FINAL REPORT OF GEOLOGICAL MAPPING & DRILLING ON THE

GREENDROP PROPERTY (COPPER, GOLD, MOLY CLAIMS)
NEW WESTMINSTER MINING DIVISION NEAR CHILLIWACK, B.C.

92-H-3/W

LOCATION:

The central part of the claims is located at coordinates 49⁰08'N latitude, 121⁰26'W longitude, approximately 5 km. north of

the Chilliwack Lake.

WORK PERIOD:

May 5 - July 31, 1980

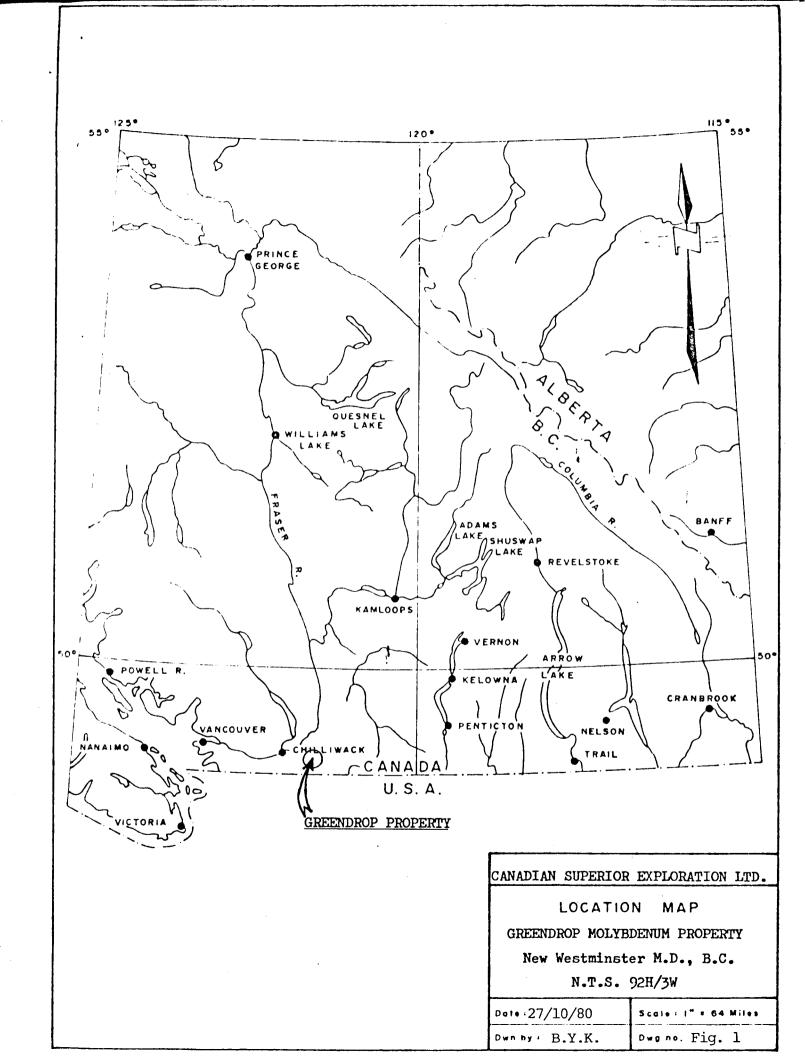


OCTOBER 20, 1980

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I SUMMARY

- i) The 1980 exploration program on the Greendrop property consisted of prospecting, geological mapping (1"=200') and diamond drilling (2 holes 3020 ft. in total).
- ii) The program revealed a well-defined elliptical zone
 (1 x 1.5 km. approximately) of hydrothermal alteration
 together with minor multiple-staged mineralization of
 Mo-Cu porphyry-type.
- iii) The two most favourable sites were drilled vertically down to 1500 ft. and 1520 ft. respectively with negative results. There was no improvement of mineralization at depth nor was there any indication of a deep-seated felsic differentiate.
- iv) The source of breccia-bearing molybdenite float remains uncertain but seems to be of little economic interest.
- v) Due to the extremely rugged topography and thick valleyfill, the selection of drill sites was limited and drilling costs were high.

II INTRODUCTION

The Greendrop property, located approximately 27 km. south of Hope, B.C. consists of three original M.G.S. claims, the Copper (4 units), Gold (2 units) and Moly (6 units). An additional four claims (80 units), the Green (1-4) were staked over and surrounding the original claims after Canadian Superior Exploration Ltd. made an option agreement with the property owner.

The 1980 program conducted on the Greendrop property was initiated as a result of a reconnaissance survey carried out in 1979. The results indicated the possibility of an exploitable molybdenum-bearing deposit within the program area. A detailed geological survey was therefore carried out, and was followed by a drilling program during the period May - July, 1980.

i) Location, Access and Physiography

The Greendrop property situated at coordinates 49⁰08'N latitude by 121⁰ 26'W longitude (N.T.S. 92H/3W) in the New Westminster Mining Division, British Columbia. The claims are located around and immediately southwest of Greendrop Lake, a small lake approximately 5 km. north of the well-known Chilliwack Lake. (Figure 1)

Access to the property is possible via helicopter from Vancouver or Hope, or walking 4 kilometers southwest along the Centennial Trail from the northeastern end of the Greendrop Lake, the present termination of local logging roads.

The claims cover part of the Post Creek Valley which in many places is bordered on the southeast and northwest by steep cliffs and talus slopes. Relief is high with elevations ranging from 900 m. in the southwestern corner of the map to 1450 m. at a southern central ridge. Vegetation consists mainly of mature hemlock, balsam and cedar trees with moderate underbrush.

ii) Property Status

The original property consisted of three M.G.S. claims (12 units) that were staked and recorded on May 4th, 1979 by J.M. Mirko, a partner of Kodiak Resources Ltd. (a private B.C. company presently consisting of three shareholders including J.M. Mirko). Following the signing of an option agreement an additional four M.G.S. claims (80 units) were staked by Canadain Superior Exploration Ltd. over and adjacent to the pre-existing claims. Those four claims were duly recorded on October 30, 1979. Claim data for all the claims are listed below (Table 1) and plotted on Map 4.

TABLE 1 - CLAIM DATA (Greendrop Option)

Claim Name	No. of Units	Record No.	Record Date
Copper	4	452 (5)	May 4, 1979
Gold	2	453 (5)	May 4, 1979
Moly	6	454 (5)	May 4, 1979
Green 1	20	664 (10)	October 30, 1979
Green 2	20	665 (10)	October 30, 1979
Green 3	20	666 (10)	October 30, 1979
Green 4	20	667 (10)	October 30, 1979 ·

iii) History of Work Done

Although the mineral showings and widespread gossan zone southwest of the Greendrop Lake probably were known for decades, there is no record of exploration activities before 1970. At that time the property was jointly optioned by the Noranda Exploration Co. Ltd. and Kerr-Addison Mines Ltd. from the previous owner, Tom Richards.

Under Noranda's management the following program was undertaken:

- (i) Reconnaissance geological mapping
- (ii) I.P. Survey
- (iii) Trenching
- (iv) Diamond drilling (one inclined hole 661 ft.)

The objective of Canadian Superior Exploration Ltd.'s 1980 program was to define the nature of widespread strong pyritization and pin-point the possible deep-seated molybdenum deposit associated with a multiple intrusion.

During May 5 - July 31, 1980 Canadian Superior Exploration Ltd. conducted an exploration program which consisted of:

- (i) Geological mapping (1:2500) of the central part of the claim block, approximately 2 x 2.5 km.
- (ii) Prospecting and local geochemical sampling covering the entire claim block and surrounding area.
- (iii) Diamond drilling of 3020 ft. in 2 holes.

III GEOLOGY

i) Introduction

Regionally the area is underlain by granodiorite and quartz-diorite belonging to the Chilliwack Batholith of late Oligocene age (J.W.H. Monger 1970). These granitic rocks have intruded the Custer gneiss, a Mesozoic (?) metamorphic complex to the north and east, and Eocehe conglomerates and sandstones along the western boundary of the claim block.

Centrally these intrusive rocks have been altered and pyritized by later intrusions of a quartz-diorite porphyry and a breccia complex. Dykes and sill-like igneous bodies of various compositions were emplaced subsequently.

The two-dimensional limits of these multiple intrusions with their associated pyrite halo are visible aerially as well-defined heavy staining in the well-exposed cliffs, immediately southwest of the Greendrop Lake. This gossan zone is elliptical in plan, measuring 1.5 km. (east-west) by 1 km. (north-south) and straddles the covered Post Creek Valley. (See Map No. 3 - coincides with alteration zone).

No significant mineral showings on surface have been found. However, the most interesting mineralization on float boulders and minor showings is molybdenite contained in:

- fractures of well-silicified altered granodiorite and diorite porphyry
- ii) silicified breccia as heavy fracture coating usually with quartz and minor disseminations

ii) Lithology

The map area is within the upper Tertiary Chilliwack Batholith except a small area in the northeast corner underlain by the metamorphic complex of the Custer Gneiss group. A centrally located elliptical gossan zone associated with multiple intrusion is of major interest. All the rocks around the gossan zone show predominantly dioritic composition characterized by very little potassium feldspar.

Bedrock exposures are generally restricted to the upper part of the steep slopes and cliffs. Outcrop occupies approximately 10% of the total map area.

1) Granodiorite-Quartz-Diorite (Tg)

Most of the area outside the gossan zone is underlain by fresh or weakly altered granodiorite to quartz-diorite of the Post Creek phase of the Chilliwack Batholith. Centrally this is intruded by irregularly-shaped igneous bodies, large numbers of dykes and breccias, mostly of dacitic composition.

In handspecimen the granodiorite-quartz-diorite is predominantly leu-cocratic and medium grained with hypidiomorphic textures. But a gradational change toward the central breccia zone locally renders the texture porphyritic, with coarsening of plagioclase feldspar and quartz. The principal minerals are plagioclase (40-50%), quartz (30-40%) and biotite/hornblende (10-15%). In most of the map area feldspar is altered to incipient sericite and mafic minerals are chloritized and locally epidotized, with calcite and minor pyrite in fine fractures.

2) Altered Granodiorite - Quartz-Diorite (Ta)

Altered granodiorite and quartz-diorite constitute a separate map unit of sericitized and/or silicified equivalents of the granodiorite and quartz-diorite. They are usually coarser grained than the unaltered equivalent and show occasional relict textures of the latter.

3) <u>Diorite - Quartz-Diorite Porphyry (Td)</u>

Irregularly shaped intrusions and dyke-like bodies of diorite to quartz-diorite porphyry are widespread inside the gossan zone. These intrusions appear to be responsible for at least the initial stages of sulphide mineralization.

Located near the drilling area this rock is a fine to medium grained porphyry with abundant sub-to euhedral feldspar laths in an inequigranular groundmass. The principal minerals are plagioclase (60-70%), quartz 5-10%), biotite (10-20%) usually with pyrite (3-5%) up to 10%. The same type of rock mapped in the western part tends to be coarser grained and contains less pyrite. All the diorite and quartz-diorite porphyries are variably altered, often with very weak to moderate propylitic alteration and local fracture-controlled sericitization.

4) Breccias (B)

The wide occurrence of a breccia complex is one of the most interesting features of the property. These brecciated rocks are visible on the main cliffs 600 m. south-southwest of Greendrop Lake, where they appear to form a pipe-like body peripheral to the phyllic alteration. The pipe seems to be controlled by N 70° W and N-S fracture systems.

The core of the breccia occurrence consists principally of two different types; an intrusive breccia called here 'rubble breccia' and a 'tuff breccia'. The rest of the breccia units are located outwardly and seem to be associated with post-breccia dyke rock ('dyke breccia') and a peripheral crackle zone ('crackle breccia'). A remaining type of breccia ('altered breccia') is an outlier which seems to have no genetic relation

with the above breccia complex.

In cliff exposures the breccia seems to intrude the altered granodiorite with near-vertical contacts. Fragments of the breccia are mostly angular and transported or at least rotated. All of these features indicate that the breccia is of a breccia pipe origin.

All the breccias contain pyrite in variable amounts and show weak to strong sericite-kaolin alteration. Drusy quartz veins with rare molybdenite are strong near the rim of the pipe.

