DIAMOND DRILLING ASSESSMENT REPORT

ON THE

BEAR, CUB PROPERTY
(EHOLT, B.C.)

Greenwood Mining Division, British Columbia
NTS 82 E / 2E
Latitude 49° 10' Longitude 118° 33'

Owner: Teck Corporation
G. R. Thomson, P.Geo.
January 15, 1996

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INTRODUCTION

In 1993, Teck Corporation optioned the Bear-Cub property, a potential copper-gold skarn prospect in the northern periphery of the Greenwood mining camp. The primary producer in the Greenwood camp was the Phoenix copper skarn deposit which yielded 27 million tonnes of ore between 1900 to 1976. The Bear-Cub property is located approximately 10 km north of the Phoenix orebody.

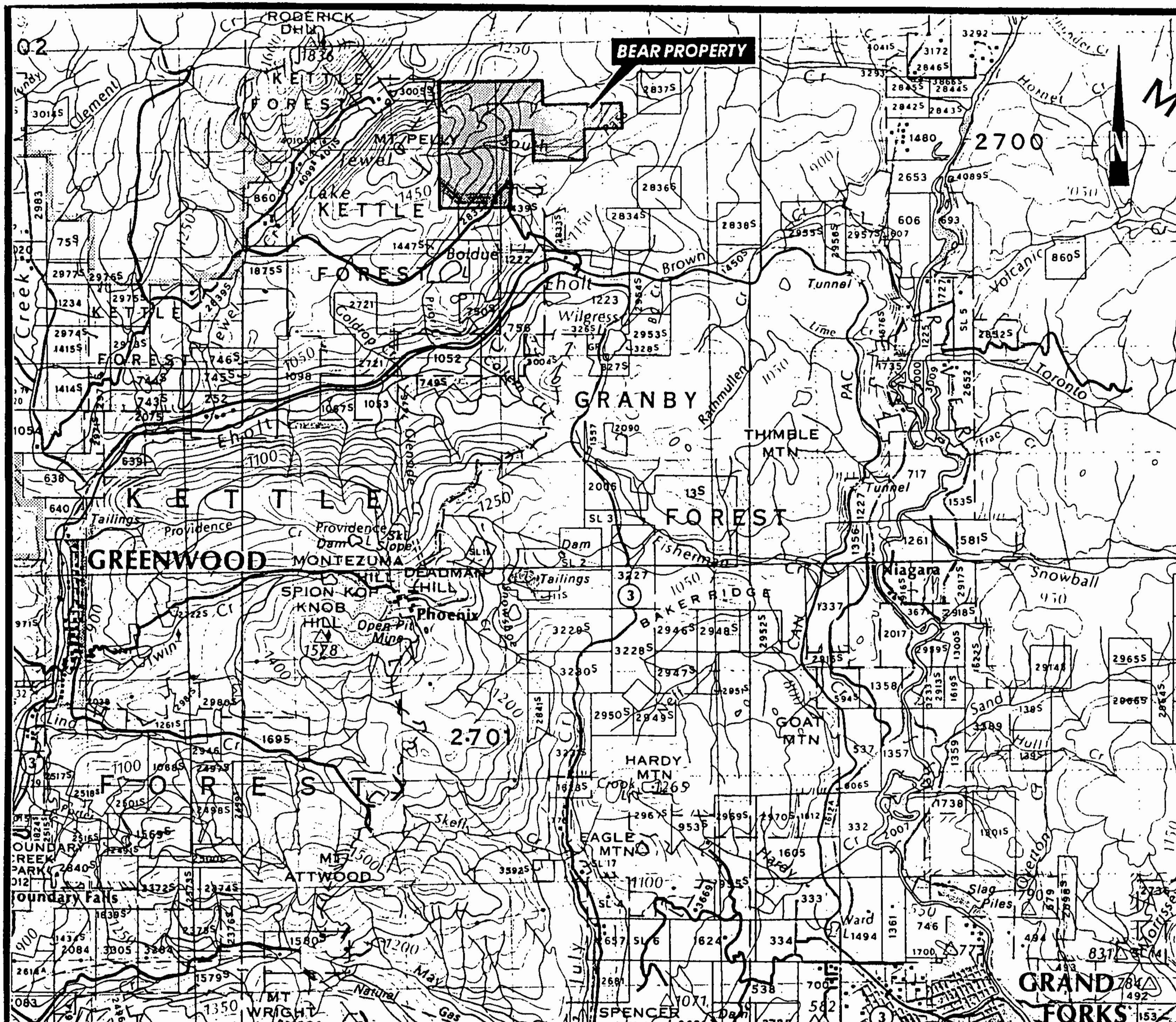
During a 1993 Teck exploration program, 607.2 m of drilling was carried out on the Bear-Cub property by Teck in six drill holes. All holes, except drill hole 93-BC-06, were generally devoid of significant mineralization. Drill hole 93-BC-06 contained a skarned -sulphidè interval from 16.5 to 19.3 (2.8)m assaying 2.2% copper and 2.2 g/t gold.

During 1995, Teck carried out an exploration program on the Bear-Cub property from May 27 to June 15. Work consisted of general prospecting and sampling throughout known or potential areas of skarn mineralization. Prospecting was followed by a program of diamond drilling totalling 755.4 m in six drill holes. The diamond drilling was carried out near an old mineral prospect known as the "Rambler". The "Rambler" workings consist of two old shafts, and several pits and trenches, developed on disseminated to massive concentrations of pyrite, chalcopyrite and pyrrhotite within fractured/brecciated calcareous garnet-epidote-chlorite skarn. Significant skarn related mineralization was encountered in four of the six holes drilled.

The Bear-Cub claims require further exploration to better define the mineralized skarn zone as located by the 1995 Teck drill program. In the area of known skarn mineralization, the property requires grid surveys along a northwest trending skarn belt which is known to extend at least 1.5 km. Geophysical and geochemical surveys should be carried out before further drilling is carried out on the Bear-Cub property.

LOCATION, ACCESS

The property is accessed from Highway # 3, which connects the towns of Greenwood and Grand Forks. A secondary logging road leaves Highway # 3 at the small settlement of Eholt and runs approximately 3 km north to reach the South Pass Creek area of the property. Access throughout the property is provided by the main logging road and several spur roads that follow the north bank of South Pass Creek.



TECK EXPLORATION LTD.

BEAR PROPERTY

PROPERTY LOCATION

0 2 4 kilometres

1:100,000

Fig 1

CLAIMS

The Bear-Cub property consists of the following claims as staked under the Modified grid system as well as 2 - post claim system.

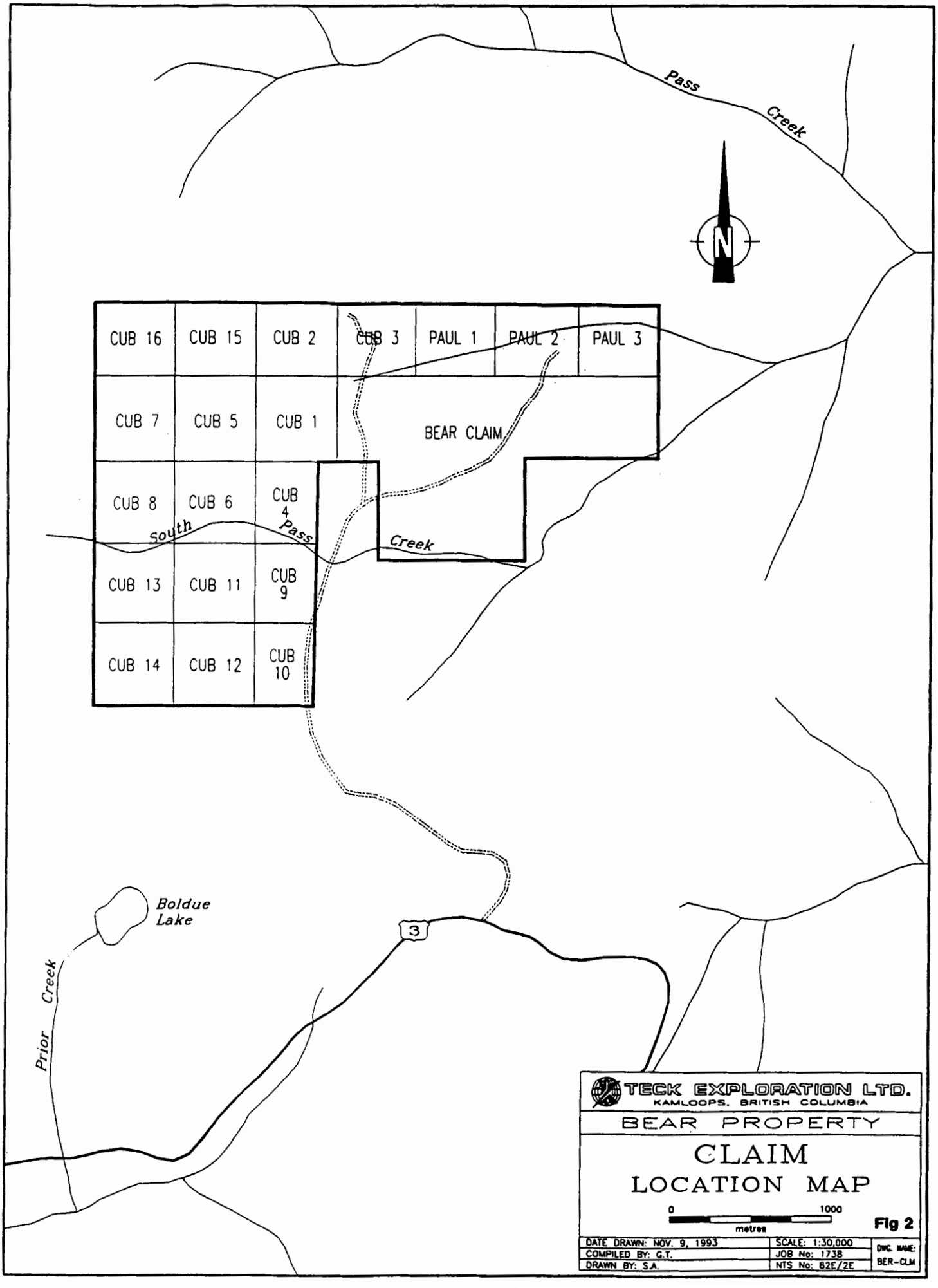
Name	Record No.	No. of Units	Expiry Date
Bear	158244	16	July 8/2002
Cub 1	318096	1	June 11/2000
Cub 2	318097	1	June 11/2000
Cub 3	318098	1	June 11/2000
Cub 4	317691	1	May 20/97
Cub 5	317692	1	May 20/97
Cub 6	317693	1	May 20/97
Cub 7	317694	1	May 20/97
Cub 8	317695	1	May 20/97
Cub 9	318105	1	June 8/97
Cub 10	318106	1	"
Cub 11	318107	1	"
Cub 12	318108	1	"
Cub 13	318109	1	"
Cub 14	318110	1	"
Cub 15	318099	1	June 11/97
Cub 16	318101	1	June 11/97
Paul 1	320531	1	Aug. 23/97
Paul 2	320532	1	"
Paul 3	320533	1	"
		35 units	

All claims are currently owned by Teck Corporation . Assessment work as described in this report will be used to apply maximum credit for the claims listed above.

Please note that the Bear claim has been reduced in size as a result of a ruling that gave the pre-existing Eholt claim (# 215004) precedence over the Bear claim.

HISTORY

Lode mineralization was first recorded in the Greenwood area near Boundary Falls in 1884 and by 1900 most of the important deposits had been found. Development was stimulated by the completion of a railway and construction of a major smelter at Grand Forks in 1900. Production


Pass Creek
N
CUB 16
CUB 15
CUB 2
CUB 3
PAUL 1
PAUL 2
PAUL 3
CUB 7
CUB 5
CUB 1
BEAR CLAIM
CUB 8
CUB 6
CUB 4
South Pass
Creek
CUB 13
CUB 11
CUB 9
CUB 14
CUB 12
CUB 10
Boldue Lake
3
Prior Creek
TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA
BEAR PROPERTY
CLAIM
LOCATION MAP
0
1000
metres
Fig 2
DATE DRAWN: NOV. 9, 1993
COMPILED BY: G.T.
DRAWN BY: S.A.
SCALE: 1:30,000
JOB No: 1738
NTS No: 82E/2E
DWG. NAME: BER-CLM

from the mines at Phoenix reached a peak delivery in 1913 of more than a million tons of ore. Labour disputes indirectly caused closure of the Grand Forks smelter and many of the mines in 1919.

Large scale open-pit production from the Motherlode and Phoenix orebodies was carried out from the late 1950's until the exhaustion of the Phoenix orebody in 1976.

Published information relative to the immediate claim area is generally lacking. There are a number of old shallow pits, shafts and small trenches with most occurring in variably skarned greenstones (metavolcanics).

GEOLOGY AND MINERALIZATION

There is generally poor outcrop exposure over the claim area, except as exposed along roadcuts or by previous mineral exploration activity (shafts, trenches).

Geologic mapping by Fyles (BCMEMPR: O. F. 1990-25) shows the claims to be underlain by a central area of Knob Hill Group, consisting of greenstone, pillow lava and breccia, amphibolite and minor limestone. The Knob Hill Group is dated at Carboniferous or Permian Age. All non intrusive rocks examined on the claim area fall mainly in the greenstone category. The west side of the claim area is underlain by Jurassic and Cretaceous Nelson Plutonic rocks, primarily quartz diorite and granodiorite. The eastern portion of the claims is underlain by Eocene Age Penticton Group, consisting of dikes, sills and intrusions of syenite, rhyodacite, monzonite and diorite. (Coryell Intrusions)

There is considerable controversy regarding the actual age of mineralized, skarn host rocks on the Bear-Cub property. Although recently mapped as Knob Hill Group, the skarns bear a marked similarity to mineralized skarn zones at the Dead Honda zone, which are reported to occur in rocks of the Brooklyn Formation (Triassic). In ascending order, the Brooklyn Formation can be subdivided into basal sharpstone conglomerate, limestone and andesitic volcanics. It is therefore proposed that mineralized skarn zones on the Bear-Cub claims may in fact be correlatable with the upper unit of the Brooklyn Formation, rather than part of the Knob Hill Group.

All significant sulphide mineralization seen on the Bear-Cub claims was found to occur in variably skarned greenstones, derived from a fine grain andesite protolith, usually in relative proximity to strong fault structures.

Sulphides consist of disseminations and pods of pyrrhotite, pyrite, chalcopyrite and minor localized sphalerite.

Calcsilicate skarns are generally calcite rich with lesser quartz and variable concentrations of garnet (almandine), epidote, chlorite/biotite. Chalcopyrite is concentrated in quartz poor sections and is intimately associated with garnet-epidote-tremolite/actinolite. Increase in gold values are directly proportional to higher chalcopyrite concentrations.

Secondary veinlets within skarn zones in order of abundance are 1. calcite 2. calcite-chalcedony and 3. chalcedony. Chalcedonic veinlets are more prevalent in more sulphide rich zones and are probably an alteration effect of later stage skarning/mineralization processes Geologic mapping, rock sampling and diamond drill sites are represented on Figures # 3, 4 and 5 at the back of this report.

It is important to note the significance of the geochemical signature of surface and drill core samples and their similarity to other skarn deposit geochemistry in the Greenwood camp. Many samples from the 1995 Teck exploration programme are anomalous in such diagnostic elements as Mo, Cu, Zn, Co, As, Sb, Bi, Ag and Au.

PETROGRAPHIC STUDY

At the completion of the drill program, twelve drill core samples were selected for petrographic study. These samples are representative of the different rock types as observed throughout the 1995 drill hole program.

The rock types have been grouped into (A) Skarn, (B) Volcanic to Hypabyssal rocks and (C) Hypabyssal Plutonic rocks.

Samples are numbered by drill hole number as well as depth in hole in metres (e.g. Sample #5, 23.25). and are described in detail in Appendix 7 at the back of this report.

PROSPECTING PROGRAM

On the Bear-Cub property, a belt of skarned greenstones occurs for approximately 1.5 km along a northwesterly trend, extending from South Pass Creek to the area around diamond drill hole 93-BC-06. The overall extent of this zone is not well known due to extensive overburden cover. This skarn belt extends continuously to the south onto the adjoining **Eholt** claims, currently held and explored by Orvana Minerals Corp.

Skarn mineralization on Orvana's "Dead Honda" zone is located approximately 1.2 km south of Teck's "Rambler" showing. Orvana's exploration has focused on a northeast trending structural, mineralized skarn trend which has been followed out along 250 m of strike, but exploration on a more northerly trend towards Teck's "Rambler" zone has not yet been explored by diamond drilling.

During the Teck exploration program, skarn zones on the Bear, Cub 1, and Cub 2 mineral claims were prospected and sampled. Areas around the Rambler workings as well as minor mineralized exposures around drill hole 93-BC-06 were examined and sampled in greatest detail. Sampling locations are shown on Figures 3, 4 and 5 at the back of this report.

Several mineralized skarn zones on the **Eholt** claims were also examined. These zones included the " Dead Honda" zone as well as several trenches on the conspicuous steep sided hill lying between the "Dead Honda" zone and the "Rambler" zone. There appears to be strong lithological continuity between the "Dead Honda" zone and the "Rambler" zone. These two areas may be related by a common structural control and it has been suggested that mineralization is localized along a possible regional thrust fault. It is strongly recommended that future diamond drilling be carried out to test for possible intervening mineralization between these two known zones.

Areas of mineralized skarn around the Rambler showing as well as mineral showings around drill hole 93-BC-06 were tested using a Beep Mat, model BM-IV electromagnetic survey instrument. The instrument was used as a reconnaissance tool to determine the extent of known mineral showings. The Beep Mat instrument discriminates between conductive and magnetic forms of mineralization, but only to shallow depths (< 2m). Numerous localized conductors were located near known workings, but no new mineralized zones were discovered.

A broad magnetic anomaly was found along the main logging road, lying approximately 110 m southeast of the collar of drill hole 93-BC-06. This anomaly lies approximately on line with the assumed strike of a projected mineralized skarn zone lying between the drill hole 93-BC-06 showing area and the Rambler showings area. This area should be further investigated by geophysical and geochemical surveys and eventually by diamond drilling.

DIAMOND DRILL PROGRAM

Diamond drilling was carried out over the Bear claim from June 1 to June 15, 1995. All drilling was of NQ size and totalled 755.4 m in six holes from four separate set-ups. The drilling was carried out by Lone Ranger Diamond Drilling Ltd. of Lumby, B.C. Drill core is stored with one of the original claim owners in Grand Forks, B.C.

Particulars of the 1995 drill program are given as follows:

HOLE NO.	DIP	AZIMUTH	LENGTH (m)
95-B-01	90°	—	75.30
95-B-02	-50°	145°	136.25
95-B-03	-50°	240°	136.25
95-B-04	-50°	205°	106.70
95-B-05	-50°	145°	157.00
95-B-06	-45°	45°	143.90

Drill collars were located using a hip chain, in conjunction with known road locations. Elevations were determined using a Thommen pocket altimeter.

DRILL PROGRAM RESULTS

The 1993 diamond drill program on the Bear property was carried out primarily in an attempt to locate possible large-tonnage skarn style mineralization, at depth. The drill program did not locate skarn zones of economic grade or thickness. However, drill hole 93-BC-06 did intersect a 2.8 m interval of semi-massive pyrite-chalcopyrite assaying 2.2% Cu and 2.2 g/t Au within a 23 m skarn zone.

Of the six drill holes from the 1995 program, three of the holes intersected copper-gold skarn mineralization of promising grade and thickness.

The purpose of the 1995 drill program was to test the area of skarn mineralization in the vicinity of the main "Rambler" shaft. The holes were drilled to determine the extent of the sulphide zone seen at the top of the shaft as well as other showings located within 100 m of the shaft. The drill program was successful in locating mineralized copper-gold zones in three of the holes, but the overall extent or strike of the mineralized skarn zone has yet to be determined.

