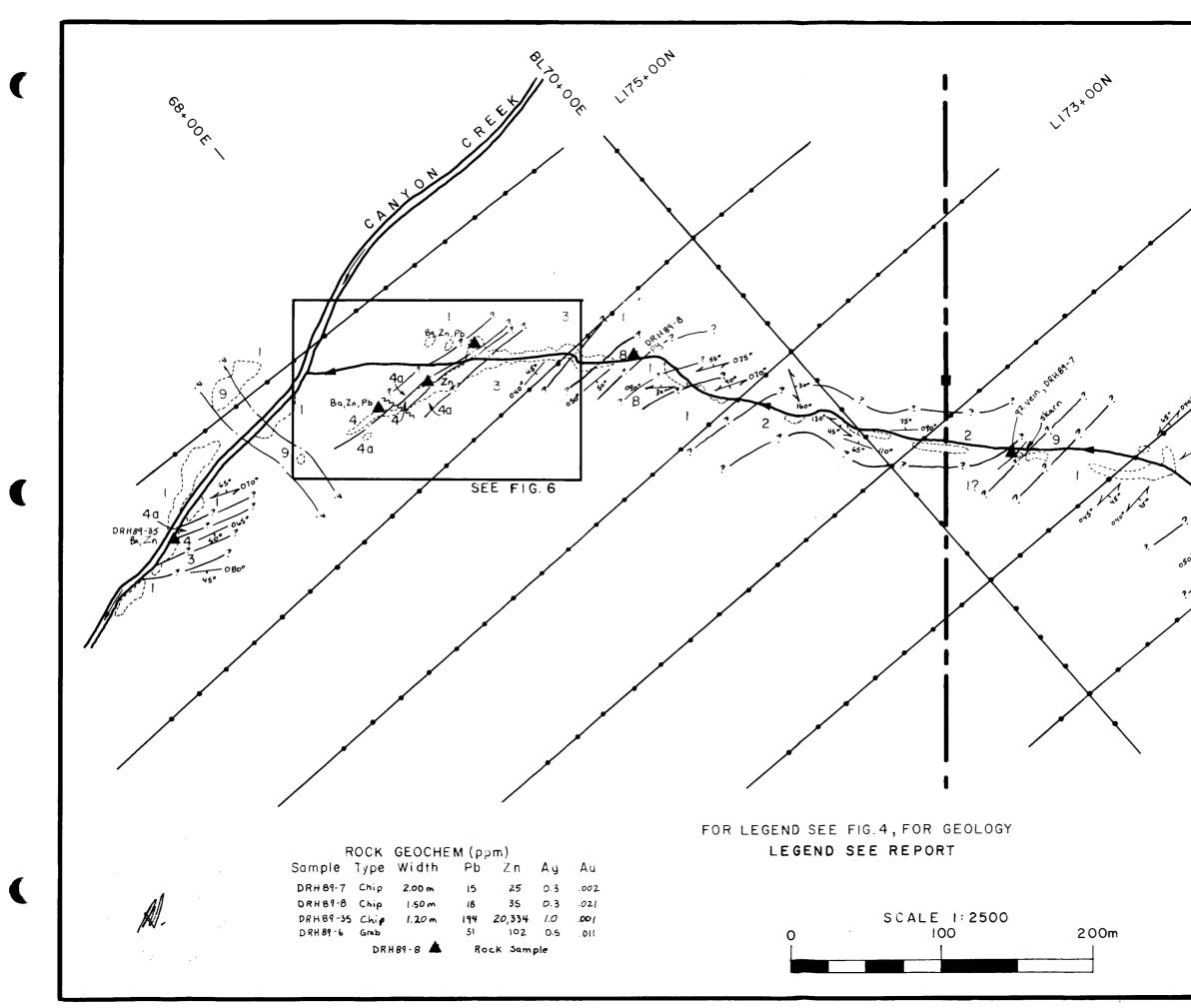
This unit is typified by poorly exposed, dark grey, weakly calcareous to noncalcareous shales with lesser silty and sandy shale components. They are generally massive to strongly fractured, often with a weak to moderate cleavage, and weather grey to buff or rusty. They also tend to be weakly hornfelsed, with up to 2% disseminated pyrite, and are locally fossiliferous (Trigonia and clam-like bivalves were noted at several locales). Thick mappable interbeds of chloritic unit 5 tuffs are common.

# Unit 9 Diabase, Diorite Porphyry, Hypabyssal Andesite

A number of fine to medium grained intrusive dykes and plugs were noted on the property and many others may exist due the distinguishing them their difficulty in from volcanic equivalents. In outcrop they are massive, grey to brown weathering and sandy textured with a pronounced green coloration speckled with white feldspar phenocrysts. These rocks are generally plagioclase-rich (typically >65%), consisting of variable concentrations of phenocrysts, (0.5-4.0 mm in size) in a meshwork aggregate matrix of finer laths. Intergrown with the plagioclase in the matrix are variable amounts of pyroxene (augite), chlorite (after amphibole or glass), and occasionally Weak saussuritization (sericite-epidote) of the K-feldspar. plagioclase is common. Specimens R89-45 and R89-55A are representative of the coarser members of this unit.

# Ascot 4 Claim - Ascot 1 Grid Extension Fig. 4

Much of the 1989 soil grid area is underlain by poorly exposed trachyandesite lithic-crystal tuffs of unit 5. These form in a few scattered outcroppings mainly in the northern corner of the grid area and along the northern edge of the prominent knoll grid west of TL80+00E. In most cases these rocks are massive, however, fine grained sandy or silty interbeds are These suggest areas of water lain and/or locally common. reworked material. An outcrop east of Doray Creek also shows a well developed and tightly folded schistosity. Unit 5 lithologies also occur as thick, strongly chloritic interbeds within weakly calcareous shales of unit 8 grid west of the Dome Babine Road.



L171\*00M DRH89-6 12\*00%

ASCOT CLAIM GROUP AREA'A' - ASCOT CREEK SHOWINGS

# GEOLOGY

Oct. '89

N.T.S. 93L/15E

Fig. **5** 

Unit 7 dark grey andesitic tuffs are well exposed along the northwestern end of the above knoll. The contact relationship with unit 5 is uncertain but appears to be discordant. Cleavages within unit 7 are often well developed and consistently trend 1250-1500, dipping 800 south to vertical. Shell fossils were found locally within this unit in this area.

The southeastern two thirds of the knoll is underlain by a small plug of medium grained, unit 9 diabase. The contacts with both tuffs units are sharp and appear in part to be controlled by north trending, near vertical joints. The diabase is generally massive with minor local jointing and stringers oriented parallel to the unit 7 cleavage.

Along those portions of L150+00N and 152+00N between the Dome Babine Road and 85+00E is an extensive area of small outcrops of unit 6 quartz keratophyre. These grade locally, particularly to grid west, into large rusty weathering zones of related albitite (unit 6a).

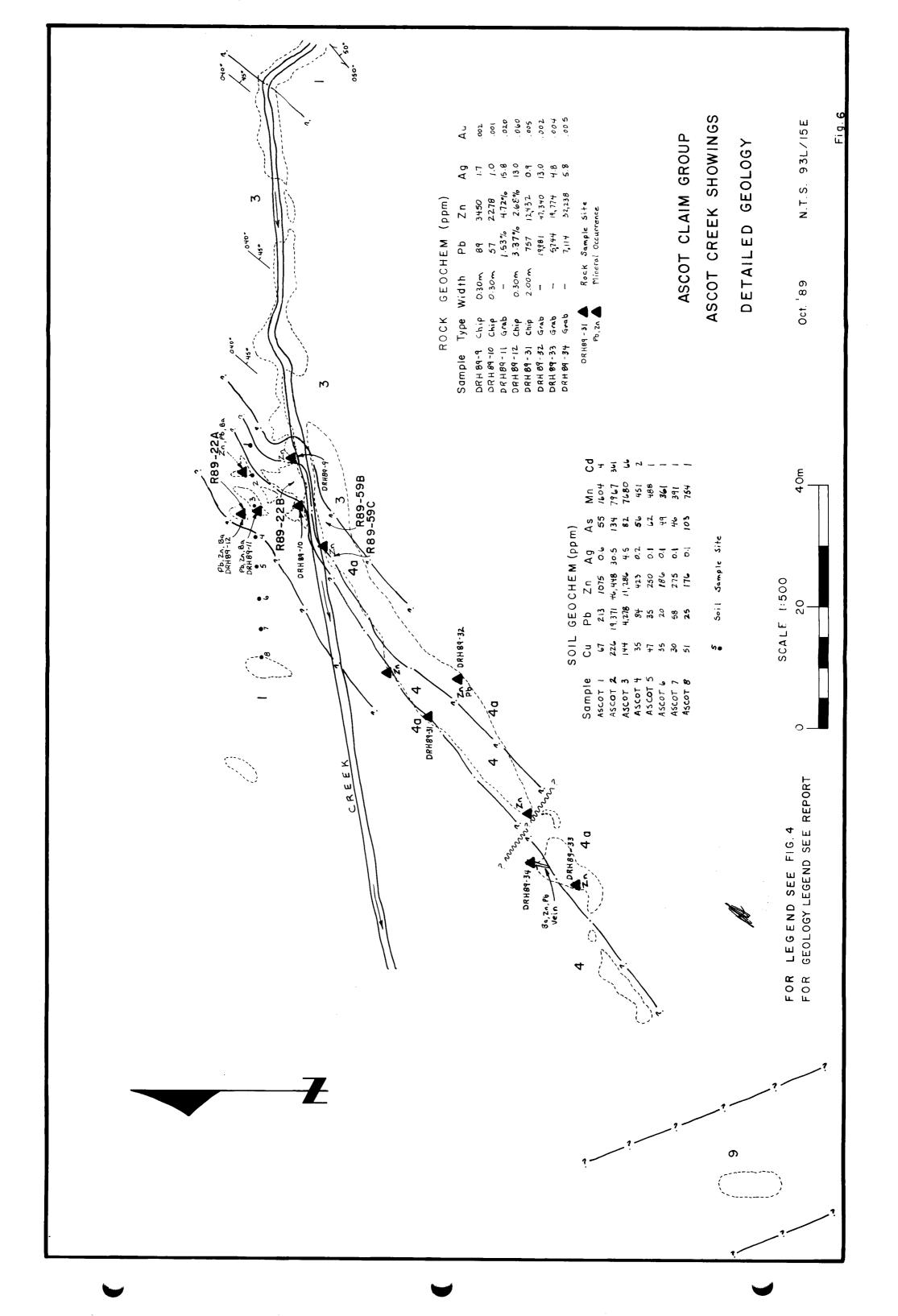
#### <u>Area 'A' - Ascot Creek Showing</u>

# Fig. 5 & 6

The upper Ascot Creek area is underlain mainly by variable tuffs and lapilli tuffs of unit 1. They are locally maroon or partially maroon in color but more commonly are green or grey. Locally they have poor to moderately well developed cleavages which largely parallel bedding in adjoining rock types. In the vicinity of Baseline 70+00E there is a thick interbed of unit 2 which sub-parallels the creek for at least 300 meters. Unit 2 contains several shaly interbeds with well developed cleavages particularly near the baseline. Further downstream, near the base of this section, are at least two major interbeds of unit 8 shale, up to 15 meters thick.

