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**ASSESSMENT REPORT ON THE
GEOLOGY AND DRILLING OF THE
ANN 1 AND 2 CLAIMS**

Longitude 121° 20' W, Latitude 51° 58' N
Clinton Mining Division, B.C.
92P/14W

By R.E. Gale, Ph.D., P. Eng.
R.E. Gale and Associates Inc.

Owner Ophir Copper Corporation
Operator ASARCO Exploration Company
of Canada Ltd.
December 17, 1991

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
1992
21,982

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In Report

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In Report

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(1.0) INTRODUCTION

The Ann 1 and Ann 2 claims of Ophir Copper Corporation were explored during the summer of 1991 by Asarco Exploration Company of Canada Ltd. The work was carried out by the author, R.E. Gale of R.E. Gale and Associates Inc. under a consulting agreement with Asarco. Tom Horning, Project Geologist with Asarco did detailed mapping of the principal mineral showings and also worked with the author on the rest of the program.

The exploration work, including line cutting, I.P. survey, geological mapping and sampling, backhoe trenching and percussion drilling, was concentrated on the Ann 2 claim because this claim has the best-known copper-gold showings.

The work was carried out at intervals during the period June 21 to October 10th, 1991. The geological results are summarized in this report. The results of the I.P. work are summarized in a separate accompanying report by J. Lloyd and J. Cornock of Lloyd Geophysics dated October, 1991.

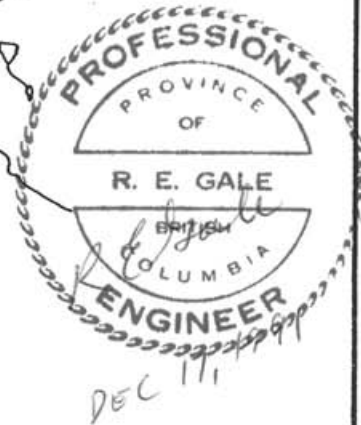
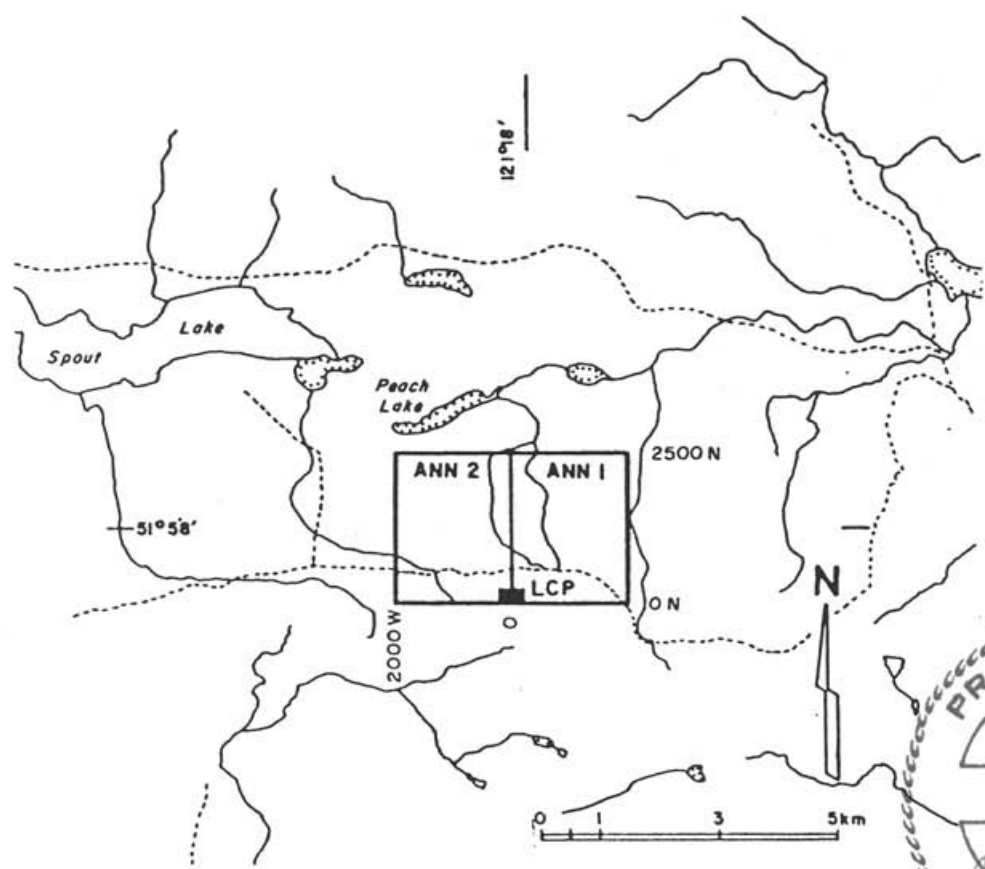
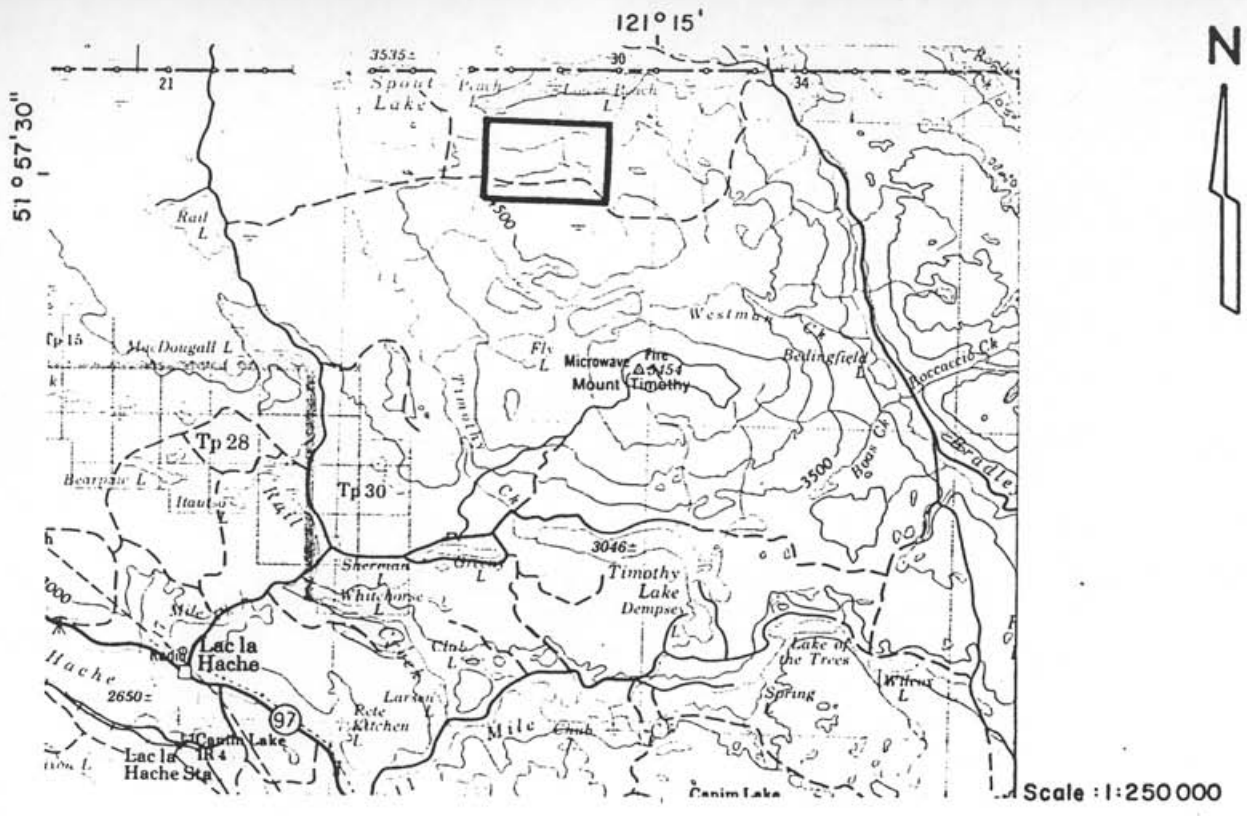
(2.0) LOCATION AND ACCESS

The Ann claims are located about 20 kms. N.E. of the town of Lac La Hache B.C. Access is by good paved and gravel roads from Lac La Hache to Rail Lake. An all season gravel road leads from Rail Lake to the property.

The location of the claims is shown in Figure One. The coordinates of the claims are latitude $51^{\circ} 58'$ N, longitude $121^{\circ} 20'$ W in NTS area 92P/14W.

(3.0) TOPOGRAPHY AND PHYSIOGRAPHY

The claims are situated at an elevation of about 3900-4500 ft.



ANN 1 & 2 CLAIMS
GENERAL CLAIMS AREA
N.T.S. 92P/14W

(1300-1500 metres) on the north-facing slopes of a group of low hills which are part of the Central Plateau of British Columbia.

The area is forested with small evergreen and deciduous trees which have been partially logged off in a clear cut fashion. Some areas have been replanted with seedlings.

Several small creeks drain westerly and northerly into Peach Lake at the NW corner of the claims. Parts of the ground are flat and boggy with cover of organic material.

Small hills of outcrop are exposed in the south-central part of the property, but further north the overburden cover becomes several metres deep. Overall, about 50% of the property is covered by glacial material or residual soils.

(4.0) CLAIMS

The Ann 1 and Ann 2 claims, totalling 40 units, are recorded in the Clinton Mining Division in the name of Ophir Copper Corporation. The location of the claims is shown in Figure One.

Claim Name	Record No.	Units	Anniversary Date*
Ann 1	2185	20	May 4, 1992
Ann 2	2184	20	May 4, 1992

* (The anniversary dates with work recorded in this report will be May 4, 2002)

(5.0) HISTORY

Claims were first staked in the area by Coranex Syndicate headed by R. Woodcock in 1966, as the result of the detection of anomalous copper values in stream sediments taken in the area by Coranex. The

claims staked were referred to as the "Peach " claims.

Coranex did geological mapping, bulldozer trenching, magnetometer and I.P. surveys and carried out a small diamond drilling program during 1966-67.

In the early 1970's to mid 1980's several Companies, including Anax and B-P Selco did soil geochemistry and percussion drilling in the area of the Peach claims.

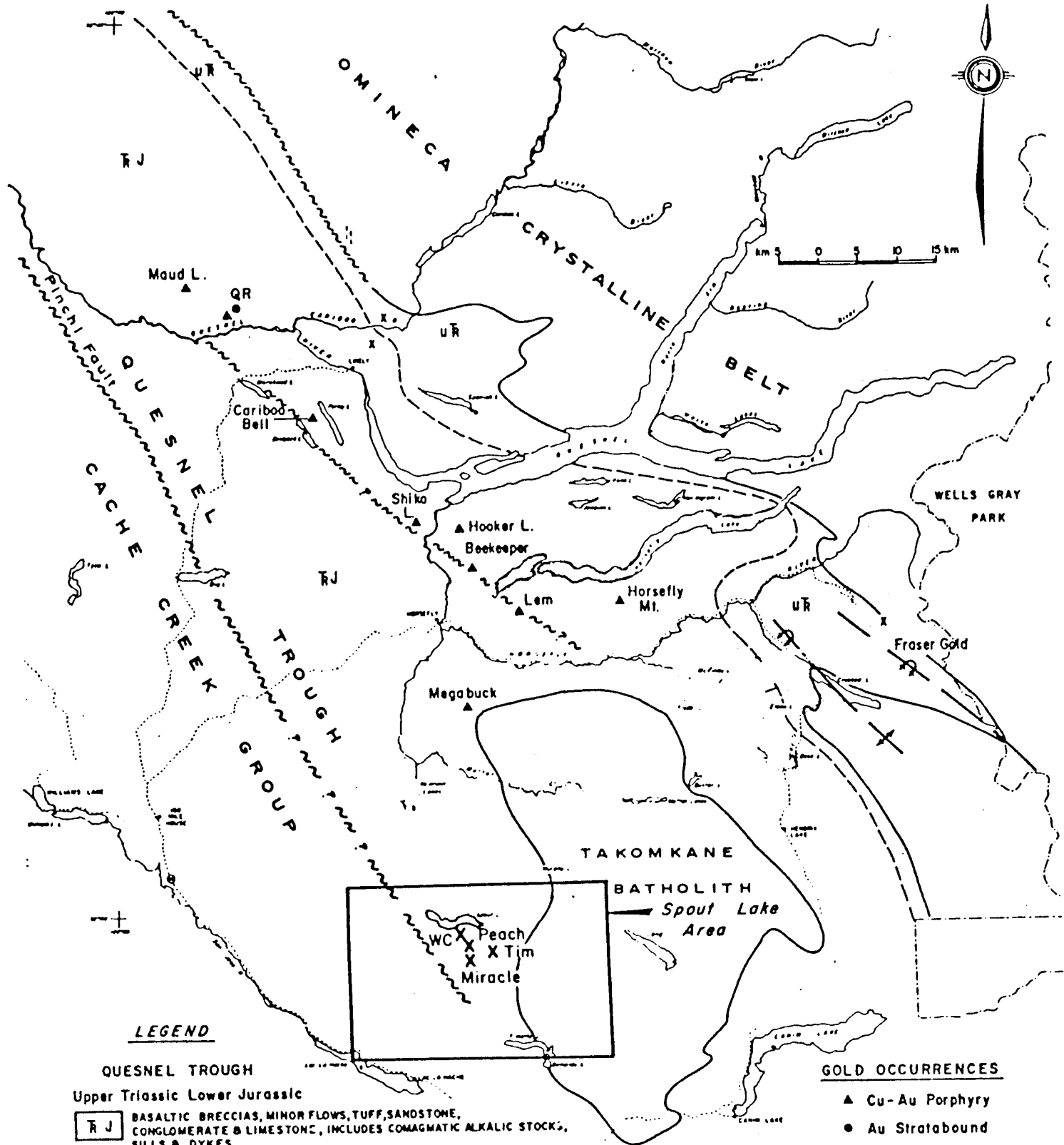
In 1987, soil geochemistry, ground VLF-Em and magnetometer surveys were done by White Geophysical Inc.

The present report covers the work done by Asarco Exploration Company of Canada Ltd. in the summer of 1991.