4-1) Rubble breccia (Br)

The most highly brecciated type in the central zone of the breccia complex is classified as 'rubble breccia'. It is composed mostly of variably-sized angular fragments with minor amount of matrix. Alteration of this breccia is so intense that the original minerals are difficult to identify. Where the alteration is weak it appears that fragments are mostly composed of altered granodiorite cemented by minor amounts of comminuted granodiorite.

The breccia contains 2-5% pyrite, mostly as coarse void-fill clusters in the matrix. Minor visible molybdenite was occasionally found in drusy quartz near the pipe rim.

.4-2) Tuff breccia (Ba)

The less-brecciated and locally non-brecciated part of the main breccia zone is occupied by tuff breccia, which is similar in part to a volcanic agglomerate-tuff. The latter is intimately intercalated with the rubble breccia (Map 1). Fragments of the brecciated rock appear to be made up mostly of light grey silicified agglomerate-tuff and minor altered granodiorite enclosed by stained tuffaceous material. The nature of contacts with the rubble breccia are unclear mainly because of intense alteration near the contact.

The tuff breccia is variably pyritized but generally weaker and finergrained than that of the rubble breccia. Although the evidence is sparse as to the origin of this tuff breccia a breccia pipe origin is preferred to an extrusive mode of emplacement.

4-3) Crackle breccia (Bc)

The weak breccias occurring around and outside the rubble breccia were termed 'Crackle breccia' for mapping purposes. This is a gradational type of rock between the rubble breccia and the altered granodiorite. The crackle breccias are principally badly crumbled rocks which contain variably-sized angular pieces of rock surrounded by stained fractures and open cracks with partly communited matrix. Therefore the rock constituents are uniform for both fragments and matrix. No visible exotic fragments were found.

Three isolated occurrences of these crackle breccias (Map 1) are texturally similar to one occurring near the main breccia pipe. These outliers may have been branch conduits structurally connected to the main pipe at depth. It is probable that pipe-boring volatiles and fluids formed those breccias by escaping with little distentional power through the structural weak zones.

4-4) Dyke breccia (Bd)

The dyke breccia differs from the preceding in that it contains a larger portion of matrix (50-70%) to rock constituents and this matrix appears to be relatively fresh. Although too fine grained to be identified under the microscope the matrix of this breccia appears to be basaltic-andesite in composition. Fragments are weakly altered granodiorite with assimilated edges. They are sometimes angular but usually rounded and 0.1 - 5 cm. in diameter. The content of pyrite is somewhat weaker than in the other breccias.

The dyke breccia is probably an intrusion breccia which may have been formed along a peripheral zone of the main breccia while the basic dyke was introduced.

4-6) Altered breccia (Bal)

The brecciated rock exposed in the eastern slope near DDH #1 is an exceptional kind which may have no genetic relation to the above mentioned breccias. This breccia shows only local fragments which are rounded and assimilated in a leucocratic granitic matrix. The fragments seem to be heterogeneous aphanetic dyke rocks of mesocratic composition, but in most cases alteration and assimilation precluded identification. The rock may be an intrusive rock with abundant inclusions. The variety of the dark-colored inclusions may have originated from the Custer gneiss group. Alternatively it may be a pre-mineral tectonic breccia which has been subjected to subsequent alteration. Pyritization is extensive and as strong as in other neighbouring rock types. However, there is no indication of Mo-Cu mineralization.

5) Dacite Porphyry Dyke (Dd)

The most frequent pre-mineral dyke observed on surface is dacite. It is 1-3 m. in width and mostly striking north $70\text{-}80^{0}$ west with a steep dip. This dacite dyke is similar and may grade into diorite porphyry. It is characterized by abundant plagioclase (60-70%) with minor biotite-hornblende and quartz. The dyke is slightly darker than the diorite porphyry and porphyritic with abundant subhedral plagioclase phenocrysts.

Pyritization is as strong as the country rocks, which are mostly the diorite porphyry and altered granodiorite. Where the dyke is highly altered and bleached the two rock-types (diorite porphyry and dacite dyke) are hardly distinguishable.

6) <u>Basic Dyke (Da)</u>

A small outcrop south of the waterfall near DDH #1 is the only surface exposure of this basic dyke. However, occurrences of this rock type are frequent in DDH #2. In the drill hole occurrences this rock occurs as a narrow, steeply-dipping dyke, intruded into the altered granodiorite but in the deeper parts of the hole the occurrence is closely related to the diorite porphyry. Some of the dykes show a gradational contact

with the porphyry. The dyke is dark grey to black, fine grained to aphanitic near the surface of the hole, but changing gradationally to lighter porphyritic dyke to the deeper parts of the core.

7) Post-mineral Dykes (P)

Most of the pre-mineral rock units in the map area are intruded by a number of post-mineral dykes. They are dacite-andesite, basalt, lamphrophyre and other narrow meso-and melanocratic dykes. Those dykes are mostly porphyritic with aphanitic groundmass, and their contacts with the intruded rocks are sharp. Minor coarse clusters of sulphide on the sharp contact include some large galena cubes. Those sulphides are probably derived by leaching from the surrounding host rocks.

Outcrops of fresh dacite-andesite porphyry weather out as prominences along the contact between the rubble breccia and altered granodiorite. One of these cliff-forming outcrops, approximately 30 x 100 m. strikes N20°W with a near-vertical dip. It is characterized by phenocrysts of plagioclase, hornblende and biotite set in fine grained greenish grey groundmass. Locally weak brecciation was found with well-assimilated fragments of granodiorite. Megascopically this porphyry dyke is dacite porphyry similar to the narrow post-mineral dacite-andesites, and is probably of the same origin.

8) Custer gneiss (Mg)

A small area in the extreme northeastern corner of the map is underlain by a metamorphic complex of the Custer gneiss group. Age determination for this metamorphic rock is still a problem but it is presumed to be Mesozoic or older. A large variety of rock types have been reported but in the map area the Custer gneiss consists of:

- i) Light colored biotite-hornblende gneiss rich in plagioclase.
- ii) Plagioclase pegmatite
- iii) Marble and calc-silicate

The Custer gneiss is intruded by the Chilliwack Batholith and the contact appears to be sharp. Minor float of calc-silicate rock were found near the assumed contact east from DDH #1. The float contains pyrophyllite, epidote, diopside and minor garnet. Rare chalcopyrite was found with magnetite-bearing float.

iii) Structure

Fractures and faults are prominent structural features in the map area. The entire structural picture for the central gossan zone is not clear due to lack of outcrop in the Post Creek Valley. Dykes and breccias were mapped along with prominent fractures around the peripheral cliff of the gossan zone. The former reflect structural weaknesses which may have acted as conduits for magma.

The most prominent fracturing trends are N70-80°W and N35-45°E. Both of these trends are indicated by zones of late-stage dykes, veins, and fractures. No definite faults have been mapped in the central gossan zone. However, an apparent fault was located in the northwest part of the map area. This fault strikes N40°E with a vertical to steep southerly dip as indicated by a strong topographic depression and local broken outcrops with heavily stained veining.

The remaining faults are expressed as linear fractured outcrops associated with moderate topographic depressions in which rock is more intensely altered and shattered. Frequently the fractured zones were occupied by late-stage dykes and veins with sharp contacts. The composite map "Geology, Alteration & Drilling" (Map #3) illustrates the basis of these structures.

No significant faulting or shearing was disclosed by drilling. In drill core slicken-sided fractures, usually coated with smeared sulphide, are weak and minor compared with other porphyry-type deposits in the Canadian Cordillera. The broken zone at 256 ft. of DDH #1 is thought to be developed by a ground-water channel. The deep overburden which hampered drilling work for DDH #2 is probably a covered, deeply incised, fault line filled with huge cliff-falls.

iv) Alteration

Hydrothermal alteration within the main gossan zone is shown by a variable assemblage of quartz, sericite, chlorite, carbonate, epidote and minor secondary biotite. There is very little argillization. Thin section study by S.C. James has verified that minor amounts of clay minerals were identified in all the altered samples. This argillization seems to occur in association with late-stage faulting or shearing.

Principally there are two alteration suites:

- (i) Sericite + quartz + pyrite (or phyllic)
- (ii) Chlorite + calcite + epidote + pyrite (or propylitic)

These two alteration suites are mainly predetermined by the type of host rocks, while the intensity of alteration is dependent on degree of fracturing. Strong quartz-sericite alteration is predominant in most of the altered granodiorite and part of breccia. Diorite porphyry and most of the pre-mineral dyke rocks tend to be propylitic. Drill cores commonly show near-vertical fracture-controlled sericitization in pervasively and weakly altered diorite porphyry (the propylitic suite).

Due to the scarcity of mineral occurrences the relation between Mo-Cu mineralization and alteration zone is not quite clear. It seems that alteration suite (i) is mostly associated with the fracture and vein-selvage type of mineralization, while suite (ii) accompanies the disseminated type of mineralization, and is generally limited to pyrite and minor chalcopyrite.

Rock alteration and sulphide impregnation are considered to be contemporaneous. However one stage of alteration in the Greendrop property may have been a barren one since a localized strong quartz-sericite zone is unaccompanied by significant mineralization.

Weathering effects are minimal although limonitic and jarositic gossan is prominent and extensive. Fresh pyrite and other minor sulphides are common on surface exposures and near the bedrock contact in drill core.

v) Mineralization

Primary metallic mineralization in the elliptical gossaneous area of the Greendrop property contains pyrite and minor chalcopyrite, molybdenite, magnetite, sphalerite and galena. Quartz, sericite, calcite and gypsum are the main non-metallic hydrothermal minerals. No zonal pattern has been recognized because occurrence of Cu-Mo sulphides are insufficient for the required information and because the central area is completely covered with valley-fill. However, it is noted that highly altered quartz-sericite rock contains less pyrite than the diorite porphyry which appears to be located outwardly in propylitic zones.

Pyrite is the only abundant primary sulphide and comprises from 1 to more than 10% of the rock constituents in most of the gossan zone. It occurs both in fractures and as disseminations. Pyrite constitutes 2 - 5% of the rubble breccia occurring as coarse clusters with quartz and rare molybdenite. Most of chalcopyrite is contained in fracture-veining and minor disseminations within the adjacent wall rock of the vein. Chalcopyrite does not necessarily occur in highly altered quartz-sericite rock.

<u>Molybdenite</u>-bearing mineralization is found most frequently within the rubble breccia and/or within the intensely altered quartz stockwork along its contact. In drill core erratic molybdenite was found on steeply dipping quartz veins as envelopes and isolated fine flakes. No pervasively disseminated molybdenite was found. All the molybdenite occurrences are from the phyllic alteration zone.

Magnetite is fairly abundant on altered granodiorite near the western contact with rubble breccia. It occurs as coarse grained clusters on vuggy fractures with quartz and/or pyrite. Occurrences of <u>sphalerite</u> and <u>galena</u> are common throughout the drill core but they appear to be restricted to steeply-dipping quartz-calcite veinlets which represent a particular stage of mineralization.

Several specks of coarse <u>scheelite</u> were found in drill core. They are on a chalcopyrite-rich fracture and seem to have been formed in a relatively earlier stage with chalcopyrite and molybdenite.

Paragenesis

The above hydrothermal minerals were introduced in several sequential stages. Each stage occupies unique sets of fractures which are filled with specific combination of minerals. The paragenetic stages are; established by separating those fracture sets according to the mineral assemblages and the crosscutting relationships. The following chronological stages are based on megascopic evidence largely from the drill core:

- Stage 1: Pyrite and rare chalcopyrite disseminated typically with clots of mafics.
- Stage 2: Quartz-pyrite-chalcopyrite-molybdenite with or without alteration envelope.
- Stage 3: Quartz-molybdenite and rare chalcopyrite without alteration envelopes.
- Stage 4: Quartz-calcite with local sphalerite-galena clusters with rare chalcopyrite and magnetite.
- Stage 5: Barren calcite veining followed by gypsum in fractures.

Since pyrite is only a common mineral the above chronology is not far beyond a speculation. More study is required to establish the paragenetic relationships particularly in the more complicated breccia zone.