Conformably? underlying unit 1 is sequence of thin bedded sandy limestones of unit 3, approximately 35 meters thick. This in turn is conformably underlain at the Ascot Creek Showing by a unit 4 altered andesite-trachyandesite flow unit, at least 12 meters thick. The trachyandesite member (subunit 4a) can be seen to both overlie and underlie the andesitic member in this area as shown in figure 6. It is this unit and particularly the trachyandesite member that hosts lead-zinc-barite mineralization as discussed in later sections. Underlying the showing area are more green-grey tuffs and lapilli tuffs of unit 1.

At least three fine grained diabase or diorite dykes were noted in this area. Two occur well upstream from the showings and are strongly chloritic. No orientations were obtained on these but they likely emanate from a large diorite body to the south. The third dyke, which cuts the mineralized horizon 150 meters southwest of the main showing, is somewhat different from



typical diorites in that it is unaltered and contains abundant hornblende needles. It trends northwest and where exposed in Canyon Creek, is 22 meters wide.

In the Ascot Creek area, the stratigraphy appears to uniformly strike 0400-0700 and dip 0400-0550 south as defined by cleavages and, where apparent, bedding. These become east to southeast, northerly dipping in the vicinity of BL70+00E, where they appear to outline a gentle, steeply plunging fold set. The structure is complicated by locally well developed, cross cutting cleavages, commonly at 0700-0900, dipping moderately to steeply north, but also folded. Local shearing was noted, but no important fault zones or displacements were observed in this section.

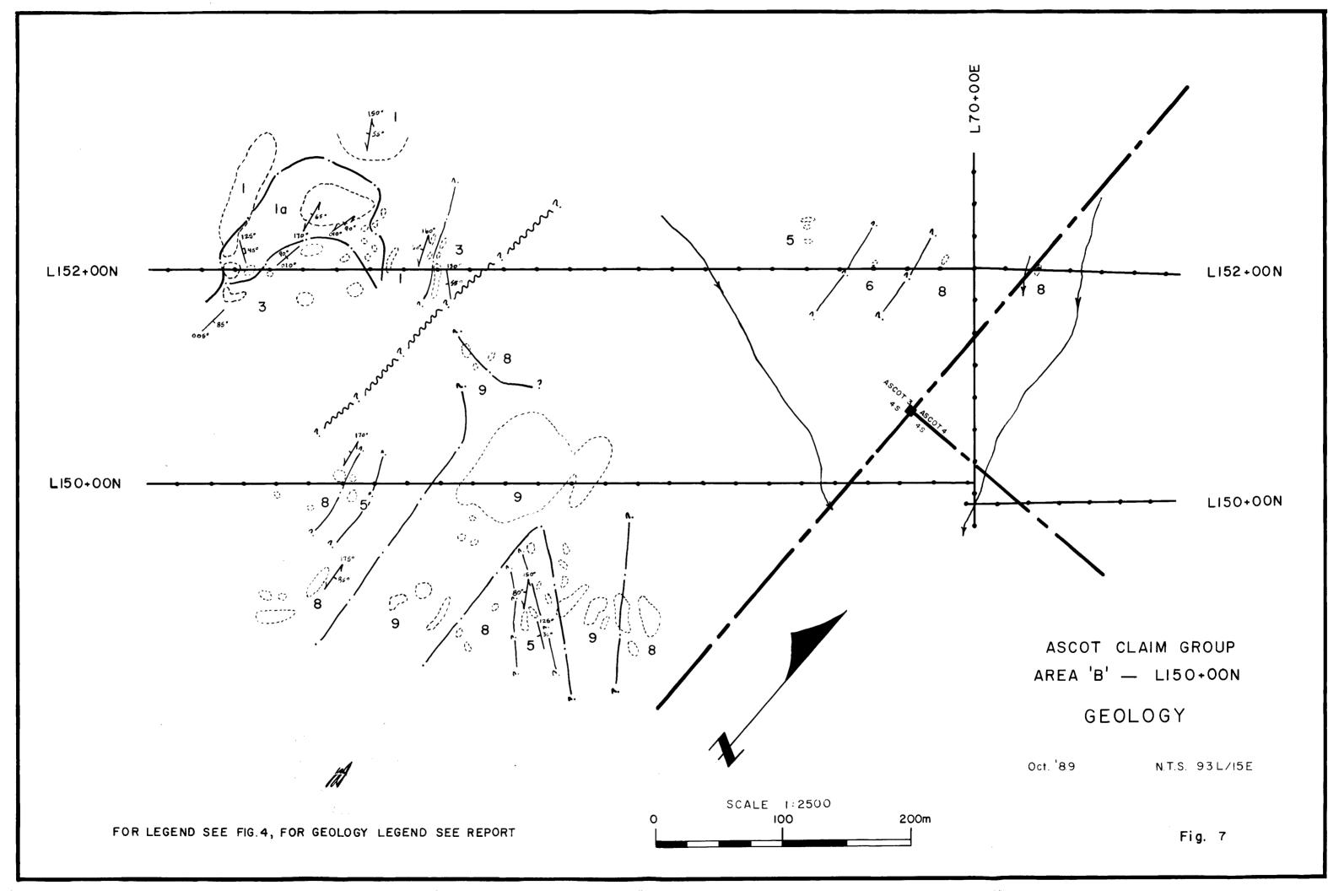
#### Area 'B' - Ascot 3 Claim

# Fig. 7

Outcrop exposure within Area 'B' is largely confined to two adjacent small knolls in the grid western region. The southernmost of these is underlain by a large branching dyke-like body of medium grained diorite porphyry (unit 9). At least two major dyke branches, 80 and 50 meters wide respectively, were delineated. The dykes cut weakly hornfelsed sediments of unit 8 and several thick interbeds of chloritic tuff or volcanic sandstone-siltstone (unit 5). Similar sediments and tuffaceous lithologies occur in limited outcrop to grid east. In this area a small outcrop of guartz keratophyre (unit 6) was also noted.

The northernmost knoll is underlain by strongly calcareous sediments and impure limestones of unit 3, capped to grid north by extensive, fine grained, uniformly maroon, crystal tuffs (unit 1). The contact appears unconformable with local minor skarn. A lensoidal body of green, glassy, carbonate altered tuff of subunit la lies along this contact and may be a result of local quenching of the tuffs with related remobilization of adjoining carbonate material.

Bedding is not often discernable within unit 8 sediments and is variable and locally highly contorted within unit 3. Poorly developed cleavages are found in both sediments and maroon tuffs. These most often strike 1500-1700 and dip moderately to steeply west, but can be variable. In places they parallel bedding and elsewhere they may parallel dyke contacts. The geology of the two knolls is markedly different and a north trending fault is proposed to separate the two areas.



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#### MINERALIZATION

The Dome Mountain area is host to numerous shear-controlled veins containing appreciable values in gold, silver, lead, zinc and copper. On the adjoining Dome Mountain property, individual vein systems consist of lensoidal quartz-sulfide and quartz-carbonate-sulfide veins, in a typical pinch and swell format, within persistent shear structures. These shear zones have often been traceable on surface for several kilometers. Mineralization typically consists of pyrite with lesser amounts of sphalerite-galena-chalcopyrite-tetrahedrite. Gold commonly occurs in the native form along the margins and in fractures within the other sulfides. Silver appears to occur largely in galena and/or tetrahedrite. Small quartz-tetrahedrite and barite-tetrahedrite veins also occur locally. Vein alteration assemblages consist primarily of pervasive carbonate-sericite-(fuchsite?) replacement envelopes ranging up to several meters in width. These are typically pale to lime green bleached zones and may contain disseminated pyrite and guartz-carbonate+/-sulfides stringers.

On the Ascot property, stratigraphically controlled leadzinc-barite mineralization occurs in Ascot Creek near the contact between altered intermediate flows (unit 4) and impure limestones (unit 3). On the north side of Ascot Creek, pyrite, sphalerite, galena and lesser smithsonite-hydrozincite occur as streaks, irregular blebs and disseminations in small, erratic, lensoidal carbonate-barite cemented breccia zones within carbonatized amygduloidal trachyandesites (unit 4a). Sulfides occur both in the matrix and within altered breccia fragments. Samples DRH89-11, -12 were collected from well mineralized breccia areas and assayed 1.53% Pb, 4.72% Zn and 3.37% Pb, 2.68% Zn respectively, low but anomalous gold-silver values. both with Silicified guartz-carbonate stockwork stringer zones, with pyrite, also occur locally within the showing area and samples (DRH89-9, -10) showed low but anomalous zinc. Sample locations and assays values are shown in figure 6.

A line of eight soil samples was collected, at 5 meter intervals across the main showing area, to test the geochemical response into adjacent overburden areas. Results for these samples are also shown in figure 6. Very highly anomalous values were obtained for lead-zinc-silver, with weaker copper-manganesecadmium, over the showing area, as expected. This did not however, extent into the adjoining areas, and the postulated width of the mineralized zone at this point is about 15 meters.

From the main showing, the mineralized stratigraphy can be traced continuously along strike to the southwest for at least 120 meters. Within this section, mineralization is found primarily in the vicinity of the contacts between chloritic andesite (unit 4) and non chloritic trachyandesite (unit 4a). Significant amounts of smithsonite, hydrozincite, and lead, probably as carbonates, occur in fracture fillings and carbonate-(barite?)-rich streaks and stringers. The mineralized zone is poorly defined but widths up to several meters were observed. Local remobilized barite veins and stringers were also noted. Samples DRH89-31 to -34 were collected at various location along this trend and all returned appreciable lead-zinc values (see figure 6).

In addition, sample DRH89-35 was collected in Canyon Creek, from the apparent extension of this horizon roughly 130 meters further along strike (see figure 5). This sample was also high in lead-zinc. Similar mineral occurrences have been reported in Canyon Creek, further downstream, but these were not examined or evaluated.