(6.0) REGIONAL GEOLOGY

The Peach showings on the Ann claims are situated within the Quesnel Trough, a NW-trending belt of Triassic (Nicola Group) sedimentary and volcanic rocks in Central B.C. The belt is bounded and partly defined by a series of NW-trending strike-slip faults, part of the Pinchi fault system, and the Triassic rocks are intruded by numerous comagmatic stocks of syenite and diorite. These alkaline intrusions are often associated with strong pink feldspar, epidote and magnetite alteration carrying significant copper and copper-gold mineralization which may occur both within the intrusives and the intruded rocks.

Figure Two shows the General Geology of the Quesnel Trough. The Spout Lake area, which includes the Ann claims and the Peach showings, are noted on Figure Two, along with the location of other important deposits such as the QR and Cariboo Bell, further north in the Trough. Other significant showings near the Peach showings are the Tim, Miracle and WC showings present on adjoining claims.



LEGEND

- QUESNEL TROUGH**
- Upper Triassic Lower Jurassic
- RJ** BASALTIC BRECCIAS, MINOR FLOWS, TUFF, SANDSTONE, CONGLOMERATE & LIMESTONE, INCLUDES COMAGMATIC ALKALIC STOCKS, SILLS & DYKES
- Upper Triassic
- UR** ARGILLITE, AUGITE-PORPHYRY BRECCIA, BASALTIC TO ANDESITIC TUFF POSSIBLE DYKES & SILLS

- GOLD OCCURRENCES**
- ▲ Cu-Au Porphyry
 - Au Stratabound
 - X Cu and Cu-Au Occurrence

Modified from Saleken & Simpson, 1984

QUESNEL TROUGH

SPOUT LAKE AREA
N.T.S. 92P/14

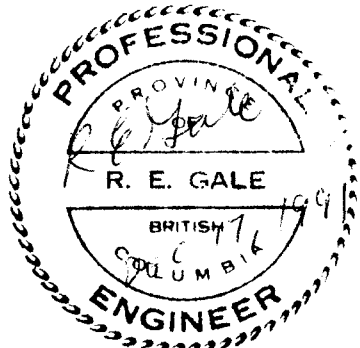
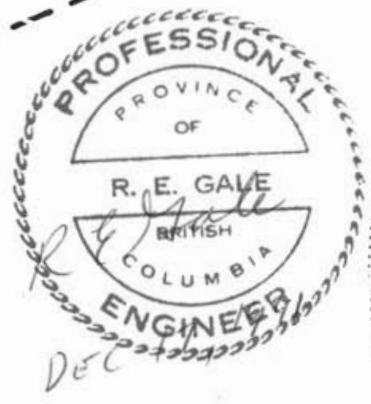
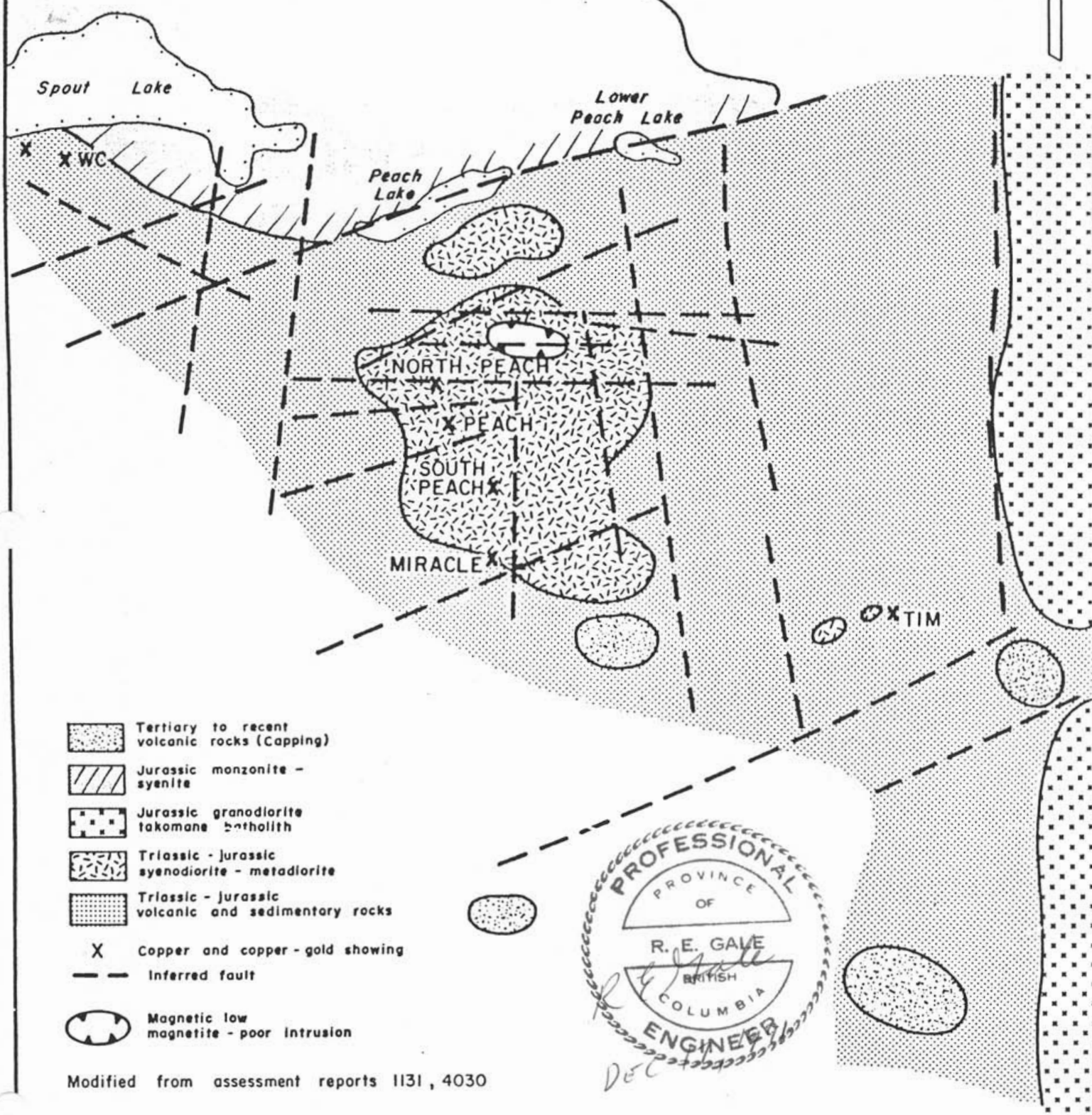


FIG. 2



ANN 1 & 2 CLAIMS
GENERAL GEOLOGY



N.T.S. 92P/14W

(7.0) GENERAL GEOLOGY - PEACH LAKE AREA

Figure Three shows the General Geology of the Ann claims area. On the claims, the Triassic sedimentary and volcanic rocks are intruded by magnetite-rich syenodiorite and diorite stocks, sills and dikes across a 3 Km. wide area. These intrusive rocks are comagmatic in age with the basaltic and andesitic volcanic rocks which they intrude.

To the north of the Peach showings, a prominent magnetic low marks the site of what is believed to be a young magnetite-poor Monzonite intrusion, possibly of Jurassic or younger age. The area of the magnetic low is entirely covered by overburden, except for one small outcrop at the south side of this anomaly.

Monzonite dikes and sills which are probably associated with the time of the intrusion of main Monzonite stock, occupy late fault and fracture zones within the syenodiorite.

The eastern fringe of the map area shown in Figure Three is occupied by the Jurassic Takomkane granodiorite Batholith. The western contact of the batholith probably follows a north-south trending late fault system. Several other N-S faults cut the syenodiorite and volcanics west of the batholith contact

North of Peach Lake, the southern edge of a large mass of Jurassic hornblende-biotite-magnetite monzonite and syenite intrudea and cuts off the Triassic rocks to the north along an ENE to WNW trending contact. This contact is also believed to be fault controlled and appears to have a series of fault and fracture zones on the same E-W trends paralleling it within the Triassic rocks to the south of the contact.

Remnants of Tertiary to recent basaltic cover rocks, and their

feeder dikes, are preserved in outcrop at irregular points across the Peach Lake area. Extensive Tertiary cover rocks, part of the Central Plateau of B.C., occur over a wide area just west of the area of Figure Three.

The series of north-south and east-west trending faults cutting all of the rocks on the Ann claims are believed to be of both pre and post mineral age. These faults and fracture zones paralleling them are important in localizing syenodiorite and monzonite intrusions and the copper mineralization which accompanies the intrusive rocks. The known showings near Peach Lake include the Peach, Miracle and Tim showings noted on Figure Three.

(8.0) GEOLOGY-ANN CLAIMS

(8.1) General

Figure Four is a geological map of the Ann claims at a scale of 1 : 5000. The map shows the distribution of the major rock types recognized and on the rock types is superimposed the contours of the copper-soil geochem values from the 1987 work, along with the results of the 1991 I.P. survey. The I.P. survey was confined to the west side of the claims, so that no I.P. data is available for the east side of Figure Four.

Because of the lack of good contact exposures, the age relationships of the different rock types shown can only be inferred. The rock types noted in the Legend are listed in the probable order of age from youngest, Basalt(Ba) at the top of the Legend, to oldest, Andesitic Tuff(Axlt) at the bottom.

(8.2) Andesitic crystal lithic tuff (Axlt)

Andesitic crystal lithic tuff is a dark green to reddish fine

grained rock composed of irregular fragments of white feldspar crystals set in a dark cryptocrystalline groundmass. In some outcrops, a few larger rounded fragments of andesitic volcanic rock may be present within the fine grained groundmass. These tuffaceous rocks are restricted to the southwest corner of the map area.

(8.3) Syenodioritic crystal lithic tuff (Sdxlt)

These rocks are similar to the (Axlt) variety but are associated in places with rocks having large white clasts of syenitic rocks. These large clasts are similar in appearance to the syenodiorite intrusive rocks occurring nearby. The (Sdxlt) rocks are restricted to a small area in the south-central part of the map area.

(8.4) Basaltic crystal tuff (Bxt)

These are the most common and widespread type of rocks occurring on the Ann claims. They are dark green to black cryptocrystalline rocks which sometimes show banding or bedding. These rocks grade into coarse-grained breccias containing clasts of basalt and very fine grained dioritic volcanic rocks. In some outcrops, the rocks are calcareous and may be locally altered to calc-silicates, epidote and garnet.

Much of this rock is typical in appearance to the Nicola Group volcanic rocks seen elsewhere in B.C.

(8.5) Syenodiorite (Sd), Mafic Syenodiorite (MSd)

The second-most common rock on property is syenodiorite intrusive rock, occupying a large area in the central part of the claims. This rock is grey-white medium grained equigranular to porphyritic composed of 50% euhedral white feldspars set in a light grey glassy feldspathic matrix. Abundant disseminated euhedral crystals of magnetite occurring in the fine grained matrix are typical of these rocks.

The mafic syenodiorite is an uncommon variant of the

syenodiorite, usually present as small dikes and/or stocks of hornblende-rich porphyritic syenodiorite. Coarse euhedral hornblende and white feldspar crystals are set in a fine grained matrix of pink feldspar.

Some outcrops of hornblende syenodiorite-diorite may represent "dioritized" volcanic rocks. These questionable intrusive rocks are composed of an anhedral mixture of ragged hornblende-chlorite in a dense groundmass of white feldspars. In general, these rocks contain much less disseminated magnetite than the true intrusive rocks.

(8.6) Syenite (Sy) Monzonite (Mz)

Syenitic to Monzonitic white to pink coarse grained porphyritic intrusive rocks carrying little or no disseminated magnetite are only exposed near the southern limit of the magnetic low near grid coordinates 18E, 17N. The large magnetic low extending north from the latter point is inferred to be underlain by these type of rocks (Sy) on Figure Four.

A small area of monzonite is also mapped in the extreme south-central part of the claims.

(8.7) Equigranular Monzonite (Em)

These rocks occur only near the southeast corner of the map area. They are buff-weathering medium grained syenite-monzonite intrusive rocks which are low in mafic and magnetite content. They are probably related in age and composition to the main mass of syenodiorite located further west and northwest.

(8.8) Andesite-Basalt (An)-(Ba)

Late grey to black coarse grained to porphyritic dikes and stocks of andesite and basalt occur in a roughly east-west trending zone near 20E, 12N which probably marks the site of a post mineral east-west trending fault zone concealed beneath cover here.

These late, basic intrusions are probably Tertiary-Recent age and constitute feeder intrusions to the basaltic cap rocks seen throughout the Peach Lake area.

These rocks are rich in disseminated magnetite of primary origin which appears to give rise to a strong I.P. response over them.

(8.9) Structural Geology

The general grain of the rocks on the Ann claims and the trend of the major contacts between the volcanic and intrusive rocks is NW to WNW. These are also important fracture orientations. Other important fracture trends are N-S and N 70 to 80 degrees east.

No major faults are mapped on Figure Four except for short ENE structures near 4E, 12N and a N-S fault east of the cut grid near what would be 27E, 3N. A major E-W post-mineral fault is probably present along the syenodiorite-basalt contact through 10E, 10N and 10E, 14N.

NE-trending fracture zones intersecting E-W and N-S fractures are prominent near altered-mineralized contacts between syenodiorite and basalt and it appears that these 3 sets of intersecting fractures are particularly significant in localizing copper-gold mineralization.

(9.0) I.P. SURVEY

The I.P. survey was carried out on the western half of the Ann claims because this area offered the best chance to find the desired target, a large area of copper-gold mineralization amenable to open pit mining.

The survey was carried out by Lloyd Geophysics Inc. during the period Sept. 3rd. to Sept. 19th, 1991. The results of their work are discussed in a separate accompanying report by J. Lloyd and J. Cornock dated October, 1991.

The I.P. report describes four zones of anomalous I.P. response, two of which are open to possible extension.

Asarco tested parts of LLOYD's zones 1,2 and 4 using a Nodwell-mounted percussion drill. On Figure Four, these zones are referred to as the Peach One zone (Zone 1), Peach Two and Jody Zones (Zone 2) and Northwest Zone (Zone 4). The largest and most important of the zones is zone No. 2. It appears to the author that this zone definitely warrants further work.

Zones 1 and 4 may be more limited in size but probably deserve further testing.

Zone 3 is partly exposed as barren or weakly mineralized syenodiorite, in old trenches. These rocks are not particularly favorable for further work. Parts of the outcrops here appear to contain fairly abundant magnetite and pyrite, which may account for the favorable I.P. response in Lloyd's Zone 3.