IV DRILLING

Two most promising sites were drilled vertically down to 1500 ft. and 1520 ft. respectively (Map 1 for location). The drill holes were laid out based on the previous geological mapping carried out in May. The drilling contract was awarded to Buccaneer Drilling Inc., which company completed 3020 ft. of drilling during the period of June 9 - July 31, 1980. The work procedure was as follows:

<u>Hole No.</u>	Total Depth	Date Started	Date Completed	Remarks
DDH #1	1500 ft.	June 13	July 7	
DDH #2	1520 ft.	July 11	July 31	450' overburden

Drilling revealed no encouragement for any deep-seated possibilities. There was no improvement of mineralization at depth nor was there any indication of a hidden felsic differentiate. The intensity of alteration near the ends of both holes are weaker than that of surface. The total sulphides and frequency of minor Mo-Cu occurrences appear to be uniform throughout the drill core. (Map 1 and Appendix 2 - drilling log)

V CONCLUSIONS & RECOMMENDATIONS

- i) The 1980 exploration program on the Greendrop property delineated a well-defined gossan zone (1 \times 1.5 km.) with an interesting breccia complex in its southern periphery. Geologically the property appears to be favourable for porphyry-type Mo-Cu deposits. Drilling verified the porphyry-type environment with minor Mo-Cu values in assay.
- ii) The diorite-quartz-diorite porphyry which seems to be a host rock for sulphide mineralization is more like dyke rock in distribution rather than the desirable high-level intrusive stock or plug.
- iii) The Greendrop property was not completely tested but seems to be of little economic interest since most of untested ground for large tonnage potential is in the Post Creek valley and open-pit operation is not feasible.
- iv) No further work is recommended.

VI <u>REFERENCES</u>

- (1) Monger JWH 1970

 Hope Map-Area, West half, B.C. GSC Paper 69-47
- (2) Blanchflower J.D. 1979 Exploration report on the Greendrop property, a private C.S.E. report.
- (3) Sutherland Brown A. (Editor) 1976

 Porphyry Deposits of the Canadian Cordillera, CIMM Special Vol. 15.

STATEMENT OF EXPENDITURES (Greendrop Project - 1980)

Drilling	\$149,570.47
Aircraft Charter	23,227.52
Assays	2,522.15
Travel Expense	270.60
Operating Supplies	982.47
Board and Lodging	1,325.50
Automotive	135.45
Salaries and Benefits	22,180.38

Total:

\$200,214.54

I certify the above expenditures to be a true and accurate account of expenses incurred.

Dated on October 27, 1980, Vancouver, B.C.

Boo Y. Kim, Geologist

CERTIFICATE

- I, Boo Young Kim, of the City of New Westminster, in the Province of British Columbia, certifies as follows:
 - That I am a geologist, residing at 222 Ash Street, New Westminster, B.C.
 - 2. That I have practised my profession continuously since being graduated in 1964 with B. Sc. in Geology from the Seoul National University in Seoul, Korea, and that I have continuously engaged in geological and mining exploration work for the past fifteen years.
 - That I am a Fellow of the Geological Association of Canada.
 - 4. That I am an employee of Canadian Superior Exploration Ltd. in Vancouver, B.C.
 - 5. That I have no interest in the property herein described.

DATED at Vancouver, British Columbia, this 28 day of October, 1980.

Boo Young Kim

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BYK:ms

PROPERTY GREENDROP	LOCATION Greendrop Lake Area, near Hope, B.C.	DRILL HOLE No DH #1
COMMENCEDJune 13, 1980	ELEVATION,030 ^m (approx) DIPSVertical	SHEET No]
COMPLETED	BEARING	
	DEPTH 1,500 ft.	

FROM Ft.	Ft.	DESCRIPTION	SAMPLE No.	FROM ft.	то ft.	SAMPLE WIDTH	% Mo	assay % Cu		Au ^{OZ/} t
0	42	Overburden								
42	176	Diorite porphyry: Abundant (not crowded) subhedral white feldspar	42301	42	47.6	5.6	.001	.04	.03	.001
		phenocrysts up to 5 mm long in dark fine grained to aphanitic groundmass. 2-5%								
		sulphides, mostly of pyrite. Rare cpy on occasional fracture faces with pyrite				MINERA	RECOU	RCES BI	RANCH	
		clusters. No sign of oxidation. Fracturing weak, predominantly 30° - 40° to				ASS	SIMIN	ripo.	et /	
		core axis. Pervasively propylitic with frequent selvage sericite-clay also with					3			
		late stage calcite coating. Occasional epidote patches and disseminations.								
		Obviously propylitic environemnt. Recovery 90%.				N	0			
		45.6-71 More like dacitic dyke, no clear contact, light gray to gray white,	42302	65	71	6.0'	.001	0.3	.04	.001
		finer (than above) grained phenocrysts of feldspar in aphanitic groundmass,								
		slightly more broken than above (42-45.6). Fine grained disseminated pyrite and								
		fractured-coated pyrite as cubes and blobs. Steeply dipping fracture with calcit	e							
		are usually coated with greenish tinted chlorite-clay smear, rare cpy with 3-5%								
		total sulphides. Slicken-sided fractures showing some weak near-horizontal								
		movements, more mafic 68.5-70 with weak porphyritic texture. Recovery 85%.								
							2116			

CONTRACTOR Buccaneer Diamond Drilling Inc.

LOGGED BY: B.Y. Kim Astronomy

	DEDT!!	
COMPLETED	BEARING	
COMMENCED	ELEVATION DIPS	SHEET No 2
PROPERTY	LOCATION	DRILL HOLE No

FROM	то	DESCRIPTION	SAMPLE No.	FROM	то	SAMPLE WIDTH	Mo %	ASSAY	VALUE Aa ^{OZ} /T	Au /T
		71-83 Broken, rubbly core with abundant calcite-coated fractures. Minor	42303	78	83	5'	.001	.05	.02	
		gypsum. fractures of 80-90° to core axis. Fracture-controlled sericite -clay								
		alteration coinciding with more broken zone 80-83'. Total sulphides 3-5%.								
		Recovery 85%.								
		83-91.5 Slightly coarser than above (45.6 - 83), more like proper diorite	42304	83	91	8'	.001	.02	.01	.001
		porphyry, near-horizontal (70° to higher angle to C.A.) fractures predominant								
		with pyrite and sericite-clay alteration halo. A near-vertical fracture of								
		quartz-calcite contains minor Pbs-ZnS with pyrite around 85 ft. of hole depth.								
		2-3% total sulphides. Recovery 90%.								
		9].5 -]]] Back to dacitic-looking section, probably from more intense alteration,	42305	100	106	6'	.001	.01	.01	.001
		lighter colored and finer grained than above (83-91.5), also more broken, 2-3%								
		total sulphides mostly of fine grained pyrite. Recovery 85%.								
						-		-		
		111-138 Similar to above (83-91.5), more porphyritic appearance due to light	42306	111	117	6'	.001	.02	.01	.001
		standing-out feldspars in darker finer grained matrix. Probably less altered	42307	123	130	7'	.001	.02	.01	.001
		section - Total sulphides ± 2%. Cpy fracture with pyrite 129'. Recovery over 9	g%.	<u> </u>						

PROPERTY	LOCATION	DRILL HOLE No DH #1
COMMENCED	ELEVATION DIPS	SHEET No
COMPLETED	BEARING	
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FROM	то	DESCRIPTION	SAMPLE	FROM	TO	SAMPLE		ASSAY	VALUE	
PROM	10	DESCRIPTION	No.	FROIVI		WIDTH	Mo %	Cu %	Ag ^{OZ} /7	Au ^{OZ/} T
		° 138-176 Similar to above (91.5-111). Sericitic alteration becoming pervasive	42308	135	142	5'	.001	.05	02	.001
		Total sulphide 2-3%. Poor recovery (65%) especially 153-176. Contact obscured	42309	153	159	6'	.001	.02	.01	.001
		by broken rubbly core.	42310	166	172	6'	.001	.05	.07	.001
176	182	Andesite porphyry dyke: dark gray, porphyritic due to light colored feldspars	42311	176	182	6'	.001	.06	.01	.001
-		and minor chloritized mafics as phenocrysts in almost black aphanitic matrix.								
	_	Weaker alteration than above diorite porphyry.Little or very weak selvage serici-								
		tization (difference from diorite porphyry). 3% pyrite and rare specks of cpy.								
		Steeply dipping (10^{0} to C.A.) sharp contact with the diorite porphyry below.								
		Recovery 90%.								
182	256	Diorite porphyry: light gray to grayish white, pervasively altered with strong	42312	182	189	7'	.001	.08	.04	.001
		quartz of secondary origin. Pervasive phyllic zone with occasional brownish								
		biotite, presumably secondary origin. Disseminated pyrites at mafic sites.								
		Steeply-dipping pyrite-quartz fractures (vuggy at times) and alteration selvage.								
		Occasionaly cpy on fracture and as disseminations. Minor fine specks and smear								
-		of MoS ₂ on weakly slipped fractures. Cpy on a near-vertical fracture at 196'	42313	195	200	5'	.001	.17	.05	.001

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No.	DH# I
COMMENCED	ELEVATION DIPS	SHEET No	. 4
COMPLETED	BEARING		

FROM	то	DESCRIPTION	SAMPLE No.	FROM	то	SAMPLE WIDTH	Mo %	assay Cu%	VALUE OZ Ag /T	Au 7T	
		Alteration intensity gradually weakens from 221 with more chloritized mafics	42314	206	211	5'	.001	.07	.07	.009	
		around 224'									
		A distinct near-vertical pyrite-quartz-sericite fracture 229-233 with shredded	42315	219	224	5'	.002	.05	.01	.001	
		<u>biotite in outside of the alteration envelope.</u>	42316	231	236	5'	.001	.08	.03	.001	
		Gradual change to more broken zone from 236 along with the increased intensity									
		of quartz-sericite alteration.	42317	241	247	6'	.001	.12	.03	.001	
		At 253 hole caved with groundwater pressure, strong sericite and flooded quartz									
		with increased amount of pyrite and minor visible cpy. Core recovery over 90% except 253-256 (40%).									
		-Hole stopped at 256 ft. (Bq Hole)									
		(Reaming and re-drilling with NQ and NQ-coring started from 120')									
120	171	Andesite porphyry dyke: as the above BQ core (176-182) Poor recovery,									
		particularly 125-146' (15%) averaged 30%. Note the difference in rock type from the initial BQ core.									
171	262	Diorite porphyry: Gray white, moderate to strong propylitic alteration with									
		occasional near-vertical fracture-controlled quartz-sericite selvages, Strong	42330	236	241	5'	.001	.15	.05	.002	
		fine disseminations of pyrite at mafic sites. Occasional cpy on fracture	42331	250	255	5'	.001	.06	.01	.001	
		with 1/10 Cp:py ratio. Total sulphides 2-3%. Weak sulphide-smeared slips									

PROPERTY	LOCATION	DRILL HOLE No. DH #1
COMMENCED	ELEVATION DIPS	SHEET No
COMPLETED	BEARING	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	то	SAMPLE WIDTH	Mo %		VALUE OZ Ag /T	oz Au /T
		around 262'. Cpy at 243, 244 and 249' core recovery 70-80%.								
262	369	Andesite porphyry dyke: dark gray, porphyritic with lighter-colored feldspar (25%) in fine grained to aphanitic black matrix at contact. Contact is sharp and steeply-dipping changing into lighter color due to alteration intensity	42332	267	273	6'	.001	.03	.01	.001
		(generally pervasive chloritization) Total sulphides 2-3%.								
		262-275 Angular broken core 3%; Total sulphides both on fracture faces and as disseminations. No predominant near-vertical structures as in diorite porphyry Fractures of high and low angles (to C.A.) are equally frequent. More chloritic for near-vertical (low angles to C.A.) fractures. Occasional	/							
		calcite-coating and minor subsequent (?) gypsum on fractures. Very fine grained pyrite disseminations throughout. Poor recovery approximately 50%.	42333	284.5	289	4.5'	.001	.05	.01	.002
		275-328 Broken and crushed core at 305 partly due to carbonate veining with minor Pbs-Zns. Pbs-Zns also at 306 in solid core. Angularly broken	42334 42318	300 311	3 ₀₅		.001	.02	.03	.002
		core due to strong calcite fractures 310-311.	42319	323	329	6'	.001	.07	.03	.002