Small quartz-carbonate stringer or silicified breccia zones were also noted at other several locales, particularly east to the Ascot Creek Showings. Some of these are weakly pyritic. One such occurrence is found near the contact between a dioritic dyke and enclosing calcareous tuffs. Fine grained skarn alteration is prevalent and a +2.0 meter rusty quartz-carbonate vein was exposed in the creek bank. Chip sample DRH89-7, however, failed to return anomalous values. Other similar showings were also not anomalous where sampled.

Widespread mineralization occurs elsewhere on the Ascot property mainly in association with calcareous sediments and adjacent volcanics, in the vicinity of dioritic intrusions. A number of these occurrences have been previously sampled and trenched. At these locales, discontinuous and erratic mineralization occurs in quartz-carbonate stringer zones, sweats and veins and are related to local remobilization of metal values from the sediments, by the diorites. Values were mainly in leadzinc with generally low to trace gold-silver content.

A small massive pyrite occurrence, of possible volcanogenic significance has also been reported along Canyon Creek in the southwestern corner of the MS 2 claim. This previously examined showing is small and contains no significant metal values. No work was done in this area in 1989.

#### SOIL GEOCHEMISTRY

The southeastern half of the Ascot 4 was untested during previous geochem programs and due to its proximity to the adjoining Dome Mountain prospects and favorable geological setting, it was deemed a likely target for further work. As a result, the existing Ascot 1 grid was extended along Tieline 80+00E from 150+00N to 138+00N at the southeastern claim corner. Crosslines were run at 050° and 200 meter spacings, from 74+00E to the eastern claim boundary. Previous grid lines L150+00N and L152+00N were also extended northeasterly to the edge of the claims. Stations and sample points were established at 25 meter intervals along each line and a total of 377 samples were collected for analysis. All lines were put in using hip chain and compass and were marked with flagging tape. Eight samples were also collected from the main Ascot showing area, however these are dealt with under Mineralization.

Sample collection was carried out using a standard sampling mattock or `grub hoe' from a depth of 15 - 30 centimeters. The **`B'** soil horizon was sampled, where possible and the sample quality was in most cases good. Organic-rich samples were avoided, and no sample was collected if the 'Ao' horizon was not penetratable. Samples were stored in kraft soil bags, labelled to grid co-ordinates, air dried, and shipped to Acme as At the Analytical Labs in Vancouver for analysis. lab, the samples were oven dried overnight, then screened to -80 mesh. Α 0.5 gram portion of screened material was digested in 3 ml. of aqua regia at 95° for 1 hour, then diluted to 10 ml. with The solution was then analyzed by standard ICP distilled water. (inductively couple argon plasma) techniques for copper, lead, zinc, silver, arsenic, manganese, cadmium, antimony, chromium and barium. Leaching for manganese and barium is only partial for this extraction technique and results are therefore only relative for these two elements. All results are reported in parts per million (ppm) and the original lab geochem sheets are contained in Appendix 1 of this report.

Previous work in the area by a number of operators has established anomalous threshold values for the various elements as approximately equal to the mean plus two standard deviations, or roughly at the 96th percentile. The highly anomalous threshold has been arbitrarily chosen at roughly twice the anomalous level. Previous work in the Ascot claims area (Helgason, 1987) plus visual evaluation of data has resulted in the following threshold levels being chosen.

<u>Element</u>	<u>Background</u>	<u>Anomalous</u>	<u>Highly Anomalous</u>
Copper	0 - 60 ppm	61 - 120 ppm	+120ppm
Lead	0 - 25 ppm	26 - 50 ppm	+50 ppm
Zinc	0 - 250 ppm	251 - 400 ppm	+400 ppm
Silver	0 - 0.9 ppm	1.0 - 1.8 ppm	+1.8 ppm
Arsenic	0 - 50 ppm	51 - 100 ppm	+100 ppm
Manganese	0 - 2000 ppm	2001 - 4000 pp	m +4000 ppm
Barium	0 - 450 ppm	451 - 700 ppm	+700 ppm
		· ·	

Geochem results for copper, lead, zinc, silver, arsenic, manganese and barium are plotted and contoured by element in figures 5 - 8.

### Discussion of Results

Using the above threshold parameters, the following number of anomalous values were obtained for each element.

Element	<u>Anomalous</u>	<u>Highly Anomalous</u>
Copper	12	1
Lead	2	0
Zinc	4	0
Silver	11	0
Arsenic	1	1
Manganese	19	2
Barium	16	2

Several spatial and coincidental relationships between elements can be distinguished. Anomalous zinc and lead values, for instance, are concentrated within the northeastern corner of the grid area, along the extended portions of L150 and L152. Zinc values are generally weak and scattered, however they are associated with elevated to weakly anomalous copper-silver+/barium+/-manganese. Lead is weak and spatially independent of other elements. There is also a very strong coincidental relationship between barium and manganese, and to a lesser degree amongst barium-manganese-silver-copper.

Barium and manganese had the strongest overall response with anomalous and highly anomalous values being concentrated into three loosely grouped areas centered at L140+00N 80+25E; L146+00N 88+25E; and TL80+00E 147+50N respectively. Many of the strongest responses for silver and copper are coincidental with the above three areas, however there are two small but significant copper+/-silver anomalies in adjoining sections. Only two anomalous arsenic values were obtained, one of which is associated with a strong Ba-Mn high. There is, however, a noticeable elevation of background arsenic (30-45ppm) associated with many of the barium, copper and lesser silver anomalies. Results for antimony, chromium, and cadmium were consistently low and no anomalous readings or trends were noted. Some of the more significant anomalous areas are summarized in more detail below.

- Area A L140+00N 80+25E Ba-Mn-Ag+/-Cu Numerous barium-manganese anomalies, with associated silver and copper, occur within a 200 meter radius of this point. Values to 720ppm Ba, 4396ppm Mn, 105ppm Cu and 1.6ppm Ag were obtained.
- 2) Area B L146+00N 88+25E Ba-Mn+/-Cu+/-As+/-Ag Two well defined barium-manganese highs, with variable associated copper-silver-arsenic, occur adjacent to this site. Values to 575ppm Ba, 7027ppm Mn, 73ppm Cu, 98ppm As and 0.9ppm Ag were obtained.

- 3) Area C TL80+00E 147+50E Ba-Mn+/-Cu Several weak scattered barium-manganese highs, with a single copper response, occur within 170 meters. Values to 553ppm Ba, 3689ppm Mn and 66ppm Cu were received.
- 4) Area D L142+00N 77+00-77+25E Cu-(Ag-As) This small but strong copper anomaly returned values to 125ppm, with elevated silver and arsenic.
- 5) Area E L144+00N 85+75-86+00E Cu-Ag-(Ba-Mn-As) Significantly anomalous copper (to92ppm) and silver (1.3ppm) results here are associated with elevated barium, manganese and arsenic.

#### CONCLUSIONS AND RECOMMENDATIONS

The Ascot Creek Showings were confirmed to be stratigraphically-controlled, but within the volcanics rather than the adjoining calcareous sediments as originally thought. The continuity of mineralization and the mineralized horizon is very encouraging, and whilst grades are currently sub-economic, they have interesting potential and more detailed sampling is needed. Mineralization is somewhat erratic and of concern and mineralized width determinations and ore controls remain to be established. In addition, the on-strike potential has not been evaluated fully but appears good as the structure is open in both directions. The low precious metal content is, however, disappointing. Insufficient work has been done to fully assess the mineral potential of this zone and other showings in the vicinity are largely untested and could hold significant potential.

Despite the stratigraphic control, alteration, stockwork mineralization and barite association, it is difficult say with any confidence that this zone is volcanogenic origin. in Elsewhere on Dome Mountain carbonate-barite veining is clearly epigenetic and alteration within the Ascot volcanics is very similar to that at the Boulder Creek Zone. It is possible that the volcanics were simply favorable hosts possibly due to porosity, competency and proximity to a carbonate source. The intense alteration is however suggestive of a large mineralizing hydrothermal system which could produce a sizable ore body.

No new mineral occurrences were discovered, however a number of interesting soil geochem anomaly clusters were outlined on the Ascot 4 claim. The fact that most of these anomalies were high in either or both manganese and barium, with associated silve., copper and arsenic, is encouraging in light of the nature of known mineral occurrences on the property. None of the anomalous areas are associated with outcrop exposures and potential sources of these anomalies is unknown.

A number of areas of mineral potential remain to be further explored on the Ascot property. The most significant of these, at present, is obviously the Ascot Creek and related showings in Canyon Creek. This area needs to be mapped and sampled in much determine the continuity, greater detail to better grade, structure and geological environment of the mineralization. Extensions to these zones should also be pursued geologically and geophysically (magnetics and E.M.). The massive pyrite showing should also be re-evaluated and this horizon traced. Follow up geochem work should be carried out on untested anomalous areas previously delineated, including those on the Ascot 4 claim. Trenching and limited drilling of favorable targets are also proposed as follow up to the above work. The following estimation of costs for the above exploration program is presented for consideration.