(10.0) ALTERATION AND MINERALIZATION

Because of the widespread overburden and the complex nature of the intrusive-volcanic contacts which are only partly understood at this time, it is necessary to select drilling targets mainly on the basis of the best combined copper soil geochemistry results and highest I.P. response.

As noted previously, the work in 1987-1991 outlined four such anomalous zones which are shown on Figure Four and which are discussed in detail below; (1) Peach One Zone, (2) Peach Two Zone, (3) Jody Zone, (4) Northwest Zone.

(10.1) Peach One Zone

The northeast side of this zone, shown in detail in Figure Five, represents the original discovery zone in the Peach Lake Area which

was trenched and drilled by Corenax Syndicate and Amax in the early 1970's. Relatively weak I.P. and geochemical response is associated with the showings and as indicated in Figure Five, the mineralization appears to be rather limited in extent, being restricted to an NE to East trending wedge of altered volcanic rocks surrounded by barren syenodiorite.

There is potential for extension of the mineralization to depth, and there may be extensions of mineralization to the east and south beneath overburden, as the true extent of the syenodiorite is still uncertain.

During the present work, several samples were taken from the zone. The samples and their Cu-Au assays are as follows:

<u>Sample No.</u>	<u>Description</u>	<u>Cu-Ppm</u>	<u>Au-Ppb</u>
223754	1 Metre chip-altered volcanics	1420	130
223755	"	1565	220
223756	"	708	70
223757	"	1685	220
223758	"	1305	225
223759	"	1780	255
223760	"	2160	245
223761	"	1080	175
223762	"	1860	290
223763	1.3 Metre chip-altered volcanics	1165	85
223764	1.0 Metre chip-altered volcanics	1880	210
223765	1.3 Metre chip-altered volcanics	668	45
223766	1.0 Metre chip-altered volcanics	2220	300
223767	"	1155	130
223770	"	1325	110
223771	"	2050	240

223772	"	3890	500
223773	"	899	95
223774	1.0 Metre chip-altered volcanics	1550	65
223775	1.3 Metre chip-altered volcanics	1250	65
61486	Grab-peices oxidized rock-20 Metres	838	70

The location of samples is shown on Figure Five and copies of assay certificates are included in Appendix "A".

The sample results from the trenches in the northern part of Peach One zone confirm the fact that several narrow zones of mineralization with significant copper gold values are present here. The Coranex drillholes in Trench 1 showed that the mineralization continues to a depth of at least 30 metres, and these holes did not test the whole zone. Trench 2 has not been tested by any drilling, and warrants at least one diamond drill hole to test the Cu-Au grade at depth.

At present the values indicated here are too low grade and the mineralized zones too narrow for open pit mining.

The southern part of the Peach One zone shows somewhat stronger I.P. response than the northern part, but Cu soil geochemical values are also quite weak here.

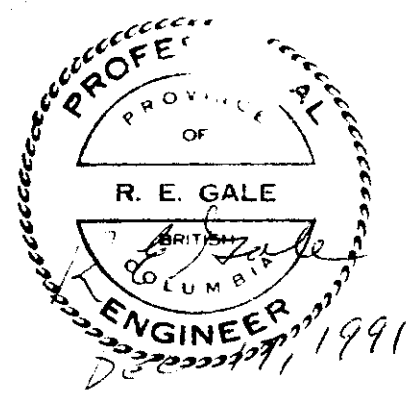
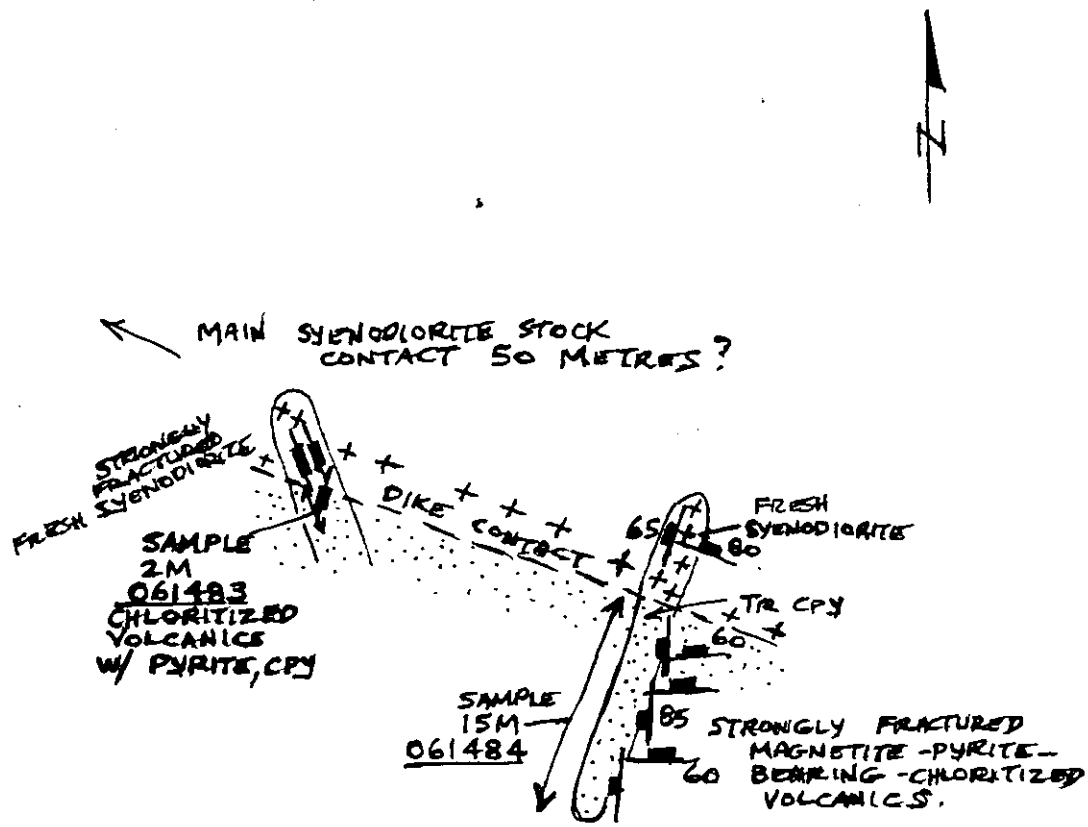
Two percussion drill holes P 91-12 and P 91-14 were drilled in the southern part of the zone. P 91-14 showed no significant values. The only interval of significance in P 91-12 was the following:

<u>From</u>	<u>To</u>	<u>Interval(Ft.)</u>	<u>Cu Ppm</u>	<u>Au Ppb</u>
60	100	40	0.11	111

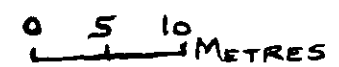
The log of this hole notes the presence of possible chrysocolla or other copper oxide in the mineralized interval.

The drill hole assays and logs for holes P 91-13 and 14 and for all other holes are included in Appendix "B".

(10.2) Peach Two Zone



SCALE 1:500



SKETCH GEOLOGY
 S. PEACH TWO SHOWING-TRENCHES
 OPHIR PROPERTY

SCALE 1:500

FIGURE 6 ASARCO EXPLORATION-R.E. GALE-SEPT, 1991

The strongest combined I.P. and copper soil geochemical response on the Ann claims occurs in this zone. The zone was partly tested by one percussion hole and the re-opening of parts of 2 old bulldozer trenches using a backhoe. Amax drilled 4 percussion holes in the area in the early 1970's, intersecting 0.05 to 0.10 % Cu.

Figure Six shows the part of the area which was trenched. The assay results on two samples of altered volcanic rocks taken in the South part of the Peach Two zone are as follows:

<u>Sample No.</u>	<u>Description</u>	<u>Cu Ppm.</u>	<u>Au Ppb</u>
061483	Grab-peices over 2 Metres	2760	860
061484	Grab-peices over 15 Metres	935	150

The two sampled areas both lie just south of an WNW striking vertically dipping contact between syenodiorite on the north and chloritized-biotitized volcanics on the south. The samples were taken approximately at right angles to the contact and they are about 25 metres apart. Sample 061483 indicates that there is a narrow zone of better grade mineralization near the intrusive contact. The same zone of better grade copper is also visually present near the contact in the eastern trench where sample 061484 was taken.

The location of the samples and their relationship to one another is indicated in Figure Six. A copy of the complete assay certificate is included in Appendix "A"

In the north part of Peach Two zone, a picked sample of mineralized volcanic rocks occurring as float in an old bulldozer trench gave the following Cu and Au assays.

<u>Sample No</u>	<u>Description</u>	<u>Cu Ppm</u>	<u>Au ppb</u>
223778	Picked sample of mineralized float	6090	240

The float material in the floor of the old trench appeared to be in place, but it is also possible that this mineralized float was

derived from elsewhere on the property. Percussion hole P 91-13 was drilled about 50 metres north in the trench from sample site 223778 with the following results:

<u>From</u>	<u>To</u>	<u>Interval-Ft.</u>	<u>Cu Ppm</u>	<u>Au Ppb</u>
20	100	80	852	207

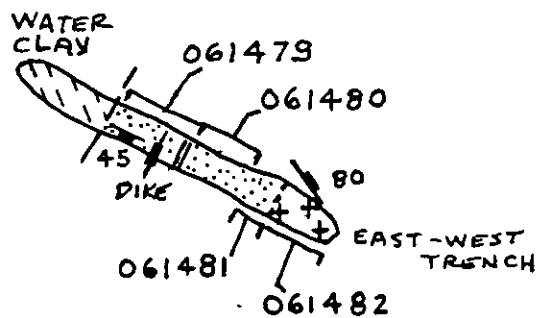
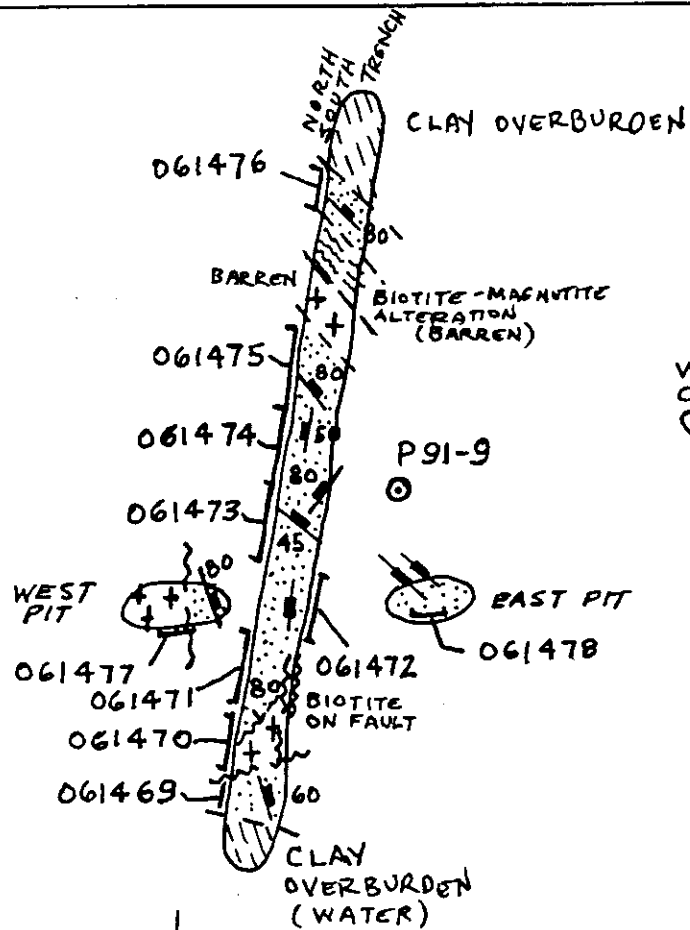
This hole is near the northern edge of the higher part of the I.P. anomaly but still well within the copper soil anomaly which extends downslope some distance to the north. It is likely that this soil geochem anomaly is enlarged to the north partly by downslope movement and enrichment in the organic soils present here, but the total extent and grade of mineralization in this direction is still open to question and needs further investigation.

In the southern part of the Peach Two zone, exposures in trenches and outcrop suggest that the higher I.P. response here is related to increased amounts of pyrite present. None of the drill or trench results to date have found any economic grade mineralization but there is still potential for further drilling to test the zone, especially to the SW towards the Jody Zone.

(10.3) Jody Zone

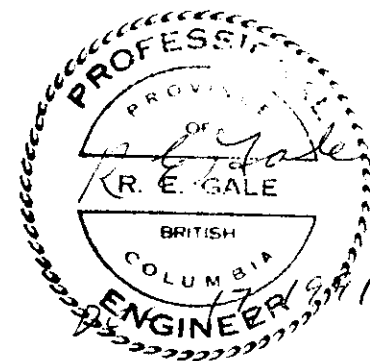
The Jody zone is a combined I.P.-copper geochemical anomaly over sub-outcropping mineralization in syenodiorite and altered volcanic rocks. The I.P. anomaly here merges with the I.P. anomaly constituting the Peach Two zone, further NE, and it is possible that the one large zone of mineralization is present here, based on the I.P. data.

The Jody zone probably represents the best grade zone of continuous copper mineralization found to date on the Ann claims and the fact that new zones of mineralization such as it are still being found after 20 years of work in the area should encourage further



▲ PICKED MINERALIZED
 FLOAT SAMPLE 223752

○ P91-10
 (APPROXIMATE)
 LOCATION



SCALE 1:500



- PERCUSSION HOLE
 - ++ SYENODIORITE
 - CHLORITE-MAGNETITE
PINK FELDSPAR - CPY.
ALTERATION-VOLCANICS
- GEOLOGY - SAMPLE LOCATIONS
 JODY SHOWING
 OPHIR PROPERTY

FIGURE 7

ASARCO EXPLORATION - R.E. GALE - SEPT, 1991

exploration.

As shown in Figure Seven, two short backhoe trenches were dug N-S and E-W across the outcrops to better expose the geology of the rocks and permit sampling to be done. Sample results for Cu, Au are as follows:

North-South Trench (Continuous samples south to north)

<u>Sample No.</u>	<u>Description</u>	<u>Cu Ppm</u>	<u>Au Ppb</u>
061469	2 Metres chip	1060	65
061470	5 Metres chip	1245	60
061471	"	225	10
061472	"	1795	95
061473	"	1765	105
061474	"	3430	125
061475	"	1815	165

Break.....7.5 metres-barren rock.....