CONTRACTOR

PROPERTY	LOCATION	DRILL HOLE No. DH#1
COMMENCED	ELEVATION DIPS	SHEET No6
COMPLETED	BEARING	
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FROM	то	DESCRIPTION SAMPLE No.	SAMPLE	FBOM	то	SAMPLE	PLE ASSAY VALUE					
			No.	1110111	10	WIDTH	Mo%	Cu %	oz Ag /T	Au /T		
		Cpy fractures at 324, 326, 328. Total sulphides 3%. Recovery 80-90%.										
		328-364 Porphyritic appearance with abundant feldspar phenocrysts in light	42320	329	335	6'	.001	.08	.04	.003		
		greenish-gray fine grained to aphanitic chloritized groundmass. Generally										
		massive with fair amount of pyrites and occasional cpy fractures with CP/py ratio										
		1/5-1/10. Propylytic (pervasive) with partial sericitization of feldspar pheno-	1	343	347	4'	.001	.21	.43	.004		
		crysts and local fracture sericite. l ^{CM} vuggy calcite-quartz vein (30% to C.A.					ļ					
		with Pbs-ZnS at 344. Cream colored ZnS and minor specular hematite. Total	42322	354	361	6'	.001	.05	.05	.003		
		sulphides 2-3%. Recovery 85%.										
		364-369 Weak alteration with almost fresh phenocryst feldspar and weakly										
		broken mafics. Fracturing is also weak, Minor cpy fractures with pyrite are			•••							
		not uncommon. MoS ₂ -Cpy on quartz veining (10 ⁰ to C.A.) at 368. Sulphides 2-3%.										
		Broken at 369, the contact with diorite porphyry below. Recovery 80%.										
369	425	Diorite porphyry: light gray to white, pervaisively and moderately altered to	42323	364	369	5'	.001	.08	.04	.002		
		sericite-chlorite and sericite-quartz. Selvage alteration more distinctive for	42324	369	375	6'	.001	.07	.03	.001		

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CONTRACTOR

PROPERTY	LOCATION	DRILL HOLE No DH #1
COMMENCED	ELEVATION DIPS	SHEET No
COMPLETED	BEARING	
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FROM TO		DESCRIPTION	SAMPLE	FROM	то	SAMPLE		ASSAY VALUE			
171014	10	DESCRIPTION	No.	PROM	10	WIDTH	Mo %	Cu %	T\ ^{QZ} A	Au /T	
		sericitization. All the structures controlled by near-vertical pyrite veining.		T-T							
		Strong pyrite as dissemination replacing mafics and on near-vertical									
	·	fractures. Minor cpy is not unusual generally associated with quartz veining.									
	-	Cpy increasing with minor MoS ₂ 380-385. Strong near-vertical veining of quartz-	42325	394	399	5'	.001	.09	.01	.001	
		pyrite with increased amount of cpy just above the contact with much fresher-	42326	399	404	5'	.001	.09	.03	.002	
		looking diorite porphyry. Minor MoS ₂ at 408.	42327	404	411	7'	.001	.09	.16	.002	
		PbS-ZnS at 408.2. Total sulphide 3-5% with 1/20 Cp-py ratio.									
		409-421 Patch of fresh to less-altered diorite porphyry.							<u> </u>		
		421-425 Pervaisively altered (weak sericite-chlorite) with stronger selvage.									
		Total sulphides 3-5% with heavy fracture pyrite. Also strong quartz veining with									
		coarse pyrite. Frequent minor cpy 421-425 associated with flooded quartz.	42328	420	425	5'	.001	.06	.01	.001	
		Recovery averaged 75% locally down to 60%.									
425	450	Andesite porphyry dyke: Similar to 362-369. Initial 2 ft. from the contact	42329	436	441	5'	.001	.14	.08	.002	
		seems like post-mineral basic porphyrite dyke but changes rapidly to mineralized									
		and weakly altered andesite porphyry dyke. Occasional good cpy fractures									
		(near-vertical). gradually more bleached toward lower contact and more frequent									
		occurrences but still local rather than pervaisive dissemination.									

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No DH #1
COMMENCED	ELEVATION DIPS	SHEET No
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FROM	то	DESCRIPTION	No.	FROM	то	WIDTH	Mo %	Cu %	Agz/T	AÛZ/T
		Total sulphides 3-5%. Recovery 80%.								
		Total Sulphites 5 5%. Recovery 50%.								
450	1500	Diorite porphyry: broken core at contact, Gray white, highly altered pervasive-	42335	450	455	5'	.001	.06	.02	.002
130	1300	ly with rare original textures. Abundant gypsum fractures. (hairline to 5 ^{mm} veir	1	462	467	5'	.001	.09	.02	.001
		of near-horizontal attitude. Gypsum veins cutting all the steeply-dipping struc-								
		tures including pyritic fractures with alteration envelopes.	42337	482	487	5'	.001	.07	.02	.001
		Amount of total sulphides decreased to 1-2% with no increase of Cp/py				_				
		ratio. Strong gypsum fractures are distinct contrast with diorite above								
		(369-435). Sulphides tend to be finer grained than above. Good core recovery								
		averaged over 90%. MoS2 on steeply-dipping fracture at 511.	42338	502	507	5'	.001	.08	.01	.002
		*Fresher diorite porphyry (clear biotite) with unattached feldspar phenocrysts)								
		patch (½ ft.) at 515. Minor PbS-ZnS-CuFeS ₂ on steeply dipping carbonate fracture								
		at 516.								
		A near-vertical slip face with near-horizontal movement at 525. Stronger,	42339	522	527	5'	.001	.08	.01	.001
		heavier pyrite fractures around 517 split and broken core due to stronger gypsum								
		fractures at 542.								
		Pervasively altered diorite continues with very minor changes and extensive	42340	546	551	5'	.001	.07	.03	.001

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No DH #1
COMMENCED	ELEVATION DIPS	SHEET No9
COMPLETED	BEARING	
	2571	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	то	SAMPLE WIDTH	Mo %	ASSAY	value OZ Ag /	oz Au /T
		strong gypsum fractures (predominantly 70° to C.A.)								
		Pbs-Zn on calcite vein at 573' and fine fracture of PbS-ZnS extending downward	42341	572	577	5'	.001	.10	.13	.003
		approximately ½ ft. Core recovery 90% 450-467 and better than 90% 467 ~ 1500								
	-	based on measurement for 5~10' drill run intervals.								
		591-614 Very slightly more siliceous and less gypsum. 1-2% total sulphides	42342	592	597	5'	.001	.05	.02	.002
		l-2% total sulphides. Minor cpy at 595. Recovery 95%.								
		614-637 Slightly sericitic than above 591-614. More pyrite fractures and	42343	615	620	5'	.001	.06	.01	.002
		gypsum. Total sulphides 2%. Cpy at 624'	42344	632	637	5'	.001	,06	.03	.002
		637-660. Strong gypsum throughout not only in near-horizontal direction but on	42345	650	655	5.'	.001	.06	.06	.002
		steeply-dipping fractures. Steeply-dipping slip faces with crushed gypsum and								
		smeared sulphide around 654'. Total sulphides 1-2%.								
		·			· · · · · · · · · · · · · · · · · · ·					
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PROPERTY	LOCATION	DRILL HOLE No DH .#1
COMMENCED	ELEVATION DIPS	SHEET No]Q
COMPLETED	BEARING	•
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FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE	E ASSAY VAL			-	
PHOIM		DESCRIPTION	No.	FRUIVI		WIDTH	Mo%	Cu%	Ag ^{OZ} /	Au ^{OZ} /	T
		660-684 Frequent heavy 1-5mm fractures of 20-300 to C.A. soft core mostly of	42346	675	680	5'	001	.07	.05	.001	
		sericite-clay and gypsum with quartz. Cpy + ZnS + PbS in fracture									,
		transparently coated by gypsum at 671. Total suphides 2%									
		684-708 Very minor changes extensively, more siliceous zone 702-708. Minor fine	42347	703	708	5'	.003	.02	.01	.002	
		grained MoS ₂ on quartz vein at 707. Gypsum persistent and strong.									<u> </u>
		708-731 More siliceous with secondary biotite, gypsum weakening slightly. Cpy	42348	726	731	5'	.001	.06	.02	.001	
		with poorly-defined flooded quartz at 70% cpy at 722 both on near-									
		horizontal pyrite fracture.									
		731-754 almost identical as above 708-731, siliceous (harder core) with									
:		secondary biotite 736-739, occasional heavy pyrite fractures of 70% to									
		C.A. cutting near-vertical structures, 1-2% Total sulphides						-	-		
		754-778.5 Usual pyrite fractures cut by strong gypsum fractures. No change from	12310	757	762	E !	.001	.06	01	.002	
		above. Dissemination of pyrite seems to be decreasing gradually to the		737	702	3	.001	.00	.01	.002	
		depth 1-2% sulphides									
		778.5-802 Heavier pyrite-carbonate veining 779-782. Two kinds of gypsum, one	42354	779	784	5'	-001	.26	. 03	-001	
		white powdery on thin to hairline fracture faces and the other is crystalline lilac-coloured transparant kind associated with steeply									

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PROPERTY	LOCATION	DRILL HOLE No DH . # I
COMMENCED	ELEVATION DIPS	SHEET No
COMPLETED	BEARING	
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FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE			VALUE		
PROM	10	DESCRIPTION	No.			WIDTH	Mo%	Cu%	Ag oz/	T Au OZ	'T
		dipping calcite-pyrite-cpy fracture at 787.5. The former is more	42355	802	807	5 1	.001	.03	.01	.001	
		usual, the latter probably anhydrite. T.S. 1-2%, Recovery 95%									
		802-826 No substantial change from above. More frequent lilac gypsum veining	-								
		and fracturing but overall less fractured due to less hairline gypsum									
		fractures. Occasional heavy pyrite usually with anhydrite-calcite									
		veining 1-2% T.S.									
		826-849.5 Unbroken core particularly from 837-849.5 due to less gypsum (less	42356	832	837	5'	.001	.11	.23	.001	
		than I fracture every inch) Large clusters of pyrite at weakly				:					
		broken, dark-colored mafic sites and white phenocryst of altered and									
		rounded feldspar (weak sericite) Heavy pyrite + PbS + ZnS veining									
		at 835 ft.									
		849.5-873 Massive core down to 866' due to less altered darker-colored	42357	850	855	5'	. 001	Ω5	.15	. 001	
		porphyritic diorite, softer due to less augumented quartz from									
		alteration. Minor PbS-ZnS at 851 & 864. Steeply dipping pyrite									
		fracturing with stronger alteration halo, minor cpy associated with									
		pyrite. Total sulphide 1-2% Anhyrdite-carbonate-pyrite veining is not									
		unusual.									