P	h	а	s	е	1

Wages		
Sr. Geologist	35 days @ \$300/day	\$9,900
Jr. Geologist	20 days @ \$250/day	5,000
Field Assistant	30 days @ \$150/day	4,500
Field Assistant	20 days @ \$150/day	3,000
Cook	20 days @ \$200/day	4,000
Mob. and Demob.	· · · · · · · · · · · · · · · · · · ·	5,000
Room and Board	120 man-days @ \$60/day	7,200
Assay and Geochem	300 soils @ \$8/sample.	2,400
-	200 rocks @ \$25/sample	5,000
Helicopter	15 hrs. @ \$600/hr.	9,000
Truck Rental	30 days @ \$60/day	1,800
Field Equipment/Supplies		2,000
VLF E.M. Rental	20 days @ \$40/day	800
Mag. Rental	20 days @ \$40/day	800
Back Hoe Trenching	50 hr. @ \$100/hr.	5,000
Diamond Drilling	1000 ft. @ \$30/ft.	30,000
Data Compilation/Report		5,000
Contingency @10%		10,000

Total \$110,400

#### SELECTED REFERENCES

- Birkeland, A.O., (1984), Geological Report, Ascot Property, unpublished report for Geostar Mining Corp.
- Christopher, P.A., (1986), Geochemical and Geophysical Report, Ascot Property, unpublished report for Geostar Mining Corp.
- Dome Mountain Project Feasibility Study (1989), Unpublished inhouse study prepared by M.P.D. Consultants for Teeshin Resources Ltd.
- Helgason, R. (1988), Geochemical, Geological, Geophysical & Trenching Report on the Ascot 1 and 2 Claim Groups, BCMEMPR Assessment Report
- Holland, R. (1986), Reconnaissance Geochemical Report on the McKen Groups 1 to 4, BCMEMPR Assessment Report
- Holland, R. (1987), Soil Geochemistry Report on the Dome North and Forks Claim Groups (Dome Mountain Gold Project), BCMEMPR Assessment Report
- L'Orsa, A., (1986), Ascot Property Geological Report, unpublished report for Luxmar Resources Inc.
- MacIntyre, D.G. (1985), Geology of the Dome Mountain Gold Camp, BCMEMPR Paper 1985-1
- MacIntyre, D., Brown, D., Desjardins, P., Mallett, P., (1987), Geology of the Dome Mountain Area, BCMEMPR Open File Map 1987/1
- Myers, D.E., Seel, V. (1985), Geology and Geochemistry of the Byron 1 and 2 Claims, BCMEMPR Assessment Report
- Peatfield, G.R., Louden, J.R., (1968), Geological Survey on the Ascot Claims and Surrounding Area, BCMEMPR Assessment Report 1702, part 1
- Price, B.J., (1978), Geological, Prospecting, Drilling Report, M.S. Claim, BCMEMPR Assessment Report 6784
- Price, B.J., (1978), Geological, Geophysical and Prospecting Report, Byron Claim, BCMEMPR Assessment Report 6937
- Tipper, H.W., (1976), Smithers, B.C., 93L, Geol. Surv. Can., Open File 351
- Tipper, H.W., Richards, T.A. (1976), Jurassic Stratigraphy and History of North Central British Columbia, Geol. Surv. Canada, Bull. 270.

# STATEMENT OF COSTS

The following costs were incurred on behalf of Teeshin Resources Ltd. and Canadian-United Minerals, Inc. for work conducted on the Dome Mountain Joint Venture's Ascot mineral claims located on Dome Mountain near Smithers, B.C. Field work was carried out during the period August 1 to October 4, 1989.

Wages R. Holland - project geologist 23 days @ \$275/day Aug 4-5, Sept 5,16-30,Oct 4,15-17, Nov 20-25	\$6325.00
T. Kent - field assistant 3 days @\$150/day Sept 17,20-21	450.00
Room and Board - 17 days @ \$70.27/day	1194.56
Truck Rental - 17 days @ \$60/day	1020.00
All Terrain Vehicle Rental - 15 days @ \$30/day	450.00
Transportation (gas, freight, travel)	456.32
Field Equipment and Supplies	251.51
Assays and Geochem 385 soils @ \$7.30/sample 13 rocks @ \$15.81/sample	2811.46 205.56
Petrographic Study	947.24
Misc. Office (phone, copying, reports)	410.00
Drafting - 45 hr. @ \$20/hr	900.00

Total

\$15,421.65

### QUALIFICATIONS

I, Robert Holland, of 13451 - 112A Avenue, Surrey, British Columbia, hereby certify that the following are true and correct:

- 1. I graduated from the University of British Columbia in 1976 and hold a Bachelor of Science degree in geology.
- I am currently employed as a consulting geologist with Holland Geoservices Ltd., of 13451 - 112A Avenue, Surrey, British Columbia.
- I have been employed in my profession by various mining exploration companies and clients for the past thirteen years.
- I am a Fellow of the Geological Association of Canada.
- 5. The information contained in this report entitled <u>Geological and Geochemical Report on the Ascot Mineral</u> <u>Claim Group</u> was obtained as a result of field work and research carried under my direction and supervision.
- 6. I am a former employee of Canadian-United Minerals, Inc. (1987-1989) and a minor shareholder of that company. Neither myself, nor Holland Geoservices Ltd., have any interest in the property described, nor in the securities of Teeshin Resources Ltd. or its associated companies, except as stated above, nor do I expect to.

Robert Holland, B.Sc., F.G.A.C.

# APPENDIX 1

# SOIL GEOCHEM ASSAY SHEETS

and the second

# GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-P11 SOIL P12 ROCK

DATE RECEIVED:	OCT 6 1989 DATE REPORT M	AILED: CUT 17	/ P <sup>2</sup> SIGNED BY.		LEONG, J.WANG; CERTIFIED B.C. ASSA	AYERS
	CUN Management G	roup Inc. PROJ	ECT ASCOT F	ile # 89-4152	Page 1	
	SAMPLE#	Cu Pb Z PPM PPM PF	In Ag Mn PM PPM PPM	AS CC Sb PPM PPM PPM	Cr Ba PPM PPM	
	L152+00N 88+75E L152+00N 89+00E L152+00N 89+25E L152+00N 89+50E L152+00N 89+75E		51 .3 337	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	19 170 22 223 18 86 14 73 13 92	
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	L152+00N 91+25E L152+00N 91+50E L152+00N 91+75E L152+00N 92+00E L152+00N 92+25E	42 28 18 40 17 20	13 .1 125 38 .4 1071	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20 96 11 47 27 167 28 247 17 87	
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	L150+00N 89+75E L150+00N 90+00E L150+00N 90+25E L150+00N 90+50E L150+00N 90+75E	16 12 7 17 13 9	10.327381.324377.215392.123578.1226	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20 84 15 79 18 88 22 76 17 63	
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SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
L150+00N 91+25E L150+00N 91+50E L150+00N 91+75E L150+00N 92+00E L150+00N 92+25E	37 9 17 28 64	12 40 11 13 18	123 117 - 85 192 259	.5 .2 .1 .2 1.1	2205 304 348 567 1392	21 7 22 21 21	1 1 1 2	2 2 2 2 2 2	22 18 18 22 27	123 70 63 123 191
L150+00N 92+50E L150+00N 92+75E L150+00N 93+00E L150+00N 93+25E L150+00N 93+50E	31 26 32 22 32	11 14 16 15 16	189 161 149 123 148	.3 .6 .5 .1	754 403 564 471 784	27 17 25 20 26	1 1 1 1	2 3 2 2 2	21 18 19 20 24	150 155 210 172 170
L150+00N 93+75E L150+00N 94+00E L150+00N 94+25E L150+00N 94+50E L148+00N 74+00E	51 30 29 21 22	10 19 12 9 12	165 153 152 112 100	, 8 .4 .2 .2	1088 713 500 337 221	23 19 23 14 22	1 1 1 1	2 2 2 2 2 2	20 22 21 19 18	196 264 210 217 124
L148+00N 74+25E L148+00N 74+50E L148+00N 74+75E L148+00N 75+00E L148+00N 75+25E	19 16 36 38	8 12 13 16 13	120 134 157 129 200	.1 .3 .4 .3 .4	436 381 735 509 507	18 15 23 31 26	1 1 1 1	<b>2</b> 3 2 2	17 20 21 24 27	154 253 295 206 283
L148+00N 75+50E L148+00N 75+75E L148+00N 76+00E L148+00N 76+25E L148+00N 76+50E	22 22 43 36 20	14 13 17 15 9	82 139 211 169 92	• 3 • 1 • 4 • 2 • 3	364 455 818 694 320	14 20 18 22 17	1 1 1 1	3 2 2 3 2	20 20 22 21 17	125 228 359 258 256
L148+00N 76+75E L148+00N 77+00E L148+00N 77+25E L148+00N 77+50E L148+00N 77+75E	12 28 17 25 19	17 14 10 13 12	62 107 71 101 89	.3 .2 .2 .1	285 439 336 359 206	14 24 18 23 16	1 1 1 1	2 2 2 2 2 2	20 21 19 21 20	128 131 105 74 117
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L148+00N L148+00N L148+00N	81+00E 81+25E 81+50E 81+75E 82+00E	21 25 48 17 21	14 16 15 13 9	103 118 241 92 97	.1 .1 .3 .1 .2	278 330 1772 222 279	26 25 21 13 13	1 1 1 1	2 2 2 2 2 2 2 2	23 24 33 20 20	104 117 553 144 100
L148+00N L148+00N L148+00N	82+25E 82+50E 82+75E 83+00E 83+25E	41 31 18 18 15	17 13 14 9 12	142 189 92 106 90	'.1 .2 .1	839 1413 225 432 245	21 22 5 9 8	1 1 1 1	2 2 2 2 2 2 2 2 2 2	27 26 20 19 18	164 302 117 218 172
L148+00N L148+00N L148+00N	83+50E 83+75E 84+00E 84+25E 84+50E	20 30 20 16 22	14 8 12 8 10	108 129 86 120 153	.1 .1 .3 .2 .4	456 464 130 145 464	15 10 16 10 12	1 1 1 1	2 2 2 2 2 2 2 2	21 23 19 17 21	223 297 219 271 179
L148+00N L148+00N L148+00N	84+75E 85+00E 85+25E 85+50E 85+75E	26 34 27 19 21	15 14 13 8 10	151 160 137 116 98	.2 .2 .1 .1	494 407 253 262 215	16 15 22 14 20	1 1 1 1	22 22 22 22 22	23 26 25 19 19	179 157 112 152 75
L148+00N L148+00N L148+00N	86+00E 86+25E 86+50E 86+75E 87+00E	24 25 26 21 20	9 15 14 12 10	104 133 117 116 106	.1 .4 .1 .1	384 343 296 520 354	17 22 23 13 19	1 1 1 1	22 22 22 22 22	23 21 24 22 21	76 197 168 159 132
L148+00N L148+00N L148+00N	87+25E 87+50E 87+75E 88+00E 88+25E	45 30 37 27 26	15 9 14 13 9	195 135 149 140 132	.3 .2 .1 .1	1351 778 560 614 573	14 20 16 20 20	1 1 1 1	2 2 2 2 2 2 2	28 26 25 23 22	329 237 309 175 209
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SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
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L148+00N 90+00E L148+00N 90+25E L148+00N 90+50E L148+00N 90+75E L148+00N 91+00E	22 37 29 37 33	7 16 12 16 11	126 133 128 139 143	.3 .2 .1 .3 .3	328 782 635 1082 763	12 21 17 18 22	1 1 1 1	2 2 2 2 2 2	20 24 24 24 23	188 150 204 208 197
L148+00N 91+25E L148+00N 91+50E L148+00N 91+75E L148+00N 92+00E L148+00N 92+25E	32 42 26 25 29	15 15 15 12 13	171 138 99 130 140	, 4 .1 .1 .3 .2	946 1304 427 313 657	24 27 22 27 19	1 1 1 1	2 2 2 2 2 2	26 23 18 22 23	229 170 135 184 178
L148+00N 92+50E L148+00N 92+75E L148+00N 93+00E L146+00N 74+00E L146+00N 74+25E	25 24 325 22	11 13 15 13 11	146 115 177 164 141	.2 .1 .5 .1 .2	650 928 1080 786 508	19 16 17 17 18	1 1 1 1	2 2 2 2 2 2 2	22 19 22 20 20	196 156 240 217 186
L146+00N 74+50E L146+00N 74+75E L146+00N 75+00E L146+00N 75+25E L146+00N 75+50E	22 28 18 18 24	16 14 11 13 12	188 116 99 83 135	.2 .3 .2 .1 .2	1128 589 366 282 294	22 22 13 16 17	1 1 1 1	2 2 2 2 2 2 2 2	22 21 17 17 22	167 111 117 76 99
L146+00N 75+75E L146+00N 76+00E L146+00N 76+25E L146+00N 76+50E L146+00N 76+75E	26 32 14 19 15	11 11 13 7 12	108 128 60 77 69	.1 .1 .1 .2	329 342 169 268 130	14 20 14 12 5	1 1 1 1	2 2 2 2 2 2 2 2	20 23 12 16 17	101 109 50 62 68
L146+00N 77+00E L146+00N 77+25E L146+00N 77+50E L146+00N 77+75E L146+00N 78+00E	53 27 25 56 34	7 14 7 18 15	118 84 140 127 137	.1 .1 .2 .1	610 178 323 318 1909	18 2 18 10 105	1 1 1 1	2 2 2 2 2 2 2	15 18 20 22 10	135 112 123 251 197
L146+00N 78+25E STD C	18 62	21 43	179 132	.1 6.8	477 1026	21 42	1 18	2 15	16 56	184 178

SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Aq PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
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L146+00N 79+75E L146+00N 80+00E L146+00N 80+25E L146+00N 80+50E L146+00N 80+75E	52 17 24 29 39	22 11 13 12 19	209 111 80 130 123	• 5 • 3 • 3 • 2 • 3	1420 239 196 761 834	25 9 15 17 22	1 1 1 1	2 2 2 2 2 2 2 2	31 19 19 24 24	520 272 105 248 125
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L146+00N 82+25E L146+00N 82+50E L146+00N 82+75E L146+00N 83+00E L146+00N 83+25E	18 38 36 38 29	10 13 13 11 12	92 189 137 160 132	.1 .3 .2 .4 .2	294 634 1327 783 772	12 20 16 18 23	1 1 1 1	2 2 2 2 2 2 2	21 29 27 27 25	130 265 299 322 258
L146+00N 83+50E L146+00N 83+75E L146+00N 84+00E L146+00N 84+25E L146+00N 84+50E	39 37 29 21 40	18 12 10 11 17	198 158 138 94 147	• 5 • 3 • 4 • 6	1131 922 1293 292 1365	24 20 16 17 19	1 1 1 1	22222	28 28 23 19 26	393 373 263 70 279
L146+00N 84+75E L146+00N 85+00E L146+00N 85+25E L146+00N 85+50E L146+00N 85+75E	26 45 40 41 46	12 20 21 18 17	105 146 169 141 145	.4 1.0 .4 .5 .5	876 2829 1748 2753 1180	17 26 22 23 20	1 1 1 1	2 2 2 2 2 2 2	22 26 27 22 22	186 271 255 350 313
L146+00N 86+00E L146+00N 86+25E L146+00N 86+50E L146+00N 86+75E L146+00N 87+00E	45 51 28 25 26	14 16 14 10 12	152 201 156 172 103	.6 .7 .3 .3	875 953 662 432 528	21 22 16 19 18	1 1 1 1	2 2 2 2 2 2 2	23 29 22 21 22	261 358 205 277 202
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CON Management Group Inc. PROJECT ASCOT FILE # 09-4152								192				
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	L146+00N L146+00N L146+00N	87+50E 87+75E 88+00E 88+25E 88+25E 88+50E	26 73 59 30 30	6 15 12 9 13	94 248 214 144 157	.1 .6 .9 .2 .4	179 1825 2397 514 7027	15 35 23 18 98	1 1 1 1	2 2 2 3 2 2 2	19 36 30 22 26	215 553 492 278 575
	L146+00N L144+00N L144+00N	88+75E 89+00E 74+00E 74+25E 74+50E	36 30 74 27 27	21 13 18 8 17	158 164 211 153 167	•3 •2 •4 •2 •4	1544 1087 1211 628 805	21 20 20 16 19	1 1 1 1	2 2 2 2 2 2 2 2	25 25 30 22 22	317 317 403 228 238
	L144+00N L144+00N L144+00N	74+75E 75+00E 75+25E 75+50E 75+75E	33 24 17 30 39	13 5 8 7 10	170 125 82 96 151	, .5 .2 .1 .2 .5	1296 612 198 286 317	17 . 18 . 11 19 . 6	1 1 1 1	2 2 2 2 2 2 2	21 21 16 25 20	274 154 76 100 203
	L144+00N L144+00N L144+00N	76+00E 76+25E 76+50E 76+75E 77+00E	34 12 30 33 22	13 13 8 7 13	184 52 127 189 97	.2 .1 .2 .2	464 94 265 572 286	17 9 22 13 19	1 1 1 1	2 2 2 2 2 2 2	20 14 23 25 21	217 57 118 217 83
	L144+00N L144+00N L144+00N	77+25E 77+50E 77+75E 78+00E 78+25E	45 16 27 48 75	7 11 13 13 8	241 114 175 142 159	.6 .1 .2 .5 .7	1365 330 1209 798 994	16 13 17 21 16	1 1 1 1	2 2 2 2 2 2 2	26 17 22 25 24	253 168 183 163 181
	L144+00N	78+50E 78+75E 79+00E 79+25E 79+50E	52 51 27 44 34	13 8 10 9 11	205 166 135 140 138	.4 .5 .1 .2	1269 1091 417 847 863	16 17 13 20 20	1 1 1 1	2 2 2 2 2 2 2 2	21 24 21 24 23	192 206 195 214 173
	L144+00N L144+00N	79+75E 80+25E 80+50E 80+75E 81+00E	39 12 22 24 15	11 10 10 6 11	161 95 83 141 84	.2 .1 .2 .1 .2	715 201 299 584 188	19 8 13 13 10	1 1 1 1	2 2 2 2 2 2 2 2	24 15 17 23 16	213 163 87 156 187
	L144+00N STD C	81+25E	20 58	10 37	136 132	.3 7.1	717 965	11 39	1 17	2 15	21 54	249 173

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SAMPLE#		Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
L144+00N 8 L144+00N 8 L144+00N 8	81+50E 81+75E 82+00E 82+25E 82+50E	22 12 19 23 24	6 11 10 5 11	71 67 106 118 111	.1 .2 .1 .1	240 238 299 421 601	13 7 13 20	1 1 1 1	2 2 2 2 2 2 2	17 12 17 18 20	77 118 180 249 219
L144+00N & L144+00N & L144+00N &	82+75E 83+00E 83+25E 83+50E 83+50E 83+75E	35 18 23 54 26	9 9 15 9	168 59 110 192 123	.2 .1 .3 .3	1035 152 490 619 492	22 17 16 31 16	1 1 1 1	2 2 2 2 2 2 2 2	23 13 18 20 19	353 86 216 165 186
L144+00N & L144+00N & L144+00N &	84+00E 84+25E 84+50E 84+75E 85+00E	23 18 36 29 27	12 8 11 11 9	103 111 131 114 136	·2 ·3 ·5 ·4	550 280 529 632 694	22 ,8 19 17 19	1 1 1 1	2 2 2 2 2 2 2 2	19 14 21 20 22	173 291 262 388 240
L144+00N 8 L144+00N 8 L144+00N 8	85+25E 85+50E 85+75E 86+00E 86+25E	35 56 79 35	17 11 13 18 11	139 119 121 140 134	.1 .5 1.3 .2	655 1741 1529 1885 593	23 24 26 34 21	1 1 1 1	2 2 2 2 3 2	22 22 24 29 24	293 344 342 400 153
L144+00N 8 L144+00N 8 L144+00N 8	86+50E 86+75E 87+00E 87+25E 87+25E 87+50E	35 42 26 16 29	15 15 7 9 11	132 144 112 123 124	.1 .2 .1 .1 .3	743 571 489 514 941	23 18 15 17 18	1 1 1 1	2 2 2 2 2 2 2 2 2	22 20 20 19 20	147 248 166 149 148
L144+00N 8 L144+00N 8 L144+00N 8	87+75E 88+00E 88+25E 88+50E 88+50E 88+75E	26 28 30 18 32	8 14 18 15 13	102 127 136 129 106	.3	614 1177 813 462 1054	17 23 24 16 18	1 1 1 1	2 2 2 2 2 2 2 2	19 19 20 20 18	127 166 165 183 146
L142+00N L142+00N L142+00N	89+00E 74+00E 74+25E 74+50E 74+75E	32 41 36 43 33	12 15 12 9 12	111 128 96 168 98	.3	1092 908 726 1253 610	20 19 26 25 24	1 1 1 1	3 3 2 2	18 21 23 24 24	165 202 96 409 111
L142+00N · L142+00N · STD C	75+00E 75+25E	23 18 63	4 9 40	75 84 132	.3 .2 6.7	316 291 998	16 13 42	1 1 18	2 2 14	17 19 56	111 72 175