061476	2.5 Metre chip	2260	100
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West Pit

061477	2.0 Ft. (0.6 metres) chip	6250	200
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East Pit

061478	2 Metres chip	3900	190
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East-West Trench (Continuous samples west to east)

061479	5 Metres chip	2260	40
061480	"	2230	35
061481	2 Metres chip	3160	40
061482	4 Metres chip	1985	30

Mapping of the trenches shows that the intrusive and volcanic

rocks are cut by a series of N-S, E-W and NW fractures and faults. The zone of alteration and mineralization is limited on the west by a N-S fault exposed in the West pit. On the north, the main mass of syenodiorite outcrops within 30 metres or less north of the north end of the north-south trench. The zone of mineralization appears to be open to the NE and east, towards the Peach Two zone and probably towards the south onto the adjoining property.

Five percussion holes were drilled in and around the Jody zone to attempt to better define its limits and test its grade. Significant results are as follows:

<u>Hole No.</u>	<u>From</u>	<u>To</u>	<u>Interval Ft.</u>	<u>% Cu.</u>	<u>Ppb Au</u>
P91-9	40	60	20	0.10	225
	150	170	20	0.13	50
P91-10	20	110	90	0.15	45
	140	160	20	0.09	288
P91-11	80	100	20	0.08	35
P91-15	80	90	10	0.04	910
P91-16	12	40	28	0.12	40
	130	150	20	0.12	32

The best results were obtained in hole P91-10 which is located about 40 metres east of the East-West trench. Further drilling, preferably with a diamond drill to give better geological information, is warranted in and around the N-S and E-W trenches and east and northeast toward P 91-10 and the Peach Two zone. This drilling should be preceded by a detailed ground magnetometer survey to find the

syenodiorite contact on the north edge of the Jody zone, as this contact may both limit and control the better grade mineralization in the volcanic rocks.

(10.4) Northwest Zone

The Northwest anomaly lies on and to the north of a fairly steep northerly-facing hill of outcrop and sub-outcrop of weakly mineralized basalt, which is strongly altered in a few places to pink feldspar rock carrying weak disseminated pyrite and chalcopyrite. The copper soil anomaly is displaced downhill somewhat by mechanical and solution movement of copper and is probably also enriched in organic material in flatter swampy ground to the north of the basaltic outcrops.

Fairly abundant pyrite (5%) is present in some of the rocks and together with anomalous amounts of magnetite, which is both of primary and hydrothermal origin, may account for the areas of highest I.P. response in the anomalous zone. A large area of lower anomalous I.P. response surrounds the I.P. high for some distance east on the Ann claims and west onto adjoining claims.

Surface samples taken in the area are as follows:

<u>Sample No.</u>	<u>Description</u>	<u>Cu Ppm</u>	<u>Au Ppb</u>
223783	Picked sample mineralized syenodiorite float on road	3380	130
223785	Grab-abundant angular pink feldspar rock w/diss. sulfides-float in stream	439	10

Three percussion drillholes were drilled on and near the strongest part of the I.P. anomaly and the highest part of the copper geochemical soil anomaly. Results of drilling are as follows:

<u>Hole No.</u>	<u>From</u>	<u>To</u>	<u>Interval Ft.</u>	<u>% Cu.</u>	<u>Ppb Au</u>
P 91-6	110	130	20	0.13	40

	210	230	20	0.12	40
P 91-7	60	80	20	0.13	255
P 91-8	30	40	10	0.09	150

Although none of the drill results are encouraging, only a small part of the zone of potential mineralization in the NW Zone has been tested. Further work, including a detailed magnetometer survey, is warranted.

(11.0) OTHER SURFACE SAMPLING

In addition to the surface samples taken from the 4 anomalous zones as described above, other samples taken as noted on Figure Four are as follows:

<u>Sample No.</u>	<u>Description</u>	<u>Cu Ppm</u>	<u>Au Ppb</u>
61460	Picked chalcopyrite mineralization in pink feldspar rock- dike contact 0.3M.	3020	415
223753	Picked-Chlorite-magnetite-Cpy mineralization-1 metre wide zone-N. of Jody zone	2640	85
223768	Grab - carbonate altered shear zone	549	485
223769	Picked -tourmaline-magnetite breccia	14	80
223776	Grab - Coarse grained pink monzonite	34	<5
223779	Picked- 1" vein with chalcopyrite	1990	130
223780	Grab - weakly pyritized basalt	98	20
223781	Grab - "	371	10

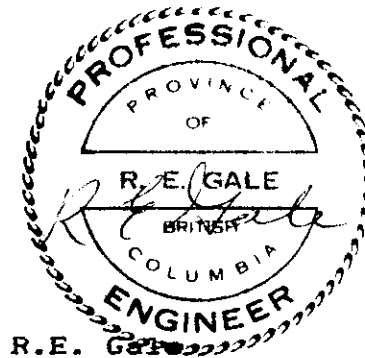
Except for sample 223752 which is from a narrow mineralized shear zone in otherwise fresh syenodiorite on the road 50 metres north of the north end of the Jody zone, none of these sample results warranted further investigation.

(12.0) CONCLUSIONS AND RECOMMENDATIONS

Further work including a detailed magnetometer survey and diamond drilling is warranted to pin down the syenodiorite-basalt contact between the Peach One, Jody and Peach Two zones, as this contact probably has a localizing effect on the copper-gold mineralization.

Although the NW zone appears to have less potential for the occurrence of better grade mineralization, a detailed magnetic survey and perhaps more percussion drilling could also help to define the potential here.

Further I.P. work may be warranted along the eastern side of the large I.P. low near the northwest corner of the Ann 1 claim if any of the 4 anomalous zones already known should prove to have economic grade mineralization associated with them.



R.E. Gale and Associates Inc.

December 17, 1991

REFERENCES

- Campbell, R.B., Tipper, H.W. 1972 G.S.C. Memoir 363- Geology of Bonaparte Lake Area , Map 1278A
- Gale, R.E., 1988 Engineering Report on Ann 1 and 2 Claims. Private report for Ophir Copper Corporation
- Gamble, D., 1983 Geochemical Survey, Core Claims. Assessment Report 11,692.
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- Janes, R.H. 1967 Report on Peach Claims, Coranex Ltd. Assessment Report 1037.
- Janes, R.H., Woodcock, J.R., Campbell, C.J., 1967 Report on Peach Claims. Assessment Report 1131.
- Saleken, L.W., Simpson, R.G. 1984 Cariboo-Quesnel Gold Belt: A Geological Overview. Western Miner.

COST STATEMENT

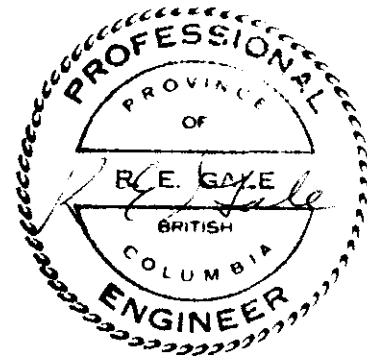
Physical Work-Trenching with Back Hoe-B and E Blacktop	\$	935.00
Geology and Geophysics		
Linecutting - Amex Exploration Services.....		11,529.79
I.P. Survey-Lloyd Geophysics.....		31,317.90
Percussion Drilling-1950 Ft.(650M).....		18,008.10
Supervision,Geology, R. Gale, T. Horning.....		12,330.00
Room and Board, 52 Man Days @ \$60.00/day.....		3,120.00
Fuel, telephone,travel expense.....		450.00
Truck rental.....		1,600.00
Assays-Chemex, Ecotech Labs.....		3,050.00

Total Geology and Geophysics		81,405.79
Grand Total	\$	82,340.79

CERTIFICATE

I, Robert E. Gale , do hereby certify that:

1. I am a geological consultant with R.E. Gale and Associates Inc. with my office at 107-2274 Folkestone Way West Vancouver, British Columbia.
2. I graduated from Stanford University with a PhD. in geology in 1965.
3. I have been practicing my profession as a geologist for thirty six years.
4. I have been a member in good standing with the Association of Professional Engineers of British Columbia since 1966.
5. This report is based on my geological work on the Ann Group of claims during parts of the period June 21 to October 10, 1991.
6. I have no interest in the Ann Group of claims or Ophir Copper Corporation directly or indirectly, nor do I expect to receive any such interest.



Robert E. Gale, PhD. P.Eng.
R.E. Gale and Associates Inc.
December 17, 1991

APPENDIX A



Chemex Labs Ltd.

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Invoice No. : I9119243
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CERTIFICATE OF ANALYSIS

A9119243

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JODY FLOAT 223752	205 294	1	0.07	< 1	2680	6	5	4	57	0.41	< 10	< 10	254	< 10	130

CERTIFICATION:

B. Coughlin



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<p><i>JODY FLOAT</i></p> <p>223752</p>	<p>205</p> <p>294</p>	85	1.0	1.89	95	60	< 0.5	< 2	1.56	< 0.5	43	15	2640	6.18	< 10	8	0.39	< 10	1.60	500

CERTIFICATION: _____

B. C. G. J.



Chemex Labs Ltd.

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ACT VOLC
N-JODY
ZONE

PEACH
ONE
ZONE

N.-PEACH
ONE

PEACH
ONE
ZONE

MONZ.

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
223753	205 294	120	0.8	1.92	15	90	< 0.5	< 2	1.26	< 0.5	17	26	2590	4.71	< 10	< 1	0.65	< 10	1.71	485
223754	205 294	130	< 0.2	1.34	5	80	< 0.5	< 2	1.06	< 0.5	18	39	1420	5.79	< 10	< 1	0.55	< 10	1.12	400
223755	205 294	220	< 0.2	1.28	15	70	< 0.5	< 2	1.00	< 0.5	18	50	1565	6.29	< 10	1	0.43	10	1.10	530
223756	205 294	70	< 0.2	1.15	20	60	< 0.5	< 2	0.90	< 0.5	16	39	708	6.04	< 10	1	0.35	10	1.07	435
223757	205 294	220	0.4	1.53	20	40	< 0.5	4	1.08	< 0.5	23	16	1685	4.83	< 10	< 1	0.23	10	1.16	545
223758	205 294	225	< 0.2	1.36	5	80	< 0.5	< 2	1.05	< 0.5	19	24	1305	6.22	< 10	< 1	0.59	< 10	1.14	375
223759	205 294	255	< 0.2	1.37	15	70	< 0.5	< 2	1.20	< 0.5	13	18	1780	4.93	< 10	1	0.47	10	0.95	360
223760	205 294	245	< 0.2	1.15	5	70	< 0.5	< 2	1.07	< 0.5	15	20	2160	4.74	< 10	< 1	0.48	10	0.96	340
223761	205 294	175	< 0.2	1.28	20	60	< 0.5	2	1.23	< 0.5	14	16	1080	4.81	< 10	< 1	0.36	10	0.93	300
223762	205 294	290	< 0.2	1.71	10	30	< 0.5	2	2.67	< 0.5	33	29	1860	6.71	< 10	< 1	0.21	10	1.12	605
223763	205 294	85	< 0.2	1.44	20	40	< 0.5	< 2	1.33	< 0.5	32	28	1165	5.79	< 10	< 1	0.24	10	0.85	365
223764	205 294	210	0.4	2.07	10	60	< 0.5	8	1.52	< 0.5	22	67	1880	4.92	< 10	< 1	0.59	10	1.53	415
223765	205 294	45	< 0.2	1.87	10	70	< 0.5	< 2	1.35	< 0.5	17	65	668	4.32	< 10	< 1	0.54	10	1.49	445
223766	205 294	300	< 0.2	1.28	< 5	70	< 0.5	4	0.86	< 0.5	14	12	2220	3.61	< 10	< 1	0.61	< 10	0.88	215
223767	205 294	130	< 0.2	1.60	10	120	< 0.5	< 2	0.97	< 0.5	17	9	1155	5.41	< 10	< 1	1.09	< 10	1.54	370
223768	205 294	485	< 0.2	0.80	30	110	< 0.5	< 2	0.61	< 0.5	20	27	549	5.70	< 10	< 1	0.15	< 10	0.25	1030
223769	205 294	80	< 0.2	1.65	20	30	< 0.5	< 2	2.60	< 0.5	12	31	14	4.05	10	< 1	0.09	< 10	1.73	765
223770	205 294	110	< 0.2	1.51	20	150	< 0.5	4	1.07	< 0.5	19	60	1325	6.02	< 10	< 1	0.89	10	1.30	375
223771	205 294	240	< 0.2	1.53	< 5	170	< 0.5	4	0.93	< 0.5	16	46	2050	5.31	< 10	2	0.92	< 10	1.34	345
223772	205 294	500	0.2	1.43	< 5	120	< 0.5	10	0.80	< 0.5	23	64	3890	5.83	< 10	< 1	0.88	< 10	1.48	450
223773	205 294	95	< 0.2	0.80	10	70	< 0.5	< 2	0.72	< 0.5	5	35	899	2.27	< 10	< 1	0.28	< 10	0.28	230
223774	205 294	65	< 0.2	1.62	10	60	< 0.5	4	1.64	< 0.5	18	15	1550	6.08	< 10	< 1	0.33	10	1.23	510
223775	205 294	65	< 0.2	1.83	15	60	< 0.5	< 2	1.77	< 0.5	19	26	1250	6.82	< 10	< 1	0.37	10	1.49	640
223776	205 294	< 5	< 0.2	0.37	5	10	< 0.5	< 2	0.93	< 0.5	4	83	34	0.92	< 10	1	0.02	< 10	0.16	205

CERTIFICATION:



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4338 RUTH CRESC.
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V7K 2M9