Diamond drill hole **95-B-01** was drilled vertically on the main access road immediately uphill of the Rambler shaft.The hole was drilled to a depth of 75.3 m and contained intervals of andesitic greenstone with variable degrees of alteration (skarn) and brecciation. Although significant amounts of pyrite were present in brecciated skarn sections, copper and gold values were generally low. This hole also contained two intervals of pink biotite syenite.

Diamond drill hole **95-B-02** was drilled from the same location as hole 95-B-01 and directed at -50° dip towards the Rambler shaft. This hole returned the most significant mineralized interval from the drill program. Assay values for drill hole 95-B-02 are as follows:

Interval (m)	Gold	Copper (%)	Silver
66.1-69.0 (2.9)	518 ppb	0.6	19.5 ppm
72.0-75.0 (3.0)	4.82 g/t	0.96	24.52 g/t
75.0-80.0 (5.0)	360 ppb	0.535	14.0 ppm
80.0-93.5 (13.5)	283 ppb	1556 ppm	2.3 ppm

Mineralization is hosted in fractured/brecciated, calcareous, garnet-epidote-chlorite skarn. The higher grade sections (66.1-80.0 m) contain conspicuous bands, patches and disseminations of mixed pyrite-chalcopyrite which is closely associated with strong skarn alteration. Chalcopyrite appears to have the greatest association with almandine garnet. Skarn alteration persists to the bottom of the hole at 136.25 m, but mineralization content shows a marked decrease at a fault contact at 114.65 m. The main mineralized skarn horizon in this hole appears to be fault bounded, with the upper fault contact at 66.1 m and the lower contact at 114.65 m.

The two flat lying biotite syenite sills that were present in drill hole 95-B-01 were also intersected in drill hole 95-B-02.

Drill hole **95-B-03**, drillled to 136.25 m, was drilled on a westerly azimuth from the main access road, in an attempt to intersect the northerly extension to the mineralized skarn zone intersected in drill hole 95-B-02.

Drill hole #3 was not successful in locating any economic mineralization, but showed a downhole progression of porphyritic rhyodacite (25% of hole), non-mineralized greenstones (40%) and diorite (10%). Four intervals of biotite syenite sill comprised 25% of the hole. The rhyodacite unit at the top of the hole (4.9-32.4 m) contained a strong fault zone from 11.0 to 18.4 m.

Drill hole **95-B-04** was drilled to 106.7 m depth from a previously trenched, gossanous area, 40 m southeast of the Rambler shaft. This hole also attempted to intersect the mineralized skarn zone as intersected in drill hole 95-B-02. This hole was drilled entirely within siliceous, fractured/brecciated greenstones. The extent of skarning and chalcopyrite mineralization was considerably less than that of drill hole #2, but a pronounced zone of brecciated skarn was intersected from 53.1 to 67.0 m with associated chlorite, garnet, carbonate alteration. Within this zone was intersected a band of semi-massive to massive mixed fine grained pyrite-pyrrhotite and minor chalcopyrite from 63.85 to 65.0 (1.15) m. A sample over the interval, 63.7-65.23(1.53)m assayed 1.2% Cu and 1.5 g/t Au. This hole ended in skarn alteration from 97.5-106.7 m, but contained only minor sporadic pyrite. Two intervals of biotite syenite sill made up 20% of the total hole footage.

Drill hole **95-B-05** was drilled from the same set-up as hole #4, and drilled downslope on the same azimuth as drill hole 95-02. The hole was drilled to 157.0 m, with the upper portion in variably fracture and skarned greenstones to 125.0 m depth. The uppermost skarn zone of the hole, from 6.0 to 21.8 m, contained the most significant values of the drill hole, assaying 0.37 g/t Au and 0.3% Cu across 16.0 m. This section was also anomalous in zinc, averaging 1441 ppm Zn.

The lower portion of hole #5 is dominated from 125.0m to 150.8 m by altered porphyritic quartz monzonite. This section is unique in the presence of strongly sericitized plagioclase phenocrysts as well as pervasive replacement of magnetite by hematite. The lowermost portion of the hole, (150.8-157.0 m) is a rhyodacite crystal tuff containing angular fragments of K-feldspar, quartz and plagioclase, several volcanic fragment types and biotite in a cryptocrystalline, slightly to moderately foliated groundmass dominated by sericite.

Drill hole **95-B-06**, the final drill hole of the 1995 exploration program, was drilled to test possible skarn mineralization beneath an old shaft and trench, located approximately 75 m northwest of the Rambler shaft. This hole only contained trace sulphide mineralization and no samples were taken for assay.

Hole # 6 was drilled to 143.9 m depth, with skarned greenstones from the top of the hole to 31.5 m. From 31.5 to 90.3 m the section is dominated by porphyritic rhyodacite, with intervening bands of aphanitic biotite hornfels from 78.9 to 90.3 m. A syenite sill occurs from 54.8 to 65.8 m.

From 90.3 to 110.0 m, hole #6 contains an interval of mottled, hybridized (quartz) diorite, followed by syenite sill (29.2m) to 139.2 m. The hole finished in fresh equigranular hornblende biotite (quartz) diorite.

It can be interpreted from the drill program that a prominent northeast structural trend exists throughout the Rambler showing area. This is also evidenced by a strong fracture set at 040° through the walls of the Rambler shaft. This northeast trend probably explains the general paucity of mineralized skarn zones in drill hole 95-B-04. Drill hole 95-B-04 was drilled parallel or sub-parallel to fault structures, rather than across fault structures. These fault zones may represent relict hydrothermal conduits, which were active during the formation of the mineralized skarn zones. Skarn intensity with associated sulphide mineralization was seen to be strongest in proximity to major fault structures.

Future drilling should be directed to the southwest from the Rambler shaft and drilled on either northwest or southeast azimuths. Drilling should also take into account the presence of a pronounced gully, leading downhill (southerly) from the Rambler shaft towards South Pass Creek. The gully may be the surface expression of possible mineralized fault-skarn zones, which should be investigated by future trenching or diamond drilling programs.

SUMMARY AND RECOMMENDATIONS

Significant concentrations of skarn related copper-gold-silver mineralization were encountered in several diamond drill holes of the 1995 exploration program. Drilling was concentrated in the immediate area of the "Rambler" prospect. During 1993, copper-gold mineralization was encountered in drill hole 93-BC-06, located approximately 900 m northwest of the Rambler shaft.

Orvana Minerals Inc. is presently carrying out exploration on a similar copper-gold skarn zone, located approximately 1.2 km south of the Rambler showing. Potential, therefore, exists between the two properties for a mineralized skarn zone, extending for at least 2.2 km, possibly oriented along a major northerly trending thrust fault.

It is recommended that no further diamond drilling be carried out on the Bear-Cub claims until detailed surface surveys are carried out over areas of greatest mineral potential. This area would extend for approximately 1.5 km between South Pass Creek to the area around drill hole 93-BC-06. Following grid establishment at 100 m line spacings, a program of magnetometer, VLF-EM, soils geochemistry and detailed mapping should be carried out over the grid area.

If these surveys generate favorable anomalies, a further stage of diamond drilling should be considered for the Bear-Cub property. Further drilling will also be contingent upon results from the adjoining Eholt property currently under exploration by Orvana Minerals Inc.

Future drilling should attempt to provide information relating orientation/structural control to the economic grades of skarn mineralization. In particular, there should be drill testing of the intervening skarn zone which is assumed to run continuously for approximately 1.2 km between Teck's "Rambler" zone and Orvana's " Dead Honda" zone. Also, one or two drill holes should be considered to test the intervening area north of the Rambler showings towards drill hole 93-BC-06. These holes would be drilled in an attempt to show continuity of skarn zone mineralization between known mineralized areas.

APPENDIX 1

COST STATEMENT

COST STATEMENT

A.	**Salaries**		
	- G. Thomson (Geologist)	30 days @ $ 250 day	$7,500.00
	- J. Laird (Prospector)	30 days @ $ 200 day	$6,000.00
B.	**Living Costs** (Motel, Meals)		$2,295.30
C.	**Transportation** (Truck Rental, gas)		$2,663.00
D.	**Drilling** (Lone Ranger Diamond Drilling Ltd.)		
	- 755.4 m NQ core @ $ 47.15/m		35,620.18
E.	**Assaying** (Rossbacher Labs)		
	- 110 core and 30 rock samples for Au		
	- geochem. and 30 element ICP analysis;		
	- 31 Au assays, 16 Ag assays, 45 Cu assays, 3 Pt, Pd assays		$2,898.25
F.	**Report Preparation**	10 days @ $ 250 /day	$2,500.00
G.	**Telephone**		$222.54
H.	**Field Supplies**		$761.67
I.	**Shipping**		$72.80
J.	**Beep-Mat Rental**		$640.80
K.	**Petrographic Study** (Vancouver Petrographics)		
	- 12 samples: thin sections and descriptions		$1,500.00
		Total:	$62,776.29

APPENDIX 2

REFERENCES

REFERENCES

Albers D. (1995): Personal communication pertaining to 1995 diamond drill program on Eholt claims by Orvana Minerals Inc.

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Thomson I., Fredericks R. (1993): Report of Geological, Geochemical and Geophysical Exploration Program, Eholt Property, B.C. for Orvana Minerals Inc. (B.C. Assessment Report # 22,933)

APPENDIX 3

CERTIFICATE OF QUALIFICATIONS

CERTIFICATE OF QUALIFICATIONS

Gregory R. Thomson, P. Geo.

I hereby certify that:

1. I graduated from the University of British Columbia in 1970 with a B.Sc. degree in geology.

2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

3. I have worked since graduation as an exploration geologist, mostly in the province of British Columbia.

4. The work described herein was carried out under my direct supervision.

G. R. Thomson, P.Geo.

APPENDIX 4

GEOCHEMICAL METHODS

Jan. 1990.

GEOCHEMICAL ANALYTICAL METHODS CURRENTLY IN USE AT ROSSBACHER LABORATORY LTD.

A. SAMPLE PREPARATION

1. Geochem. Soil and Silt:
   Samples are dried and sifted to minus 80 Mesh, through stainless steel or nylon screens.

2. Geochem. Rock:
   Samples are dried, crushed to minus 1/4 inch, split, and pulverized to minus 100 mesh.

B. METHODS OF ANALYSIS

1. Multi element: (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb, Cd, As):
   0.50 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid. The resulting extract is analyzed by Atomic Absorbtion spectroscopy, using Background Correction where approoriate.

2. Antimony:
   0.50 Gram sample is fused with Ammonium Iodide and dissolved. The resulting solution is extracted into TOPO/MIBK and analyzed by Atomic Absorbtion spectroscopy.

3. Arsenic: (Generation Method)
   0.25 Gram sample is digested with Nitric-Perchloric acid. Arsenic from the solution is converted to arsine, which in turn reacts with silver D.D.C. The resulting solution is analyzed by colorimetry.

4. Barium:
   0.20 Gram sample is repeatedly digested with $HClO_4$-HNO_3 and HF. The solution is analyzed by atomic absorbtion spectroscopy.

5. Biogeochemical:
   Samples are dried and ashed at 550°C. The resulting ash analyzed as in *1. Multielement Analysis.

6. Bismuth:
   0.50 Gram sample is digested with Nitric acid. The The solution is analysed by Atomic absorbtion spectroscopy.

METHODS OF ANALYSIS (CONT'D)

7. **Chromium:**

0.25 Gram sample is fused with Sodium Peroxide. The solution is analyzed by atomic absorbtion spectroscopy.

8. **Fluorine:**

0.50 Gram sample is fused with Carbonate Flux, and dissolved. The solution is analysed for Fluorine by use of an Ion Selective Electrode.

9. **Gold AR/AAS:**

10.0 Gram sample is roasted at 550°C and dissolved in Aqua Regia. The resulting solution is subjected to a MIBK extraction, and the extract is analzed for Gold using Atomic Absorbtion spectroscopy.

9A **Gold FA:**

10.0 Gram sample is fused with appropriate fluxes. and the resulting lead button is cupelled to produce a gold/silver bead. The bead is dissolved in Aqua Regia and analyzed for gold by AAS.

10. **Mercury:**

1.00 Gram sample is digested with Nitric and Sulfuric acids. The solution if analyzed by Atomic Absorbtion spectroscopy, using a cold vapor generation technique.

11. **Partial Extraction and Fe/Mn oxides:**

0.50 Gram sample is extracted using one of the following: hot or cold 0.5 N. HCl, 2.5% E.D.T.A., Ammonium citrate, or other selected organic acids. The solution is analyzed by use of Atomic Absorbtion spectroscopy.

12. **pH:**

An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.

13. **Rapid Silicate Analysis:**

0.10 Gram sample is fused with Lithium Metaborate. and dissolved in HNO_3. The solution is analyzed by Atomic Absorbtion for SiO_2, Al_2O_3, Fe_2O_3, MgO, CaO, Na_2O, K_2O, TiO_2, TiO_2, P_2O_5, and MnO.

14. **Tin:**

0.50 Gram sample is ~~s~~ublimated by fusion with Ammonium Iodide. and dissolved. The resulting solution is extracted into TOPO/MIBK and analysed by atomic absorbtion spectroscopy.

15. Tungsten:

1.00 Gram sample is sintered with a carbonate flux, and dissolved. The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.

16. ICP :

0.5 Gram sample is digested with Aqua Regia, and analyzed using a JOBIN YVON MODEL JY 32 1987 ICP Emission Spectrophotometer for Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, La, Mg, Mo, Mn, Ni, P, Pb, Sb, Si, Sr, Ti, U, V, W, Zn.

APPENDIX 5

GEOCHEMICAL ANALYSES

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: ICP

Certificate: 95062 I
Invoice: 50440
Date Entered: 95-06-09
File Name: TEK95062.I
Page No.: 1

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% SI	PPM W	PPM BE	PPB AU AA
A1	58701	5	371	15	1494	2.7	16	51	769	4.73	89	5	N/A	ND	73	11	7	16	115	1.57	0.10	2	34	1.33	20	0.19	1.28	0.02	0.15	0.03	54	1	60
A1	58702	5	109	12	529	1.0	13	34	1208	3.91	59	5	N/A	ND	138	4	12	1	90	3.25	0.07	1	54	1.03	58	0.14	1.62	0.05	0.15	0.03	32	1	40
A1	58703	9	350	23	473	2.1	16	67	1504	6.11	108	5	N/A	ND	165	6	5	1	80	3.58	0.08	1	43	0.98	42	0.11	1.70	0.02	0.12	0.05	26	1	60
A1	58704	25	529	15	171	2.5	23	50	1509	6.94	120	5	N/A	ND	193	4	11	1	100	3.88	0.09	1	66	1.04	30	0.10	2.01	0.05	0.10	0.05	15	1	70
A1	58705	16	600	23	569	2.8	14	44	998	4.80	109	5	N/A	ND	202	7	6	1	80	3.13	0.10	1	31	0.99	29	0.13	1.99	0.14	0.11	0.05	55	1	50
A1	58706	13	981	23	1009	3.3	22	36	1003	5.19	73	5	N/A	ND	229	9	7	1	78	3.24	0.09	2	46	0.87	40	0.16	2.21	0.20	0.11	0.04	46	1	40
A1	58707	5	1582	24	180	4.8	14	56	1016	6.13	140	5	N/A	ND	122	4	2	1	60	3.80	0.16	4	68	0.55	19	0.07	1.54	0.02	0.10	0.04	17	1	60
A1	58708	4	1412	19	123	7.3	14	36	947	4.80	125	5	N/A	ND	159	2	1	1	55	3.98	0.15	5	79	0.67	29	0.08	1.76	0.05	0.12	0.04	12	1	480
A1	58709	4	591	14	83	1.8	9	43	830	4.86	97	5	N/A	ND	122	1	1	1	39	3.20	0.11	3	69	0.59	16	0.08	1.48	0.05	0.08	0.03	8	1	40
A1	58710	5	541	14	112	1.5	14	39	1236	5.65	92	5	N/A	ND	186	3	3	1	76	4.64	0.09	3	54	1.03	49	0.13	2.03	0.09	0.21	0.04	13	1	20
A1	58711	4	233	19	122	1.0	17	28	1008	4.08	44	5	N/A	ND	269	2	4	23	73	3.50	0.08	1	22	1.00	34	0.11	1.85	0.15	0.15	0.01	12	2	30
A1	58712	4	57	18	137	0.2	20	44	1070	3.95	88	5	N/A	5	165	2	4	17	99	2.15	0.11	2	28	1.50	63	0.25	1.75	0.11	0.18	0.03	15	2	20
A1	58713	4	1010	29	173	2.6	71	29	1328	7.34	113	5	N/A	ND	279	7	17	7	107	4.16	0.07	1	27	1.71	148	0.18	3.42	0.32	0.68	0.05	15	1	60
A1	58714	11	134	18	78	0.8	11	4	719	3.23	68	5	N/A	ND	131	1	8	15	61	2.51	0.04	14	48	0.70	42	0.07	1.27	0.09	0.21	0.03	15	2	30
A1	58715	2	175	24	243	1.0	19	14	1020	4.74	70	5	N/A	ND	316	4	6	10	156	3.26	0.12	4	26	1.69	108	0.16	3.67	0.44	0.35	0.02	24	2	30
A1	58716	10	604	26	358	3.2	31	94	1724	9.15	139	5	N/A	5	188	8	16	2	72	3.90	0.08	2	55	0.86	54	0.09	1.80	0.03	0.18	0.04	23	2	50
A1	58717	10	609	31	357	3.6	35	89	1642	9.52	144	5	N/A	7	188	8	6	17	68	3.68	0.08	1	50	0.92	57	0.08	1.80	0.02	0.16	0.05	20	2	50
A1	58718	9	385	31	312	2.2	27	46	2406	8.34	133	5	N/A	ND	145	10	7	5	100	3.97	0.12	3	38	1.19	43	0.12	2.54	0.01	0.12	0.03	24	2	40
A1	58719	3	182	20	1550	1.0	28	10	1049	3.63	66	5	N/A	ND	164	11	7	8	60	2.60	0.08	1	72	0.90	55	0.11	1.43	0.01	0.06	0.02	48	1	30
A1	58720	7	4063	36	259	10.5	38	58	1442	11.07	125	5	N/A	8	450	13	7	13	77	4.24	0.10	5	58	0.82	40	0.03	2.87	0.03	0.07	0.03	24	3	40
A1	58721	4	10490	18	365	30.4	29	158	1330	8.93	183	5	N/A	ND	205	9	1	12	32	6.70	0.09	3	27	0.36	13	0.02	0.95	0.02	0.02	0.06	9	2	90
A1	58722	4	1280	16	126	4.8	21	27	884	5.37	87	5	N/A	ND	186	3	5	11	50	3.56	0.09	2	55	0.60	36	0.11	1.37	0.03	0.21	0.03	13	1	30
A1	58723	2	794	12	102	3.5	15	25	951	4.39	80	5	N/A	ND	202	2	1	10	69	4.99	0.13	3	70	0.68	56	0.10	1.97	0.10	0.11	0.03	6	1	30
A1	58724	2	1612	11	155	7.2	16	26	837	3.66	108	5	N/A	ND	229	3	1	13	54	4.56	0.20	4	55	0.89	50	0.08	2.17	0.10	0.18	0.04	16	1	30
A1	58725	3	508	15	124	1.5	15	16	740	3.57	93	5	N/A	ND	273	2	1	16	46	3.97	0.18	4	72	0.84	57	0.09	2.00	0.18	0.14	0.06	21	1	30
A1	58726	1	2074	10	196	5.2	12	18	1178	5.03	81	5	N/A	ND	215	3	1	13	46	6.29	0.16	4	73	0.65	15	0.07	1.49	0.15	0.05	0.06	8	1	70
A1	58727	2	1249	26	155	3.7	24	35	1279	6.94	91	5	N/A	ND	221	6	4	10	62	4.62	0.13	4	76	0.87	25	0.10	1.93	0.03	0.08	0.04	21	2	30
A1	58728	3	960	10	141	2.5	11	5	1069	4.04	70		N/A	ND	179	1	1	1	68	5.17	0.16	6	89	0.78	27	0.07	1.92	0.07	0.08	0.01	3	1	10
A1	58729	3	934	14	182	2.9	31	52	1200	7.30	62		N/A	ND	289	2	1	1	58	5.59	0.09	4	56	1.07	33	0.05	2.24	0.08	0.08	0.01	2	1	20
A1	58730	2	810	19	156	2.8	36	110	1839	11.23	132		N/A	ND	367	1	1	6	92	6.73	0.11	3	58	1.49	54	0.05	3.58	0.16	0.10	0.01	6	2	50
A1	58731	13	54	13	58	0.5	11	5	1266	4.00	37		N/A	ND	266	1	1	1	116	5.68	0.12	6	63	1.43	35	0.06	1.83	0.04	0.07	0.01	3	2	5
A1	58732	8	140	10	72	0.4	10	2	1476	4.09	35		N/A	ND	356	1	1	1	127	6.15	0.10	7	54	1.64	31	0.07	2.02	0.03	0.08	0.01	2	2	5
A1	58733	7	62	8	79	0.3	6	2	1548	3.88	13		N/A	ND	441	1	2	8	123	7.66	0.10	13	44	1.14	38	0.06	1.57	0.04	0.10	0.01	1	3	5
A1	58734	13	4379	35	197	12.9	60	98	2038	11.18	115	5	N/A	ND	363	13	4	1	111	6.16	0.11	7	69	1.19	19	0.01	2.63	0.01	0.07	0.05	16	4	580
A1	58735	7	6160	32	289	21.4	61	143	1772	12.21	130	5	N/A	ND	319	15	13	3	86	4.99	0.13	7	66	1.05	21	0.01	2.48	0.01	0.02	0.02	24	4	500
A1	58736	10	1248	11	189	4.0	18	24	1698	5.37	44	5	N/A	ND	428	4	1	1	95	7.72	0.10	16	75	1.36	14	0.01	2.25	0.01	0.32	0.01	3	3	60
A1	58737	18	930	13	154	3.8	31	20	1435	5.03	67	5	N/A	ND	404	3	1	14	91	6.76	0.11	10	60	0.90	19	0.01	1.70	0.01	0.25	0.01	8	3	50
A1	58738	7	7742	10	403	25.8	28	38	1631	8.11	123	5	N/A	ND	299	9	1	5	50	7.12	0.13	4	66	0.85	23	0.02	1.63	0.01	0.10	0.03	10	2	2440
A1	58739	5	9597	15	523	32.4	24	28	1512	7.46	90	5	N/A	ND	229	10	2	1	52	6.11	0.13	2	46	1.02	18	0.04	1.67	0.01	0.08	0.03	13	1	3300
A1	58740	4	4838	25	192	13.8	42	94	1508	9.89	113	5	N/A	ND	245	9	2	5	50	5.26	0.13	3	78	0.83	15	0.03	1.56	0.01	0.01	0.09	15	1	310