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SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
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L142+00N 77- L142+00N 77- L142+00N 77-	+75E 25 +00E 125 +25E 69 +50E 52 +75E 21	9 17 10 11 14	141 129 95 148 166	.1 .8 .2 .7 .1	477 938 1624 558 663	17 44 32 17 17	1 1 1 1	2 2 2 2 2 2 2	19 25 10 24 19	180 212 287 290 210
L142+00N 78- L142+00N 78- L142+00N 78-	+00E 37 +25E 43 +50E 40 +75E 45 +00E 43	21	154 176 134 203 206	'.1 .3 .5 .2	1055 902 789 1470 2158	23 22 23 21 20	1 1 1 1	2 2 2 2 2 2 2 2	23 22 21 24 25	239 285 225 356 351
L142+00N 79- L142+00N 79- L142+00N 80-	+25E 32 +50E 16 +75E 33 +25E 53 +50E 24	9 14 24	158 96 102 202 114	.2 .3 .5 .1	487 190 3051 4396 986	22 9 28 19	1 1 1 1	3 2 2 2 2 2	22 15 14 30 21	303 156 379 720 246
L142+00N 81 L142+00N 81 L142+00N 81	+75E 35 +00E 10 +25E 15 +50E 22 +75E 18	10 10 11	137 66 117 122 105	.4 .1 .2 .1	719 122 287 426 588	15 8 9 16 12	1 1 1 1	2 2 2 2 2 2 2 2	21 12 16 18 16	330 144 199 272 213
L142+00N 82 L142+00N 82 L142+00N 82	+00E 33 +25E 25 +50E 26 +75E 25 +00E 27	$5 12 \\ 5 19$	156 102 140 136 136	.3 .1 .3 .1	818 364 659 736 980	15 16 14 18 20	1 1 1 1	2 2 2 3 2	21 20 20 19 21	351 112 253 172 191
L142+00N 83 L142+00N 83 L142+00N 84	+25E 27 +50E 15 +75E 32 +00E 29 +25E 33	5 11 2 18 9 19	148 52 101 107 128	.1 .1 .2 .1	1661 110 368 696 934	19 8 14 24 18	1 1 1 1	2 2 2 2 2 2 2 2 2 2	22 12 21 21 22	171 133 168 149 190
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# CUN Management Group Inc. PROJECT ASCOT FILE # 89-4152

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SAMPLE#		Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
L140+00N L140+00N L140+00N	75+00E 75+25E 75+50E 75+75E 76+00E	40 19 16 21 26	15 8 10 16 15	168 166 94 89 93	1.3 .3 .3 .3	1212 693 255 242 381	20 15 13 20 24	1 1 1	22322	24 20 17 18 22	311 231 188 64 71
L140+00N L140+00N L140+00N	76+25E 76+50E 76+75E 77+00E 77+25E	21 35 27 38 27	7 13 10 13 12	80 171 230 174 156	.4 .6 .4 .3	337 684 821 806 644	17 28 19 17 17	1111	42222	19 20 22 23 20	60 312 224 239 202
L140+00N L140+00N L140+00N	77+50E 77+75E 78+00E 78+25E 78+50E	31 34 51 26 20	13 10 9 14	162 119 193 130 77	· .2 .6 .1 .3	836 516 1078 338 727	19 17 24 22 18	1 1 1 1	2222	22 21 28 22 16	300 215 413 83 112
L140+00N L140+00N L140+00N	78+75E 79+00E 79+25E 79+50E 79+75E	105 26 32 28 40	19 14 18 21 21	214 136 134 145 162	1.5 .2 .2 .2	2888 956 1282 1139 2058	30 19 22 20 28	1 1 1 1	222233	36 20 21 22 20	702 217 224 180 259
L140+00N L140+00N L140+00N	80+50E 80+75E 81+00E 81+25E 81+50E	29 35 31 27 65	23 16 16 18	156 162 137 144 192	.2 .2 .3 1.4	2132 1871 1017 582 882	20 19 18 17 27	1 1 1 1	2322	19 21 21 21 33	221 213 290 200 542
L140+00N L140+00N L140+00N	81+75E 82+00E 82+25E 82+50E 82+75E	22 12 33 96 34	11 10 11 18 10	82 44 82 230 147	.4 .2 .8 1.6 .2	346 187 263 2165 843	19 6 16 31 19	1 1 1 1	2 2 2 2 2 3	21 16 15 34 23	87 95 216 591 285
L140+00N L140+00N L140+00N	83+00E 83+25E 83+50E 83+75E 84+00E	46 32 42 19 34	16 9 11 11 12	182 177 167 70 99	.8 .4 .3 .3 .2	1408 1121 950 228 681	25 14 22 19 21	1 1 1 1	2 2 2 2 2 2 2	25 22 25 16 20	345 299 298 64 117
L140+00N STD C	84+25E	30 63	14 37	105 132	7.2	444 1044	21 43	1 18	5 15	22 55	97 176

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SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
L140+00N 84+50E L140+00N 84+75E L140+00N 85+00E BL 80+00E 149+75N BL 80+00E 149+50N	27 47 14 22 18	12 13 7 8 9	91 177 47 136 132	.1 .7 .1 .2 .1	236 2039 121 421 406	19 19 6 24 15	1 1 1 1	2 2 2 2 2 2 2	21 27 10 23 22	65 434 134 214 292
BL 80+00E 149+25N BL 80+00E 149+00N BL 80+00E 148+75N BL 80+00E 148+50N BL 80+00E 148+25N	20 20 34 19 33	9 10 12 12 15	136 109 191 107 127	.1 .3 .1 .1	444 412 890 402 755	17 18 20 16 23	1 1 1 1	2 2 2 2 2 2	23 20 25 21 25	261 243 410 254 223
BL 80+00E 148+00N BL 80+00E 147+75N BL 80+00E 147+50N BL 80+00E 147+25N BL 80+00E 147+25N BL 80+00E 147+00N	50 18 41 36 51	14 8 13 14 12	158 77 139 94 189	, 5 .2 .4 .1 .7	847 249 775 1079 1551	21 17 21 23 21	1 1 1 1	2 2 2 2 2 2 2	29 18 28 21 28	385 82 395 213 437
BL 80+00E 146+75N BL 80+00E 146+50N BL 80+00E 146+25N BL 80+00E 146+25N BL 80+00E 146+00N BL 80+00E 145+75N	54 22 20 25 28	14 10 9 11	186 134 109 115 89	.3 .2 .1 .1	2011 371 375 275 251	29 15 15 14 19	1 1 1 1	2 2 2 2 3	34 22 29 23	494 260 217 273 107
BL 80+00E 145+50N BL 80+00E 145+25N BL 80+00E 145+00N BL 80+00E 144+75N BL 80+00E 144+50N	27 33 23 50 32	7 13 13 17 9	119 178 136 205 162	.1 .1 .3 .3	340 439 337 859 716	22 23 17 21 16	1 ]. 1 1 1	2 2 2 2 2 2 2 2	24 25 22 30 24	229 300 300 372 449
BL 80+00E 144+25N BL 80+00E 144+00N BL 80+00E 143+75N BL 80+00E 143+50N BL 80+00E 143+25N BL 80+00E 143+25N	21 48 51 35 25	8 18 15 11 14	98 190 149 126 127	.1 .6 .3 .2 .3	262 1477 1502 524 410	27 44 23 17 15	1 1 1 1	2222 2222 2	19 28 24 20 20	172 344 244 235 234
BL 80+00E 143+00N BL 80+00E 142+75N BL 80+00E 142+75N BL 80+00E 142+50N BL 80+00E 142+25N BL 80+00E 142+00N	10 27 35 20 38	7 16 10 11 13	55 134 102 77 116	.1 .6 .5 .1 .2	225 1350 395 216 947	8 13 23 17 25	1 1 1 1	<b>2</b> 22222222	13 15 19 15 24	170 295 242 105 279
STD C	62	39	132	7.1	997	41	18	15	55	173

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SAMPLE#	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Mn PPM	As PPM	Cd PPM	Sb PPM	Cr PPM	Ba PPM
BL 80+00E 141+75N BL 80+00E 141+50N BL 80+00E 141+25N BL 80+00E 141+25N BL 80+00E 141+00N BL 80+00E 140+75N	27 39 26 38 32	12 17 19 19 17	165 142 106 157 133	• 68 • 45 • 5	358 682 451 2287 2626	11 14 20 23 24	1 1 1 1	2 2 2 2 2 2 2 2	24 28 25 26 29	295 385 230 301 325
BL 80+00E 140+50N BL 80+00E 140+25N BL 80+00E 140+00N BL 80+00E 139+75N BL 80+00E 139+50N	25 36 21 49 44	22 14 16 22 15	155 118 129 179 138	.1 .2 .1 1.2 1.2	1347 1727 798 1314 825	21 19 13 36 13	1 1 1 1	2 2 2 4 2	21 21 33 21	162 257 195 463 511
BL 80+00E 139+25N BL 80+00E 139+00N BL 80+00E 138+75N BL 80+00E 138+50N BL 80+00E 138+50N BL 80+00E 138+25N	49 39 31 34 32	18 19 18 15 15	194' 168 151 168 126	.8 .5 .4 .4	1622 2857 523 1135 555	19 28 15 19 14	1 1 1 1	2 2 2 2 2 2 2 2 2	27 29 27 26 21	540 563 421 379 276
BL 80+00E 138+00N ASCOT 1 ASCOT 2 ASCOT 3 ASCOT 4	28 67 226 144 35	20 213 19371 4278 84	112 1075 46448 11286 423	.4 .6 30.5 4.5 .2	382 1604 7967 7680 451	24 55 134 82 56	1 4 361 66 2	2 4 36 17 2	22 28 13 19 30	198 1227 91 324 485
ASCOT 5 ASCOT 6 ASCOT 7 ASCOT 8 STD C	47 35 30 51 57	35 20 58 25 44	250 186 275 176 131	.1 .1 .1 7.2	488 361 391 754 977	62 49 46 103 41	1 1 1 18	2 2 2 2 15	28 27 23 25 56	197 145 270 150 173

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SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag Ppm	Ni PPM	Co PPM	Mn PPM	Fe X	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	SĐ PPM	Bi PPM	V PPM	Ca X	P X	La PPM	Cr PPM	Mg X	Ba PPM	ti X	B PPM	AL X	Na X	ĸ	W PPM	Au* PPB
DRH89-29	2	6	8	35		45	1	232	1.52	20	5	ND	1	11		2	2	1	.24	.101	17	11	.02	271	.01	7	.45	.04	.17	<b>81</b>	6
DRH89-30	1.	74	491	18066/	1.5	24	23	2442	4.83	30	5	ND	1	134	77	4	2	21	10.39	.084	3	14	.18	65	.01		.50	.02	.18		5
DRH89-31	1	70	757	, 12432	/ .9	27	26	2057	4.48	40	5	ND	1	164	44	2	2	51	13.59	.072	4	32	.58	52	.01	5	.98	.02	.09	- 18 <b>f</b> (	5
DRH89-32	1	125	19981	47340	13.0	9	11	1279	1.55	39	5.	ND	1	142	198	82	2	5	7.71	.030	2	3	.08	80	.01	8	.14	.01	.06	- 4	2
DRH89-33	1	96	5744	19774	/ 4.8	21	24	2407	4.56	50	5	ND	1	179	82	13	2	18	13.56	.074	4	9	.11	64	.01	23	.35	.02	.16	3	4
DRH89-34	2	24	7114	32238	5.8	2	3	1437	.21	810	5	ND	1	167	122	13	2	1	6.83	.002	2	1	.01	70	.01	2	.02	.01	.01	3	5
DRH89-35	1	36	194	20334			23	1909	2.15	47	5	NÐ	1	201	69	2	2	14	14.38	.060	3	10	.09	44	.01	7	.28	.01	.13	2	1
STD C/AU-R	17	59	38	139	6.7	68	30	1034	4.08	39	22	8	36	47	18	16	18	57	.48	.096	37	55	.87	173	.06	33	1.92	.06	.14	12	510