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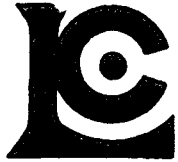
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223754	205 294	1	0.04	11	1510	12	< 5	9	63	0.19	< 10	< 10	259	< 10	38
223755	205 294	< 1	0.05	13	1730	12	< 5	14	57	0.21	< 10	< 10	271	< 10	38
223756	205 294	< 1	0.03	12	1900	14	< 5	10	49	0.18	< 10	< 10	267	< 10	36
223757	205 294	< 1	0.03	8	2080	8	< 5	11	119	0.16	< 10	< 10	198	< 10	36
223758	205 294	< 1	0.04	4	1900	12	< 5	7	47	0.22	< 10	< 10	267	< 10	34
223759	205 294	< 1	0.04	6	1590	8	< 5	9	60	0.15	< 10	< 10	251	< 10	28
223760	205 294	< 1	0.04	7	1840	8	< 5	7	60	0.18	< 10	< 10	247	< 10	30
223761	205 294	< 1	0.06	7	1990	4	< 5	6	76	0.18	< 10	< 10	235	< 10	28
223762	205 294	< 1	0.06	5	2070	12	< 5	9	91	0.27	< 10	< 10	226	< 10	54
223763	205 294	11	0.04	16	2260	12	< 5	11	105	0.22	< 10	< 10	194	< 10	24
223764	205 294	8	0.08	12	1890	8	< 5	6	126	0.18	< 10	< 10	207	< 10	38
223765	205 294	5	0.06	12	2030	8	< 5	6	91	0.20	< 10	< 10	222	< 10	38
223766	205 294	2	0.06	1	1910	6	< 5	5	57	0.11	< 10	< 10	141	< 10	24
223767	205 294	< 1	0.04	3	1860	6	< 5	9	36	0.16	< 10	< 10	271	< 10	34
223768	205 294	7	0.01	4	1400	12	10	15	120	0.01	< 10	< 10	176	< 10	64
223769	205 294	< 1	0.03	7	1380	6	< 5	8	62	0.10	< 10	< 10	115	< 10	50
223770	205 294	1	0.09	12	1650	16	< 5	9	67	0.21	< 10	< 10	266	< 10	34
223771	205 294	4	0.07	14	1720	6	< 5	10	63	0.22	< 10	< 10	252	< 10	32
223772	205 294	< 1	0.03	13	1890	4	< 5	15	37	0.21	< 10	< 10	263	< 10	46
223773	205 294	1	0.09	1	1070	< 2	< 5	4	62	0.09	< 10	< 10	131	< 10	28
223774	205 294	< 1	0.05	3	1830	6	< 5	8	94	0.24	< 10	< 10	327	< 10	40
223775	205 294	< 1	0.09	5	1960	14	< 5	12	66	0.23	< 10	< 10	332	< 10	44
223776	205 294	< 1	0.08	1	350	6	< 5	2	12	< 0.01	< 10	< 10	35	< 10	14

CERTIFICATION:

B. Coughlin



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A9121861

JODY
ZONE

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			ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
061469	205	294	3	0.04	2	2220	< 2	< 5	10	70	0.25	< 10	< 10	199	< 10	122
061470	205	294	5	0.04	5	2220	< 2	< 5	10	72	0.20	< 10	< 10	224	< 10	96
061471	205	294	1	0.05	5	2060	< 2	< 5	5	131	0.22	< 10	< 10	181	< 10	44
061472	205	294	4	0.06	8	1990	< 2	< 5	6	108	0.30	< 10	< 10	233	< 10	44
061473	205	294	7	0.06	4	2080	< 2	< 5	7	81	0.29	< 10	< 10	228	< 10	48
061474	205	294	15	0.04	3	2300	< 2	< 5	6	64	0.36	< 10	< 10	232	< 10	52
061475	205	294	14	0.07	3	2170	< 2	< 5	5	85	0.33	< 10	< 10	250	< 10	34
061476	205	294	10	0.07	2	1940	< 2	< 5	5	87	0.33	< 10	< 10	241	< 10	36
061477	205	294	10	0.06	7	1890	< 2	< 5	10	103	0.23	< 10	< 10	210	< 10	64
061478	205	294	95	0.06	5	2070	< 2	< 5	6	81	0.30	< 10	< 10	212	< 10	46
061479	205	294	51	0.07	2	2190	< 2	< 5	4	104	0.23	< 10	< 10	194	< 10	48
061480	205	294	11	0.05	4	1490	< 2	< 5	7	113	0.15	< 10	< 10	154	< 10	50
061481	205	294	68	0.06	3	2180	< 2	< 5	5	125	0.28	< 10	< 10	202	< 10	60
061482	205	294	48	0.06	4	2160	< 2	< 5	6	115	0.28	< 10	< 10	241	< 10	74
061483	205	294	1	0.07	7	1920	< 2	< 5	7	122	0.31	< 10	< 10	263	< 10	66
061484	205	294	1	0.11	7	1740	2	< 5	10	126	0.35	< 10	< 10	323	< 10	80
061486	205	294	4	0.05	6	1980	< 2	< 5	13	81	0.25	< 10	< 10	243	< 10	48
223783	205	294	35	0.45	12	1570	< 2	< 5	5	108	0.27	< 10	< 10	244	< 10	46
223785	205	294	4	0.06	4	1670	< 2	< 5	4	123	0.17	< 10	< 10	134	< 10	24

BEACH 2

SOUTH

GRAB
BEACH 1
20 M

N. W. ZONE
FLOAT

GRAB

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A9121238

SAMPLE DESCRIPTION	PREP CODE	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Ti	Tl	U	V	W	Zn
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223778	205 294	< 1	0.09	7	1660	< 2	< 5	4	48	0.23	< 10	< 10	159	< 10	32

BATCH 2
TICKED
SAMPLE

CERTIFICATION:



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Project :
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A9121238

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223778	205 294	240	2.2	1.13	20	40	< 0.5	18	0.94	< 0.5	29	21	6090	5.73	< 10	< 1	0.32	< 10	0.71	325

WASH 2
CHECKED
SAMPLE

CERTIFICATION: B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

GALE, R. E.

4338 RUTH CRESC.
NORTH VANCOUVER, B.C.
V7K 2M9

Page Number : 1-A
Total Pages : 1
Certificate Date: 23-JUL-91
Invoice No. : 19118149
P.O. Number :

Project :
Comments:

CERTIFICATE OF ANALYSIS

A9118149

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
61460	205 294	415	2.4	1.09	20	40	< 0.5	4	1.33	< 0.5	10	30	3020	3.51	10	< 1	0.18	< 10	0.78	420

CERTIFICATION:

B. Coughlin



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

GALE, R. E.

4338 RUTH CRESC.
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CERTIFICATE OF ANALYSIS

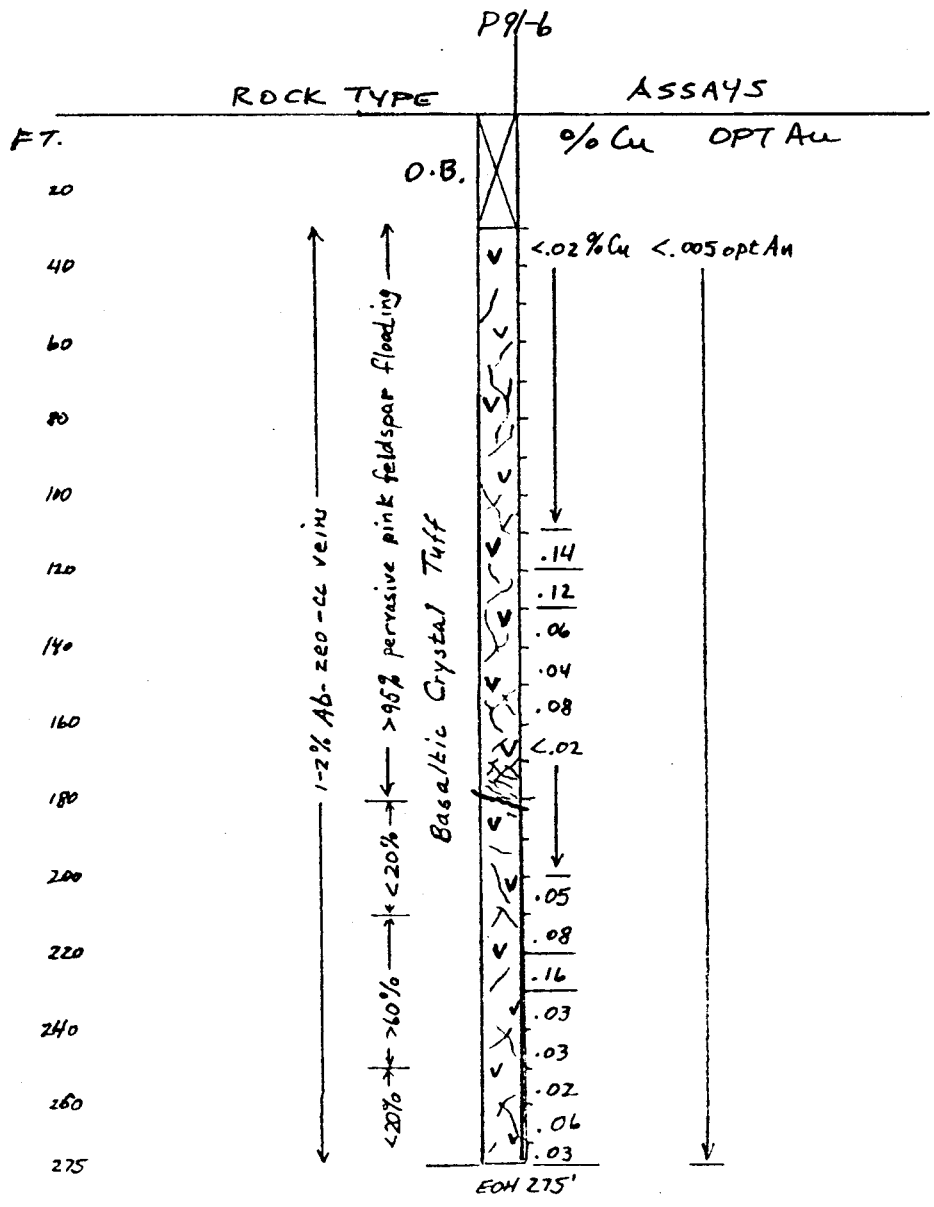
A9118149

SAMPLE DESCRIPTION	PREP CODE	Au ppb FA+AA	Ag ppm	Al %	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
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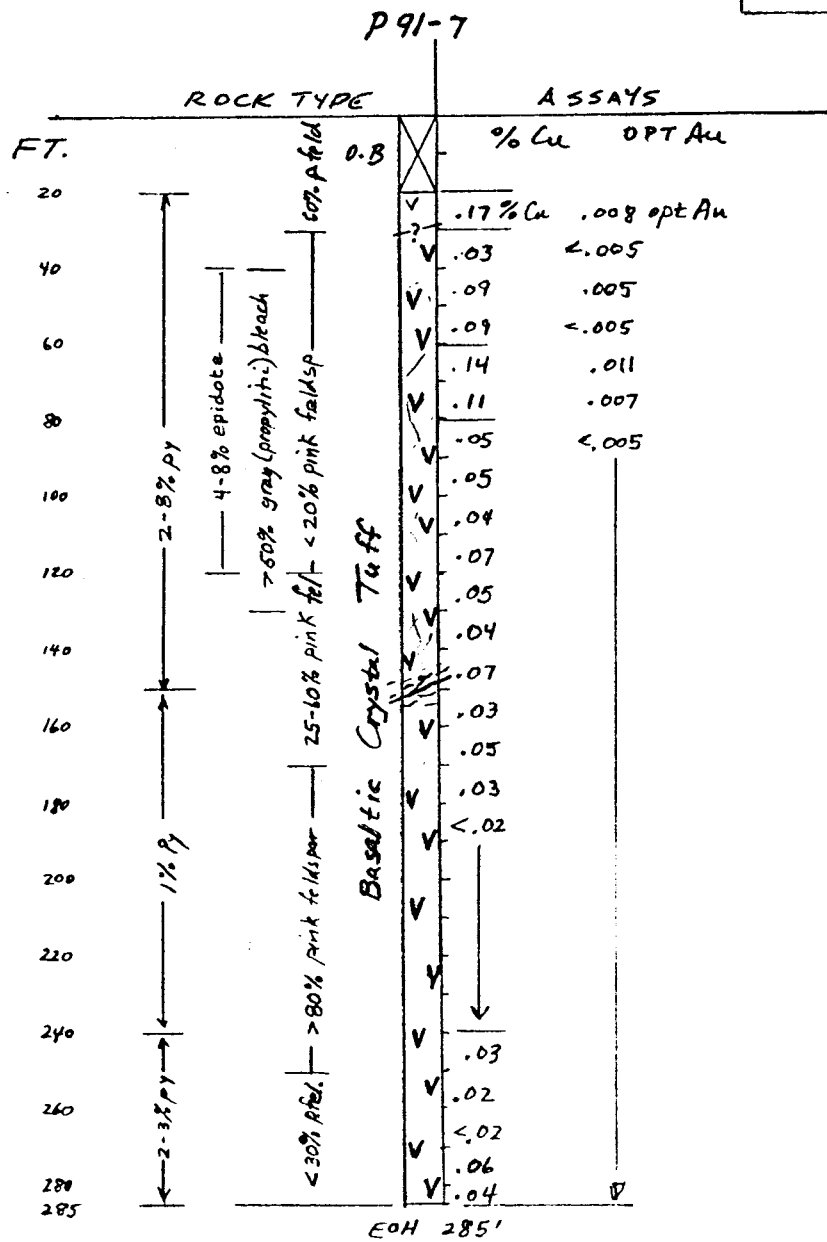
CERTIFICATION: B. Coughlin

APPENDIX B

Percussion Drill Hole P91-6
 Log by T. Horning
 Ophir Property (NW Cu Zone)
 Sept. 17-18, 1991
 Inclination: -90°
 Location: 2320 N X 170 E
 [as measured from ZElme]



Percussion Drill Hole P91-7
 Log By T. Herring
 Ophir Property (NW Cu zone)
 Sept. 19, 1991
 Inclination: -90°
 Location: 2025 N x 95 E
 [as measured from OE line]