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CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: ICP

Certificate: 95062 I
Invoice: 50440
Date Entered: 95-06-09
File Name: TEK95062.I
Page No.: 2

PREFIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% SI	PPM W	PPM BE	PPB AU AA
A1	58741	3	6675	21	231	18.0	42	82	1169	10.09	120	5	N/A	ND	164	8	7	1	42	3.58	0.12	1	74	0.59	14	0.04	1.17	0.01	0.02	0.04	23	1	390
A1	58742	3	4186	36	179	13.2	60	91	1323	11.88	128	5	N/A	ND	148	11	14	1	40	3.65	0.12	1	88	0.66	18	0.04	1.26	0.01	0.01	0.09	20	1	490
A1	58743	4	4807	30	233	11.0	52	62	1543	10.91	118	5	N/A	6	219	10	12	1	52	4.05	0.12	1	57	1.06	16	0.05	1.72	0.01	0.01	0.06	28	1	250
A1	58744	3	1394	16	123	2.8	19	22	1675	6.06	77	5	N/A	ND	283	4	6	1	105	5.74	0.12	2	68	1.56	21	0.07	2.17	0.04	0.05	0.03	11	1	400
A1	58745	3	1229	9	119	1.7	33	15	1807	6.90	66	5	N/A	ND	303	7	1	1	109	6.16	0.14	1	58	1.72	12	0.05	2.18	0.01	0.02	0.04	11	1	320
A1	58746	1	1157	16	98	1.7	36	15	1536	6.23	58	5	N/A	ND	213	3	1	19	97	6.17	0.09	2	54	1.04	14	0.07	1.69	0.02	0.01	0.05	7	2	230
A1	58747	2	1206	5	126	1.6	32	16	2046	6.28	52	5	N/A	ND	293	6	3	9	115	7.14	0.15	2	46	1.26	16	0.05	1.92	0.02	0.01	0.03	1	3	150
A1	58748	2	2647	12	147	3.6	28	16	1632	5.92	68	5	N/A	ND	256	6	1	7	91	6.69	0.16	2	48	1.35	20	0.04	1.52	0.02	0.02	0.03	2	2	320
A1	58749	1	1041	20	94	1.7	24	13	1508	5.36	57	5	N/A	ND	226	3	1	7	85	5.89	0.12	2	53	1.44	12	0.06	1.63	0.01	0.02	0.04	2	2	540
A1	58750	2	1442	26	146	3.8	24	10	1715	5.35	60	5	N/A	ND	266	4	2	5	92	5.34	0.14	2	73	1.68	13	0.07	1.76	0.01	0.02	0.03	8	2	290
A1	58751	2	1340	9	95	3.6	14	11	1726	5.70	53	5	N/A	ND	237	4	1	13	107	6.36	0.13	4	64	1.35	9	0.07	1.76	0.01	0.02	0.04	8	2	300
A1	58752	3	2549	26	107	3.1	72	57	1509	9.28	146	5	N/A	ND	169	10	2	11	96	5.65	0.12	3	92	1.05	13	0.07	1.91	0.01	0.02	0.06	8	2	130
A1	58753	7	1471	5	110	2.2	40	27	1561	7.45	77	5	N/A	ND	322	7	1	8	111	6.63	0.10	6	62	1.08	21	0.03	2.09	0.03	0.12	0.02	7	3	50
A1	58754	3	1338	33	112	2.4	74	42	1328	9.67	115	5	N/A	ND	305	9	1	12	102	5.51	0.11	4	87	0.73	16	0.04	1.99	0.01	0.03	0.03	19	3	100
A1	58755	5	1431	38	88	2.5	88	56	1115	9.63	123	5	N/A	ND	292	8	1	9	70	4.33	0.10	2	61	1.05	12	0.06	1.56	0.01	0.02	0.10	21	2	250
A1	58756	8	862	15	85	1.9	48	24	1122	6.63	112	5	N/A	ND	312	4	6	8	87	4.83	0.14	3	84	1.33	27	0.13	1.47	0.03	0.05	0.08	11	2	60
A1	58757	15	291	18	75	1.0	24	11	1380	4.88	68	5	N/A	ND	445	4	1	2	145	6.02	0.15	3	72	1.62	27	0.15	1.81	0.03	0.06	0.03	8	3	20
A1	58758	9	263	4	82	1.0	28	9	1046	3.40	44	5	N/A	ND	423	1	1	15	97	5.77	0.12	1	47	0.99	29	0.12	1.05	0.02	0.08	0.03	1	2	10
A1	58759	8	460	24	91	1.3	43	22	889	4.28	70	5	N/A	ND	448	2	1	13	101	3.87	0.13	1	56	1.57	20	0.12	1.35	0.03	0.04	0.04	13	2	50
A1	58760	9	1376	19	101	2.1	49	36	1087	6.26	68	5	N/A	ND	416	4	1	12	89	5.39	0.13	2	57	1.12	16	0.11	1.45	0.04	0.03	0.05	7	2	110
A1	58761	16	948	19	112	1.8	56	56	1189	7.25	92	5	N/A	ND	376	6	1	7	101	5.55	0.13	3	93	1.14	23	0.07	1.77	0.04	0.03	0.04	3	3	130
A1	58762	37	790	4	109	2.0	39	17	1113	5.16	55	5	N/A	ND	441	4	1	8	130	7.06	0.15	3	57	1.06	35	0.10	1.51	0.01	0.85	0.06	2	3	100
A1	58763	22	421	20	91	1.0	30	9	835	3.62	64	5	N/A	ND	257	2	3	3	105	5.04	0.15	2	92	0.86	51	0.14	1.37	0.06	0.10	0.04	8	2	30

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350 272 VICTORIA STREET
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Page No.: 3

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM U	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% S1	PPM W	PPM BE	PPB AU AA
A1	JL 95 B-1	14	1410	40	205	3.7	24	98	1499	14.92	157	5	N/A	ND	38	11	13	10	42	1.07	0.07	2	37	0.92	47	0.03	2.03	0.01	0.26	0.02	24	2	assay
A1	JL 95 B-2	11	2265	43	274	8.0	57	94	1042	14.40	143	5	N/A	ND	32	7	10	6	105	0.70	0.12	2	73	0.90	36	0.13	2.38	0.02	0.18	0.01	23	2	assay
A1	JL 95 B-3	21	504	56	179	4.4	95	389	711	23.03	201	5	N/A	ND	9	5	26	27	28	0.14	0.04	1	83	0.30	30	0.01	0.71	0.01	0.04	0.02	17	1	assay
A1	JL 95 B-4	11	4036	76	441	12.7	109	333	912	27.53	99	5	N/A	ND	10	4	29	85	14	0.17	0.04	1	66	0.17	51	0.01	0.35	0.01	0.02	0.06	33	2	assay
A1	JL 95 B-5	1	91360	44	5519	>100	38	96	797	18.78	43	5	N/A	ND	14	48	9	1	16	0.50	0.05	1	45	0.24	26	0.01	0.37	0.01	0.02	0.04	272	2	assay
A1	JL 95 B-6	10	4608	47	491	17.1	86	251	1044	22.73	275	5	N/A	ND	4	4	18	47	16	0.14	0.04	2	71	0.19	35	0.01	0.52	0.01	0.02	0.04	30	1	assay
A1	JL 95 B-7	4	17790	37	1342	48.7	57	393	1075	20.87	96	5	N/A	ND	11	9	19	36	22	0.39	0.06	1	44	0.31	27	0.01	0.54	0.01	0.02	0.03	250	1	assay
A1	JL 95 B-8	5	30629	57	1963	75.2	72	236	1088	23.78	110	5	N/A	ND	21	21	21	39	20	0.41	0.06	1	63	0.30	36	0.01	0.68	0.01	0.02	0.07	147	1	assay
A1	JL 95 B-9	5	27199	64	1853	70.3	73	266	1023	23.70	97	5	N/A	ND	20	28	25	34	19	0.37	0.05	1	49	0.28	36	0.01	0.61	0.01	0.02	0.05	243	1	assay

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To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: Assay

Certificate: 95062 A
Invoice: 50440
Date Entered: 95-06-09
File Name: TEK95062.A
Page No.: 1

PRE FIX	SAMPLE NAME	oz/t Au	oz/t Ag	% Cu
A1	58721		1.00	1.20
A1	58734			0.45
A1	58735		0.65	0.64
A1	58736			0.10
A1	58737			0.09
A1	58738	0.218	0.75	0.88
A1	58739	0.121	0.98	1.04
A1	58740			0.52
A1	58741			0.70
A1	58742			0.42
A1	58743			0.50
A1	58744			0.13
A1	58745			0.11
A1	58746			0.12
A1	58747			0.12
A1	58748			0.28
A1	58749			0.10
A1	58750			0.14
A1	58751			0.15
A1	58752			0.25
A1	58753			0.14
A1	58754			0.14
A1	58755			0.14
A1	58756			0.08
A1	58757			0.04
A1	58758			0.03
A1	58759			0.06
A1	58760			0.13
A1	58761			0.09
A1	58762			0.08
A1	58763			0.04

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CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: Assay

Certificate: 95062 A
Invoice: 50440
Date Entered: 95-06-09
File Name: TEK95062.A
Page No.: 2

PRE FIX	SAMPLE NAME	oz/t Au	oz/t Ag	% Cu
A1	JL 95 B-1	0.032		0.14
A1	JL 95 B-2	0.038		0.20
A1	JL 95 B-3	0.031		0.06
A1	JL 95 B-4	0.012		0.42
A1	JL 95 B-5	0.160	8.10	10.80
A1	JL 95 B-6	0.022	0.60	0.52
A1	JL 95 B-7	0.084	1.54	2.00
A1	JL 95 B-8	0.125	2.50	3.12
A1	JL 95 B-9	0.144	2.30	2.68

CERTIFIED BY :

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: Assay

Certificate: 95067 Pt
Invoice: 50458
Date Entered: 95-07-04
File Name: TEK95067.PT
Page No.: 1

PRE FIX	SAMPLE NAME	g/t Pt	g/t Pd
P	JL95 B-7	<0.003	<0.003
P	JL95 B-8	<0.003	<0.003
P	JL95 B-9	0.005	<0.003

CERTIFIED BY : Rossbach

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
British Columbia, Can. V5B 3N1
Ph:(604)299-6910 Fax:299-6252

To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: ICP

Certificate: 95067
Invoice: 50440
Date Entered: 95-06-21
File Name: TEK95067.I2
Page No.: 1

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% S	PPM W	PPM BE	PPB AU AA
A1	29501	2	180	12	72	1.0	12	35	1047	4.60	48	ND	ND	178	1	1	12	131	3.29	0.06	8	36	1.40	46	0.04	1.72	0.03	0.36	0.01	1	3	20
A1	29502	2	330	2	74	1.0	15	18	971	4.19	34	ND	ND	250	1	1	1	107	4.21	0.07	8	31	1.09	49	0.06	2.03	0.10	0.28	0.01	1	2	10
A1	29503	5	145	5	52	0.8	5	7	1318	4.70	34	ND	ND	164	1	1	1	60	2.58	0.05	13	44	0.91	31	0.01	1.66	0.04	0.20	0.02	1	1	5
A1	29504	5	19	13	50	0.4	3	1	1164	3.64	14	ND	ND	52	1	1	4	17	1.28	0.04	19	46	0.48	64	0.01	1.16	0.04	0.15	0.02	1	1	10
A1	29505	2	214	2	1485	1.4	27	5	2062	4.97	13	ND	ND	238	6	1	1	101	4.26	0.06	4	75	1.45	78	0.14	1.96	0.04	0.24	0.01	1	2	10
A1	29506	3	1220	3	150	4.8	35	18	1877	8.94	68	ND	ND	247	2	1	1	108	4.14	0.11	6	72	1.49	36	0.03	2.58	0.02	0.18	0.01	1	2	60
A1	29507	3	1650	5	212	6.4	39	30	1851	8.45	56	ND	ND	232	2	1	1	111	4.69	0.09	6	61	1.15	63	0.10	2.02	0.05	0.40	0.01	1	2	150
A1	29508	1	620	10	127	4.0	13	10	2235	7.54	46	ND	ND	161	1	1	1	75	4.13	0.07	3	62	1.13	28	0.09	2.18	0.02	0.12	0.01	1	1	50
A1	29509	1	1360	3	186	5.8	7	9	2331	7.77	40	ND	ND	183	2	1	1	69	5.11	0.07	2	39	1.20	25	0.15	2.13	0.02	0.11	0.01	1	1	70
A1	29510	1	590	4	104	2.6	6	7	1757	6.28	33	ND	ND	198	1	1	1	70	4.06	0.07	4	71	0.93	24	0.17	1.77	0.02	0.09	0.01	1	1	30
A1	29511	1	750	2	73	3.2	9	25	1585	6.80	41	ND	ND	181	1	1	1	56	3.77	0.06	2	36	1.03	16	0.14	1.73	0.02	0.05	0.01	1	1	60
A1	29512	1	2280	2	123	6.3	10	21	1805	7.86	33	ND	ND	276	2	1	1	58	5.28	0.09	3	40	1.18	20	0.13	1.84	0.02	0.05	0.01	1	1	140
A1	29514	5	2080	2	128	7.6	24	54	2144	9.16	80	ND	ND	211	2	1	1	88	5.58	0.10	4	37	1.15	26	0.02	2.18	0.03	0.07	0.03	1	2	180
A1	29515	7	755	2	72	2.2	23	25	1684	6.18	66	ND	ND	253	1	1	1	118	5.80	0.13	4	46	1.20	27	0.05	1.81	0.03	0.10	0.01	1	3	110
A1	29516	3	195	2	67	0.8	20	2	1778	5.46	42	ND	ND	273	1	1	1	120	6.25	0.13	5	46	1.39	28	0.05	1.95	0.02	0.10	0.01	1	3	70
A1	29517	1	345	2	80	1.0	23	9	2557	7.75	35	ND	ND	218	2	1	1	128	6.28	0.12	4	41	1.53	37	0.04	2.66	0.03	0.11	0.02	1	3	60
A1	29518	7	480	5	76	1.4	16	10	1622	5.47	56	ND	ND	172	1	1	1	106	4.52	0.13	4	43	1.34	34	0.07	1.88	0.03	0.10	0.01	1	2	40
A1	29519	5	410	4	60	1.4	10	5	1350	4.30	40	ND	ND	263	1	1	1	94	4.69	0.12	6	41	1.20	35	0.06	1.61	0.03	0.15	0.01	1	3	30
A1	29520	4	292	2	55	1.0	13	8	1382	4.91	47	ND	ND	349	1	1	1	105	5.64	0.13	4	37	1.20	30	0.07	1.69	0.03	0.15	0.01	1	3	20
A1	29521	1	1150	3	67	3.0	52	35	1281	7.77	62	ND	ND	323	2	1	1	115	4.78	0.12	1	34	1.77	24	0.08	1.98	0.03	0.08	0.02	1	3	110
A1	29522	27	360	2	56	1.0	17	18	1383	4.74	27	ND	ND	386	1	1	1	98	6.01	0.14	5	50	1.19	32	0.04	1.53	0.03	0.12	0.01	1	2	70
A1	29523	12	1170	2	69	2.2	25	13	1350	5.85	32	ND	ND	370	1	1	1	118	6.15	0.13	4	43	1.46	31	0.05	1.96	0.03	0.12	0.01	1	3	110
A1	29524	1	348	2	46	1.0	4	7	714	3.64	59	ND	ND	180	1	1	1	82	5.67	0.11	1	46	0.49	42	0.08	1.54	0.03	0.15	0.01	1	2	40
A1	29525	1	1110	7	54	1.9	32	71	940	8.45	73	ND	ND	210	1	1	1	67	3.60	0.14	1	51	0.57	22	0.07	1.21	0.02	0.05	0.03	1	1	
A1	29526	5	1310	7	52	2.5	26	54	863	8.09	56	ND	ND	262	2	1	1	48	3.67	0.10	1	100	0.67	20	0.06	1.26	0.02	0.02	0.05	1	1	
A1	29527	2	980	12	34	1.9	42	85	824	10.73	74	ND	ND	307	1	1	1	46	2.85	0.13	1	51	0.75	24	0.05	1.17	0.02	0.01	0.05	1	1	
A1	29528	6	1160	11	42	2.5	44	88	904	11.10	74	ND	ND	297	1	1	1	55	3.29	0.10	2	73	0.86	24	0.07	1.30	0.03	0.01	0.05	1	1	
A1	29529	5	840	2	60	2.2	32	79	1306	9.77	59	ND	ND	236	2	1	1	71	4.95	0.12	4	55	0.76	43	0.06	1.41	0.05	0.13	0.02	1	2	
A1	29530	7	4660	4	2326	21.6	48	100	1232	9.87	81	ND	ND	101	15	1	1	55	2.62	0.07	1	82	0.77	23	0.08	1.51	0.02	0.09	0.02	1	2	560
A1	29531	2	2130	2	1283	10.4	11	21	1593	6.03	41	ND	ND	106	8	1	1	64	4.32	0.07	1	49	1.00	17	0.08	1.70	0.02	0.07	0.01	1	1	340
A1	29532	5	2770	2	1241	14.0	25	64	1556	7.91	62	ND	ND	134	8	1	1	63	4.28	0.07	1	91	1.03	20	0.09	1.87	0.03	0.10	0.01	1	2	280
A1	29533	1	2350	3	930	10.6	14	27	1446	6.37	41	ND	ND	130	7	1	1	51	4.27	0.09	1	56	0.96	16	0.08	1.55	0.02	0.04	0.03	1	1	270
A1	29534	5	2950	7	1198	14.6	13	17	1467	5.84	31	ND	ND	93	7	3	1	58	4.05	0.07	1	91	0.79	13	0.09	1.39	0.01	0.02	0.03	1	1	250
A1	29535	2	2120	6	1038	6.2	12	16	1359	5.37	34	ND	ND	111	7	1	1	49	3.61	0.12	1	66	0.71	11	0.07	1.29	0.01	0.01	0.03	1	1	200
A1	29536	5	1340	7	1680	3.6	17	13	1479	5.79	27	ND	ND	118	9	1	1	52	3.59	0.10	1	98	0.94	17	0.09	1.54	0.02	0.02	0.03	1	1	110
A1	29537	4	3100	3	752	10.2	21	40	1720	7.79	43	ND	ND	237	6	1	1	72	4.91	0.04	1	134	1.33	18	0.06	1.98	0.03	0.04	0.03	1	1	370
A1	29538	2	1080	5	754	13.8	23	46	1166	7.59	35	ND	ND	149	6	10	1	64	3.08	0.04	1	128	0.85	16	0.07	1.53	0.02	0.02	0.03	1	2	450
A1	29539	1	7100	5	2179	27.8	20	40	1125	7.26	22	ND	ND	138	13	1	1	64	2.90	0.04	1	100	0.82	14	0.06	1.43	0.02	0.01	0.03	1	1	890
A1	29540	2	2950	2	1034	10.8	17	23	1794	7.48	56	ND	ND	144	8	1	1	78	4.17	0.06	2	47	1.07	26	0.09	1.77	0.03	0.14	0.01	1	2	340
A1	29541	1	4600	2	496	15.4	7	52	1650	8.28	49	ND	ND	457	3	1	1	71	6.52	0.11	4	45	0.87	29	0.03	1.76	0.03	0.13	0.01	1	3	530