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PROPERTY	LOCATION	DRILL HOLE No DH . #.1
COMMENCED	ELEVATION DIPS	SHEET No
COMPLETED	BEARING	
	DERTH	

, TO	TO DESCRIPTION S	SAMPLE	- FD014	TO	SAMPLE	E ASSAY VALUE				
,0		DESCRIPTION	No.	FNOIVI		WIDTH	Mo%	Cu%	Ag ⁰² /T	Au ^{OZ} /T
	873-897	Generally stronger for anhyrdite veining. A near-vertical anhydrite-	42358	878	883	5'	.001	.16	.07	.001
		carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its								
		satellite disseminations associated with the anhydrite veining								
		2% T.S								
	897-920	Pervasive alteration is weak. Clearly stronger alteration is controlle		900	905	5'	.001	.15	.06	.001
	0	by near-vertical fracture selvages. Gypsum fractures weakened								
	920-944	Flooded quartz and circular patches of incompletely altered dark portion	42360	935	940	5'	.001	.02	.01	.001
		give a partially assimilated breccia texture 1-2% T.S. No improvement								
		on copper grade expected.								
		Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply-		:						
		dipping veinlets - while gypsum occuring on near-horizontal to gently-								
	· ·	dipping hairline fractures.								
		Moderate pervasive sericitization with local strong quartz flooding.								
	944-968	Altered andesite porphyry dyke 950.5-955 both contacts are poorly	42361	963	968	5	.001	.04	.02	.001
		defined due to chilled margins, alteration, quartz veining and pyrite								
		+ gypsum fractures. Lower contact 350 to C.A. Approximately ten feet								
		from the both contact might have been brecciated zone, subjected to later alteration. Now quartz-rich matrix with light green gray								
	ТО	873-897 897-920 920-944	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled by near-vertical fracture selvages. Gypsum fractures weakened 920-944 Flooded quartz and circular patches of incompletely altered dark portion give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply-dipping veinlets - while gypsum occuring on near-horizontal to gently-dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite—42358 carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled by near-vertical fracture selvages. Gypsum fractures weakened 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply-dipping veinlets - while gypsum occuring on near-horizontal to gently-dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly 42361 defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled by near-vertical fracture selvages. Gypsum fractures weakened 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 935 give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply- dipping veinlets - while gypsum occuring on near-horizontal to gently- dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- 28 7.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 935 940 give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply- dipping veinlets - while gypsum occuring on near-horizontal to gently- dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly 42361 963 968 defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 350 to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 935 940 5' give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply- dipping veinlets - while gypsum occuring on near-horizontal to gently- dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly 42361 963 968 5' defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled by near-vertical fracture selvages. Gypsum fractures weakened 920-944 Flooded quartz and circular patches of incompletely altered dark portion42360 935 940 5' .001 give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply- dipping veinlets - while gypsum occuring on near-horizontal to gently- dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite— carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled by near-vertical fracture selvages. Gypsum fractures weakened 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 935 940 5' .001 .02 give a partially assimilated breccia texture 1-2% T.S. No improvement on copper grade expected. Usual gypsum anhydrite fractures, anhydrite mostly on thicker, steeply— dipping veinlets - while gypsum occuring on near-horizontal to gently— dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly 42361 963 968 5 .001 .04 defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 35° to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to	873-897 Generally stronger for anhyrdite veining. A near-vertical anhydrite- carbonate-quartz-pyrite vein from 878-883, occasional large cpy and its satellite disseminations associated with the anhydrite veining 2% T.S. 897-920 Pervasive alteration is weak. Clearly stronger alteration is controlled 920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 1920-944 Flooded quartz and circular patches of incompletely altered dark portion 42360 1930-944 Gipping veinlots - while gypsum occuring on near-horizontal to gently- dipping veinlots - while gypsum occuring on near-horizontal to gently- dipping hairline fractures. Moderate pervasive sericitization with local strong quartz flooding. 944-968 Altered andesite porphyry dyke 950.5-955 both contacts are poorly defined due to chilled margins, alteration, quartz veining and pyrite + gypsum fractures. Lower contact 350 to C.A. Approximately ten feet from the both contact might have been brecciated zone, subjected to

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No DH#]
COMMENCED	ELEVATION DIPS	SHEET No13
COMPLETED	BEARING	
	DEDTH	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE		,	VALUE		
			No.	1 110111		WIDTH	Mo%	Cu%	Ag OZ-	Au OZ	<u>T</u>
		sericitized & chloritized fragment patches of obsecure circular shapes.									
		968-991.5 Unbroken core rich in quartz and clearer mafic sites occupied by	42362	978.5	982.5	4'	.001	.07_	.04	.001	
		pyrite. Sharp but less-frequent gypsum fractures. Near-vertical									
		pyrite fracturing decreased. Lilac anhydrite fracture of 25 ⁰ to C.A.							:		
		at 986'.									
		991.5-1015.5 Altered diorite porphyry rich in quartz with pervasive moderate	42363	1007	1012	5'	.001	.08	.05	.001	
		sericitization, occasional thin alteration selvages on pyrite fractures.									
		Consistantly strong pyrite dissemination on partially or completely									
		broken mafic sites. Cpy is erratic and very minor. Overall T.S.									
		increased from 1-2% to 2-3%, Cpy fractures with pyrite at 996 and									
		1002. Fracture-controlled alteration (stronger sericite and greenish		:							
		clay(?) with quartz) around 1006 ft.									
		Decreased gypsum fractures, still common with occasional lilac anhydrite									
		vein.						=			
		Good recovery, core generally massive, siliceous with easily-split									
		gypsum fractures.									

LOGGED BY:

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No. DH #1
COMMENCED	ELEVATION DIPS	SHEET No].4
COMPLETED	BEARING	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE		ASSAY	VALUE	r 	ļ
			No.		, ,	WIDTH	Mo%	Cu%	Agoz/	T Au oz	/T
		1015.5-1039 Fresh to weakly altered biotite quartz-diorite porphyry rich in	42364	1032	1037	5'	.001	.09	.09	.001	
		quartz around 1016. Incompletely assimilated darker patches surrounded by									
		flooded quartz and feldspar give a brecciated texture (rounded dark fragment in									
		felsic matrix) 1025-1039.									
		Minor Pbs-ZnS veining associated with carbonate 2-3% T.S. Minor specks of cpy									
		and rare large chalcopyrite on fracture vein.									
		Unbroken core with good recovery.									
		1039-1063 Solid core mostly of feldspar (weakly sericitized) and quartz and	42365	1052	1057	5'	.001	.09	.02	.001	
		usual pyrite and /or gypsum fractures of various attitude.									
		Minor steeply-dipping cryptocrystalline MoS ₂ in dark colored quartz-pyrite									
		veining around 1061, T.S. 2-3%, cpy minor 0.1-0.15% Cu expected.									
		1063-1086.5 same as above. Changing from 1075 into pyrite porphyry (?) fine	42366	1072	1077	5'	.002	.11	.06	.001	
		grained pyrite disseminations in white siliceous aphanitic matrix									
		(quartz-sericite), probably a felsic dyke subjected to pervasive:									
		phyllic alteration later.									
		Cpy-ZnS veining around 1075', a heavy pyrite and minor cpy vein									
		at 1086'. 2-3% total sulphides.									

CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No DH .#.1
COMMENCED	ELEVATION DIPS	SHEET No 1.5
COMPLETED	BEARING	
	2571	

FROM TO	DESCRIPTION	SAMPLE	I FROM I TO		SAMPLE					
,	"	DESCRIPTION	No.	PROM	10	WIDTH	Mo%	Cu%	Ag oz/	Au oz/T
		1086.5-1109.5 Weaker pyrite porphyry as above and usual altered quartz-diorite	42367	1102	1107	5'	.003	.04	.03	.001
		porphyry. Minor brecciated textures due to poorly-defined pyrite veining					:			
		thin selvage alteration and later gypsum fracturing particularly around								
		1102'. 2-3% T.S.								
		1109.5-1134 Massive, unbroken light gray grayish white core, fresher than the								
		above due to less frequent near-vertical fracturing, cpy is not unusual								
		locally 1/10- 1/20 CP/PY ratio with 2-3% T.S. strong pyrite 1121-1123								
	ļ	1134-1157.5 Py-cpy fractures and darker alteration selvages in lighter flooded	42368	1132	1137	5'	.001	.06	.02	.001
		quartz and feldspar. Continuous weak brecciated textures. Near vertical								
		quartz-carbonate-pyrite stringer with local strong sericite-clay (green?)								
		around 1051. 2% T.S. in solid core								
		1157.5-1184.5 Fresh-looking core of fine grained quartz-diorite porphyry with 2%	42369	1162	1167	5'	.001	.06	.04	.001
		T.S. around 1171'. Moderate to strong fracture-controlled alteration			-					
		with increased amount of pyrite (3-5%) around 1176'. No improvement					ļ			
		on cpy content. T.S. 2-3%								
		1184.5-1208.5 Fresh core (very weak prophylitic alteration) alternating with	42370	1198	1203	5'	.005	.09	.07	.001
		moderately altered core from steeply-dipping pyrite fracturing.								

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CONTRACTOR:

PROPERTY	LOCATION	DRILL HOLE No DH#.1
COMMENCED	ELEVATION DIPS	SHEET No 1,6
COMPLETED	BEARING	
	DERTH	

		PERCENTION	SAMPLE	FROM	EDOM	то	SAMPLE		ASSAY	VALUE	
FROM	то	o DESCRIPTION	No.	PROM	10	WIDTH	Mo%	Cu%	Ag oz/1	Au oz/T	
		Cpy on near-vertical fracture with PbS + ZnS at 1191. Heavy pyrite									
		and quartz veining and specks of MoS ₂ with dark colored quartz and									
		also with good cpy around 1198'. 2-3% T.S. solid core in general							ļ		
		with occasional sharp gypsum fractures and fair cpy.									
		1208.5-1233 More frequent and extensive (1-2ft) fresher quartz diorite porphyry	42371	1229	1234	5 '	.001	.05	.03	.001	
	f	between fracture-controlled altered zone. Overall fracturing becoming							-		
		weak with decreased amount of pyrite veining. Transparant anhydrite or									
		gypsum vein of 20° C.A. at 1230'. 1-2% T.S. poor copper grade expected									
		1233-1256.6 Similar to above with slightly more stockwork fracturing and	42372	1254.6	1259.6	5'	.002	.08	.02	.001	
-		consequently shorter fresh core, occasional quartz-calcite-pyrite-cpy-									
		PbS + ZnS fractures & veins. 1-2% T.S.	-								
		1256-1271 Similar to above. Fresher (weak chloritization of matics & pyrite)									
		quartz diorite with occasional stockwork fractures which are respon-									
		sible for local bleaching and selvage alteration.									
		Stronger near-vertical fractures around 1267 with green tinted chlorite-	_								
		clay.							ļ		
		A narrow basic porphyritic dyke or inclusion at 1267 with sharp contact.	,								

CONTRACTOR:

 LOGGED BY:

PROPERTY	LOCATION	DRILL HOLE No DH. # . 1
COMMENCED	ELEVATION DIPS	SHEET No 1,7,
COMPLETED	BEARING	
	DEPTH	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE		ASSAY	VALUE		
PROIVI	10	DESCRIPTION	No.	1110101		WIDTH	Mo %	Cu %	Ag oz/	Au oz/1	<u> </u>
		pyritized.									
		2% T.S.									
		1271-1295 Improvement of alteration and pyritization due to more fractures with	42373	1280	1285	5'	.001	.02	.01	.001	
		decreased fresher quartz diorite patches. Strong near-vertical slip									
		fractures with weakly crushed sulphides and calcite-clay, gypsum coating									
		at later (?) stage. Minor MoS ₂ with quartz-coarse sericite veining at									
		1294. 2-3% T.S.									
		1295-1318 Generally fresh core of biotite-hornblende diorite porphyry mostly of	42374	1307	1312	5'	.002	.04	.01	.001	
		plagioclase and minor mafics and a little quartz.									
		More pervasive and stronger alteration zone 1311-1317. Total sulphides									
		decreased to 1-2% with solid recovery,occasional cpy as disseminations									
		and on fractures.			ļ						
		1318-1342 Local improvement of strong pyrite and quartz veining with heavy coarse	42375	1327	1332	5'	.002	.03	.05	.001	
		sericite flakes and fine grained alteration envelopes. Cpy + MoS ₂									
		associated with pyrite clusters 1322-1336. Cpy + MoS ₂ at 1228 with									
		lilac-colored anhydrite patches. 2-3% T.S. with good recovery of hard									
		siliceous core.									