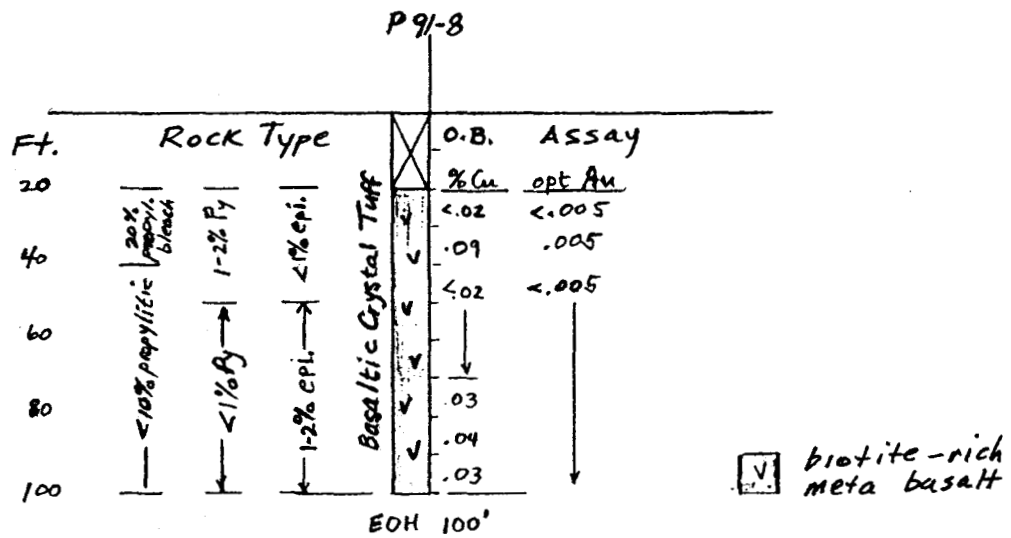


Percussion Drill Hole P 91-8
 Log By T. Hornig
 Ophir Property (NW Cu Zone)

Sept 20, 1991

Inclination: -90°

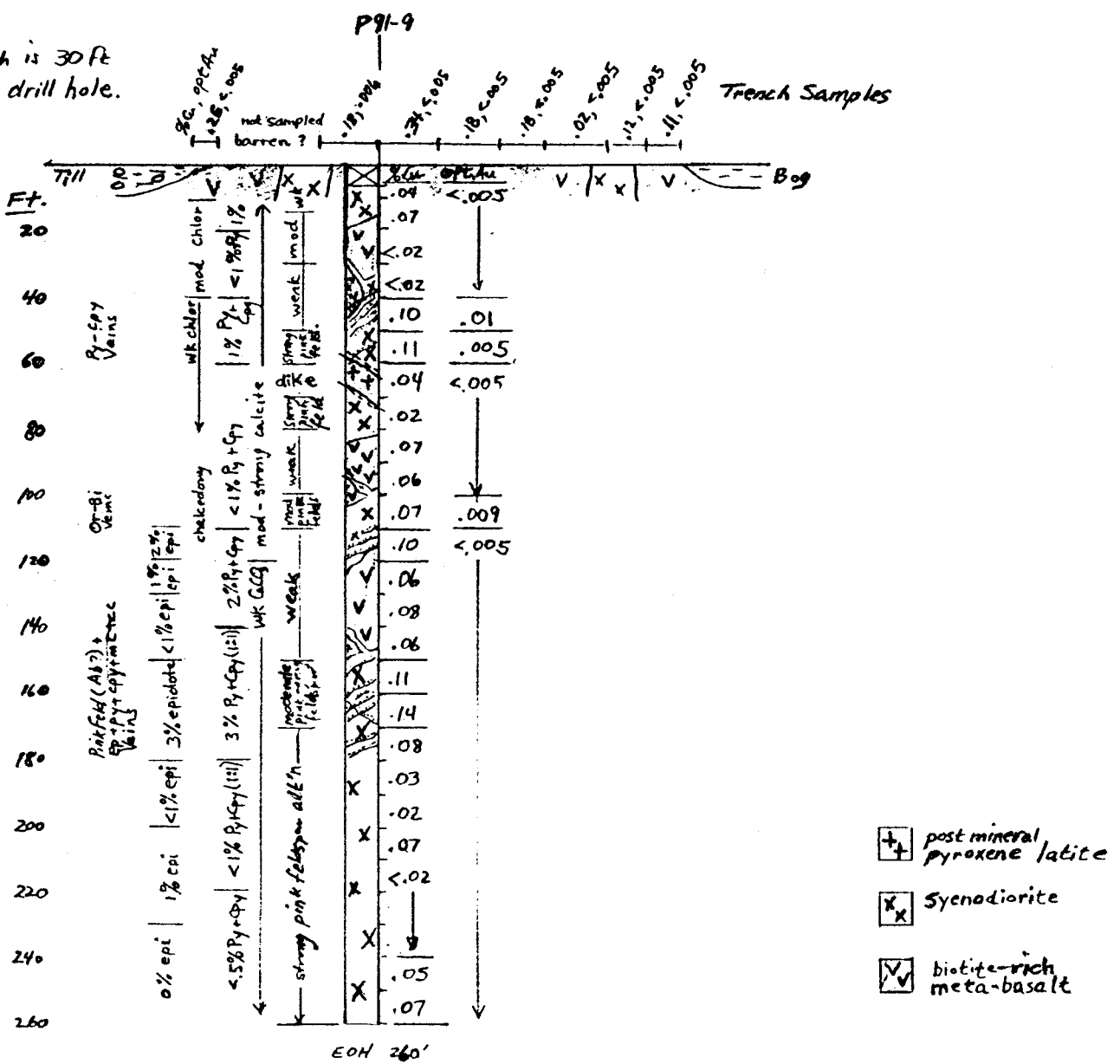
Location: 2060 N X 107E ←
 [as measured from OE line]



Percussion Drill Hole 91-9
 Log By T. Horning
 Ophir Property
 Jody Zone
 Sept. 21, 1991
 Inclination: -90°
 Location: 210N x 127E

Looking East

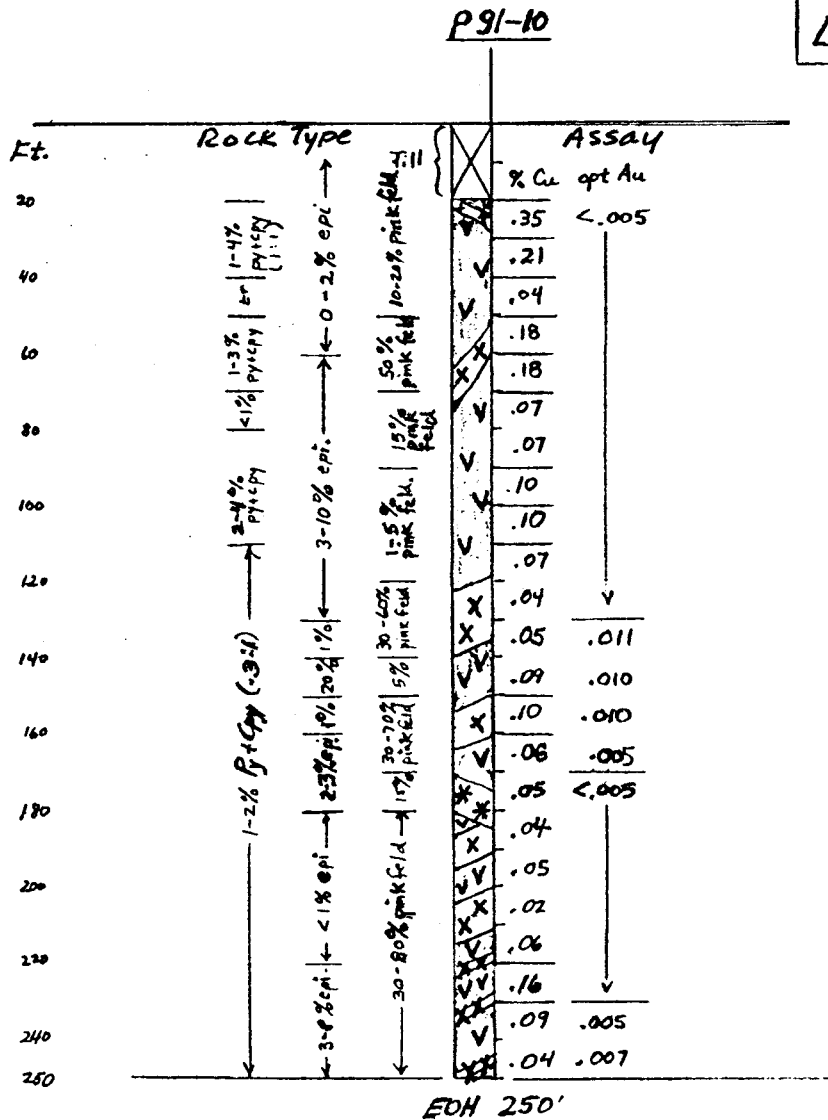
NOTE: Trench is 30 ft west of drill hole.



Percussion Drill Hole P91-10
 Log By T. Horning
 Ophir Property
 Jody Zone
 SEPT. 22, 1991

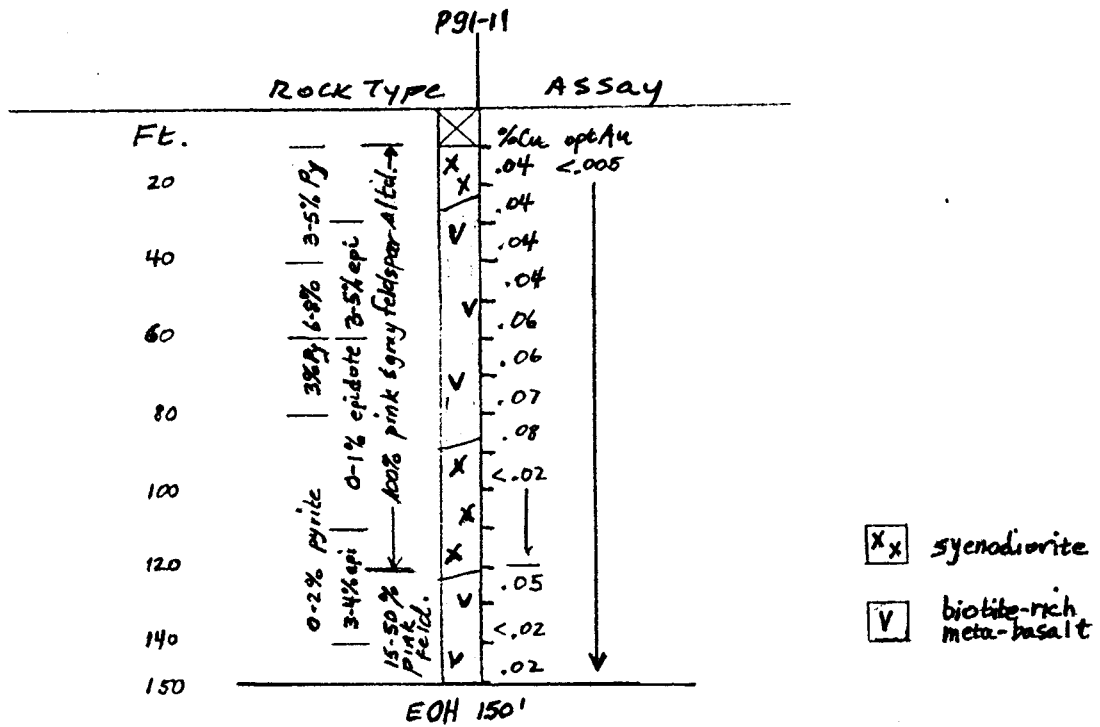
Inclination: -90°

Location: 207 NX 1296 E

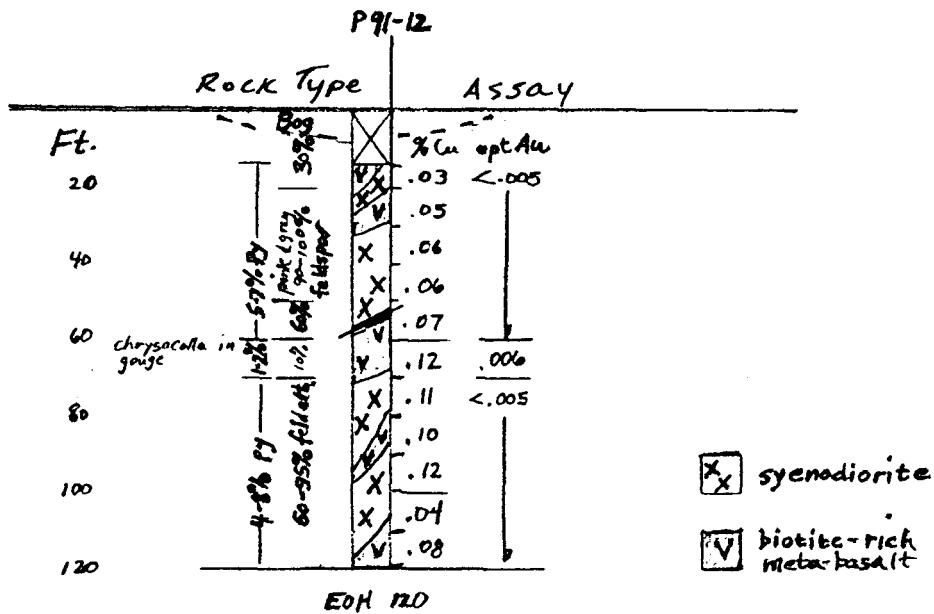


- ✱ post-mineral talite
- X X syenodiorite
- V V biotite-rich meta-basalt

Percussion Drill Hole 91-11
 Log - T. Horning
 Ophir Property
 Jody Zone
 Sept. 23, 1991
 Inclination : -90°
 Location : 125 NX 1380E



Percussion Drill Hole P91-12
 Log - T. Horning
 Ophir Property
 South-Peach One Zone
 Sept 23, 1991
 Inclination : -90°
 Location : 480 N X 800 E

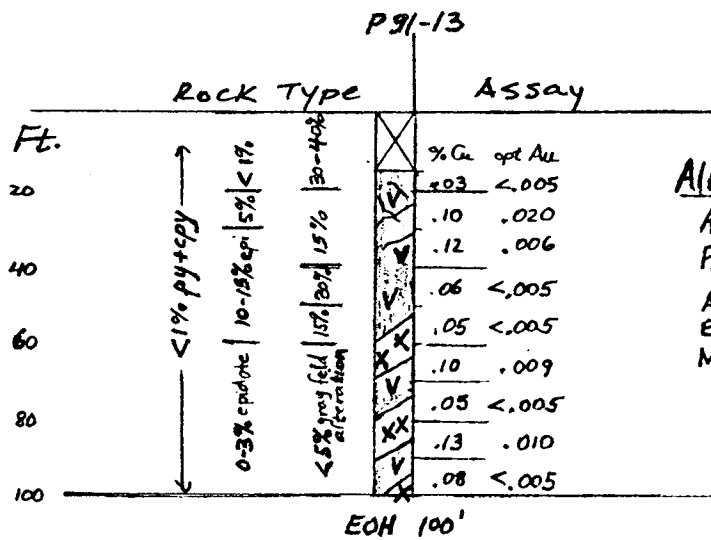


Percussion Drill Hole P91-13
Log - T. Horning

Ophir Property
Jody Zone
Sept. 24, 1991

Inclination: -90°

Location: 630 N X 1600 E



Alteration Assemblage:

Ab+Ep+Mt+Py+Chl+Cpy

Fracture controlled & in patches

Ab-Albite Py-Pyrite

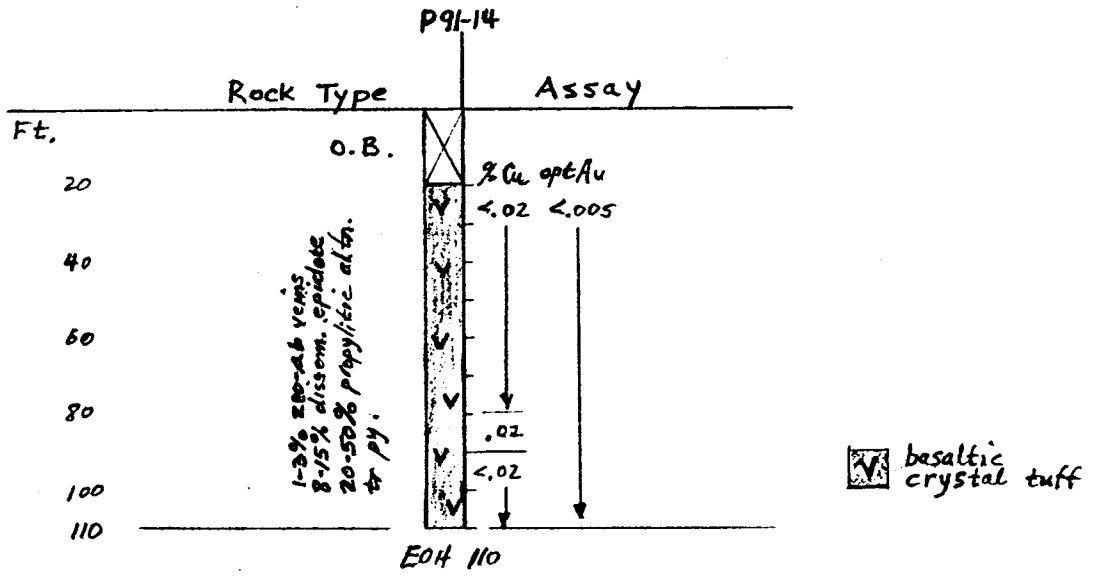
EP-Epidote Chl-Chlorite

Mt-Magnetite Cpy-Chalcopyrite

syenodiorite

biotite-rich
meta-basalt

Percussion Drill Hole P91-14
 Log - T. Horning
 Ophir Property
 South-Peach One Zone
 Sept. 24, 1991
 Inclination: -90°
 Location: 552 N X 690 E

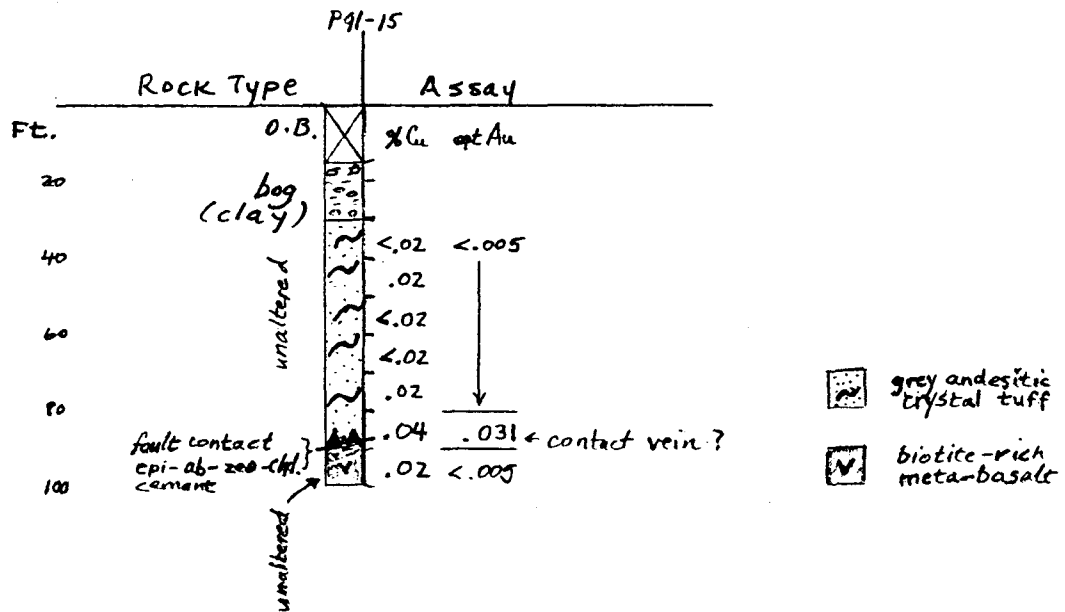


Percussion Drill Hole P91-15
 Log - T. Horning

Ophir Property
 Jody Zone
 Sept 25, 1991

Inclination: -90°

Location: 105 N X 1183 E



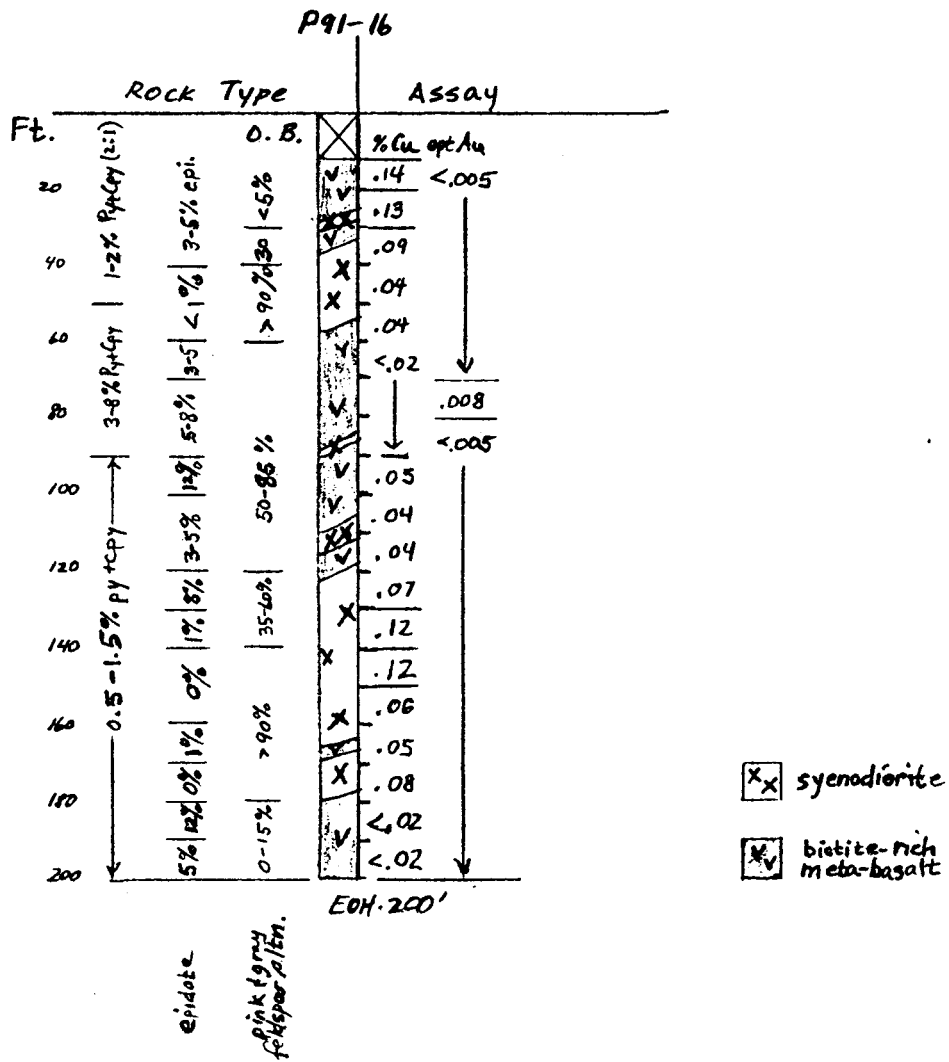
Percussion Drill Hole P91-16
Log - T Horning

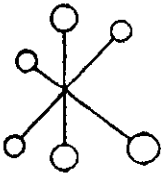
Ophir Property
Jody Zone

Sept. 25, 1991

Inclination -90°

Location: 225 N x 1430 E





ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 673-6700 Fax 673-4557

CERTIFICATE OF ANALYSIS ETK 91-771

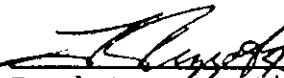
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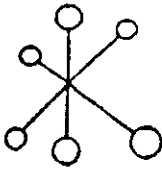
ASARCO INC.
E. 920 WOLVERTON CRT.
SPOKANE, WASHINGTON
U.S.A.
99207

ATTENTION: MIKE McCLAVE

SAMPLE IDENTIFICATION: 115 DRILL CUTTINGS/ ROCK samples received SEPTEMBER 23, 1991

ET#	Asarco # Description	AU (ppb)	CU (ppm)	
<u>P91-6</u> 0-20'	1-	108631	5	52
	2-	108632	5	54
	3-	108633	5	29
	4-	108634	5	59
	5-	108635	75	51
	6-	108636	5	22
	7-	108637	5	32
	8-	108638	5	26
	9-	108639	10	27
	10-	108640	5	46
	11-	108641	45	1439
	12-	108642	35	1178
	13-	108643	10	642
	14-	108644	5	408
	15-	108645	85	820
	16-	108646	5	160
	17-	108647	5	123
	18-	108648	5	82
	19-	108649	5	75
	20-	108650	15	507
	21-	108651	20	807
	22-	108652	50	1571
	23-	108653	5	316
	24-	108654	10	289
	25-	108655	5	202
	26-	108656	15	558
<u>275'</u>	27-	108657	10	262
<u>P91-7</u> 0-20'	29-	108659	245	1684


Frank J. Perzotti, Certified Assayer



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

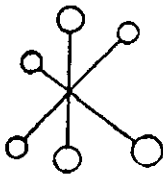
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-6700 Fax 573-4887

ASARCO INC.

SEPTEMBER 25, 1991

ETK 91-771

ET#	ASARCO # Description	AU (ppb)	CU (ppm)
<u>P91-7</u> <u>CONTD.</u>	30- 108660	65	340
	31- 108661	155	859
	32- 108662	90	907
	33- 108663	310	1374
	34- 108664	205	1123
	35- 108665	95	507
	36- 108666	85	467
	37- 108667	35	358
	38- 108668	135	653
	39- 108669	45	483
	40- 108670	35	438
	41- 108671	95	704
	42- 108672	25	272
	43- 108673	130	483
	44- 108674	35	307
	45- 108675	5	110
	46- 108676	5	126
	47- 108677	5	109
	48- 108678	5	93
	49- 108679	55	112
	50- 108680	10	157
	51- 108681	15	288
	52- 108682	10	235
	53- 108683	10	173
	54- 108684	20	606
<u>285'</u>	55- 108685	5	412
<u>P91-8</u> ^{20'-30'}	56- 108686	25	193
	57- 108687	150	943
	58- 108688	20	147
	59- 108689	40	155
	60- 108690	5	59
	61- 108691	30	286
<u>100'</u>	62- 108692	35	363
	63- 108693	30	331
<u>P91-9</u> ^{0-10'}	65- 108695	25	392
	66- 108696	5	687
	67- 108697	5	172
	68- 108698	5	129
	69- 108699	290	996
	70- 108700	160	1085
	71- 108701	30	402
	72- 108702	10	206
	73- 108703	35	736
	74- 108704	30	637



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

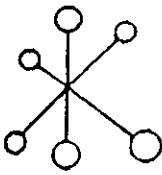
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (804) 573-5700 Fax 573-4557

ASARCO INC.

SEPTEMBER 25, 1991

ETK 91-771

ET#	ASARCO # Description	AU (ppb)	CU (ppm)
<i>P91-9</i>	75- 108705	260	681
<i>CONTO.</i>	76- 108706	25	979
	77- 108707	10	641
	78- 108708	25	776
	79- 108709	35	649
	80- 108710	30	1088
	81- 108711	70	1358
	82- 108712	105	793
	83- 108713	5	326
	84- 108714	5	206
	85- 108715	25	705
	86- 108716	5	129
	87- 108717	5	94
	88- 108718	5	136
	89- 108719	30	541
<i>260'</i>	90- 108720	25	678
<i>20-30'</i>	91- 108721	100	3478
<i>P91-10</i>	92- 108722	60	2142
	93- 108723	20	417
	94- 108724	50	1754
	95- 108725	30	1788
	96- 108726	15	678
	97- 108727	45	749
	98- 108728	65	1042
	99- 108729	20	1079
	100- 108730	40	726
	101- 108731	105	448
	102- 108732	325	494
	103- 108733	280	851
	104- 108734	295	1029
	105- 108735	160	551
	106- 108736	30	451
	107- 108737	110	403
	108- 108738	90	457
	109- 108739	60	242
	110- 108740	45	634
	111- 108741	80	1569



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 673-5700 Fax 673-4557

ASARCO INC.

SEPTEMBER 25, 1991

ETK 91-771

P91-10
CENTO.
250!