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To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: ICP

Certificate: 95067
Invoice: 50440
Date Entered: 95-06-21
File Name: TEK95067.I2
Page No.: 2

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% S	PPM W	PPM BE	PPB AU AA
A1	29542	1	380	5	186	1.4	17	7	897	4.44	38	ND	ND	173	2	6	1	106	2.16	0.10	1	38	1.43	107	0.25	2.47	0.23	0.54	0.01	1	2	70
A1	29543	1	158	9	70	0.6	2	2	1280	4.03	26	ND	ND	194	1	1	1	92	6.58	0.11	1	39	1.06	35	0.12	1.47	0.04	0.19	0.01	1	1	30
A1	29544	2	3690	3	134	6.6	26	48	1344	8.17	49	ND	ND	381	3	1	1	74	6.00	0.12	4	54	0.86	37	0.05	1.64	0.04	0.10	0.01	1	2	60
A1	29545	3	40	5	38	0.3	1	7	416	2.75	14	ND	ND	151	1	7	11	18	0.82	0.03	22	39	0.28	82	0.01	0.64	0.03	0.34	0.02	1	2	5
A1	29546	2	86	6	20	0.5	1	3	242	1.70	5	ND	ND	131	1	1	14	13	0.48	0.01	14	40	0.13	130	0.01	0.39	0.03	0.36	0.02	1	1	20
A1	29547	2	38	11	16	0.3	1	1	163	1.61	10	ND	ND	148	1	2	6	12	0.24	0.02	20	45	0.07	111	0.01	0.36	0.02	0.40	0.02	1	1	10
A1	29548	3	16	3	24	0.2	1	2	397	1.97	11	ND	ND	98	1	6	23	14	0.48	0.04	26	46	0.14	84	0.01	0.40	0.03	0.34	0.02	1	1	10

CERTIFIED BY : J. Rossbacher

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To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: ICP

Certificate: 95067
Invoice: 50440
Date Entered: 95-06-21
File Name: TEK95067.I2
Page No.: 3

PRE FIX	SAMPLE NAME	PPM MO	PPM CU	PPM PB	PPM ZN	PPM AG	PPM NI	PPM CO	PPM MN	% FE	PPM AS	PPM AU	PPM HG	PPM SR	PPM CD	PPM SB	PPM BI	PPM V	% CA	% P	PPM LA	PPM CR	% MG	PPM BA	% TI	% AL	% NA	% K	% SI	PPM W	PPM BE	PPB AU AA
A1	JL95B10	1	20000	18	1487	>100	47	156	1216	21.71	97	ND	ND	53	9	1	1	32	1.43	0.12	3	40	0.53	41	0.07	1.20	0.03	0.10	0.01	1	2	
A1	JL95B11	1	12000	4	1256	65.0	42	272	1335	19.74	88	ND	ND	34	10	1	1	47	1.79	0.11	3	62	0.51	38	0.10	1.44	0.03	0.10	0.01	1	2	
A1	JL95B12	6	20000	12	1632	>100	47	213	1203	22.68	198	ND	ND	29	12	1	1	43	1.09	0.14	5	46	0.54	46	0.06	1.44	0.03	0.08	0.01	19	2	
A1	JL95B13	4	960	2	75	10.8	18	44	1162	8.41	96	ND	ND	55	2	1	1	78	1.69	0.09	4	80	0.69	51	0.22	2.23	0.05	0.16	0.01	1	2	160
A1	JL95B14	6	520	3	136	13.8	9	7	729	9.90	130	ND	ND	26	1	1	1	70	0.54	0.10	3	55	0.49	58	0.22	1.08	0.04	0.20	0.01	1	2	340
A1	JL95B15	6	510	4	190	5.2	16	34	1309	7.90	86	ND	ND	105	2	1	1	103	1.84	0.09	3	56	1.27	138	0.29	3.26	0.11	0.54	0.01	1	2	100
A1	JL95B16	2	1300	2	126	14.4	18	44	1665	9.84	135	ND	ND	87	2	1	1	80	3.45	0.14	4	54	0.85	50	0.16	2.43	0.04	0.18	0.01	1	2	170
A1	JL95B17	6	534	2	96	4.8	16	32	1311	7.01	84	ND	ND	92	1	1	1	86	2.45	0.11	3	79	0.89	56	0.20	2.53	0.05	0.22	0.01	1	2	50
A1	JL95B18	3	140	11	321	1.3	7	9	974	2.93	56	ND	ND	62	2	1	1	69	1.17	0.12	4	19	0.97	57	0.37	1.79	0.10	0.20	0.01	1	2	30
A1	JL95B19	3	164	4	132	1.8	10	8	1198	4.19	43	ND	ND	135	1	1	1	120	2.12	0.12	5	69	0.89	86	0.30	3.12	0.18	0.48	0.01	1	2	40
A1	JL95B20	5	990	5	72	2.4	88	62	2094	18.25	29	ND	ND	32	1	1	1	98	2.88	0.96	35	45	0.28	63	0.08	1.07	0.14	0.25	0.01	1	4	110
A1	JL95B21	2	1550	2	128	6.4	19	56	937	7.82	49	ND	ND	125	2	1	1	77	3.11	0.14	4	60	0.37	35	0.17	2.15	0.06	0.16	0.01	107	2	200
A1	JL95B22	2	88	16	55	0.8	6	7	402	3.18	8	ND	ND	14	1	1	1	44	0.27	0.04	18	47	0.41	77	0.02	1.06	0.04	0.58	0.01	1	3	5
A1	JL95B23	1	12000	7	710	48.6	6	18	1375	6.56	74	ND	ND	34	7	1	1	44	3.82	0.16	4	100	0.28	32	0.07	1.08	0.03	0.12	0.01	1	2	4100
A1	JL95B24	1	178	3	50	1.6	18	8	759	5.82	40	ND	ND	123	2	1	1	112	1.78	0.18	4	81	0.84	22	0.23	2.04	0.04	0.08	0.01	1	2	140
A1	JL95B25	4	165	3	24	1.3	14	25	280	4.82	20	ND	ND	25	1	1	1	121	0.32	0.07	2	79	0.58	102	0.37	0.87	0.03	0.26	0.01	1	2	30
A1	JL95B26	2	6200	7	210	30.1	75	132	1400	13.96	59	ND	ND	99	2	1	1	71	3.82	0.10	1	34	0.66	39	0.09	1.56	0.03	0.12	0.02	1	2	190
A1	JL95B27	26	82	7	6	0.8	17	10	165	1.66	8	ND	5	7	1	3	1	17	0.43	0.12	2	225	D.05	11	0.01	0.17	0.01	0.07	0.02	1	1	10
A1	JL95B28	3	2350	7	168	5.8	378	894	2173	11.92	192	ND	ND	66	2	1	1	95	6.23	0.07	1	49	0.70	25	0.07	1.66	0.03	0.01	0.07	1	2	530
A1	JL95B29	122	180	2	42	1.4	60	150	1223	9.95	41	ND	ND	52	2	1	1	66	7.50	0.06	1	44	0.29	20	0.07	1.13	0.02	0.02	0.13	1	1	50
A1	JL95B30	2	4000	8	116	28.0	24	95	607	10.85	51	ND	ND	33	2	3	1	38	1.13	0.11	3	51	0.38	29	0.06	0.81	0.02	0.08	0.01	1	1	430
A1																																
A1																																
A1																																
A1																																

CERTIFIED BY : J. Rossbacher

ROSSBACHER LABORATORY LTD.

CERTIFICATE OF ANALYSIS

2225 Springer Ave., Burnaby,
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To : TECK EXPLORATIONS LTD.
350 272 VICTORIA STREET
KAMLOOPS, B.C.

Project: 1738
Type of Analysis: Assay

Certificate: 95067 A
Invoice: 50440
Date Entered: 95-06-26
File Name: TEK95067.A
Page No.: 1

PRE FIX	SAMPLE NAME	oz/t Au	oz/t Ag	% Cu
P	29513	0.045	0.98	1.20
P	58734	0.020		
P	58735	0.016		
P	58740	0.012		
P	58741	0.036		
P	58742	0.012		
P	58743	0.016		
P	29530	0.021		
P	29539	0.024		
P	29541	0.020		
P	29525	0.010		
P	29526	0.008		
P	29527	0.010		
P	29528	0.008		
P	29529	0.004		
P	JL 95 B 10	0.085		2.30
P	JL 95 B 11	0.050		1.54
P	JL 95 B 12	0.125		2.45

CERTIFIED BY : M. Rossbach

APPENDIX 6

DRILL LOGS

TECK EXPLORATION LTD.

HOLE No. 95-B-01

DIAMOND DRILL LOG

OPTIONOR KEMP, HAIRSINE
Project No: 1738
Property: Eholt

NTS	82 E / 2E	DATE: COLLARED	June 1/95	DEPTH	DIP	AZ.	LENGTH:	75.3 m
CLAIM	Bear	: COMPLETED	June 2/95		-90°		DEPTH OF OVB:	3.0 m
ELEVATION	1112 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	0.9 km
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
0-3.0	Overburden (roadbed)															
3.0-5.1	Greenstone: med to drk green, mod fractd, local. brecciation w. calcite matrix, chloritic, calc. microfracts, perv. py(1-2%) as fract. fills/isolated clots, irreg. lower contact					py 1-2%	58701	3.0	5.0	2.0	60	2.7	371		1494	
5.1-10.08	Fragmental greenstone skarn: pale to med green, mottled, siliceous, wkly calcareous, brecciated, perv. grey to buff silic. frags and bands (10-20%), localized dark chlor. bands+/- hem. as minor microfracts and rims, perv., localized clusters of pale brown garnet assoc w. epidote, py. as irreg., perv. clusters, bands and disseminations, w. minor assoc. po., perv. wht calcite as microfract and minor breccia matrix(1-2%), grad. lower cont.				Skarn-wk garnet,epidote	py(po) 2-10%	58702 58703 58704	5.0 6.5 8.0	6.5 8.0 9.5	1.5 1.5 1.5	40 60 70	1.0 2.1 2.5	109 350 529			
10.08-12.0	Greenstone: dark green aphanitic, minor narrow siliceous bands, frags, wk. calcite microfracturing, perv. py as dissem,microfract,clots, cpy trc.					py 1-3%	58705 58706	9.5 11.0	11.0 12.4	1.5 1.4	50 40	2.8 3.3	600 981		 1009	
12.0-18.2	Fragmental cherty greenstone skarn: mottled w. cream bands cht w. intermixed pink-brownish garnet, epid, chlor, py as irreg. clots/bands, 3-8%, trc. cpy assoc w. skarn, non magnetic, wkly calcareous, wk. calcite microfracts		8 cm cht band @50°@ 13.5 m		Skarn-mod-stg garn,epid	py 3-5% cpy trc	58707 58708 58709 58710	12.4 14.0 15.5 17.0	14.0 15.5 17.0 18.95	1.6 1.5 1.5 1.95	60 480 40 20	4.8 7.3 1.8 1.5	1582 1412 591 541			

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
18.2-18.95	Greenstone: drk greeen, aphanitic, py as clusters, bands, dissemin's (2-4%), very minor calcite microfracts, sharp lower contact ~ 60°															
19.95-26.7	Syenite porphyry: 5% euhedral plg phenos, 3-5 mm , evenly distrib, brownish pink groundmass, < 1% fg biotite xls, v. minor calcite microvnlts, greenish chill margins ~ 2o cm at both contacts @ 65°; @ 25.3-25.75, intensive mottled skarn w. strong patches pale brown garnet-chlor-epidote, ~ 1% calcite microfracts +/- hem.		65°													
26.7-59.9	Greenstone: aphanitic, drk grn, mottled, perv. chloritic, wk-mod. fract's, perv wk-mod bands pale bwn garnet w. pale grn (epid) envelopes, perv. dissem py 0.5%, w. minor local clusters/bands asoc. w. garnet bands, perv. wht calcite microfills (~1%), wk hem fract coatings to 29.6 m; semimsv py associat. w. strg garnet-diopside bands @ 43.2-44.0 m				Skarn, wk-mod garnet-epid.	py trc, several 1 cm blebs cpy across 10 cm @ 42 m	58711 58712 58713	26.7 28.2 43.1	28.2 29.85 44.2	1.5 1.65 1.1	30 20 60	1.0 0.2 2.6	233 57 1010			
59.9-60.75	Feldspar porphyry (Transition zone): silkiceous, chlor. dark grey groundmass, scattered cream to pale green euhedral plag. phenos, 1-5 mm (10%) sharp lower contact					py 1%	58714	59.9	60.75	0.85	30	0.8	134			
60.75-73.7	Syenite porphyry: 10-15% scattered subhedral plag. phenos, 2-7 mm , partially chloritized, med pink groundmass, f.g biotite xls, 1-3 mm (3%), minor calcite microfracts-rarely to 1.0 cm width, irreg. sharp lower contact		60°													
73.7-75.3	Greenstone: dark greeu, siliceous, aphanitic, py 1-2% as microfracts, minor calcite microfracts					py 1-2%	58715	73.7	75.3	1.6	30	1.0	175			
75.3	E.O.H.															

TECK EXPLORATION LTD.

HOLE No 95-B-02

DIAMOND DRILL LOG

OPTIONOR KEMP, HAIRSINE
Project No: 1738
Property: Eholt

NTS	82 E/2E	DATE: COLLARED	June 3/95	DEPTH	DIP	AZ.	LENGTH:	136.25
CLAIM	Bear	: COMPLETED	June 5/95		-50°	145°	DEPTH OF OVB:	3.0
ELEVATION	1112 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
0-3.0	Overburden (Roadbed)															
3.0-7.65	Greenstone: dark green, aphanitic, minor grey cht bands/frags, perv. minor py as dissem's and fract fills , minor sporad. garnet-epid bands, fol @ 50° from 7.0-7.65 m, shrp lower contact		cht bed @: 60° 50°		chlor	py 0.5-1%										
7.65-8.5	Porpyry dyke/sill: siliceous, mottled, med-drk gry matrix, euhedral-subhedral plag phenos, 2-7 mm (15%), chlor-calcite microfract fills, also py fract fills, 0.5-1%l, sharp lower contact partially along core axis				silic, chlor	py 0.5-1.0%										
8.5-9.0	Zone of mixed mottled Fp. porphyry w. drk green greenstone w. pyritic microfracts		L. Cont@: 45°			py 1-2%										
9.0-22.55	Greenstone, Chert: 9.0-11.4 fragmental, siliceous, med to drk green w. angular grey to green grey cht frags and disrupted beds, frequent interstitial drk chlor. bands and fract fills, perv clusters and bands of framboidal py and access. po, rare blue chalcedonic fract fills , minor calcite fract. fills				chlor. hem(wk)	py 10-20% localized w. minor access. po	58716 58717	9.0 10.0	10.0 11.5	1.0 1.5	50 50	3.2 3.6	604 609			
	11.4-12.6 Cht breccia-ang. cht frags to 5.0 cm,chlor. matrix, localized py in matrix occas. semimsv, @11.6 semimsv py w. intense red hem, 11.85-12.1, conspic. epidote replacement of cht clasts w. hem. matrix				chlor-hem-epid	py 2-10%	58718	11.5	12.6	1.1	40	2.2	385			
	12.6-22.55 Cht, bedded, grey green, drk green,		Fracts-beds		chlor.	py trc	58719	21.55	22.55	1.0	30	1.0	182		1550	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (*o)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
	locally fragmental, wk garnet-epid bands and patches, minor py (0.5%) as dissem's, patches, 16.2-19.75, mod-strgly fractd, brkn w. chlor fracts and py-chlor fract fills		@: 80-90° to core axis													
22.55-33.0	Syenite porphyry, 10-20% euhed. plag phenos, subhedral,wht,variable replac. by chlor., ~1-2% f.g diss biot., wk. calcite microfracts		U.cont@: 60°													
	26.35-27.65; inclusion band of strongly altered pyritic cht fragmental w. intense chlor., mag patches, sharp contacts with syen.,py 10-20% as irreg. patches and bands w. irreg. po blebs to 3.0 cm assoc. w. py, minor cpy disseminations and bands,; 26.35-26.5, irreg mottled pale grey contact zone, strongly calcareous		Banding@: 45° Sharp irreg L. cont			py 10-20% po 1% Mag 2-5% cpy-minor	58720	26.5	27.65	1.15	40	10.5	4063			
33.0-46.6	Greenstone (Cherty skarn): mod-strg garnet-epid. skarned frag. cht bands and frags, irreg. mottled, irreg patches and dissem py, cpy assoc w. skarning		45° garnet bands		chlor-garn-epid. hem. trc to minor	1-2% py.(cpy) mag. patches w. cpy@: 33.0-33.4	58721 58722 58723 58724 58725 58726 58727 58728 58729 58730	33.0 33.5 35.0 36.5 38.0 39.5 41.0 42.5 44.0 45.5	33.5 35.0 36.5 38.0 39.5 41.0 42.5 44.0 45.5 46.6	0.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.1	90 30 30 30 30 70 30 10 20 50	30.4 4.8 3.5 7.2 1.5 5.2 3.7 2.5 2.9 2.8	1.2% 1280 794 1612 508 2074 1249 960 934 810			
46.6-61.6	Greenstone: drk grn aphanitic, minor cht frags/interbeds, wk calcite microfract fills , py as minor isolated blebs, hem along fract. planes @: 58.85-61.6					py trc										
61.6-66.1	Chert fragmental breccia \ skarn (Fracture zone) marked zone of increased fracturing w. calcite infilling, (~5%), red hem rims along voids and veinlets, local strong epid. alt patches, 10-15 cm, 64.12-64.5, strg fracts @ 10-25°to c.a., broken calcite and fault gouge @: 65.9-66.1				Chlor,calc.hem. epid	py trc	58731 58732 58733	61.6 63.0 64.5	63.0 64.5 66.1	1.4 1.5 1.6	5 5 5	0.5 0.4 0.3	54 140 62			