LOGGED BY:

PROPERTY	LOCATION	DRILL HOLE No	DH#.1
COMMENCED	ELEVATION DIPS	SHEET No	18
COMPLETED	BEARING		
	DERTH		

FROM	то	DESCRIPTION	SAMPLE	FROM	FROM TO			ASSAY	VALUE	
			No.			WIDTH	Mo%	Cu%	Ag oz/T	Au œ/T
		1342-1365 Fresh to weakly altered (propylitic) quartz-diorite porphyry with	42376	1357	1363	6'	.001	.06	.01	.001
		occasional quartz-pyrite fractures and veins, moderate sericite halo								
		of variable width. 2% T.S. Cpy on fracture 1343 and 1363. MoS ₂ with								
		pyrite-quartz fracture at 1364.								
		1365-1389.5 Fresher quartz-diorite due to less frequent steeply-dipping veining.	42377	1363	1368	5'	.006	.08	.02	.001
		Nearly fresh rock particularly 1375-1389. Occasional cpy fractures								
		with pyrite and also minor MoS ₂ with quartz veining. Solid core 95%						-		
		recovery. Total sulphides 1 - 2 %								
		1389.5 - 1412 Broken and split core, especially 1394-1402, due to steeply-dipping	g 42378	1394.6	1399.6	5'	.005	.09	.03	.001
-	-	slip faces with crushed carbonate-gypsum, chlorite-clay and also and								
		minor sulphides. Weak indication of near-horizontal movement on the								
		slickensided fracture. 1-2% T.S. over 90% recovery.			:					
		1412-1435 Fresh to weakly altered diorite porphyry with more broken and altered	42379	1415	1420	5'	.010	.06_	.08	.001
		zone (1414-1417) due to steeply-dipping fractures and veins. Occasiona	1							
		cpy on a fracture face. Minor MoS ₂ on a fine gently dipping fracture								
		at 1420.								
		1-2% T.S.								

PROPERTY	LOCATION	DRILL HOLE No	DH#1
COMMENCED	ELEVATION DIPS	SHEET No	19
COMPLETED	BEARING		

55014				SAMPLE	50014	FROM	EBOM TO			SAMPLE		ASSAY	VALUE	
FROM	то		DESCRIPTION	No.	FROM	FROM TO		Mo %	Cu%	Ag oz/ T	Au oz/T			
		1435-1459	Same as above (1412-1435). Thin selvage alteration on pyrite-quartz-	42380	1451	1456	5'	.002	.13	.05	.001			
			sericite-chlorite fracture.						·					
			Minor specks of MoS ₂ on quartz veining at 1436 and 1452											
		1459-1483	Fresh to weakly altered diorite porphyry,80-90% plagioclase mostly											
			fresh, + 10% biotite, partly chloritized. Occasional fracture											
			alteration halo with pyrite, quartz, carbonate and minor gypsum.											
			Weakly slipped fracture faces are not uncommon, local sericite											
			(coarse) are associated with the above fracture. Solid fresh core											
			in general with 1-2% T.S.											
		1483-1500	Light gray to gray diorite porphyry, porphyritic textures due to large	42381	1484	1489	5'	.002	.08	.03	.001			
			and small clusters of shredded black biotites in lighter colored fine											
			grained plagioclase groundmass.											
			Generally fresh with minor chloritization particularly along occasional											
			stock work fractures with pyrite. Decreased amount of pyrite, mostly											
			on fractures and only minor disseminations, T.S. or 1-2%											
			- End of Hole - 1,500 ft.											

CONTRACTOR:

LOGGED BY:

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(GREENDROP PROJECT)
                           DH #1
  Core Recovery
  0 - 42'
                                                        2941
                                                                     90%
                 Overburden
                                                                     80%
                                                        296'
       47.6'
                      90%
       52'
                      90%
                                                        305'
                                                                     70%
                                                        3081
                                                                     80%
       54'
                      90%
       57'
                                                        309'
                      50%
                                                                     90%
       65'
                      80%
                                                        3191
                                                                     90%
      67'
                                                        329'
                                                                     90%
                      95%
                      90%
                                                        333'
                                                                     90%
       70'
       76'
                      80%
                                                        343'
                                                                     90%
      78'
                                                        347'
                      80%
                                                                     85%
                      85%
                                                        3491
                                                                     85%
      83'
                                                        354'
      86'
                                                                     90%
                      90%
      91'
                      85%
                                                                     75%
                                                        358'
      931
                      90%
                                                                     85%
                                                        365'
      961
                                                        369.6'
                      90%
                                                                     80%
                                                        3721
       100'
                      85%
                                                                     60%
                                                        375'
       103'
                      85%
                                                                     95%
       106'
                      90%
                                                        377.81
                                                                     90%
      113'
                      90%
                                                                     85%
                                                        380'
                                                        3821
       118'
                      85%
                                                                     95%
                                                        388'
       1231
                      90%
                                                                     60%
      125'
                     100%
                                                        3941
                                                                     75%
                                                        397'
                      90%
                                                                     80%
       130'
      135'
                      85%
                                                        401.5'
                                                                     85%
       1381
                      85%
                                                        407'
                                                                     70%
                                                        411'
       142'
                                                                     70%
                      90%
       147'
                                                        415'
                      85%
                                                                     60%
       153'
                      85%
                                                        420'
                                                                     70%
      154'
                      30%
                                                        423'
                                                                     75%
                      50%
                                                        425'
                                                                     85%
       156'
       159'
                      40%
                                                        426'
                                                                     90%
      162'
                      40%
                                                        4281
                                                                     70%
       166'
                      50%
                                                        430'
                                                                     60%
      1721
                                                        436'
                                                                     90%
                      35%
                                                                     80%
       176'
                      75%
                                                        441'
       177'
                      95%
                                                        446.5'
                                                                    < 10%
       181'
                      90%
                                                        450'
                                                                    <10%
      186'
                                                450'- 457'
                      90%
                                                                     85%
                                                        467'
                                                                    >90%
       196'
                     100%
      200'
                     100%
       206'
                     100%
      211'
                      95%
      216'
                      95%
       224'
                      95%
       230'
                      90%
                                   * Below 467' all the way down to 1500', core
                                      recovery is 90% or better based on measurement for 5 - 10' drill run intervals.
       233'
                      90%
       236'
                      85%
      241'
                      85%
       244'
                      90%
       249'
                      90%
      253'
                      85%
                     <10%
       256'
        (stopped initial
         BQ Hole here.)
      NQ Hole
236 - 246'
                      70%
      250'
                      80%
      254'
                      80%
       2621
                      80%
      264'
                      30%
                      70%
       2651
      266'
                      80%
      267'
                      80%
      2691
                      30%
      273'
                      40%
      275
                      40%
       279.51
                      80%
      282.5
                      80%
      284.5'
                      80%
       286.5'
                      80%
```

2891

80%

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B.C.	DRILL HOLE No. DH #2
COMMENCED July 11, 1980	ELEVATION .960 M(approx.) DIPS Vertical	SHEET No 1
COMPLETED July 31, 1980	BEARING	

EDOM	70	occopination ,	SAMPLE				SAMPLE		ASSAY	VALUE	
FROM	то	DESCRIPTION	No.	FROM Ft.	Ft.	width Ft.		Cu %	Ag ^{OZ} /T	OZ/ Au T	
0	456	Overburden (occasional huge boulders of altered granodiorite & agglomeraté						<u>.</u>			
		breccia)									
456	459	Basic porphyry dyke	42388	456	466	10'	.001	.03	.05	.001	
		dark gray to black basic (andesite-basalt) dyke with weak porphyritic									
		appearance due to sparse light feldspar phenocrysts in aphanetic to		MIN	ERAL R	ESOUR	CES BRA	NCH			
		very fine grained ground mass. Stockwork fractures of pyrite with weak					CART				
		alteration halo. Sharp and steeply-dipping (20% to C.A.) contact with		J.	X'	K					
		highly altered granodiorite below. Fine to hairline fractures of									
		pyrite along with sparse disseminated pyrite. Strong gypsum fractures			NO.						
		of late stage. Total sulphides < 1 - 1%. Recovery 90%									
459	527.5	Altered granodiorite	42389	466	476	10'	.004	.02	.04	.001	
		White to grayish white, highly altered coarse grained granodiorite.									
		Relict texture retained locally due to highly sericitized coarse									
		feldspar. Strong quartz both from original and secondary origin.									
		Locally flooded quartz and pyrite fractures with alteration halo erased									

CONTRACTOR: ... Buccaneer, Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D.H. #2
COMMENCED July 11, 1980	ELEVATION .9.60. M. (approx.) DIPSVertical	SHEET No2
COMPLETED July .31, .1980.	BEARING	
	550 ft.	

FROM	то	DESCRIPTION	SAMPLE No.	FROM Ft.	то Ft.	SAMPLE	Mo %		VALUE	Au ^{oz/} T
		all the relict textures. Abundant pyrite clusters usually associated	42390	476	486	10'	.021	.02	.05	.001
		with poorly defined quartz veining. Pyrite dissemination is very minor		486	496	10'	.009	.03	.03	.001
		compared with fracture and cluster pyrite.								
		Significant MoS ₂ around 480 ft. as an extensive envelope on a 1 cm								
		near-vertical quartz vein. Visual estimate of MoS2 grade could be								
		0.05%. Minor amounts of PbS and ZnS is usual with local cpy. Their								
		occurrences are on steeply-dipping fine fractures and related with								
		quartz-carbonate veining. Gypsum occurrences are usual, mostly on								
		near-horizontal fractures and occasionally as larger chunks on cracks.								
		486 - 508.5 same altered granodiorite as above, totally altered to quartz-	42392	496	506	10'	.001	.01	.01	.001
		sericite and clay (?) with strong fracturing. Practically shattered								
		core. The shattered cracks filled with crushed clay-carbonate-gypsum.								
		Pyrite occuring as clusters on curved and criss-crossed fractures.								
		Straight fractures are mostly near-vertical ones. Strong quartz								
		intermingled with sericite. Locally weak granular texture of coarse								
		granodiorite. No mafics. Occasional fine grained MoS ₂ associated with								

LOGGED BY:B, Y, Kim

PROPERTY GREENDROP	LOCATIONGreendrop Lake area near Hope, B. C.	DRILL HOLE No. D.H., #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No 3
COMPLETED July 31, 1980	BEARING	
	DEPTH . 1520 .ft	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	FROM TO SA				VALUE	07/	
		9		Ft.	_Ft.	Ft.	Mo %	Cu %	Ag ^{O2} /T	Au ^{OZ} /T	
		quartz and/or pyrite veining but the amount of MoS2 is not as much as									
		the above core box (464' - 486') Total sulphides 2%, core recovery									
		over 90%.									
		508.5 - 527.8 Quartz-sericite fels with no relict textures down to 522. Weak									
		granular texture of original granodiorite from 522 - 527.5 (contact									
		with dyke below) Very strong pervaisive alteration with abundant late-									
		stage gypsum fractures. Pyrite occuring as local heavy clusters and									
		intermittent fracture fillings. Evenly disseminated pyrite are very									
		minor. 2-3% T.S. with rare fine grained MoS2. Recovery over 90%.									
527.5	537	Pacie nembyny dyke, dawk gway aphanetic to fine gwained dyke weck with sparse	42393	527	537	10'	.001	.02	.01	.001	
527.5	337	Basic porphyry dyke: dark gray, aphanetic to fine grained dyke rock with sparse light-colored feldspar lath. Sharp steeply-dipping contact (10 ⁵ to C.A.)	1	327	337	10	.001	.02	.01	.001	
		with the above altered granodiorite. Thin selvages of bleaching on									
		pyritic fractures. Strong gently-dipping gypsum fractures, one of them									للتهوفية فرير والمالة
		cross-cutting and shifting the near-vertical contact line.									
		T.S. ± 1% core recovery over 90%									

CONTRACTOR: .. Buccaneer. Diamond .Drilling .Inc..

GREENDROP PROPERTY	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCED July 11, 1980	ELEVATION .960 M.(approx.) DIPS Vertical	
COMPLETED July 31, 1980	BEARING	
	DERTH 1520 ft.	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE		ASSAY	VALUE	
			No.	Ft.	Ft.	Ft.	Mo %	Cu %	Ag ^{0/T}	Au ^{0/} T
537	547.5	Altered granodiorite: same as the above granodiorite (459-527.5) Local original	42394	537	547	10'	.001	.02	.01	.001
		granular texture saved due to coarse sericitized feldspars and quartz								
		grains. Mafics all gone and commonly replaced by pyrite. Where quartz								
		flooding is stronger no relict texture at all. Persistent gypsum								
		fractures. T. S. 2%. Recovery > 90%								
547.5	5 561.5	Basic porphyry dyke (Andesite-Basalt): same as the above dyke at 527.5 - 537.								
		Criss-crossed pyrite fractures with thin envelope of alteration and								
		bleaching. Occasional heavy pyrite clusters. Some angular inclusions								
		of granodiorite. Granodiorite section 554-556 (large inclusion)								
		Steeply-dipping contact. T. S. 1 - 2% . Recovery > 90%	42395	557	567	10'	.001	.02	.02	.001
561.5	5 650	Altered granodiorite: Very usual type, same as above granodiorites. Original								
		granular textures except where strong quartz veining. Fine grains of								
		MoS2 on fracture near the contact above minor secondary biotite								
		around 563'. A steeply-dipping slip face at 572 showing near-horizontal	I							
		slicken-sided movement. T. S. 2 - 3 % Recovery > 90%								

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCEDJuly. 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No
COMPLETED July 31, 1980	BEARING	
•	1520 ft.	

FROM	то	DESCRIPTION .	SAMPLE No.	FROM Ft.	то Ft.	SAMPLE WIDTH Ft.			Ag ^U /T	Δ ₁₁ 0/ _T
		574.5 - 598 same as above. Stronger quartz veining and minor MoS ₂ at 599' , 1"	42396	584	594	10'	.003	.02	.02	.001
		aplitic core at 594'								
		T. S. 2 - 3 % with over 90% recovery.								
		598 - 621 same as above, uniform core extensively. Strong solid quartz veining	42397	604	614	10'	.001	.01	.01	.001
		603 - 604 and at 609' Pyrite mostly as heavy fracture-filling and								
		clusters on cracks. Dissemination is minor. Increased amount of								
		pyrite (T.S. 3 - 5%) along with flooded quartz. Recovery good all the								
		way,over 90%.								
		621 - 644 same as above, slightly more quartz both of well-defined vein type	42398	624	634	10'	.004	.01	.03	.001
		and flooded type. Relict granular texture of coarse granodiorite								
		preserved locally from pervaisive alteration and quartz flooding.	ļ							
		Heavy pyrite on fractures and as matrix-like void-filling is usual,								
		especially around 632'. Minor MoS2 associated with the above pyrite								
		zone around 632' . A near-vertical fracture around 632' filled with								
		discontinuous ZnS - minor PbS & cpy. The fracture above is later than								

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PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCEDJuly 11, 1980	ELEVATION 960. M. (approx.) DIPSVert.ical	SHEET No
COMPLETED July 31, 1980	BEARING	
	1520 5+	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	A TO SAMPLE WIDTH				VALUE	0/-	
				Ft.	Ft.	Ft.	Mo %	Cu %	Ag o' T	Au T	
		main pyrite mineralization stage.									
		Smeared sulphide along with crushed clay minerals on a near-vertical		·							
		slip face at 643'									
		3 - 5% T. S. over 90% recovery.									
		N .			4						
		644 - 650 Coarse altered granodiorite rich in quartz-sericite. Pyritic									
		stockwork fractures are usual. Dark greenish gray spots of altered									
		mafics partly replaced by fine grained pyrite. Usual gypsum fractures									
		throughout. Total sulphides weaker than above due to less pyrite									
		clusters, 2 - 3 %. Recovery over 90%.									
650	671	Basic porphyry dyke: same dyke as above (547.5 - 561.5)	42399	653.5	663.5	5 10'	.07	.01	.01	.001	
		Stronger stockwork veining and wider bleached halo, consequently the									
		core is locally grayish white. Contact with the granodiorite above is									
		sharp and gently-dipped (70° to C.A.) Fine grains of MoS2 as									
		envelope on a well-defined near-vertical quartz vein 658.5 - 660.5	42400	667	677	10'	.02	.02	.01	.001	
		and minor MoS2 around 655.									

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PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No D H #2
COMMENCEDJuly 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No
COMPLETED July 31, 1980	BEARING	
	1520 Ft.	

FROM	то	DESCRIPTION	SAMPLE	FROM	FROM	EDOM TO		TO	SAMPLE			VALUE		
		DESCRIPTION	No.	Ft.	то Ft.	WHOTH.	Mo %	Cu %	Ag ^{OZ/} T	Au ^{OZ} /T				
		Gypsum fractures cross-cutting all other structures. Purple gypsum or												
		anhydrite is usual.												
		Weakly prophyritic due to subhedral to anhedral feldspar phenocrysts.					Į.							
		Original structure of the lower contact obsecured by flooded quartz.												
		T. S. 1 - 2%, mostly on fractures, > 90% recovery												
671	677	Altered granodiorite: Totally sericitized feldspar and mafics and partly replaced	l											
		by pyrite. Strong quartz both from primary and secondary origin.												
		Incompletely assimilated inclusions of the dark dyke rock in highly												
		silicified granodiorite near contact. 2 - 3% T. S. over 90% recovery.					:							
677	688	Basic porphyry dyke: generally same as the above dykes, slightly darker due to												
		less stockwork fractures. Dissemination of fine grained pyrite												
		increased comparing with the above dyke rocks. 2% T. S.												
		Recovery > 90%												

CONTRACTOR Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No 8
COMPLETED July 31, 1980	BEARING	
	1520 5+	

FROM	то	DESCRIPTION	SAMPLE	FROM	FROM	FROM	FROM	FROM	FROM	FROM	FROM	то	SAMPLE		ASSAY	VALUE		