-ASSAY REQUIRED FOR CORRECT RESULT -

CONP: CUN MANAGEMENT GROUP INC. DOG & DONE MOINTAIN

#### MIN-EN LABS - ICP REPORT

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FILE NO: 95-0117-RJ2

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PROJ: DOME NOUNTAIN ATTN: R.HOLLAND			70		15TH ST., (604)980-				V7M 11	2					* 1	YPE F	OCK G			WG-12-89
SAMPLE AG AL AS Number PPN PPN PPM	B BA PPM PPM	BE BI PPM PPM	CA CD PPM PPM	CO PPM F	CU FE PPM PPM	K L PPM PPI	I NG H PPK	KN PPH	HO N PPM PP	A NI M PPM	P PPN	PB PPH	SB S PPN PP	R TH H PPN	U PPM	V PPN	ZN ( PPM PI	GA SN PM PPN	U PPN P	CR AU PPN PPB
DRH8906         .5         10120         1           DRH8907         .3         1810         36           DRH8908         .3         4490         853           DRH8909         1.7         3140         1           DRH8910         1.0         5020         8	4 122 4 70 12 150 3 640 2 1164	.8 6 .1 2 .5 2 .7 11 .5 8	8520 .9 5760 .1 19490 4.8 123620 31.9 116840 16.8	26 4 9 38 31	44 61790 6 13180 10 35750 68 45470 62 55720	2490 400 2770 2120 2250	8 14430 1 430 1 2460 2 33000 2 3950	2054 437 1431 4272 3012	4 38 2 85 1 7 9 12 1 23	0 1 0 1 0 24 0 15	900 520 850 890 1070	51 15 18 89 57	1 1 1 11 6 2 4	1 1	101	2.6 3.7 8.5 24.1 38.5 2	102 25 35 450 278	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1	3 11 154 2 47 21 1 2 1 1
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AUG 12 '89 12:21 MIN-EN LABS VANC.



SPECIALISTS IN MINERAL ENVIRONMENTS CHEMISTS - ASSAYERS - ANALYSTS - GEOCHEMISY8 2<u>71 PØ5</u>

VANCOUVER OFFICE: 705 WEST 15TH STREET NORTH VANCOUVER, B.C. CANADA, V7M 1T2 TELEPHONE (604) 980-5814 OR (604) 988-4524 TELEPHONE (604) 980-9621 TIMMINS OFFICE: 33 EAST IROQUOIS ROAD P.O. BOX 867 TIMMINS, ONTARIO CANADA, P4N 7G7 TELEPHONE: (705) 264-9998

Assay	Cert	ifica	<u>ite</u>			95-1	0117-RA2	
Company: CUN MAN Project: DOME MOUN Attn: R.HOLLAND	AGEMENT G ITAIN )	ROUP IN	-	2. 3.	CANADIAN UNIT CUN MANAGMENT	T GROUP, VANC ED, C/D MIN-E GROUP, C/D M	N LABS	)
He hereby certify submitted AUG-08	-89 by R.	HOLLAND	•	3 ROCK	samples			
Sample Number	AU G/TONNE	AU 02/TON	AG G/TONNE	AG DZ/TON	CU %	PB %	ZN X	
DRH 87 11 DRH 87 12 DRH 87 13 Fw 81-19	.02	.001 .002	15.8 13.0	. 46 . 38 . 62	.003	1 <b>.53</b> 3 <b>.37</b>	4.72 2.68 .01	
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MIN EN LABORATORIES

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# APPENDIX 2 PETROGRAPHIC REPORT

# ROCK DESCRIPTIONS



# Vancouver Petrographics Ltd.

JAMES VINNELL, Manager JOHN G. PAYNE, Ph.D. Geologist CRAIG LEITCH, Ph.D. Geologist JEFF HARRIS, Ph.D. Geologist KEN E. NORTHCOTE, Ph.D. Geologist P.O. BOX 39 8080 GLOVER ROAD, FORT LANGLEY, B.C. V0X 1J0 PHONE (604) 888-1323 FAX. (604) 888-3642

Report for: Robert Holland, Holland Geoservices Ltd., 13451 - 112A Ave., Surrey, B.C. V3R 2G7

Invoice 8576

November 8th, 1989

#### SAMPLES:

16 rock samples from the Ascot Claims, for thin sectioning and petrographic examination.

Samples are numbered R89-22A, 22B, 36C, 36D, 37B, 40A, 41B, 45, 47, 48, 50A, 54C, 55A, 57A, 59B and 59C.

#### SUMMARY:

The rocks of this suite fall into 3 main groups, as follows:

#### A. Probable Flows:

i) Amygdaloidal andesites. Samples 36C, 59C. Aphanitic plagioclase-rich rocks with carbonate amydgules. 36C includes some clays. 59C is sericitized.

ii) Dacite(?). Sample 36D. Aphanitic felsic rock, probably relatively siliceous.

iii) Trachyandesite. Sample 59B. Flow-textured, holocrystalline; possibly amygdaloidal. Could be a dyke rock

B. Probable Hypabyssal Intrusives:

- i) Diabase. Sample 45
- ii) Diorite porphyry. Sample 55A
- iii) Albitite. Sample 50A.

iv) Altered andesite. Sample 22B. Totally altered to sericite, carbonate and chlorite. Could be extrusive.

#### C. Tuffs:

i) Andesite. Samples 40A, 41B, 47, 57A. Listed in order of decreasing average clast size. Clasts are mixed lithic and crystals. Composition is leucocratic.

ii) Trachyandesite. Samples 37B, 48, 54C. The first two are relatively coarse and contain abundant crystals. The last is finer grained and strongly chloritic.

#### D. Other:

i) Mineralized breccia. Sample 22A. Brecciated, carbonated trachyandesite with pyrite and sphalerite. Cemented and replaced by fine-grained barite and carbonate.

Details of styles and relative intensities of alteration may be found from the individual petrographic descriptions (attached).

J.F. Harris Ph.D.

(929 - 5867)

Copy to:

Canadian United Minerals Inc. 325-1130, West Pender St., Vancouver, B.C. V6E 4A4

Plagioclase 10 K-feldspar 5 Carbonate 49 Barite 30 Sphalerite 4 Pyrite 2

This is a rock of specialized mineralogy, unlike any other of the suite.

As is clearly apparent from the cut-off block, it is a breccia of sub-angular fragments, 2 - 10mm in size.

The rock is texturally heterogenous, and it is not easy to relate observations in thin section to the macroscopic features.

The fragments are of various kinds. Some are blocky to meshwork aggregates of plagioclase and K-feldspar with semi-coalescent, pockety segregations of carbonate. The latter appear to be amygdules in a crystalline trachyandesite or latite.

Other fragments are composed of sparry carbonate with clumps of pyrite and sphalerite. The mineralized carbonate sometimes appears to form composite fragments with the trachyandesite - which may represent the host to a pre-brecciation carbonate-sulfide mineralization phase.

Smaller patches of these two lithotypes, and small, individual feldspar crystals, occur between the coarser fragments - representing finely granulated and/or partially assimilated host rock.

The matrix or cementing phase of the breccia is a minutely microgranular aggregate of carbonate and barite, of grain size 10 -100 microns. Locally the barite forms segregations of bladed crystals to 0.5mm in size - mainly associated with pockety veniform zones of sparry carbonate.

The mineralization - particularly sphalerite - may, in part, be associated with the barite: i.e. it is partly pre-brecciation and partly associated with the cementing phase.

Sericite	55
Carbonate	30
Chlorite	12
Rutile)	3
Leucoxene)	5

The thin section of this rock shows a homogenous, clearly defined fabric, indicative of igneous origin. It is now totally pseudomorphed by secondary products.

The principal component is a close-packed, sub-oriented aggregate of sharply defined, lath-like, prismatic forms, 0.2 - 0.5mm in size. These almost certainly represent original plagioclase, now totally altered to finely felted sericite.

The interstitial phase to the altered plagioclase laths is now composed of minutely fine-grained chlorite and carbonate, intimately intergrown in various proportions.

Local segregations of relatively more chloritic composition show partial crystal outlines, and apparently represent totally altered mafic phenocrysts. These show elongation paralleling the prevalent orientation of the altered feldspars.

The remaining constituent is rutile, largely altered to leucoxene, which forms rather evenly disseminated small flecks and irregular, angular/elongate grains, 0.02 - 0.2mm in size, scattered through the chloritic matrix.

The rock is cut by occasional hairline veinlets of chlorite, and by apparent microshears which are the locus of intense carbonate alteration. This is reactive to dilute acid, and is apparently calcite. The carbonate in the matrix is unreactive, and may be dolomite.

The oriented fabric is presumably related to flow in an extrusive or hypabyssal andesite, subsequently modified by intense pervasive alteration.90

Plagioclase	68
Sericite	1
Pyroxene	12
Secondary amphibole)	15
Chlorite)	10
Epidote	2
Opaqu <b>es)</b>	2
Rutile)	2

This is another fine-grained, plagioclase-rich rock whose character is not readily determinable on the macroscopic scale.

In thin section it is clearly revealed as being quite different from the predominant (tuffaceous) rocks of the suite. It is a homogenous, crystalline, igneous rock showing typical diabase texture and mineralogy.

Plagioclase is the principal constituent, as a meshwork aggregate of small prismatic grains, 0.05 - 0.5mm in size. It also forms scattered phenocrysts, 0.8 - 1.5mm in size. The groundmass plagioclase is generally fresh, but the phenocrysts show patchy, rather strong alteration to sericite and cryptocrystalline epidote. They are also sometimes diffusely veined by secondary mafic minerals.

The groundmass plagioclase is evenly intergrown with two distinct mafic components. One is a colourless clinopyroxene (augite) as equant subhedral grains, 0.05 - 0.2mm in size; this is completely fresh. The other is a totally altered phase now consisting of bright green, minutely fine-grained, felted aggregates. This is apparently secondary amphibole or a form of chlorite - possibly after residual glass. Both mafics occupy a generally interstitial relationship to the plagioclase meshwork.