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
66.1-66.76	Chaotic breccia (Chert fragmental) Zone of mixed calcite, pyrite and cherty clasts, variable to 2 cm, drk grey calc.chlor-cht matrix, py semimsv over last 30 cm, strong slicks					py 10-20% as fg matrix and bands w. minor cpy	58734	66.1	66.75	0.65	580 (0.7g/t)	12.9	4379			
66.76-71.5	66.76-68.8; grey to drk grey cht bands w. dk. green chloritic interbeds, mod-strong calcite veinlets and breccia fillings, intermixed msv-semimsv py bands,patches w. locally strong cpy, minor red hem. cht clast replacement @ 69.0-69.4, local bluish chalcedonic vnlts.				chlor-calc-hem -strong	py 5-20% cpy 2-5%	58735	66.75	69.0	2.25	500 0.55 g/t	21.4	6160			
	68.8-71.5; strongly brecciated (cataclastite) w. intense carbonate-chlorite alt., microfrac'd w. abundant calcite veinlets and matrix fillings. py as isolated clasts, 0.5-1.0 cm, pervasively broken, local red hem. patches				chlor.calc (hem) -intense	py 3-5% as breccia matrix, minor cpy	58736 58737	69.0 70.5	70.5 72.0	1.5 1.5	60 50	4.0 3.8	1248 930			
71.5-79.5	Chert Fragmental Skarn: irreg. cherty bands,frags w. interstitial dk green chlor. bands, patches, broad bands brown- pinkish garnet-epidote skarn with cpy. , pervasive ,repetitive bands of intermixed f.g. py,po, and lesser cpy , bands 10-20 cm, often massive to semimsv, 2-5% calc. vnlt fillings (hairline-0.5cm)				chlor-garnet-epidote-hem-calcite -mod-strong	py,po, cpy as msv bands (10-20% of section)	58738 58739 58740 58741 58742 58743	72.0 73.5 75.0 76.5 77.0 78.5	73.5 75.0 76.5 77.0 78.5 80.0	1.5 1.5 1.5 0.5 1.5 1.5	6.8 g/t 3.8 g/t .37 g/t 1.1 g/t .4 g/t .5 g/t	23.3 g/t 30.5 g/t 13.8 g/t 18.0 g/t 13.2 g/t 11.0 g/t	0.88 % 1.04 % 0.52 % 0.70 % 0.42 % 0.50 %			
79.5-82.9	Greenstone skarn: similar to above section with lesser sulphides, local brecciation, increased chloritized greenstone with lesser siliceous (cht) component, py as minor disseminations, patches and breccia matrix fillings, multiple calcite fracture fills (5-10%), hairline to 0.5 cm, strong hem on fracts w. 5 cm msv py patch @ 82.9-83.3m, local garnet patches				chlor -strong	py 2-3%	58744 58745	80.0 81.5	81.5 83.0	1.5 1.5	400 320	2.8 1.7	0.13 % 0.11 %			
82.9-94.35	Greenstone skarn: perv. strong hem-epid-chlor-garn patches throughout, pale brown garnet patches, locally strong, perv. py patches, bands + dissem's throughout, calc. vnlts to 0.5 cm (2-5%), 3 cm calc vnlt @ 85.8 m, @ 88.92-90.3:- strong fractures subparallel to c.a., broken w.		50°,		Hem-epid-garn-chlor -intense	py+/- cpy, 3-10% as minor patches, vnlts, dissem's	58746 58747 58748 58749 58750	83.0 84.5 86.0 87.5 89.0	84.5 86.0 87.5 89.0 90.5	1.5 1.5 1.5 1.5 1.5	230 150 320 540 290	1.7 1.6 3.6 1.7 3.8	0.12% 0.12% 0.28% 0.10% 0.14%			

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
	hem and coarse calcite along fracture planes, @ 87.82-90.2:- mod to strong brecciation w. frags subangular to 2.0 cm						58751 58752 58753	90.5 92.0 93.5	92.0 93.5 94.35	1.5 1.5 0.85	300 130 50	3.6 3.1 2.2	0.15% 0.25% 0.14%			
94.35-102.15	Syenite porphyry: chilled green grey upper margin @ 94.35-94.75 (sharp), plag phenos, subhedral to 5 mm, (20%) pervasively chloritized,brown pink groundmass, minor calc,chlor vnlts, f.g. biotite, 3-5%, chilled l.cont, irreg. sharp		U.C. @ 40°													
102.15-105.8	Chert fragmental skarn: dark green chlor. bands w. grey cherty interbeds, bands, patches, dissem f.g. py w. access. cpy, mottled overall , strong chlor-calc. on fracts				garnet-chlor -strong	py 10-25% (cpy)	58754 58755	102.15 103.7	103.7 105.0	1.55 1.3	100 250	2.4 2.5	0.14 % 0.14 %			
105.8-114.65	Greenstone skarn: pale to drk grn cht locally fragmental w. drk. green interstitial chlorite, perv. pinkish brown garnet-epidote-chlorite patches,bands, 1-2% calcite vnlts, 5cm calc. band @ 108.0 m w. brecciation, minor dissem py, locally to bands,patches, 10-30% semimsv py @ 111.8-113.2 m, increased calcite veinlets and chlor. alt w. assoc. incresed py+/-cpy @ 111.7-114.65m, intense fractures, brecciation w. strong calc., chlor., py in breccia gouge matrix @ 114.32-114.65 m, local hem on fracture planes/slips, abrupt drop in sulphide content at 114.65 (fault contact)		Lcont 45°		garn-chlor-epid -strong	py~1%,trc cpy semimsv diss py @ 111.8-113.2 m	58756 58757 58758 58759 58760 58761 58762	105.0 106.5 108.0 109.5 111.0 112.5 114.0	106.5 108.0 109.5 111.0 112.5 114.0 114.65	1.5 1.5 1.5 1.5 1.5 1.5 0.65	60 20 10 50 110 130 100	1.9 1.0 1.0 1.3 2.1 1.8 2.0	862 291 263 460 1376 948 790			
114.65-136.25	Greenstone skarn: pale to med. green, mottled w. perv. garnet-chlor-epidote patches, local brecciation/fracturing, trc py throughout section w. minor local. patches, increased chlorite alt and py patches and strong red hem on fracts @ 133.2-135.9 m.				garnet-chlor-epid -mod.	py -trc	58763	114.65	116.0	1.35	30	1.0	421			
136.25	E.O.H.															

TECK EXPLORATION LTD.

HOLE No. 95-B-03

DIAMOND DRILL LOG

OPTIONOR KEMP, HAIRSINE
Project No: 1738
Property: Eholt

NTS	82E/2E	DATE: COLLARED	June 6/95	DEPTH	DIP	AZ.	LENGTH:	126.25 m
CLAIM	Bear	: COMPLETED	June 8/95		-50°	240°	DEPTH OF OVB:	4.9 m
ELEVATION	1114 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
0-4.9	Overburden (Roadbed)															
4.9-11.0	Feldspar porphyry (Rhyodacite): greenish grey, siliceous, broken w. limonitic fract. coatings. scattered euhedral plag phenos up to 1.0 cm (5-10% phenos), partial chlor. alt of plag, localized brecciation w. chlor., py matrix				chlor-(mod)	py-trc										
11.0-18.36	Fault zone (rhyodacite): zone of strongly broken, altered porphyry, intense chlor-calcite development, pervasive cataclastite w. localized crushed/gouge zones, fract. planes @ 30-50° to core axis.				chlor-calcite -intense	py. trc	29501	11.0	13.0	2.0	20	1.0	180			
							29502	13.0	15.0	2.0	10	1.0	330			
							29503	15.0	17.0	2.0	5	0.8	145			
							29504	17.0	13.5	1.5	10	0.4	19			
18.36-31.4	Feldspar porphyry (rhyodacite): mixed assemblage of white to pinkish (potassic) alt. plag. phenos, euhedral phenos up to 1.0 cm ,crowded texture, grey groundmass, scattered labradorite xls, @ 23.2-23.4 m drk f.g greenstone inclusion w. 10 cm cherty frag @ 24.1-25.95: fine grain dark greenish grey chill zone, vague f.g. scattered plag. phenos, possible altered siliceous tuff.				chlor- mainly as microfract. fills and minor wk. breccia matrix fills	py. trc										
31.4-32.4	Gradational chill margin zone: dark f.g. vague plag phenos (as above @ 24.1-25.95), strongly chloritized @ 32.0-32.4		L. cont. sharp @ 90°													

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
32.4-38.38	Syenite porphyry: brownish pink groundmass, subhedral cream plag. phenos to 7 mm (5-10%), minor sporadic potassic bands, 3-4 cm, conspic. alt. of plag. phenos (chloritized) @: 34.2-35.5, f.g. biotite in groundmass, greenish chill margins with chlor. alt phenos (50 cm -top, 60 cm bottom)	°	L. cont. sharp @: 90													
38.38-43.55	Greenstone: aphanitic, dark green, v. minor calcite veinlets, pervasive fract. fill. disseminations and patches of pyrite					py. 1-2%										
43.55-44.65	Syenite porphyry : brown to brownish pink, scattered subhedral plag phenos, pervasive potassic/chlor.replacmnts, gradational contacts, weakly brecciated at upper contact (20 cm) w. calcte matrix.		Sharp L. cont @: 70°													
44.6-82.0	Greenstone (cherty): aphanitic, dark grey green , very minor calcite vnlts, minor pale green alt. patches and spots, perv. localized breccia zones w. calcite matrix filling, very minor wk. localized garnet patches.					py. trc.										
82.0-103.5	Syenite porphyry: sharp irregular u. contact, 10% subhedral plag phenos, 2-10 mm , pink biotiferous matrix, minor calcite fract. fills															
103.5-106.4	Greenstone : cherty, fragmental, varied cream to pale green rounded frags, 1-10 cm w. chlor matrix		L. cont @: 30°			py-trc to 1%										
106.4-110.35	(Quartz) Diorite: f.g-m.g , mottled, grey, perv. wk. chlor-epid alt, wk perv calcite vnlts, non-magnetic				chlor-epid (wk)											
110.35-121.5	Greenstone (cherty): aphanitic, dark grey green, strongly fractured w. localized brecciation @: 116.3-118.2 m, fract's strongly chloritic w. calcite in matrix					py- trc										
121.5-128.2	Syenite porphyry: as above @: 82.0-103.5, upper and lower contacts @: 60°, 5 cm magnetite band @: 128.15 m		Contacts@: 60°													

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
128.2-136.25	(Quartz) Diorite: fresh, med. grain, 15% pxn phenos, 1-2 mm	U. cont @ 60°														
136.25	E.O.H.															

TECK EXPLORATION LTD.

HOLE 95-B-04

DIAMOND DRILL LOG

OPTIONOR KEMP, HAIRSINE
Project No: 1738
Property: Eholt

NTS	82E/2E	DATE: COLLARED	June 8/95	DEPTH	DIP	AZ.	LENGTH:	106.7 m
CLAIM	Bear	: COMPLETED	June 10/95		-50°	205°	DEPTH OF OVB:	3.0 m
ELEVATION	1102 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
0-3.0	Overburden															
3.0-11.4	Greenstone: (Chert fragmental), grey green, irreg. grey green, pink angular to sub-ang. frags. 1-2 cm occasionally to 5 cm, minor carb. vnlts, chloritized mafics 1-2% (~5%), grad. l. contact					py-trc										
11.4-20.9	Greenstone: grey green, aphanitic, minor hem. along fract's, minor calcite vnlts, cherty frags, occas. banded.															
20.9-36.5	Greenstone: interbedded cherty nfragmental and tuffaceous greenstone, med to dark grey green, 70% fragmental, 30% tuffaceous greenstone, gradationally interbedded, fragmental sections contain 1-2% diss. py, minor hem. on fracts, w. minor calcite vnlts.					py-trc to 2%										
36.5-46.6	Syenite porphyry: brownish pink matrix w. f.g. biotite, subhedral plag. phenes, 10%, 1-5 mm, irreg. brecciated u. cont w. calcite matrix, 8 cm @ 50° to core axis, v. minor calc. vnlts.															
46.6-49.8	Interbedded cherty fragmental and tuffaceous greenstone (as above @ 20.9-36.5 m)															
49.8-53.1	Calcareous chert fragmemtal: light to med grey, finely ground fragmental/breccia w. cherty frags, angular, not> 1 cm, drk green chlor-calc. matrix, interbedded calcareus tuff band w. localized py. patches @ 52.0-52.45 m., minor calc. vnlts			carb-chlor -strong			29505	52.0	53.64	1.64	10	1.4	214		1485	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
53.1-63.85	Greenstone (skarn breccia/fracture zone): zone of intensely fractured and brecciated cherty greenstone w. mixed chloritic bands, patches and matrix fillings, strong calcite development in matrix, sporadic brown garnet patches, 10-20 cm, perv. calc. microvnlts, pronounced fracrure @ 53.64-54.4 m, parallel to subparallel to c.axis, w. intense chlor-calc-py, slickensides throughout fract'd section, intense fault breccia @ 54.4-55.0 w. calc-chlor-py as matrix w. finely ground cherty frags. to 1-3 cm, subangular, majority of section contains irreg. patches of chloritized, garnet alt silic frags w. minor localized calcite matrix breccia (5-10 cm sections), perv. sporadic py/po bands/patches with strong chlor-garnet alt. often w. minor hem, cpy		Sharp L. cont			py,po(cpy) 1-2%	29506 29507 29508 29509 29510 29511 29512	53.64 55.0 56.5 58.0 59.5 61.0 62.5	55.0 56.5 58.0 59.5 61.0 62.5 63.7	1.36 1.5 1.5 1.5 1.5 1.5 1.2	60 150 50 70 30 60 140	4.8 6.4 4.0 5.8 2.6 3.2 6.3	1220 1650 620 1360 590 750 2280			
63.85-65.0	Massive sulphide: f.g msv py,po,cpy, skarn component~5%, conspic. minor hairline -2 mm vnlts bluish, banded chalcedony, hem microvnlts, minor calcite vnlts.					Mixed msv py,po,cpy (80%)	29513	63 7	65.23	1.53	0.045 oz/t	0.98 oz/t	1.20 %			
65.0-65.4	Greenstone (chty fragmental): continuation of above sulphide zone w. 4 cm msv py,po,cpy sulphide band @ 65.1 m , bluish chalcedoniv vnlt crosscuts sulphide band			50°			29514	65.23	67.0	1.77	180	7.6	2080			
65.4-66.95	Fault breccia: dark green, strongly developed, calcareous w. green grey cht frags, variable 1-5 cm, angular, mainly chloritic matrix, ~30% w. localized py. disseminations, minor hem., calcite as minor microvnlts, 1 cm calc. vnlt @ 65.6 @25° to c.a.		L.cont@ 30°			py 3-5% cpy trc.										
66.95-75.75	Cherty to tuffaceous greenstone: grey green to drk green, generally fractured, fragmental, intense chlor-calc-hem alt, perv. hem,calc microvnlts, strongly broken @ 69.3-69.85 , zone of alternating gouge (chlor-calc-py) and breccia @ 71.0-74.8(fault contact), drk green gouge @ 71.0-71.25, 71.6(5cm), 71.95-72.35, 73.9-74.8., coarse clear calcite xls @ 74.3 m (brkn vn)				Calcite-chlor-hem -strong		29515 29516 29517 29518 29519 29520	67.0 68.5 70.0 71.5 73.0 74.5	68.5 70.0 71.5 73.0 74.5 76.0	1.5 1.5 1.5 1.5 1.5 1.5	110 70 60 40 30 20	2.2 0.8 1.0 1.4 1.4 1.0	755 195 345 480 410 292			

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
75.75-77.2	Greenstone: drk green (chlor.), msv. to semimsv f.g. py throughout (60-80%), v. minor calc. vnlts, weakly fract'd.					py, 70-80%	29521	76.0	77.5	1.5	110	3.0	1150			
77.2-81.4	Greenstone: siliceous, grey green, minor local crackle breccia, minor calcite veinlets to 2 mm, occas. w. hem. selvages., v. wk. sporadic garnet patches				chlor-wk	py-trc										
81.4-92.45	Syenite porphyry: brownish pink, f.g. biotite matrix, plag. phenos, 10%, subhedral, locally chloritized		U. cont 55°													
92.45-97.5	Greenstone (Fault zone): strongly broken, fractured w. mod-strong calcite veinlets, locally 10-15 cm, generally hairline to 3 mm., hem., calc. strong along fract's, strongly developed hem. slickensides		Fracts 0-20° to c.a.		calc-hem-chlor -intense	py trc in minor fract. fills	29522 29523 29524	92.85 95.0 96.5	95.0 96.5 97.5	2.15 1.5 1.0	70 110 40	1.0 2.2 1.0	360 1170 348			
97.5-106.7	Greenstone (Skarn): strong bands pinkish brown garnet to ~ 101.4 m w. minor sporadic epid. patches, v. minor calc. vnlts, weaker skarning Pale to drk green) @ 101.4-106.7 w. minor localized breccia bands, 10-20 cm, @ 102.8-103.3 minor fract/matrix fills of bluish chalcedonic (banded) veinlets / blebs				garnet-chlor-epid -modto strong trc. hem.	py-trc to minor dissem's /patches										
106.7	E.O.H.															

TECK EXPLORATION LTD.