			No.	ft.	ft.	ft.	Mo %	Cu %_	Ag ^{OZ/} T	Au ^{OZ} /T								
688	695	Altered granodiorite: same as above granodiorite (671-677). Inclusion of dyke	42401	687	697	10'	.01	.02	.01	.001								
		rock in flooded quartz at 691 2 - 3% T. S. Core recovery over 90%																
695	715.5	Basic porphyry dyke: same as the above dyke rocks. Abundant stockwork fractures																
		with weak alteration halo. Local light-colored core due to the																
		concentration of stockwork fracturing and bleaching.																
		Local inclusions of altered granodiorite.																
		Total sulphides 2% with recovery > 90%																
ļ																		
715.5	762	Altered granodiorite: (same as above granodiorites) Weaker silicification than																
		above, therefore more obvious original textures preserved. Well-																
		fractured, softened and greenish tinted feldspar grains due to strong																
		sericite and/or clay alteration. Usual gypsum veining. More siliceous																
		around 719'. No sign of improvement on Cpy or molybdenite mineralization	n.															
		715.5 - 738.5 T. S. ± 3%. Recovery over 90%																
		•																

CONTRACTOR: Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATIONGreendrop Lake area near Hope, B. C.	DRILL HOLE No. D.H. #2
COMMENCEDJuly 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No 9
COMPLETED July 31, 1980	BEARING	
	1520 Ft.	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE		Ţ	AY VALUE			
			ft.		ft.	ft.	Mo %	Cu %	Ag ^{OZ/} I	Au ^{OZ/} T		
		738.5 - 762 More pervaisively altered but still weak original granular texture	42402	752	762	10'	.03	.03	.02	.001		
		preserved. Disseminated pyrite is minor comparing with strong fracture										
		pyrite.										
		A steeply-dipping slip fracture 748 - 751 with smeared sulphide and										
		clay, strong alteration halo for sericite and greenish clay(?), no										
		relict textures around.			·· · · · · · ·							
762	924	Diorite porphyry										
		Gradational in color and porphyritic texture from the above basic dykes	,									
		mostly gray to dark gray with lighter-colored stockwork fractures and										
		bleached alteration halo. Poprhyritic due to sparse (locally abundant)										
		white feldspar and sharp biotite phenocrysts in fine grained to										
		aphanetic dark gray groundmass. Remarkable changes in short intervals										
		due to fracture-controlled alteration.										
		Abundant criss-crossed stockwork fractures with weak pyrite and thin										
		envelope bleaching. Occasional near-vertical heavy pyrite fractures										

CONTRACTOR: Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No10
COMPLETED July 31, 1980	BEARING	
••••••	DEPTH 1520 ft.	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE			VALUE	
		DESCRIPTION	No.	ft.	ft.	#toth	Mo %	Cu %	Ag ^{OZ/} T	Au ^{OZ/} T
		with wide strong alteration halo, which is responsible for local								
		pervaisive (for core width) sericite and clay. About a foot away from								
		the above pervaisively altered fractures the core is much fresher.								
		Greenish clay (montmorillonite?) after feldspar swells up when wet,								
-		developed along the steeply-dipping pyrite fractures that are usually							-	
		slipped.								
		Inclusions of altered granodiorite 768.5 - 770.5 and 774.5 - 776.5								
		762.5 - 786.5 2 - 3% T. S. Recovery > 90%								
		786.5 - 810 Fresher and solider core with less pyrite fractures.	42403	784.5	794.5	10'	.01	.01	.01	.001
		Heavy pyrite on a near-vertical fracture around 799'. 2 - 3% T. S.								
		Recover > 90%.								
		810 - 834 Stronger pervaisive clay alteration with strong pyrite	42404	825	835	10'	.01	.04	.04	.001
		825 - 832. 3 - 5% T. S. Recovery > 90%								
		834 - 858 0.5 mm near-vertical heavy pyrite vein with strong								
		alteration halo 838 - 843. Solid core with increased amount of								
		overall pyrite 843 - 848. 3 - 5% T. S. Recovery > 90%								

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B.C.	DRILL HOLE No. D.H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No11
COMPLETED July 31, 1980	BEARING	
	DEPTH 1520 ft.	

FROM	то	TO TO THE SERIES OF THE SERIES	SAMPLE	FROM	то	SAMPLE		ASSAY VALUE			
			No.	ft.	ft.	ft.	Mo %	Cu %	Ag T	Au ^{OZ} /T	
		858 - 881 Darker, solider core with moderate stockwork veining with	42405	873	883	10'	.01	.02	.05	.001	
		thin alteration halo and occasional near-vertical pyrite fractures with									
		stronger alteration. Greenish clay swollen up with water around the									
		alteration fractures. 2% T. S. Recovery > 90%									
		881 - 924 same as above. Solid core with occasional thin fracture bleaching	-								
		and alteration. Gypsum fracturing not as strong as above, very sharp									
		contact with granodiorite below, 25 °C.A.									
		2% T.S. Recovery > 90%									
924	939	Altered granodiorite									
		Coarse granular textured (preserved from the original feldspar rich	42406	927	937	10'	.001	.01	.01	.001	
		granodiorite) in grayish white, pervaisively altered with strong									
		fracture and cluster pyrite. Gypsum fractures are usual.									
		3 - 5% T. S. Recovery > 90%									
		• ••									
937	947	Basic porphyry dyke	_								
		Dark gray to gray, porphyritic due to white feldspar grains in									

CONTRACTOR: Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No D. H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No
COMPLETED July 31, 1980	BEARING	
	DEPTH 1520 ft.	

FROM	то	DESCRIPTION	SAMPLE	FROM		SAMPLE			/ VALUE		
			No.		ft.	width ft.	Mo %	Cu %	Ag ^{O/} T	Au ^{O/T}	
		dark-colored andesitic to basaltic groundmass. Fair stockwork fractures	S								
		with thin selvage alteration. Upper contact obsecured by slip									
		movement and development of alteration clay. Lower contact sharp,									
		steeply dipped. Hairline fractures of pyrite cross-cutting the contact	•								
		3 - 5% T. S. Recovery > 90%									
947	1060	Altered granodiorite	42407	947	957	10'	.002	.04	.01	.001	
		same as above granodiorites. Inclusions of angular fragments of dark									
		aphanetic dyke near the contact (weak breccia texture). Prevaisively							,		
		and weakly altered to sericite - clay (sericitization was probably						ļ			
		overprinted later by fracture - controlled alteration for clay) Strong									
		fracture pyrite and usual gypsum fractures. Strong purple gypsum	42408	975.5	985.5	10'	.001	.01	.01	.001	
		(anhydrite?) around 985' and 1 cm poorly-defined vein of anhydrite									
		1008' - 1009'	42409	1005.5	1015.5	10'	.001	.01	.01	.001	
		Incompletely assimilated dyke rock fragments or dyke swarm 1026 - 1034									
		Cpy vein (0.3 mm 30 to C.A.) at 1033.5 ft.									

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PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D.H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No13
COMPLETED July 31, 1980	BEARING	
	DEPTH 1520 ft.	

FROM	то	то	то	то	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH		ASSAY	VALUE	0/-	
		Criss-crossing pyrite fractures in more siliceous (from alteration) zone around 1040.		ft.	ft.	ft.	MO %	Cu %	Ag I	Au o / I				
		° Fine grained MoS ₂ on fracture around 1056'	42410	1046.5	1056.5	10'	.003	.02	.01	.001				
		3 - 5% T.S. Recovery > 90%												
1060	1210	Basic porphyry dyke												
•		Brecciated contact (partly assimilated fragments) with stockwork veining	ı											
		and bleaching. Heavy pyrite clusters and bleaching obsecured the												
		contact line. Usually darker in color near the contact.												
***		1060 - 1092.5. porphyry dyke showing frequent zonal change in color, texture and												
		alteration intensity. Fresher core to the depth.												
		Solid massive core of diorite porphyry with fracture pyrite and												
		alteration halo. 2% T.S. Recovery > 90%												
		1092.5 - 1116.5 More pervaisively altered 1101 - 1105, minor breccia texture	42411	1097	1107	10'	.001	.02	.01	.001				
		from strong stockwork veining at 1115. Darker-colored core from												
		around 1115 to the depth. 2% T. S. Recovery > 90%												

CONTRACTOR: Buccanger Diamond Drilling Inc.

LOGGED BY:	В.	Υ.	Kim		
LUGGED BT:				 	

PROPERTYGREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCED July 11, 1980	ELEVATION .960. M. (approx.) DIPS Vertical	SHEET No
COMPLETED July 31, 1980	BEARING	
	55554 1520 ft	

FROM	то	DESCRIPTION	SAMPLE	FROM	то	SAMPLE			/ VALUE	
			No.	ft.	ft.	width ft.	Mo %_	Cu %	Ag ^{0/} I	Au ⁰ /T
		1116.5 - 1140 dark-colored and fine grained to aphanetic with frequent stock-	42412	1137	1147	10'	.001	.01	.02	.001
		work veining. A weak breccia texture 1116 - 1122. Changing gradationa	11y							
		to light gray more proper diorite porphyry with sparse sharp biotite.								
		Frequent thin criss-crossing stockwork fractures.								
		1140 - 1163 Gradationally changed to lighter-colored with more disseminated								
		fine-grained pyrite 1140 - 1148.5. Coarse sericite envelope on 1 cm								
		pyrite vein (50 to C.A.) at 1160 where a minor dark-colored dyke								
		° occurs.								
		1163 - 1187 More pervaisively and strongly altered with stronger pyrite.	42413	1167	1177	10'	.001	.08	.02	.001
		3 - 5% T. S. Recovery > 90%								
	! 	1187 - 1210 Solid massive core of diorite porphyry with fracture-controlled	42414	1187	1197	10'	.001	.04	.02	.001
•		alteration and pyritization. Disseminated pyrite is minor to cluster								
		pyrite on fractures. Approximately 10% pyrite 1186 - 1199. Locally								
		breccia texture due to stockwork, alteration, pyrite veining and slip								
		movements. 3 - 5% T. S. Recovery > 90%								

CONTRACTOR Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D.H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No
COMPLETED July 31, 1980	BEARING	
·	DEPTH1250 ft.	

FROM	то	, DESCRIPTION	SAMPLE No.	FROM ft.	то ft.	SAMPLE WIDTH ft.	Mo %		VALUE Aq ⁰ /T	Au ⁰ / _T	
1210	1308	Diorite Porphyry									
		Darker-colored porphyritic diorite, fresh-looking other than stockwork			·						
		fracturing and its alteration envelope. Only a few millimeter									:
		envelope of bleaching. Pyrite decreased remarkable from above.									
		1210 - 1235 Fairly fresh sharp biotite books while some other mafics (hornblender	?)								
		are broken to chlorite and replaced by pyrite.									
		2 - 3% pyrite (T.S.) Recovery > 90%									
		Minor MoS2 on a gently-dipping quartz-pyrite-gypsum vein around 1226'									
		1235 - 1282 Fresh looking diorite with frequent stockwork pyritic fractures of	42415	1237	1247	10'	.001	.02	.01	.001	
		weak alteration intensity. Gypsum overcoating on some of the fractures.									
		Solid massive core 2% T.S. with more than 90% recovery.	42416	1266	1276	10'	.001	.02	.01	.001	
:		1282 - 1308 Stronger (than above) criss-crossing stockwork veining and near-									
		vertical fracture-controlled pyrite-quartz-gypsum veins. Minor ZnS-PbS	42417	1287	1297	10'	.001	.03	.03	.001	
		associated with the latter.									
		1" steeply-dipping basic dyke at 1302 with sharp lower contact and									
		poorly-defined chilled upper contact.									
		Strong silicification near the contact below with basic porphyry dyke									

PROPERTYGREENDROP	LOCATION	DRILL HOLE No. D.H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No. 16
COMPLETED. July 31, 1980	BEARING	
••••••	DEPTH 1250 ft	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	TO	SAMPLE WIDTH	Mo_%		VALUE	h0/-	
		2" wide pyritic vein at the contact.		ft.	ft.	Tt	LMO_%_	Cu %	Ag	Au '' I	
		2 - 3% T. S. Recovery > 90%									
1308	1316.5	Basic porphyry dyke									
		same as the above dykes, darker and finer-grained near the contact.									
		2 - 3% T. S. Recovery > 90%									
									<u> </u>		
1316.5	1338	Diorite porphyry									
		Light gray to gray, plagioclase-rich ($^+$ 80%) weakly altered diorite	42418	1327	1337	10'	.001	.05	.04	.001	
		porphyry. Abundant clusters of biotite broken weakly but pervaisively									
-		to chlorite. Very strong disseminated and fracture pyrite. ± 1 cm									
		chloritic alteration envelopes on pyritic stockwork fracutures. More									
		siliceous around 1328 ± 5% T. S. Recovery > 90%		E							
1338	1474	Basic Porphyry dyke and diorite porphyry									
		Basic porphyry dyke at the contact changing gradually into lighter	42419	1347	1357	10'	.001	.01	.03	.001	
		and more prophyritic diorite. Frequent zonal change from diorite									

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PROPERTYGREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No D. H. #2
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No 17
COMPLETED July 31, 1980	BEARING	
	DEPTH 1250 ft.	

FROM	то	DESCRIPTION	SAMPLE No.	FROM	то	SAMPLE WIDTH			VALUE	. 0/
				ft.	_ft.	wiртн ft.	Mo %	Cu %	Ag * / T	Au"/T
		porphyry to darker dyke phase. 3 - 5% T. S. but locally 5 - 10%,								
		Recovery > 90% .								
		Lighter-colored fracture-controlled alteration zone 1349 - 1362,	42420	1387	1397	10'	.001	.03	.02	.001
		probably argillic environment.								
		Minor ZnS with anhydrite at 1377 and pyrite-anhydrite-coarse sericite								
		at 1379.								
		1400 - 1448 Gradational change from darker and more porphyritic phase to finer	42421	1417	2427	10'	.015	.06	.01	.001
		(aphanetic locally) and pervaisively altered phase, changing point								
		around 1410. This change is probably due to alteration from near-								
		vertical heavy pyrite veining.								
		0.3 - 0.5 mm near-vertical MoS2 fracture with quartz-pyrite-magnetite								
		at 1425' 3 - 5% T. S. Recovery > 90%.								
		1448 - 1474 Fine-grained, gray to light gray diorite with abundant disseminated								
		and fracture pyrite: Weakly altered mafics mostly to chlorite and	42422	1457	1467	10'	.006	.08	.01	.001
		partly replaced pyrite. Feldspars fresh except those near the heavy								
		pyrite fractures. They are partly altered to green clay or sericite.								
		Gypsum (purplish anhydrite) is usual on wide (up to ½") and hairline								

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y: B. Y. Kim

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	D. H. #2 DRILL HOLE No
COMMENCED July 11, 1980	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No 18
COMPLETED July 31, 1980	BEARING	
	DEDTU 1250 ft	

FROM TO		DESCRIPTION	SAMPLE	FROM	то	SAMPLE		ASSAY	VALUE		
FHOM	10	DESCRIPTION	No.	ft.	ft.	width ft.	Mo %	Cu %	$Ag^{0/T}$	Au ⁰ /T	
		fractures with pyrite.									
		In general, massive fresh-looking core with heavy pyrite. \pm 5% T.S.									
		Core recovery > 90%									
1474	1495.5	Diorite porphyry									
		Gradational change from above to more porphyritic with strong cluster									
		biotite (like diorite porphyry of DDH#1). Contact should be	42423	1487	1496	9'	.002	.08	.01	.001	
		1474 - 1475 where strong fracture sericite-clay alteration with pyrite) -								
		gypsum veining (steeply-dipped)									
		Massive diorite porphyry with large clusters of biotite in feldspar									
		(weakly sericitzed) groundmass. Quartz is minor. Heavy disseminated									
		and fracture pyrite with weak steeply-dipping magnetite fractures. The	ne								
		magnetite increasing to the depth. 3 - 5% T. S.									
		Core recovery > 90%.									
		4									
1495.5	5 1514	Breccia									
		Sharp contact with strong breccia textures. Angular magnetite	42424	1497	1507	10'	.008	.07	.01	.001	

CONTRACTOR: Buccaneer Diamond Drilling Inc.

PROPERTY GREENDROP	LOCATION Greendrop Lake area near Hope, B. C.	DRILL HOLE No. D. H. #2
COMMENCEDJuly. 11. 1980.	ELEVATION 960 M (approx.) DIPS Vertical	SHEET No
COMPLETEDJuly 31, 1980	BEARING	
	DERTH 1250 ft.	

		DESCRIPTION	SAMPLE	FROM	то	SAMPLE			VALUE	γ	
FROM	то	DESCRIPTION	No.	ft.	ft.	WIDTH ft.	Mo %	Cu %	$Ag^{0/}T$	Au ^{0/} T	
		fragments along with others and heavy pyrite (minor cpy) in matrix of									
		dark porphyritic diorite. Total sulphides ± 10% for 1495.5 - 1497.5									
		1497.5 - 1498.5 dark diorite porphyry with minor breccia texture due to pyrite									
		veining and other stockwork fractures. Gypsum fractures fairly strong,	42425	1514	1520	6'	.001	.01	.01	.001	
		sharp decrease in T. S. from the above well-brecciated zone. T.S. 3%.									
		1498.5 - 1514 Weak breccia, neither large magnetite fragments nor cpy									
		mineralization. Gray white altered granodiorite with irregular patches									
		of incompletely assimilated dark-colored fragments. T. S. 2 - 3%									
1514	1520	Diorite Porphyry dyke					-	ļ			
		Gray to dark gray, porphyritic due to abundant light-colored feldspar							-		
		in darker groundmass. Sharp fresh-looking biotite standing-out locally									
		Weak stockwork fracturing. Contact is steeply-dipped and cross-cut by									_
		fine fractures and veins. A 1 cm quartz vein at 1514.5 (40 $^{\circ}$ to C.A.)	-								
		Showing minor fine grained MoS2 on vein envelope. T. S. 2 - 3%. Solic	l								<u></u>
		core with no visible cpy.					-				
		- End of Hole 1520 ft				<u> </u>					

CONTRACTOR: Buccaneer Diamond Drilling Inc.

```
0 - 456'
                   Overburden
       466'
                    >90%
       471.5'
                       11
       481.5'.
490'
                       11
                       п
       496.5'
       497'
                     25% (ground-up pebbles)
       507'
                    >90%
       509'
                      80%
       517'
527'
                    >90%
       531'
                     90%
       537'
                    >90%
       545'
                       н
       553.5'
557'
       567'
                       11
                       11
       574'
       584'
                       11
       594'
                       11
                       11
       604'
       614'
       6241
                       н
                       11
       634'
       644
                       11
       653.5'
657'
                       11
                      90%
       667'
                    >90%
       673'
                       H
                       ti
       677'
       687'
                       11
                       **
       697'
                       11
       705'
705 - 715.5'
715.5 721'
                      11
                      75% (ground up core-
                            technical difficulty)
721 - 731.5'
                    >90%
       741.5'
752'
                       ii.
                       11
                       11
752 - 762'
       764.5'
                     60%
       774.5
                    >90%
       784.5
```

^{*} Below this point all the way down to 1520' core recovery is 90% or better based on measurement for 10' drill run intervals.