The green felted material forms a few equant/irregular pockets which have the aspect of amygdules, or are possibly pseudomorphs of rare mafic phenocrysts.

Granules and diffuse dust of rutile and opaques are the remaining component - evenly disseminated throughout the groundmass.

Plagioclase 70 K-feldspar 3 Chlorite 20 Carbonate 5 Opaques) 2 Sub-opaques)

This is a very fine-grained, weakly potassic tuff made up predominantly of close-packed, tiny, equant/sub-rounded, lithic clasts 0.03 - 0.3mm in size.

The lithic clasts are cryptocrystalline/felsitic to meshworktextured plagioclase aggregates, with varying proportions of minutely intergrown chlorite. Minor wispy/patchy concentrations of more potassic clasts also occur.

An interstitial matrix phase of cryptocrystalline chloritic material is recognizable, locally with relict shards - indicative of origin as vitric ash.

Carbonate is relatively minor in this rock, occurring as evenly distributed small flecks and discrete clumps, comparable in size to the lithic clasts.

The overall small-scale, pellety, clastic fabric shows a weak preferred orientation (bedding/compaction), mainly defined by wisps of micron-sized sub-opaque dust.

The rock contains traces of fine-grained disseminated pyrite.

Plagioclase32K-feldspar32Chlorite15Carbonate20Rutile1

This is another mixed lithic/crystal tuff - in this case of medium grain size and notably potassic composition. It shows pervasive disseminated carbonate, as do almost all the tuffs of this suite.

Clasts range from 0.1 - 3.0mm or more in size. They include equant to elongate, sub-angular fragments of fine-grained micro-porphyritic latites, consisting of tiny plagioclase phenocrysts in cryptocrystalline felsitic to trachytic-textured potassic groundmasses, occasionally quite strongly chloritic. Also prominent (and making up some 50% of the clasts in total) are disaggregated plagioclase crystals, to 2.0mm in size. These are mainly fairly fresh, but sometimes show partial alteration to carbonate.

The lithic and crystal clasts are tightly packed, as a weakly oriented aggregate, with an interstitial matrix phase composed essentially of chlorite and diffuse wisps of dust-sized rutile.

Carbonate occurs intimately intergrown throughout. It forms fine-grained dustings and granular disseminations in the larger lithic clasts, patchy replacements of some crystal clasts, and most prominently - occurs pervasively throughout the areas of closepacked smaller clasts. Some carbonate clumps appear to be clasts in their own right, and the carbonatization may, in part, predate the fragmentation and clastic deposition.

The carbonate is unreactive to dilute acid, and is probably dolomite or ankerite.

ALBITITE

Estimated mode

Plagioclase 85 Quartz 2 Sericite 2 Carbonate 8 Chlorite 1 Rutile) 2 Opaques)

This rock is a feldspar-rich, leucocratic rock of hypabyssal aspect.

It consists essentially of an interlocking meshwork aggregate of subhedral plagioclase, of grain size 0.1 - 0.5mm. This shows the low refractive index and small twinning extinction angle indicative of probable albite composition. The presence of some molecular substitution by K in this alkali feldspar is apparent from the diffuse, weak cobaltinitrite stain developed on the cut-off block.

Quartz is a minor accessory, as scattered, discrete grains, scattered through the albite aggregate. Intimately intergrown sericite, chlorite, carbonate, and shreds and flecks of rutile form an evenly distributed, but rather sparse, interstitial phase, as tiny pockets.

The rock shows an ill-defined crypto-brecciation texture, in the form of networks of noticeably fine grain size separating patches of the normal meshwork aggregate. This is probably a form of autobrecciation.

Carbonate also concentrates as diffuse pervasive patches, veniform wisps and rare, discrete clumps, 1 - 2mm in size. The carbonate distribution appears independent of the weak autobrecciation structure.

Plagioclase 28 K-feldspar 18 Quartz 1 2 Sericite Chlorite 47 Carbonate 1 2 Rutile Pyrite 1

This rock lacks the strong, white etch (indicative of the plagioclase-rich composition) which characterizes the majority of the suite. In thin section it is found to be highly chloritic, and is apparently of relatively mafic character.

It is also distinctive in lacking a pervasive carbonate component.

It is a homogenous, well-sorted, clastic aggregate of equant lithic fragments and lesser crystals, 0.1 - 0.5mm in size. It has a notably blocky, equigranular appearance in thin section, with a total absence of preferred orientation and a notable paucity of fine-grained, interstitial/matrix material.

Crystal clasts (plagioclase, plus minor K-spar and quartz) make up about 20% of the rock. The plagioclase crystals are weakly flecked by sericite.

Lithic clasts are cryptocrystalline to minutely felsitic/trachytic material, composed of K-feldspar, plagioclase and chlorite in various proportions.

Some clasts appear to be almost entirely composed of minutely felted chlorite. Chlorite also forms a diffuse, pervasive phase of tiny interstitial pockets and films, together with granules and micronsized dust of rutile and opaques (including traces of pyrite).

Much of the chlorite in this rock is a distinctive intense dark emerald green in thin section.

65 Plagioclase 7 K-feldspar Sericite 5 6 Pyroxene Chlorite 12 Epidote trace Sphene 3 2 Opagues

This is an abundantly porphyritic rock of distinctive texture (see stained cut-off block).

About 50% of the rock is composed of phenocrysts, 0.5 - 4.0mm in size. These are predominantly subhedral plagioclase - sometimes as composite clumps. Scattered, equant/irregular patches of minutely felted chlorite may represent a form of totally altered mafic phenocryst. There are also rare phenocrysts of fresh pyroxene.

The plagioclase phenocrysts are generally fresh, or very mildly saussuritized (flecked with sericite and cryptocrystalline epidote).

The phenocrysts are scattered, with random orientation, through a groundmass consisting of a meshwork aggregate of mildly sericitized plagioclase laths (with minor intergrown K-spar), of grain size 0.1 - 0.3mm. This has an evenly distributed, rather abundant intergranular accessory phase of chlorite, pyroxene, sphene and opaques (readily apparent as dark, unstained flecks on the cut-off block).

This rock is best described as a diorite porphyry - presumably of minor intrusive character.

#### ANDESITE TUFF

SAMPLE R89-57A

Estimated mode

Matrix Cryptocrystalline material) 75 Altered glass) 75 Clasts Plagioclase 8 Chlorite 7 Carbonate 10 Epidote trace

This is another fine-grained tuff. It is distinct from somewhat similar samples seen earlier in the suite, in that it lacks dispersed carbonate, has a notably lower proportion of crystal clasts, and consists predominantly of a cryptocrystalline matrix.

Lithic clasts, 0.1 - 0.7mm in size, make up 15-20% of the rock. They are of varied composition, ranging from cryptocrystalline felsite to compact chlorite or carbonate. One of the commonest types consists of essentially monomineralic carbonate.

Crystal clasts (about 5-10% in total) are subhedral-euhedral plagioclase, 0.1 - 0.5mm in size. They are mostly fresh, but sometimes show partial alteration to carbonate and/or cryptocrystalline epidote.

The recognizable clasts are scattered (with a tendency for parallel elongation - at least in the case of some lithic fragments) through a turbid, cryptocrystalline matrix. This appears to be composed of minutely felsitic material, packed with tiny flecks and granules of chlorite, sphene/leucoxene and possible epidote, and wisps of sericite.

Relict shards are locally recognizable within the matrix, which is clearly an aggregate of comminuted, partially altered glass and tiny lithic fragments.

Plagioclase62K-feldspar12Sericite5Carbonate18Rutile3

This is another of the non-fragmental igneous rocks which make up a significant sub-group within this suite.

It is of leucocratic, feldspar-rich composition (somewhat similar to Sample 50A, but more potassic), and shows a distinctly foliated texture which is most likely due to flow and/or incipient cataclasis in the intrusion or extrusion of a crystal mush.

It consists of a close-packed aggregate of subhedral, sometimes incipiently fractured feldspar crystals, 0.1 - 0.7mm in size. These show a distinct, though imperfect, parallelism of elongation.

These coarser crystals make up some 80% of the rock. They include a significant proportion of K-feldspar (orthoclase/sanidine). They are cemented interstitially by an aggregate of somewhat finer grained feldspar, of grain size 0.05 - 0.1mm, intergrown with abundant parallel/elongate grains of rutile. The latter form sinuous swarms and networks outlining the coarser feldspar grains.

Minor sericite forms tiny wisps in the interstitial phase and alteration flecks in some of the feldspar crystals.

Carbonate (calcite) is abundant. It occurs, to a minor degree, intergrown with the interstitial phase, and as patchy and veniform replacements of some feldspar crystals (particularly K-spar). Predominantly, however, it is present in segregated form, as prominent lensoid and branching/elongate masses (dark areas on the cut-off block), sometimes with rims or minor intergrowths of sericite.

These bodies resemble amygdules which have been deformed by the same process which caused the preferred elongation of the feldspar aggregate. If they are amygdules, the rock is indicated as of extrusive origin.

Plagioclase	40
Sericite	18
Carbonate	38
Quartz	2
Rutile	2

This is a rock made up of similar constituents to others of the suite, but in significantly different proportions. It contains abundant carbonate, and sericite alteration is more prominent than in most of the other samples.

No definite fragmental features are recognizable, and the cut-off block shows rounded/irregular patches of quartz and carbonate which are almost certainly amygdules. The rock is thus indicated as extrusive.

Plagioclase occurs as scattered, small, relict crystals, 0.1 - 0.3mm in size, within a matrix of minutely felsitic plagioclase, now strongly altered to wispy sericite. Micron-sized rutile is an accessory component.

The most prominent constituent is carbonate, as abundant semi-coalescent, microgranular clumps, 0.05 - 0.2mm in size. Locally the carbonate aggregates as more or less extensive, irregular to elongate patches. In a few cases the carbonate clumps contain remnants of crystalline plagioclase, and they may, in part, represent totally altered phenocrysts - though some is most likely a pervasive impregnation of the matrix. A proportion of the carbonate also represents micro-amygdules.

The carbonate is totally unreactive to dilute acid. Some areas show strong limonite staining suggesting that it is, at least in part, of ferruginous composition.

The sericite wisps tend to define an incipient, sinuous foliation (flow structure?), diverging around the relict plagioclase crystals and carbonate clumps.

The larger amygdules (0.5 - 3.0mm in size) consist of microgranular quartz and carbonate in various proportions.