HOLE No. 95-B-05

DIAMOND DRILL LOG

OPTIONOR	KEMP, HAIRSINE
Project No:	1738
Property:	Eholt

NTS	82E/2E	DATE: COLLARED	June 10/195	DEPTH	DIP	AZ.	LENGTH:	157.0 m
CLAIM	Bear	: COMPLETED	June 12/95		-50°	145°	DEPTH OF OVB:	1.8 m
ELEVATION	1102 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH			STRUCTURE			METALLIC	SAMPLE DATA				RESULTS					
(metres)	DESCRIPTION	REC.			ALTERATION	MINERALS					Au	Ag	Cu	Pb	Zn	
FROM/TO		%	CONTACT	VEINS		(%)	No.	FROM	TO	LENGTH	ppb	ppm	ppm	ppm	ppm	
0-1.8	Overburden															
1.8-21.1	Greenstone (Fragmental skarn): highly mottled. , zone of irregular bands. patches of garnet-chlor alt. w. assoc. sporadic py,cpy patches. v. minor sporadic hem. patches/narrow bands, minor calcite as fract's / localized matrix fillings. bluish banded chalcedonic matrix fillings @ 14.6, 16.3-16.5 m.				garnet-chlor -strong	py, cpy, 1-3%	29530	6.0	7.5	1.5	560(.021	21.6	4660		2326	
							29531	7.5	8.5	1.0	340	10.4	2130		1283	
							29532	8.5	10.0	1.5	280	14.0	2770		1241	
							29533	10.0	11.5	1.5	270	10.6	2350		930	
							29534	11.5	13.0	1.5	250	14.6	2950		1198	
							29535	13.0	14.5	1.5	200	6.2	2120		1038	
							29536	14.5	16.0	1.5	110	3.6	1340		1680	
							29537	16.0	17.5	1.5	370	10.2	3100		752	
							29538	17.5	19.0	1.5	450	13.8	1080		754	
							29539	19.0	20.5	1.5	890(.024	27.8	7100		2179	
							29540	20.5	22.0	1.5	340	10.8	2950		1034	
21.1-21.8	Fault zone: broken dark (chlor.) greenstone and cht frags to 5 cm		30° fracts		chlor-strong hem-minor	py, 1-2% in fract fills										
21.8-33.0	Greenstone: med drk grey, aphanitic, wkly frac'd, ~ 70° to c.a., 1-2% chlor. mafics, 1-3 mm, (3%), v. minor hairline calcite vnlts, trc. hem w. minor chlor. alt bands, 1-5 cm, 1-3 mm cpy vnlts @ 32.95 m		U. cont w. 1 cm calc. vnlt @ 30°			py. trc										
33.0-39.15	Syenite porphyry: brownish pink groundmass. f.g. bio. throughout groundmass. subhedral wht plag phenos to 7 mm (10%). trc. calc. vnlts.		U. cont 40°													

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
39.15-39.72	Chert fragmental: disrupted cht bands w . intermixed garnet-chlor bands, 10 cm semimsv py @ u. cont (39.15-39.2		u.. cont ~70°			py, 3-5%, trc cpy	29541	39.15	39.7	0.55	530	15.4	4600		496	
39.72-51.0	Greenstone: dark gren, aphanitic, perv. py(cpy) as dissem., local small patches, vnlts, minor calc. vnlts, minor narrow sporadic garnet bands, wk, local hem. along calc vnlt selvages, hem along fract's @ 48.0-51.0 m		U.cont w. 0.5 cm calc vnlt, 20-30°			py+/- cpy 0.5-1%	29542	45.0	47.0	2.0	70	1.4	380			
51.15-52.4	Fracture/Breccia Zone: pale green cht, highly dissected by hairline -3 mm calcite, close spaced hem vnlts, intense calcite vn. brecciation across 25 cm at upper contact, sporadic minor garnet bands				chlor-calc (strong to intense), hem - wk.	py trc.	29543	51.0	52.7	1.7	30	0.6	158			
52.4-82.85	Greenstone (Skarn):pale green w. perv. wk. - mod garnet-epid. bands, 1-10 cm, zones of local brecciation, 0.5-1.0 m, @ 59.9-60.32, 10-15% py. w. strong garnet bands, @ 61.25-61.5, semimsv py. w. strong chlor. alt.				garnet+/- epid. wk-mod, chlor.- wk	trc py assoc. w. skarn										
82.85-89.2	Pyritic chloritic tuff: dark green, strongly chloritic, sporadic calcite vnlts, 1-2 mm up to 2.0 cm., minor sporadic chalcedonic vnlts (banded), calcite vnlts often lined w.ith f.g amber garnet, sporadic red-brown garnet bands, diffuse/distinct, ~ 1 cm, often py associated, entire section contains 10-20% f.g. py as fracture coatings, blebs, disseminations, veinlets and irregular masses, po(~1%) occurs w. py. @ 88.5-89.2 m				chlor- intense	py, 10-20% po, 1% @ 88.5-89.2	29525 29526 29527 29528 29529	82.85 84.0 85.5 87.0 88.5	84.0 85.5 87.0 88.5 89.7	1.15 1.5 1.5 1.5 1.2	.01 oz .008 " .01 " .008 " .004 "	1.9 2.5 1.9 2.5 2.2	1110 1310 980 1160 840			
89.2-107.55	Syenite porphyry: gradat. pinkish green chill zone w. mottling of plag phenos from 89.2-90.2 m, dark to pale green cht frag. @ 89.27-89.4 m w. indistinct contacts, brownish pink groundmass w. perv. f.g. biotite, minor local chloritic fract. sfcs, minor calcite fracts @ 70°, plag phenos up to 1.0 cm (10%)															

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
107.55-115.4	Greenstone (Skarn): pervasive irregular bands .patches, light to dark green w. pale brown garnet, perv. calcite vnlts w. downsection increase in thickness and vn density, ~ 5% calcite vnlts at irreg. angles @ 110.1-113.4 m., minor local py as dissem's/patches, 20 cm seminisv py band @ 111.1-111.3 w. one 2mm cpy bleb, 10-20% semimsv py. bands @ 112.44-112.9 m, mixed 2-3 cm msv. py,cpy band @ 112.9, trc. hem. on fract"s			10-20°,	garnet-chlor -mod-strong	py trc (except as noted)	29544	111.0	112.94	1.94	60	6.6	3690			
115.4-117.65	Greenstone: med to drk green, continuation of above w. little or no skarn alt., minor hem w . calc. fillings/ fract. planes					py trc.										
117.65-121.35	Monzonite porphyry: mottled, green and pink plag phenos,3-5 mm. subhedral, crowded, perv. potassic alteration of plag., green chloritic-sericitic groundmass, perv. microfracturing w. py-chlor hairline fillings, mod to intense perv. hem alt @ 120.3-121.35, f.g. breccia $ 120.7-121.25 w. intense hem alt.				potassic, hem - chlor-sreic (wk-strong)	py trc										
121.35-124.95	Greenstone: chloritic, siliceous, med grey green, scattered f.g. vague plag phenos, 1-2 mm, wk-mod microfracts w. perv. hem on fracts, intense hem alt @ 124.5-124.95 m															
124.95-129.4	Monzonite porphyry: intesely mottled, altered with almost complete sericitization (apple green) and potassic alt. of plag phenos, many plag phenos show partial alt. w.seric. cores, phenos 3-5 mm , crowded, entire section has strong hem.alt, possibly masking extensive potassic alt. plag phenos are subhedral, indistinct						29545	128.42	129.42	1.0	5	0.3	40			
129.4-133.2	Syenite porphyry: brownish pink groundmass w. f.g. biotite, 10% plag phenos, wht, to 7 mm, subhedral, lower contact contains irreg sharp contact with inclusions of hem. alt plag porph as part of greenish chill margin		U.cont@ 50°w. 10 cm chill margin													

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
133.2-143.6	Monzonite porphyry : continuation of above zone @ 124.95-129.4 m, perv. sericite, potassic alt. of subhedral plag phenos, overall brick red hem alt w. apple green (Ser), pink (potassic) alt.of plag phenos, crowded phenos, 2-5 m, hem,seric developed along fract's, trc. f.g diss mag., py						29546 29547 29548	134.2 137.4 142.5	135.2 138.4 143.5	1.0 1.0 1.0	20 10 10	0.5 0.3 0.2	86 38 16			
143.6-146.7	Syenite porphyry: broken, fract'd w. minor calcite vnlts @ 50° to core axis, minor brown segregation bands, plag phenos perv. chloritized															
146.7-147.83	Monzonite porphyry: f.g crowded plag phenos, 1 mm , pale green chloritic, calcareous groundmass, brecciated over last 30 cm, @ 147.13-147.36, inclusion of hem. monz. porph with inner core of 7 cm pale green cherty tuff w. scattered angular qtz frags, 3-5 mm															
147.83-150.8	Syenite porphyry: as described above, broken along chlor. fractures, no calc. veining, greenish tinge lower contact zone, 30 cm															
150.8-157.97	Rhyodacite crystal ash tuff: crowded, susubhedral wht plag phenos, 1-2 mm, up to 3-5 mm, dark grey groundmass, mod. brkn, @ 152.8-153.2, 153.8-154.0; bands of dark, aphanitic, soapy serpentine?		Serp.? band @ 15° to c.a.													
157.97	E.O.H.															

TECK EXPLORATION LTD.

HOLE No. 95-B-06

DIAMOND DRILL LOG

OPTIONOR KEMP, HAIRSINE
Project No: 1738
Property: Eholt

NTS	82 E/2E	DATE: COLLARED	June 14/95	DEPTH	DIP	AZ.	LENGTH:	143.9 m
CLAIM	Bear	: COMPLETED	June 15/95		-45°	045°	DEPTH OF OVB:	2.4 m
ELEVATION	1122 m	: LOGGED					CASING REMAINING:	
NORTHING		LOGGED BY:	G.T.				WATERLINE LENGTH:	
EASTING		CORE SIZE:	NQ				PROBLEMS:	

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	
0-2.4	Overburen															
2.4-19.2	Greenstone (Skarn): cherty, pale -drk green, mottled, moderately fragmented, perv. sporadic pinkish brown garnet patches, minor local brecciation to 5.0 cm, w. calcite matrix, sporad. py. blebs and assoc. alt patches, minor sporadic epidote patch/ clast replacements				Garnet-chlor -mod to strong	py, 1%, cpy trc										
19.2-31.54	Greenstone (Skarn): purple, green cherty, banded, perv. microfract's, often w. displacements, wk-mod. narrow garnet bands, trc py as minor dissem/patches, calcite filled microfract's, local brecciation@ 28.66-29.48- mottled fp porph w. gradat. cotacts, plag phenos, subhedral, 2-5 mm, wk potassic alt		sharp l. cont.~ 30° w. semimsv py,trc cpy across 15 cm													
31.54-54.77	Rhyodacite porphyry: , pale green to grey groundmass, plag phenos, 2-5 mm, subhedral, cream colored, weakly mottled, 20-40%: srong chlor. microvnlts @ 53.64-54.77		Sharp u. cont @ 70°													
	34.05-34.52; chlor-garn skarn w. distinct hem. spots				garn-chlor-hem -mod-strong	py trc										
	41.53-42.3; chlor-garn skarn				chlor-garn (mod) hem (wk)	py,1-2% cpy trc										
	45.78-48.96; chlor. u.cont @ 0-20°, local ang. buff frags. to 3.0 cm, minor hem patches, local				chlor (strg) w.	py 1%,trc										

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
	py bands/patches, rarely w. cpy in garnet 50.86-52.1; grey cht, wk skarn, local breccia				mod. garn w. hem patches /fract. fills	cpy py 1% as patches or dissemin's										
54.77-65.84	Syenite porphyry: greenish brown u. and l. cont chill zones (30 cm, 40 cm resp.), brownish pink groundmass w. f.g. biotite, 5-10% subhedral plag. phenos, 2-7 mm		Sharp u. cont @ 30°, l. cont @ 40°													
65.84-74.3	Rhyodacite porphyry: dark grey matrix, light grey-buff subhedral phenos, 1-6 mm				chlor-(wk)	py trc										
74.3-78.9	Greenstone: drk grey, green, aphanitic, brecciated contact to 74.7 m w. porphyry and calcite matrix filling		Sharp l.cont @ 40°		chlor (wk)	py -trc										
78.9-90.3	Rhyodacite, Biotite hornfels: - zone of variably mixed greenish brown , aphanitic biotite hornfels in sharp contact w, grey mottled rhyodacite, gradual downsection decrease in hornfels component, porph is mottled w. crowded euhedral plag phenos to 6 mm (dark grey groundmass w. light grey phenos), hornfels contains minor sporad. dissem. py.					py trc										
90.3-110.0	Rhyodacite: grey green aphanitic to med, grain, mottled, locally brecciated w. sporadic patches of dissem. py. , f.g-m.g grey intrusive texture groundmass, w. variable pyroxene phenos, chlor spots and patches, minor skarn bands (this section possibly represents a zone of mixing between rhyodacite and underlying diorite) 96.1-98.6; sporadic chlor. slip sfcs 96.3-101.0; localized narrow breccia zones w. magnetite in matrix 105.0-110.0; section has 10-20% fine angular				chlor (wk)	py trc, locally to 1-2%										

DEPTH (metres) FROM/TO	DESCRIPTION	REC. %	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS					
			CONTACT	VEINS			No.	FROM	TO	LENGTH	Au	Ag	Cu	Pb	Zn	
	buff chert frags. to 1.0 cm w. accompanying wk-mod. chlor-py alt.															
110.0-139.22	Syenite porphyry: brown pink groundmass, w. f.g biotite, no calcite veining, plag phenos, subhedral, 2-7 mm, 10%, corroded lower contact															
139.22-143.86	(Quartz) Diorite: med grey groundmass , qtz,plag., 20% pxn phenos, 1-3 mm, equigranular, fresh															
143.86	E.O.H.															

APPENDIX 7

PETROGRAPHIC STUDY

Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V3A 4P9
PHONE (604) 888-1323 • FAX (604) 888-3642

Report # 950631 for:

Greg Thomson,
Teck Exploration Ltd.,
200 Burrard Street,
Vancouver, B.C., V6C 3L9

October, 1995

Project: 1738

Samples:	**#2:**	**66.6, 67.8, 73.7**
	#3:	**18.5, 56.0,**
	#5:	**12.3, 14.7, 23.25, 141.9, 156.8**
	#6:	**120.7, 142.0**

Summary:

Samples in hole #2 and the upper part of hole #5 are of patchy, zoned skarns containing a wide variety of silicates and minor to abundant patches of sulfides, dominated by pyrite and chalcopyrite, with lesser pyrrhotite and minor sphalerite. Typical; skarn minerals include quartz, garnet, epidote, clinopyroxene, calcite, biotite/chlorite, chlorite, and tremolite/actinolite. Some samples contain abundant secondary K-feldspar.

Samples lower in hole #5 and Hole #6 are of hypabyssal to plutonic rocks of quartz diorite to syenite composition. Some of these (especially the "syenite") contain K-feldspar alteration.

Samples in Hole #3 and the lowest part of Hole #5 are of a variety of volcanic and hypabyssal rocks, some of which may represent the host for the skarn.

A: Skarn

Sample #2 66.6 is a patchy skarn dominated by calcite/aragonite, biotite/chlorite-pyrrhotite-pyrite, quartz, quartz-chalcopyrite, and coarser grained calcite/aragonite. Some pyrite is secondary after pyrrhotite. One fragment is dominated by cryptocrystalline plagioclase. A few veinlets are of calcite.

Sample #2 67.8 is a patchy skarn dominated by biotite/chlorite and calcite, with abundant patches of pyrite-pyrrhotite and lesser ones of quartz. Major veins have margins of calcite and cores of two ages chalcedonic quartz. Some calcite veinlets cut across patches of chalcedonic quartz. Veinlets cutting patches of pyrite are of biotite/chlorite-calcite-quartz.

Sample #2 73.7 is a very patchy skarn, which is dominated by garnet, calcite, biotite/chlorite, and sulfides (pyrite, chalcopyrite, and pyrrhotite), with less abundant patches of clinopyroxene, tremolite/actinolite, quartz, and epidote. A major banded vein contains the following major zones from oldest to youngest: calcite, sulfide-rich inclusion, calcite, quartz, calcite-pyrite, calcite, and chalcedony. It is cut by a veinlet of quartz-calcite.

Sample #5 12.3 is a skarn dominated by quartz with minor to abundant disseminated patches of epidote and minor patches of garnet. It was brecciated moderately to strongly and fragments up to 15 mm across were cemented by a groundmass containing quartz, patches of epidote, biotite-chlorite, and minor garnet, with moderately abundant patches of pyrite and minor chalcopyrite.

Sample #5 14.7 an extremely fine to fine grained patchy skarn, with some patches dominated by quartz, others by quartz-epidote, and others by epidote-garnet-biotite/chlorite-tremolite/actinolite. Sulfides (pyrite, chalcopyrite, and minor sphalerite and pyrrhotite) are concentrated strongly in quartz-poor parts of the section, and are especially abundant with epidote and tremolite/actinolite. A few veinlets and replacement patches are dominated by calcite. A veinlet of quartz cuts part of the quartz-rich zone.

B: Volcanic to Hypabyssal Rocks (Possible Host from which Skarn Formed?)

Sample #3 18.5 is a fractured porphyritic rhyodacite containing phenocrysts of K-feldspar, plagioclase, and much less abundant hornblende in a very fine grained groundmass dominated by K-feldspar, quartz, and plagioclase. Plagioclase is replaced by dusty hematite and minor patches of calcite. K-feldspar is replaced by minor patches of calcite. Hornblende is replaced by patchy aggregates of plagioclase and chlorite. Early veinlets of quartz-feldspars as in the groundmass cut some feldspar phenocrysts. The rock was brecciated moderately in braided, vein-like zones, and abundant fractures were filled by veinlets of calcite and chlorite.

Sample #3 56.0 is a metamorphosed, altered, porphyritic hypabyssal andesite containing phenocrysts of plagioclase and hornblende in a groundmass of extremely fine grained plagioclase and amphibole with minor opaque/leucoxene. Textures are metamorphic, and some plagioclase phenocrysts were recrystallized to much finer grained aggregates as in the groundmass. The rock was brecciated slightly. Discontinuous veins, veinlets and replacement patches dominated by calcite with minor chlorite and quartz occur in irregular fractures commonly associated with the zones of brecciation.

Sample #5 156.8 is a rhyodacite crystal tuff containing angular fragments of K-feldspar, quartz, and plagioclase, several volcanic fragment types, and biotite in a cryptocrystalline, slightly to moderately foliated groundmass dominated by sericite. Quartz crystals are phenocrysts from volcanic rocks, suggesting that all the megacrysts are of volcanic origin. Minor discontinuous veinlets are of calcite. The relation between this rock and the rocks higher in the hole is uncertain.

C: Hypabyssal Plutonic Rocks

Sample #5 23.25 is a porphyritic, hypabyssal (quartz) diorite containing megacrysts of plagioclase and minor ones of hornblende and quartz in a very fine grained groundmass dominated by plagioclase with less abundant hornblende, quartz, K-feldspar, and biotite. Alteration is slight: plagioclase is altered to sericite, and hornblende is replaced by tremolite/ actinolite and calcite. A few lensy veinlets are of calcite and minor K-feldspar and chlorite.

Sample #5 141.9 is an altered porphyritic quartz monzonite containing megacrysts of plagioclase and K-feldspar and minor ones of hornblende and biotite in a finer grained groundmass of quartz and feldspars with minor biotite and magnetite. Plagioclase is replaced strongly by sericite-(calcite). K-feldspar is replaced slightly by hematite-sericite-calcite. Biotite is replaced completely by pseudomorphic muscovite. Hornblende is replaced completely by quartz-sericite. Magnetite is replaced by hematite, and ilmenite is replaced by leucoxene. An inclusion is of extremely fine grained plagioclase with patches of magnetite.

Sample #6 120.7 is a (biotite) syenite dominated by slightly interlocking K-feldspar grains with much less abundant plagioclase and biotite, and minor hornblende and magnetite. Interstitial patches are of kaolinite and sericite (possibly after plagioclase), calcite, and minor muscovite. Much of the K-feldspar probably is secondary after plagioclase. A vein is of sericite and calcite.

Sample #6 142 is a hornblende biotite (quartz) diorite containing subhedral plagioclase intergrown with anhedral hornblende and biotite, with minor interstitial quartz and K-feldspar. Alteration is weak to moderate, with plagioclase replaced by sericite-(epidote), biotite by chlorite-(Ti-oxide), and hornblende by tremolite/actinolite-calcite. The rock was granulated strongly in a breccia zone up to 1.5 mm wide. Late veinlets and replacement patches of calcite are mainly associated with the breccia zone. A few wispy veinlets are of chlorite-calcite.

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Sample #2 66.6 Patchy Calcite/Aragonite-Chlorite-Quartz-Pyrite Skarn

The sample is very irregular in composition, with patches dominated by calcite/aragonite, biotite/chlorite-pyrrhotite-pyrite, quartz, quartz-chalcopyrite, and coarser grained calcite/aragonite. Some pyrite is secondary after pyrrhotite. One fragment is dominated by cryptocrystalline plagioclase. A few veinlets are of calcite.

calcite/ankerite	35-40%	chalcopyrite	2- 3%
chlorite/biotite	30-35	plagioclase	1- 2
quartz	8-10	kaolinite	minor
pyrrhotite (alt'd to pyrite)	7- 8	magnetite	minor
calcite/aragonite 5- 7		sphalerite	trace
pyrite	3- 4		
veinlets			
calcite	0.3		

Much of the sample consists of irregular, interlocking grains of calcite/ankerite and lesser chlorite.

Calcite/aragonite is concentrated in patches up to several mm in size, whose texture suggests that they are of replacement origin. In some patches, many of the grains are elongate prismatic grains up to 0.8 mm in length, which suggests that the mineral is aragonite. Other patches are of equant grains up to 2 mm in size.

Biotite/chlorite forms irregular patches of cryptocrystalline to extremely fine grains. Biotite is medium greenish brown in colour and chlorite is light green. Other patches up to a few mm across consist of intimate intergrowths of calcite and chlorite. Much of the pyrite and pyrrhotite occur in chlorite-rich patches.

Quartz occurs in two main modes. It forms patches up to 2 mm in size of equant grains averaging 0.03-0.05 mm in size in some and 0.05-0.15 mm in size in others. Other patches up to 1 mm in size are of quartz grains averaging 0.02-0.03 mm in size intergrown with moderately abundant chlorite and some calcite and moderately abundant chalcopyrite. Some patches up to a few mm in size are of very fine grained intergrowths of quartz and chalcopyrite. These commonly are between patches rich in calcite and those rich in chlorite. Some quartz-rich patches show cataclastic textures in which grains were granulated moderately to strongly.

One patch 3 mm across is of cryptocrystalline plagioclase with less abundant calcite and chlorite.