ET#	ASARCO # Description	AU (ppb)	CU (ppm)
112-	108742	160	935
113-	108743	195	445


NOTE: > = GREATER THAN

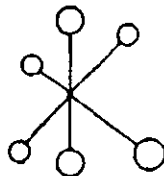
C.C. : R.E. GALE & ASSOC.
4338 RUTH CRESC.
N. VANCOUVER, B.C.
V7K 2M9

ATTN: BOB GALE

FAX: TOM HORNING
(604) 396-4447
ASARCO INC. (Mike McLave)
(509) 483-0131

BC91/ASARCO1


ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4557

OCTOBER 3, 1991

CERTIFICATE OF ANALYSIS ETK 91-784

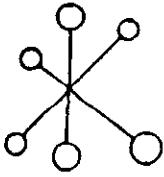
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ASARCO INC.
E. 920 WOLVERTON CRT.
SPOKANE, WASHINGTON
U.S.A.
99207

ATTENTION: MIKE McCLAVE

SAMPLE IDENTIFICATION: 74 CHIP/ROCK samples received SEPTEMBER 30, 1991

ET#	ASARCO # Description	AU (ppb)	CU (ppm)
<u>P91-11</u>	11-20'		
	1-	108745	35
	2-	108746	65
	3-	108747	15
	4-	108748	5
	5-	108749	10
	6-	108750	5
	7-	223801	20
	8-	223802	50
	9-	223803	10
	10-	223804	5
	11-	223805	5
	12-	223806	20
	13-	223807	15
	14-	223808	20
	140-150'		
	15-	223809	10
<u>P91-12</u>	16-	223810	120
	17-	223811	30
	18-	223812	25
	19-	223813	90
	20-	223814	190
	21-	223815	115
	22-	223816	75
	23-	223817	65
	24-	223818	85
	110-120'		
	25-	223819	30
<u>P91-13</u>	15-20'		
	26-	223820	30
	27-	223821	585
	28-	223822	190
	29-	223823	40



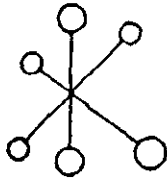
ECO-TECH LABORATORIES LTD.

ASSAYING · ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4882

ASARCO INC. ETK 91-784

OCTOBER 3, 1991

ET#	ASARCO # Description	AU (ppb)	CU (ppm)	
<i>P 91-13</i>	30-	223824	75	523
<i>CONTD.</i>	31-	223825	275	970
	32-	223826	85	532
	33-	223827	280	1290
<i>99-100</i>	34-	223828	125	765
<i>P 91-14</i>	<i>20-30</i> 35-	223829	15	107
	36-	223830	<5	69
	37-	223831	10	155
	38-	223832	10	140
	39-	223833	25	113
	40-	223834	15	176
	41-	223835	<5	150
	42-	223836	<5	228
	43-	223837	<5	129
<i>110-120</i>	44-	223838	<5	60
<i>P 91-15</i>	<i>30-40</i> 45-	223841	<5	89
	46-	223842	<5	202
	47-	223843	<5	122
	48-	223844	20	119
	49-	223845	20	217
	50-	223846	910	405
<i>90-100</i>	51-	223847	50	235
<i>P 91-16</i>	<i>12-20</i> 52-	223848	40	1350
	53-	223849	45	1320
	54-	223850	35	887
	55-	223851	10	449
	56-	223852	25	356
	57-	223853	30	136
	58-	223854	235	186
<i>80-90</i>	59-	223855	15	126



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ASARCO INC. ETK 91-784

OCTOBER 3, 1991

D91-16
CONTD.


ET#	ASARCO# Description	AU (ppb)	CU (ppm)	
90-100' 60-	223856	80	479	
61-	223857	25	375	
62-	223858	40	434	
63-	223859	30	646	
64-	223860	40	1210	
65-	223861	25	1150	
66-	223862	30	622	
67-	223863	10	482	
68-	223864	35	784	
69-	223865	15	181	
190-200' 70-	223866	10	99	
72-	223779	130	1990	SURFACE ROCK SAMPLES 2E-17N
73-	223780	20	98	
74-	223781	10	371	

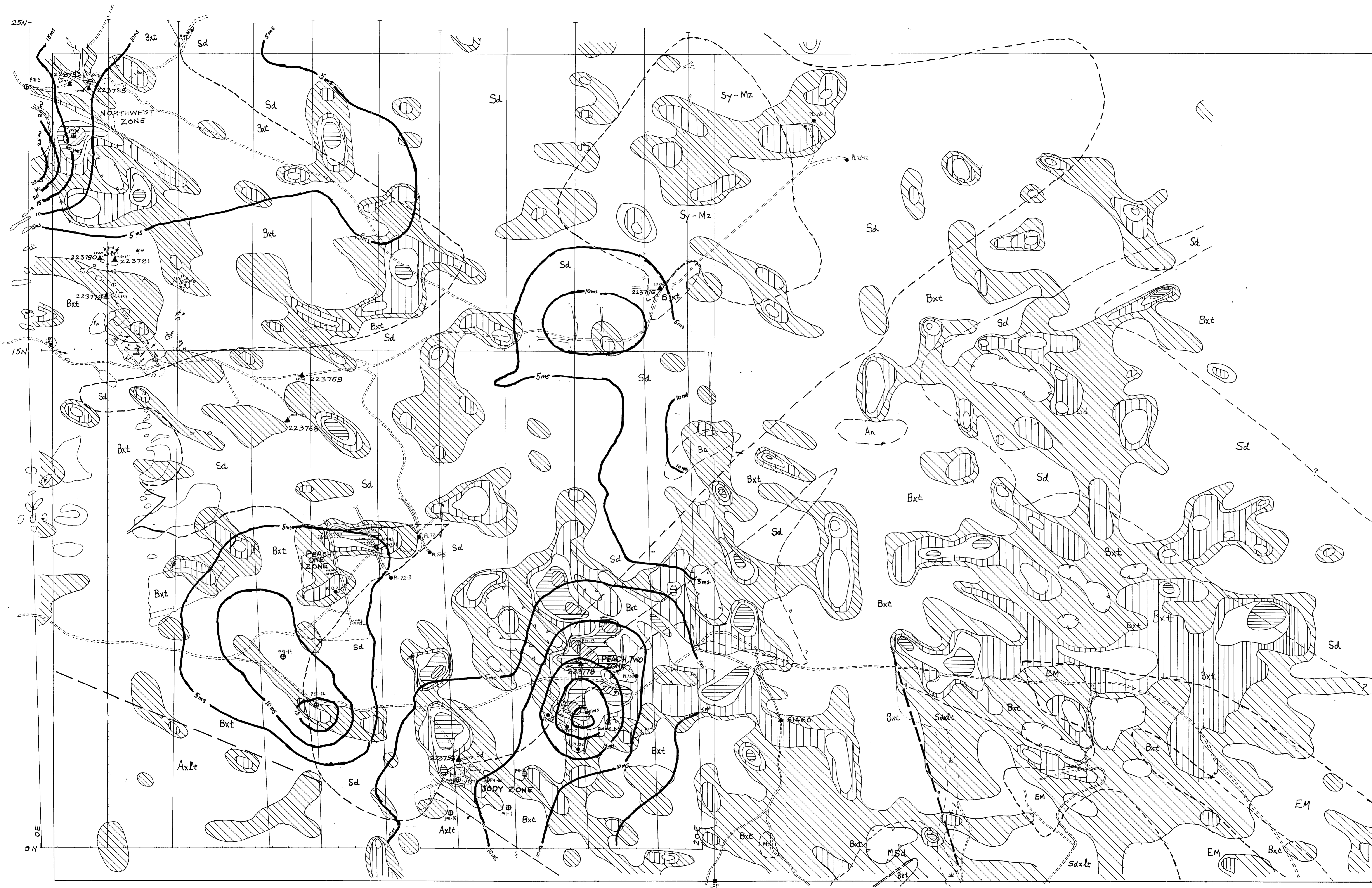
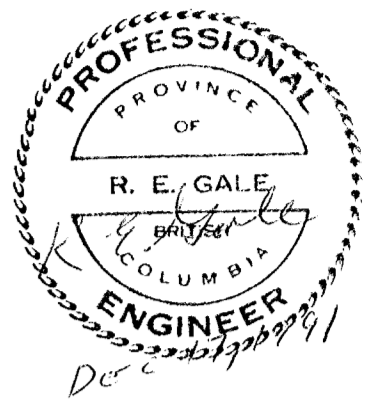
NOTE: < = less than
> = greater than

C.C. : R.E. GALE & ASSOC.
4338 RUTH CRESC.
N. VANCOUVER, B.C.
V7K 2M9
ATTBOB GALE

FAX: TOM HORNING
(604) 396-4447
ASARCO INC. (Mike McLave)
(509) 483-0131

8C91/ASARCO1

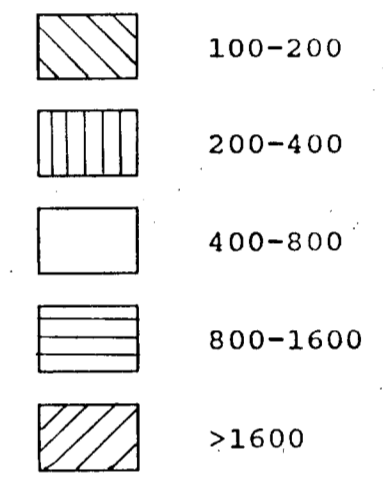

ECO-TECH LABORATORIES LTD.
FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer



IP Chargeability (milliseconds)



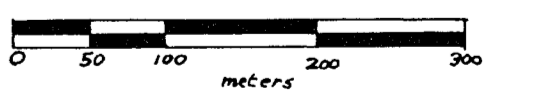
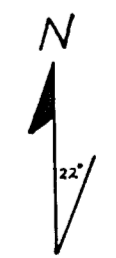
Soil Geochemistry, ppm Cu



Legend

- An Andesite
- Ba Basalt
- Mz Monzonite
- EM Equigranular Monzonite
- Sy Syenite
- MSd Mafic Syenodiorite
- Sd Syenodiorite
- Bxt Basaltic Crystal Tuff
- Sdxt Syenodioritic Crystal Lithic Tuff
- Axlt Andesitic Crystal Lithic Tuff

- ▲ 223781 SAMPLE SITE
- ⊙ ASARCO Drill Hole
- ⊙ Previous Drill Hole (AMAX 1972; Coranex 1967)
- - - Fault; dashed where approximate
- - - Contact; dashed where approximate



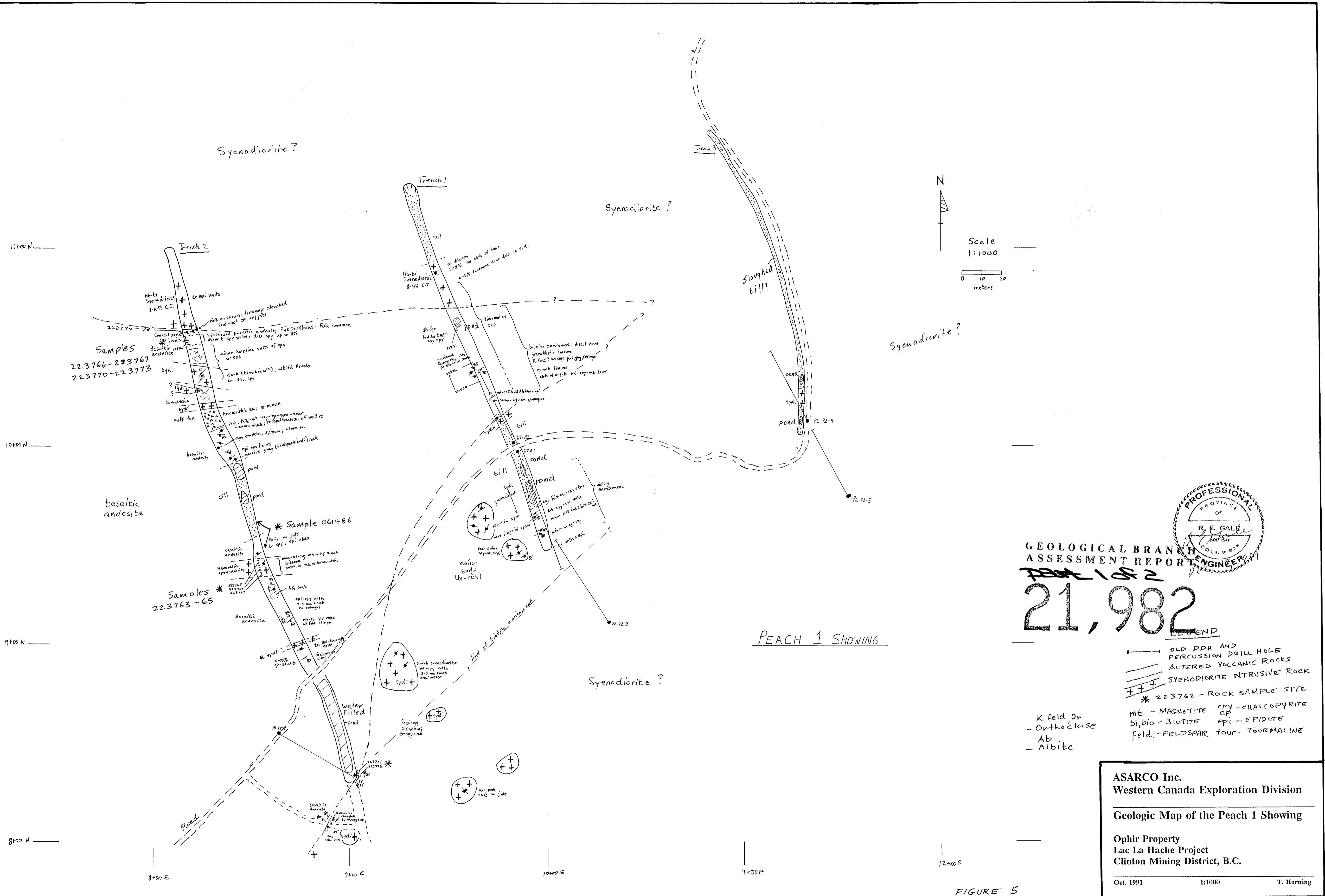
ASARCO Inc.
Western Canada Exploration Division

Geological Map
Ophir Property, Lac La Hache Project
Clinton Mining District, B.C.

October 1971 1:5000 T. Horning

GEOLOGICAL BRANCH
 ASSESSMENT REPORT
 21,982
 1/82

FIGURE 4



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**
21,982

- LEGEND**
- OLD DDH AND PERCUSSION DRILL HOLE
 - ALTERED VOLCANIC ROCKS
 - /// SYENODIORITE INTRUSIVE ROCK
 - +++ 223762 - ROCK SAMPLE SITE
 - * 223762 - ROCK SAMPLE SITE
 - mt - MAGNETITE CPY - CHALCOPYRITE
 - bi, bio - BIOTITE EPI - EPIDOTE
 - Ab - ALBITE feld. - FELDSPAR tour - TOURMALINE
 - K feld. Or - Orthoclase

ASARCO Inc.
Western Canada Exploration Division

Geologic Map of the Peach 1 Showing

Ophir Property
Lac La Hache Project
Clinton Mining District, B.C.

Oct. 1991 1:1000 T. Horning

FIGURE 5