Pyrite is concentrated in patches up to a few mm across. Some grains are subhedral and average 0.3-0.7 mm in size. Intergrown with these are patches of extremely fine grains pyrite intergrown with silicates; these grains may have formed by replacement of pyrrhotite. Some patches consist of ragged, corroded grains of pyrite enclosed in chalcopyrite.

A few sulfide-rich patches contain spheroidal inclusions of silicates, mainly intergrowths of calcite and chlorite.

Chalcopyrite is concentrated in a few patches of very fine grained quartz as irregular patches up to 0.5 mm in size and disseminated grains averaging 0.01-0.02 mm in size. A few patches of calcite grains contain moderately abundant chalcopyrite grains averaging 0.02-0.05 mm in size.

Kaolinite forms a few patches up to 0.5 mm long of cryptocrystalline grains.

Magnetite forms a grain 0.2 mm across in a coarse grain of calcite.

Sphalerite forms a few grains up to 0.07 mm in size. Grains are opaque because they contain very abundant sub-micron-sized exsolution blebs of chalcopyrite.

A few veinlets averaging 0.02-0.05 mm wide are of very fine grained calcite.

Sample #2 67.8 Patchy Skarn: Calcite-Biotite/Chlorite-Pyrite/Pyrrhotite-Quartz Veins of Calcite-Chalcedony; Veinlets of Biotite/Chlorite-Calcite-Quartz-Pyrite

The sample is a patchy skarn dominated by biotite/chlorite and calcite, with abundant patches of pyrite-pyrrhotite and lesser ones of quartz. Major veins have margins of calcite and cores of two ages chalcedonic quartz. Some calcite veinlets cut across patches of chalcedonic quartz. Veinlets cutting patches of pyrite are of biotite/chlorite-calcite-quartz.

biotite/chlorite	30-35%
calcite	25-30
pyrite	12-15
chlorite	7- 8
quartz	2- 3
pyrrhotite	2- 3 (altered to pyrite/dusty non-reflective material)
Ti-oxide/leucoxene	0.7
chalcopyrite	0.1
apatite	trace

veins

1) calcite-chalcedonic quartz	10-12%
2) biotite/chlorite-calcite-quartz	1- 2

Calcite forms extremely fine grained aggregates, mainly intergrown with less abundant biotite/chlorite and much less patches of extremely fine grained quartz. Biotite/chlorite forms cryptocrystalline to extremely fine grained aggregates of flakes with a few ragged flakes up to 0.3 mm long. Pleochroism from light to medium brownish green. Chlorite forms patches up to 2 mm in size of cryptocrystalline, pale to light green grains.

Quartz is concentrated in a few lensy patches up to 1.7 mm long as submosaic grains averaging 0.02-0.05 mm in size and a few up to 0.1 mm across. Some patches up to 2 mm in size are of extremely fine grained aggregates of quartz, biotite/chlorite, calcite, and minor disseminated pyrite.

Ti-oxide/leucoxene forms disseminated patches averaging 0.03-0.08 mm in size.

Pyrite forms irregular patches up to several few mm across with textures as in Sample #2 66.6. A few patches are of coarse grained pyrite in which coarsely spaced fractures are filled mainly by calcite. Some patches are very fine grained and are intergrown with silicates. A few of these contain interstitial patches of calcite which are surrounded by euhedrally terminated pyrite grains averaging 0.05-0.1 mm in size.

In cores of some large pyrite patches are patches up to 0.7 mm across of pyrite which contain abundant dusty non-reflective material. They probably are secondary after pyrrhotite.

Pyrrhotite forms anhedral inclusions in pyrite up to 0.02 mm in size.

Chalcopyrite is concentrated in a few patches up to 2 mm in size in which it forms minor to moderately abundant disseminated grains averaging 0.02-0.04 mm in size. It also forms very minor inclusions in pyrite averaging 0.02-0.05 mm in size.

Apatite forms disseminated, subhedral to euhedral grains averaging 0.1-0.15 mm in size.

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Veinlets averaging 0.02-0.03 mm wide which commonly cut pyrite grains are of cryptocrystalline biotite/chlorite and calcite. A few wider ones have comb-textured patches of quartz up to 0.1 mm wide along their margins. Bordering these, pyrite was recrystallized to extremely fine rained aggregates.

Veins up to a few mm across are patchy, commonly with rims of calcite and cores of feathery chalcedonic quartz. In some veins, early formed calcite grains have euhedral terminations which are marked by a zone 0.015 mm wide containing abundant medium brown limonite. A few patches of similar limonite occur within the calcite grains. Chalcedony grains average 0.05-0.1 mm in length. In the largest vein, a core up to 1.5 mm wide is of much more delicately intergrown chalcedony grains with well developed radiating aggregates of fibrous grains showing delicate, rhythmic growth layering defined by wispy lines, possibly of dusty opaque. Some calcite veinlets contain patches of chalcopyrite and of pyrite averaging 0.03-0.05 mm in size. A few pyrite patches are up to 0.3 mm across. One vein contains a patch 1 mm across containing moderately abundant pyrite grains averaging 0.02-0.04 mm in size. Some calcite patches on the margins of veins contain moderately abundant inclusions of Ti-oxide averaging 0.003-0.005 mm in size. A few late veinlets of calcite and ankerite up to 0.1 mm wide cut some of the chalcedonic quartz patches.

One lens 0.7 mm long enclosed in a coarse calcite grain contains patches of ilmenite grains averaging 0.03-0.05 mm in size intergrown with calcite in a broad core. A thinner outer zone is of similar calcite. A very thin rim is of limonite.

Sample #2 73.7 Patchy Skarn: Garnet-Calcite-Clinopyroxene-Biotite-Pyrite-Chalcopyrite-Chlorite-Quartz-Tremolite/Actinolite-(Epidote); Banded Vein of Calcite-Chalcedony-Pyrite-Quartz

The skarn is very patchy in composition. It is dominated by garnet, calcite, biotite/chlorite, and sulfides (pyrite, chalcopyrite, and pyrrhotite) and contains less abundant patches of clinopyroxene, tremolite/actinolite, quartz, and epidote. A major banded vein contains the following major zones from oldest to youngest: calcite, sulfide-rich inclusion, calcite, quartz, calcite-pyrite, calcite, and chalcedony. It is cut by a veinlet of quartz-calcite.

calcite	20-25%
garnet	17-20
biotite/chlorite	10-12
pyrite	7- 8
chalcopyrite	4- 5
pyrrhotite	4- 5
clinopyroxene	4- 5
quartz	2- 3
tremolite/actinolite	2- 3
chlorite	1- 2
veins, veinlets	
1) calcite-chalcedony-quartz	10-12
2) quartz-calcite	1- 2

Garnet forms anhedral grains averaging 1-2.5 mm in size in patches up to a few mm across. Grains are fractured strongly and intergrown mainly coarsely with calcite and biotite. A few garnet grains contain inclusions of calcite and biotite/chlorite. A few at one end of the section away from the veins are replaced moderately along fractures by cryptocrystalline calcite.

Clinopyroxene is concentrated in one corner of the section as equant granular grains averaging 0.02-0.05 mm in size and a few prismatic grains up to 0.2 mm long.

Calcite forms patches of equant grains averaging 0.005-0.01 mm in size, in part alone and in part intergrown intimately with biotite/chlorite.

Biotite/chlorite forms cryptocrystalline flakes intergrown intimately to coarsely with patches of calcite. Pleochroism is from light to medium greenish brown.

Chlorite forms patches up to 0.5 mm in size of pale green, cryptocrystalline flakes, mainly surrounded by a thin rim of biotite.

Tremolite/actinolite is concentrated in lensy patches up to 1.5 mm in size as subhedral to euhedral grains averaging 0.07-0.15 mm in size and a few up to 0.6 mm long intergrown intimately with chalcopyrite and much less pyrite. Pleochroism is from colourless to pale to light green.

Quartz forms patches of grains averaging 0.05-0.1 mm in size, commonly intergrown with sulfides and tremolite/actinolite. A few grains up to 0.8 mm in size are intergrown with patches of epidote-chalcopyrite and contain minor disseminated grains of epidote and tremolite/actinolite.

Pyrite is concentrated strongly in one large patch 15 mm across. It is dominated by dense zones of pyrite intergrown with patches averaging 0.3-0.8 mm in size of calcite-quartz-biotite/chlorite intergrown with abundant extremely fine grained pyrite and hematite.

(continued)

One irregular patch 6 mm across is dominated by anhedral chalcopyrite with slightly less abundant anhedral pyrrhotite and minor patches of subhedral to euhedral pyrite. Elsewhere in the rock, chalcopyrite and generally much less pyrrhotite and pyrite occur in irregular patches averaging 0.1-0.5 mm in size intergrown intimately with silicates, especially tremolite/actinolite, garnet, and epidote. Pyrrhotite is altered to intimate intergrowths of pyrite with hematite, or to hematite with minor pyrite. Most of the latter have a rim of pyrite 0.005-0.01 mm wide.

Epidote is concentrated in a few patches up to 2 mm across in which it forms skeletal grains up to 0.8 mm in size intergrown intimately with chalcopyrite.

Sphalerite forms irregular patches averaging 0.03-0.08 mm in size, commonly associated with chalcopyrite. It contains abundant sub-micron to micron sized exsolution inclusions of chalcopyrite.

At one end of the section is a composite vein up to several few mm wide which is zoned as follows:

1) 0.3-1.8 mm wide zone of fine to medium grained calcite, with minor lenses of host rock parallel to the length of the vein.

2) 1-2 mm wide, lensy zone of altered host rock(?) consisting of extremely fine grained quartz with lesser biotite/chlorite and calcite containing abundant patches and disseminated grains of sulfides dominated by chalcopyrite, pyrite, and pyrrhotite. The last of these (pyrrhotite) forms distinctive elongate platy(?) grains averaging 0.1-0.15 mm long. Pyrrhotite is replaced by cryptocrystalline pyrite and hematite in widely varying proportions.

3) 0.3-0.8 mm wide zone dominated by elongate grains of calcite oriented parallel to the length of the vein, containing wispy lenses averaging 0.05-0.1 mm wide of cryptocrystalline, medium green chlorite, and a few lenses containing moderately abundant extremely fine grained pyrite.

4) 0-0.3 mm wide, zone dominated by quartz grains averaging 0.07-0.2 mm in size with minor patches of extremely fine grained biotite. The zone is somewhat discontinuous.

5a) 0.3-0.5 mm wide, zone of medium grained calcite containing moderately abundant clusters up to 0.6 mm in size of subhedral pyrite.

5b) 2 mm wide zone of coarse grained calcite (contains an inclusion of host rock)

6) up to 2 mm wide (at edge of section) of delicate subradiating aggregates of chalcedonic quartz (as in the core of the vein in Sample #2 67.8), with subradiating fans up to 1.5 mm long. It contains a few irregular, banded lenses up to 0.1 mm wide and 3 mm long of extremely fine grained ankerite.

7) 0.7 mm wide, in one corner of the section where Zone 6 is missing, this zone is of quartz grains averaging 0.2-0.5 mm in size. It borders against Zone 5b on one side and against host rock in the extreme corner of the section on the other side.

A veinlet averaging 0.05-0.07 mm wide cuts Zones 5b and 6 of the main vein. Where it cuts chalcedony, the veinlet is of extremely fine grained quartz, and where it cuts calcite, the calcite grain was recrystallized slightly and minor dusty opaque inclusions were destroyed or removed.

Sample #3 18.5 **Fractured Porphyritic Rhyodacite; Quartz-Feldspar Veinlets; Brecciation with Calcite-Chlorite Veinlets**

Phenocrysts of K-feldspar, plagioclase, and much less abundant hornblende are set in a very fine grained groundmass dominated by K-feldspar, quartz, and plagioclase. Plagioclase is replaced by dusty hematite and minor patches of calcite. K-feldspar is replaced by minor patches of calcite. Hornblende is replaced by patchy aggregates of plagioclase and chlorite. Early veinlets of quartz-feldspars as in the groundmass cut some feldspar phenocrysts. The rock was brecciated moderately in braided, vein-like zones, and abundant fractures were filled by veinlets of calcite and chlorite.

phenocrysts			
K-feldspar	20-25%		
plagioclase	10-12		
hornblende	2- 3		
biotite	0.3		
groundmass			
K-feldspar	20-25	Ti-oxide/leucoxene	minor
quartz	12-15	apatite	trace
plagioclase	12-15	zircon	trace
chlorite	0.3		
veinlets, replacement patches			
1) quartz-(feldspar)	1- 2		
2) calcite-chlorite-(pyrite-quartz-leucoxene)	5- 7		

Plagioclase forms subhedral to euhedral phenocrysts averaging 1-2 mm in size and a few up to 3.5 mm long. Composition is about An_{30-35}. Alteration is slight to dusty hematite, patches of calcite up to 0.2 mm in size and minor patches of K-feldspar.

K-feldspar forms subhedral, equant phenocrysts averaging 1-2 mm in size and a few up to 3.5 mm long. A few are replaced slightly by anhedral grains of calcite averaging 0.05-0.15 mm in size. A few of these may be replacements of plagioclase.

A few patches consist of intergrowths of two to three K-feldspar and plagioclase phenocrysts.

Hornblende forms subhedral prismatic grains up to 1.7 mm in length. It is replaced by patches of interlocking plagioclase grains averaging 0.03-0.05 mm in size and patches of cryptocrystalline to extremely fine grained chlorite. One contains minor ragged prismatic tremolite/actinolite grains up to 0.12 mm long. One contains a few subhedral to euhedral grains of pyrite averaging 0.05-0.07 mm in size.

Biotite forms phenocrysts averaging 0.5-1 mm in length. Alteration is complete to pseudomorphic, pale to medium green chlorite with lenses of very fine grained calcite and disseminated grains of leucoxene.

The groundmass contains anhedral to subhedral, prismatic plagioclase grains averaging 0.05-0.1 mm in length intergrown with anhedral grains of K-feldspar and plagioclase averaging 0.02-0.05 mm in size, with interstitial quartz grains averaging 0.03-0.07 mm in size. A few veinlets of groundmass material cut some K-feldspar and plagioclase phenocrysts.

(continued)

Chlorite (probably after both biotite and hornblende) forms disseminated patches averaging 0.03-0.05 mm in size.

Ti-oxide/leucoxene forms clusters up to 0.35 mm in size of equant grains averaging 0.03-0.05 mm in size. Other clusters up to 0.4 mm across are of ribs of leucoxene intergrown with cryptocrystalline chlorite (after sphene); these are associated with hornblende phenocrysts.

Apatite forms subhedral prismatic grains up to 0.12 mm long associated with biotite and in the groundmass.

Zircon forms subhedral grains averaging 0.07-0.12 mm in size.

The rock was brecciated moderately in a few braided zones up to 2 mm wide. In these zones and elsewhere, abundant fractures are healed by veins up to 0.6 mm wide and veinlets of calcite and/or chlorite with minor pyrite, quartz, and leucoxene. A few replacement patches up to 0.6 mm across are of very fine grained calcite and extremely fine grained chlorite. Pyrite forms minor, equant, euhedral grains averaging 0.1-0.2 mm in size.

Sample #3 56.0 **Metamorphosed, Altered Porphyritic Hypabyssal Andesite; Actinolite Alteration; Weak Brecciation, Calcite Veins, Veinlets**

Phenocrysts of plagioclase and hornblende are set in a groundmass of extremely fine grained plagioclase and amphibole with minor opaque/leucoxene. Textures are metamorphic, and some plagioclase phenocrysts were recrystallized to much finer grained aggregates as in the groundmass. The rock was brecciated slightly. Discontinuous veins, veinlets and replacement patches dominated by calcite with minor chlorite and quartz occur in irregular fractures commonly associated with the zones of brecciation.

phenocrysts			
plagioclase	5- 7%		
hornblende	2- 3		
groundmass			
plagioclase	55-60	pyrite	0.1
hornblende	25-30	apatite	minor
opaque/leucoxene	2		
fragment			
andesite	0.3		
veins, veinlets, replacement patches			
calcite-(quartz-chlorite)	4- 5		
chlorite	minor		

Plagioclase forms anhedral, prismatic phenocrysts averaging 0.7-1 mm long. They are recrystallized slightly to moderately to much finer grained aggregates as in the groundmass.

A few patches up to 1 mm in size of actinolite grains up to 0.3 mm long probably are after original hornblende phenocrysts. One patch 3.5 mm across is of very fine to extremely fine grained actinolite and minor very fine grained calcite and extremely fine grained quartz and pyrite. In the offcut block, pyrite is more abundant, forming a cluster up to 1 mm across.

In the groundmass, plagioclase forms anhedral grains averaging 0.01-0.05 mm in size, and a few up to 0.1 mm long. Actinolite forms anhedral prismatic grains averaging 0.05-0.1 mm long. Chlorite forms patches of grains averaging 0.01 mm in size.

Opaque forms disseminated patches averaging 0.1-0.2 mm in size of extremely fine grains. It probably is ilmenite replaced partly by leucoxene.

Apatite forms anhedral, in part poikilitic grains up to 0.2 mm in size and one patch of two grains from 0.3-0.4 mm long.

A fragment 1.7 mm across is dominated by extremely fine grained plagioclase and 5% disseminated patches of ilmenite/leucoxene and ragged patches up to 0.3 mm long of apatite.

Calcite forms lensy veins up to 1.5 mm in width of fine to medium grains. It also forms veinlets averaging 0.03-0.1 mm in width A few irregular replacement patches up to 1 mm across are of single calcite grains.

A few lenses up to 0.6 mm long are of radiating clusters of greenish brown chlorite flakes averaging 0.15-0.25 mm long.

A few veinlets 0.05-0.15 mm wide are of extremely fine grained quartz and chlorite; some of these grade into calcite veins.

Sample #5 12.3 **Brecciated Quartz-Epidote-(Garnet) Skarn; Matrix of Biotite/Chlorite-Epidote-Quartz-Pyrite-Carbonate**

Fragments up to 15 mm across are dominated by quartz with minor to abundant disseminated patches of epidote and minor patches of garnet. The origin of the rock is uncertain; it probably is a quartz-epidote-(garnet) skarn. It was brecciated moderately to strongly and fragments cemented by a groundmass containing quartz, patches of epidote, biotite-chlorite, and minor garnet, with moderately abundant patches of pyrite and minor chalcopyrite.

fragments (55-60%)			
quartz	45-50%		
epidote	10-12		
garnet	0.7		
breccia matrix (40-45%)			
quartz	17-20	garnet	1- 2%
epidote	12-15	pyrite	1
chlorite/biotite	10-12	chalcopyrite	minor
carbonate	3- 4	sphalerite	trace
veinlets			
calcite	0.1		

Fragments are mainly of quartz or quartz-epidote. Quartz commonly forms equant grains averaging 0.05-0.1 mm in size. In a few fragments, grain size averages 0.2-0.5 mm, and in one fragment, irregular grains are up to 1 mm across.

The largest fragment and a few smaller ones contain abundant patches of epidote intergrown with quartz. In these, quartz forms grains averaging 0.03-0.07 mm in size. Epidote forms irregular grains averaging 0.05-0.5 mm in size, and a few ragged, in part skeletal grains up to 1 mm in size. Some fragments also contain minor to moderately abundant irregular calcite grains. A few fragments contain minor irregular garnet grains up to 0.7 mm in size surrounded by quartz. In some fragments, disseminated anhedral garnet grains averaging 0.03-0.05 mm in size are surrounded by calcite and epidote. In a few fragments, very skeletal garnet grains up to 1 mm in size are intergrown with abundant quartz. Carbonate forms a rounded patch 0.6 mm across of cryptocrystalline grains included in quartz.

The breccia matrix contains moderately abundant, very fine grained quartz, which probably represents granulated and recrystallized quartz from the fragments. Groundmass quartz commonly contains moderately abundant disseminated grains of epidote averaging 0.005 mm in size; this is one way to distinguish groundmass quartz from similar quartz in fragments.

Other matrix minerals occur in irregular patches up to a few mm across which range from monomineralic to polymineralic, commonly in intimate intergrowths. Some are of very fine to fine grained epidote and patches of very fine to extremely fine grained carbonate, some of which has a prismatic habit, suggesting that it is aragonite. Calcite also forms irregular patches of extremely fine to fine grains. Chlorite/biotite forms irregular patches and seams of pale green, cryptocrystalline grains. It is pleochroic from light yellowish green to medium green. Several patches contain fractured cores of epidote contained in patches of chlorite/biotite. Garnet forms ragged, commonly strongly fractured grains averaging 0.1-0.5 mm in size enclosed in epidote and chlorite/biotite.

(continued)

Pyrite forms disseminated grains averaging 0.03-0.07 mm in size and a few subhedral to euhedral grains up to 0.3 mm in size. It is concentrated moderately in a few lenses and patches up to 1 mm across. One equant patch 1 mm across contains very abundant dusty non-reflective material, which is concentrated in a broad band in the core. On both sides of this core, pyrite contains much less abundant dusty non-reflective inclusions. This patch is cut by a veinlet of calcite-chlorite-chalcopyrite.

Chalcopyrite forms disseminated grains averaging 0.01-0.03 mm in size.

Sphalerite forms a few grains averaging 0.03-0.1 mm in size and a few from 0.01-0.02 mm in size associated with chalcopyrite. It contains sub-micron sized exsolution spots of chalcopyrite.

A few veinlets up to 0.05 mm wide are of very fine grained calcite.

Sample #5 14.7 **Patchy Zoned Quartz-Epidote-Garnet-Biotite/Chlorite Skarn; Veinlets, Replacement Patches of Calcite; Veinlet of Quartz**

The sample is a very fine to extremely fine grained patchy skarn, with some patches dominated by quartz, others by quartz-epidote, and others by epidote-garnet-biotite/chlorite-tremolite/actinolite. Sulfides (pyrite, chalcopyrite, and minor sphalerite and pyrrhotite) are concentrated strongly in quartz-poor parts of the section, and are especially abundant with epidote and tremolite/actinolite. A few veinlets and replacement patches are dominated by calcite. A veinlet of quartz cuts part of the quartz-rich zone.

quartz	45-50%	tremolite/actinolite	2- 3%
epidote	20-25	sphalerite	0.4
garnet	10-12	plagioclase	0.2
biotite/chlorite	5- 7	pyrrhotite	0.1
pyrite	2- 3	apatite	0.1
chalcopyrite	2- 3		
veinlets and replacement patches			
calcite-(chlorite-chalcopyrite)	0.5		
quartz	0.1		

In the quartz-rich zone, quartz forms equant grains ranging in size from 0.02-0.03 mm in some patches to 0.07-0.15 mm in size in others. Finer grained patches commonly contain moderately abundant disseminated epidote grains averaging 0.005-0.01 mm in size and scattered quartz grains averaging 0.05-0.1 mm in size. Bordering the epidote-garnet zone, quartz contains moderately abundant, irregular patches of extremely fine to very fine grained epidote and lesser ones of cryptocrystalline biotite/chlorite. Adjacent to the quartz-poor patch, quartz generally is of the coarser grained variety (0.07-0.15 mm).

In the quartz-rich zone near the quartz-poor zone, epidote forms a few proximal patches averaging 1-2.5 mm in size of irregular, commonly strongly interlocking grains averaging 0.1-0.2 mm in size. One epidote-rich patch is cut by a veinlet 0.05-0.07 mm wide of very fine grained tremolite with much less epidote and minor pyrite. Further from the contact, garnet forms a ragged patch 2.5 mm across intergrown with very fine grained quartz and minor tremolite. Minor pyrite occurs in fractures in garnet.

In the quartz-poor zone, garnet forms anhedral grains averaging 0.5-1.5 mm in size. It is light/medium orange in colour suggesting a composition of almandine. It is intergrown intimately with epidote, and may be in part replaced by epidote. Epidote forms anhedral grains averaging 0.2-0.5 mm in size and a few up to 0.8 mm across. A few patches adjacent to the quartz-rich patch are dominated by cryptocrystalline to extremely fine grained epidote.

Biotite/chlorite forms patches up to 1 mm in size of cryptocrystalline to extremely fine grains with a light to medium greenish brown colour. A few are intergrown with epidote. It occurs mainly between the garnet-epidote-rich zone and the quartz-rich zone, but is not everywhere present along that contact.

Tremolite/actinolite forms disseminated anhedral to subhedral prismatic grains averaging 0.2-0.3 mm long and a few up to 1 mm long. Pleochroism is from colourless to pale or light green.

Quartz forms a few interstitial grains from 0.1-0.5 mm in size intergrown with epidote and garnet.

(continued)

Calcite forms a few interstitial patches up to 2 mm, across of grains averaging 0.2-0.7 mm in size enclosed by biotite/chlorite. Some patches have a zoned texture, with borders of extremely fine grained calcite intergrown with cryptocrystalline, medium brown biotite and cores of coarser grains of calcite.

Pyrite forms irregular patches up to 1 mm in size alone or with chalcopyrite. It also forms disseminated patches averaging 0.05-0.3 mm in size, mainly of extremely fine grained aggregates, some of which are intergrown with chalcopyrite. A few patches up to 0.3 mm in size contain abundant dusty, non-reflective inclusions, and probably are secondary after pyrrhotite.

Chalcopyrite forms disseminated grains averaging 0.02-0.05 mm in size and a few, commonly skeletal patches up to 0.5 mm in size. In some patches, grains are rimmed by secondary reaction rims of chalcocite or hematite up to 0.005 mm thick.

Sphalerite forms disseminated grains averaging 0.03-0.07 mm in size and a few irregular patches up to 0.3 mm across. It contains sub-micron-sized exsolution inclusions of chalcopyrite. One patch 1.2 mm across of garnet and epidote contains abundant skeletal patches of sphalerite up to 0.5 mm in size. In this zone, chalcopyrite inclusions in sphalerite are coarser than elsewhere.

Apatite forms a few lenses up to 0.5 mm long of anhedral grains averaging 0.05-0.08 mm in size; these are enclosed in tremolite/actinolite-epidote. It forms a few equant grains up to 0.2 mm in size in quartz-rich patches.

One patch up to 1 mm in size contains moderately abundant extremely fine grained plagioclase and quartz intergrown with biotite/chlorite.

A few veinlets up to 0.05 mm wide are of very fine grained calcite. A few veinlets averaging 0.01-0.02 mm wide are of extremely fine grained calcite and chlorite. One contains moderately abundant chalcopyrite.

A veinlet 0.2 mm wide of quartz grains averaging 0.05-0.1 mm in size cuts a patch of extremely fine grained quartz and is connected to an irregular patchy zone up to a few mm across of coarser grained quartz.

Sample #5 23.25 **Porphyritic Hypabyssal (Quartz) Diorite; Veins of Calcite-K-feldspar-Chlorite**

Megacrysts of plagioclase and minor ones of hornblende and quartz are set in a very fine grained groundmass dominated by plagioclase with less abundant hornblende, quartz, K-feldspar, and biotite. Alteration is slight: plagioclase is altered to sericite, and hornblende is replaced by tremolite/ actinolite and calcite. A few lensy veinlets are of calcite and minor K-feldspar and chlorite.

megacrysts			
plagioclase	20-25%	quartz	0.3%
hornblende	5- 7		
groundmass			
plagioclase	50-55	biotite	3- 4
K-feldspar	4- 5	opaque	0.4
hornblende	4- 5	sphene	0.2
quartz	3- 4	apatite	0.1
veinlets			
calcite-K-feldspar-chlorite	0.3		

Plagioclase forms subhedral prismatic grains averaging 0.7-1.5 mm in size and a few up to 3 mm long. They show compositional growth zones from broad cores of An_{45-50} to rims of An_{20-25}; the strongest changes in composition occur in the outer 0.05 mm of the grains. Alteration is slight to moderate to extremely fine grained sericite, and is concentrated in the more-calcic cores. Some grains also contain minor patches of calcite and/or K-feldspar.

Hornblende forms ragged to subhedral grains averaging 0.7-1.5 mm in size and a few up to 3.5 mm long. Pleochroism is from light to medium green. Many grains are altered to very fine grained aggregates of pale to light green tremolite/actinolite and patches of calcite; this alteration is prominent in broad cores, whereas thin rims are replaced by pseudomorphic tremolite/actinolite. One patch contains an irregular patch up to 0.3 mm across and veinlets of extremely fine grained opaque. A few grains are poikilitic with abundant inclusions of plagioclase averaging 0.02-0.03 mm in size and one of these also contains abundant disseminated opaque grains averaging 0.02 mm in size.

Quartz forms a few patches up to 1.5 mm in size of grains averaging 0.3-1 mm in size. Grains are strained moderately.

In the groundmass, plagioclase forms anhedral, prismatic grains averaging 0.1-0.3 mm long. They show moderate to strong compositional growth zoning as in the phenocrysts. Alteration is slight to locally moderate to sericite, and is concentrated in the more-calcic cores. K-feldspar and quartz occur in interstitial patches as anhedral grains averaging 0.1-0.3 mm in size.

Hornblende forms ragged grains averaging 0.07-0.15 mm in size. Biotite forms ragged, equant flakes averaging 0.05-0.1 mm in size. Pleochroism is from light to dark brown.

Opaque forms disseminated, anhedral grains averaging 0.1-0.2 mm in size and a few up to 0.3 mm long. A few lenses (pyrite?) are up to 0.6 mm long.

Sphene forms a few irregular patches up to 0.2 mm in size of grains averaging 0.03-0.05 mm in size. A few patches up to 0.3 mm across are of ribs of leucoxene intergrown with patches of very fine grained calcite and cryptocrystalline chlorite; these may be secondary after sphene. Some of them are associated with hornblende.

(continued)

Apatite forms acicular grains averaging 0.05-0.2 mm long, mainly in plagioclase. It forms a few prismatic grains up to 0.1 mm long associated with hornblende.

Veinlets up to 0.15 mm wide contain cores of very fine to fine grained calcite and locally extremely fine grained K-feldspar with discontinuous rims of cryptocrystalline to extremely fine grained, medium to dark green chlorite.

Sample #5 141.9 **Altered Porphyritic Quartz Monzonite; Sericite-(Calcite-Quartz) Alteration; Inclusion of Plagioclase-Magnetite**

Megacrysts of plagioclase and K-feldspar and minor ones of hornblende and biotite are set in a finer grained groundmass of quartz and feldspars with minor biotite and magnetite. Plagioclase is replaced strongly by sericite-(calcite). K-feldspar is replaced slightly by hematite-sericite-calcite. Biotite is replaced completely by pseudomorphic muscovite. Hornblende is replaced completely by quartz-sericite. Magnetite is replaced by hematite, and ilmenite is replaced by leucoxene. An inclusion is of extremely fine grained plagioclase with patches of magnetite.

megacrysts			
plagioclase	25-30%		
K-feldspar	25-30		
biotite	minor		
groundmass			
quartz	15-20	ilmenite	0.1%
K-feldspar	10-12	pyrite	minor
plagioclase	10-12	zircon	minor
biotite	3- 4	bornite	trace
hornblende	1- 2	chalcopyrite	trace
magnetite	0.5		
inclusion			
plagioclase-magnetite	0.3		
veinlets			
sericite	minor		

Plagioclase forms subhedral, prismatic grains averaging 0.7-2 mm in length and a few up to 4 mm across. A few are zoned slightly to moderately; composition of unzoned grains is about An_{28-30}. Alteration is slight to strong to cryptocrystalline sericite with minor to moderately abundant limonite. A few large megacrysts contain several patches of calcite averaging 0.1-0.2 mm in size. As few grains contain ragged patches of ankerite up to 0.4 mm in size. Some K-feldspar grains may have formed by replacement of plagioclase.

K-feldspar forms anhedral megacrysts averaging 1.5-3 mm in size. Some contain moderately abundant, irregular exsolution(?) lenses of plagioclase which contain minor to moderately abundant dusty hematite and cryptocrystalline sericite. One megacryst contains abundant replacement(?) patches of extremely fine grained, moderately interlocking quartz grains and minor sericite.

Quartz is concentrated in interstitial patches up to 1.5 mm in size of anhedral grains averaging 0.1-0.5 mm in size.

In the groundmass, plagioclase, K-feldspar, and quartz form patches up to 1 mm in size of anhedral, slightly interlocking grains averaging 0.05-0.1 mm in size.

Biotite forms ragged flakes averaging 0.3-0.8 mm in size and a few up to 1.8 mm long. Alteration is complete to pseudomorphic muscovite or extremely fine grained sericite.

Hornblende(?) forms anhedral grains up to 1 mm long. Alteration is complete to extremely fine grained aggregates of quartz and irregular patches of cryptocrystalline sericite. Some very fine grained patches of quartz and K-feldspar may be after hornblende or may be interstitial groundmass material.

(continued)

Magnetite forms equant grains averaging 0.05-0.2 mm in size and a few up to 0.5 mm across. Alteration of magnetite is complete to cryptocrystalline intergrowths of anisotropic hematite in two main optic orientations. Some contain exsolution plates of ilmenite up to 0.05 mm thick; the latter is replaced by leucoxene.

Pyrite forms anhedral grains averaging 0.03-0.08 mm in size. A few slender lenses are from 0.2-0.3 mm long, one occurs along a cleavage plane in a flake of biotite.

Bornite and less abundant chalcopyrite form disseminated, equant grains averaging 0.03-0.04 mm in size.

Zircon forms subhedral to euhedral, equant grains averaging 0.05-0.15 mm in size; it is concentrated moderately with magnetite.

One elongate, ragged patch (probably an inclusion) 1.7 mm long is of extremely fine grained plagioclase (altered partly to sericite) with moderately abundant magnetite-(ilmenite) in patches from 0.0-5-0.3 mm in size and minor zircon and biotite (altered to muscovite/sericite).

A few wispy veinlets are of cryptocrystalline sericite.

Sample #5 156.8 **Rhyodacite Crystal Tuff; Sericite-rich Matrix; Calcite Veinlets**

Angular fragments of K-feldspar, quartz, and plagioclase, several volcanic fragment types, and biotite are set in a cryptocrystalline, slightly to moderately foliated groundmass dominated by sericite. Quartz crystals are phenocrysts from volcanic rocks, suggesting that all the megacrysts are of volcanic origin. Minor discontinuous veinlets are of calcite.

fragments	
plagioclase	17-20%
quartz	17-20
K-feldspar	10-12
porphyritic latite/rhyodacite/trachyte	3- 4
biotite	1- 2
sphene	minor
apatite	trace
groundmass	
sericite	45-50
calcite porphyroblasts	2
leucoxene	0.3
veinlets	
calcite	0.2

K-feldspar forms fragments of single grains up to 1.5 mm in size. Several contain irregular replacement patches of calcite. A few contain irregular patches of cryptocrystalline kaolinite.

Quartz forms fragments averaging 0.5-1.7 mm in size of single, unstrained grains, and one 3 mm across, whose textures are typical of quartz phenocrysts in a volcanic rock. One patch 3.5 mm across consists of several angular quartz grains averaging 0.5-1.5 mm in size. These are separated by thin selvages and patches of cryptocrystalline sericite as in the matrix of the breccia.

Plagioclase forms fragments averaging 0.3-1 mm in size, and a few fragments up to 2 mm across of a few grains. Composition is An_{30-35}. Alteration is slight to sericite and locally slight to moderate to irregular patches of calcite.

One fragment 1.8 mm long is dominated by slightly interlocking plagioclase grains averaging 0.03-0.07 mm in size. Plagioclase is altered slightly to sericite. One phenocryst on the border of the fragment is 0.3 mm across; it has an overgrowth up to 0.05 mm wide against the groundmass.

Biotite forms ragged, commonly warped flakes averaging 0.3-0.6 mm long and one 1.5 mm long. Alteration is complete to pseudomorphic muscovite/chlorite with disseminated Ti-oxide patches and lenses.

A few fragments up to 0.8 mm long are of intimate intergrowths of leucoxene and calcite, probably secondary after subhedral sphene grains.

One fragment 0.25 mm across is of cherty quartz grains averaging 0.005-0.01 mm in size.

One equant fragment 0.5 mm across is of extremely fine grained latite with one lathy plagioclase grain 0.1 mm long in a groundmass of interlocking plagioclase grains averaging 0.2-0.05 mm in size, whose texture is obscured moderately by abundant dusty hematite.

One fragment 1.3 mm long contains several plagioclase grains averaging 0.2-0.4 mm in size and one patch of leucoxene 0.12 mm long in a cryptocrystalline groundmass of plagioclase and minor kaolinite.

(continued)

One fragment 1.3 mm long is dominated by extremely fine grained K-feldspar with much less plagioclase. It contains a phenocryst of K-feldspar 0.3 mm across, one of quartz at least 0.6 mm across, and a patch of leucoxene 0.25 mm across which contains a zircon grain 0.05 mm long.

A few fragments averaging 0.3-1.2 mm long are of cryptocrystalline to extremely fine, interlocking grains of K-feldspar. One of these contains a slightly coarser phenocryst 0.1 mm long of plagioclase or K-feldspar, another contains a plagioclase phenocryst and a patch of extremely fine grained quartz, and a third contains a phenocryst of biotite 0.5 mm long (replaced by chlorite-muscovite) and a phenocryst of K-feldspar 0.1 mm across.

A few fragments from 0.3-0.6 mm across are of cryptocrystalline to extremely fine grained, equant plagioclase altered slightly to moderately to sericite. One similar fragment 2.5 mm across contains a few equant to prismatic plagioclase phenocrysts up to 0.5 mm in size which are replaced completely by cryptocrystalline sericite, and one ragged, biotite flake 0.3 mm long altered to muscovite-(Ti-oxide).

One fragment 0.5 mm across is of slightly interlocking quartz grains averaging 0.02-0.07 mm in size.

Apatite forms one euhedral prismatic grain 0.3 mm long.

In the groundmass, sericite forms flakes ranging from cryptocrystalline to extremely fine grained, with a few small patches of flakes up to 0.1 mm in size. A weak to locally moderate foliation is defined by parallel orientation of coarser sericite flakes.

A few ragged calcite porphyroblasts are from 0.5-1.5 mm in size. One skeletal porphyroblast 2.5 mm across contains several fragments of subhedral to euhedral plagioclase and K-feldspar from 1-1.5 mm in size.

Leucoxene forms disseminated patches of cryptocrystalline grains averaging 0.05-0.2 mm in size.

A few wispy, discontinuous veinlets and lenses up to 0.05 mm wide are of very fine to fine grained calcite.

Sample #6 120.7 (Biotite) Syenite

The sample is dominated by slightly interlocking K-feldspar grains with much less abundant plagioclase and biotite, and minor hornblende and magnetite. Interstitial patches are of kaolinite and sericite (possibly after plagioclase), calcite, and minor muscovite. Much of the K-feldspar may be secondary after plagioclase. The rock is brecciated slightly. A vein is of sericite and calcite.

K-feldspar	80-83%	magnetite	1- 2%
plagioclase	8-10	pyrite	minor
biotite	4- 5	apatite	minor
kaolinite	3- 4	muscovite	minor
calcite	1- 2	zircon	trace
hornblende	1		
vein			
sericite-calcite	0.5		

Plagioclase forms subhedral grains averaging 0.7-1 mm in size. Alteration is slight to moderate to sericite and minor calcite. Some grains are replaced moderately by irregular patches of K-feldspar. K-feldspar forms subhedral to anhedral, prismatic grains averaging 0.8-1.5 mm in size. Alteration is moderate to dusty hematite. Many grains have thin rims of sodic plagioclase, with textures which suggest that much of the K-feldspar is secondary, formed by replacement of the slightly more-calcic cores of original plagioclase grains. A few large plagioclase grains are replaced moderately in their cores by irregular patches of cryptocrystalline kaolinite.

Interstitial patches up to 2 mm in size are of cryptocrystalline kaolinite and minor to locally moderately abundant, extremely fine grained sericite; these may be secondary after plagioclase.

Biotite forms slender flakes averaging 0.3-0.8 mm long and a few up to 1.8 mm long, mainly enclosed in K-feldspar grains and broader flakes up to 0.3 mm in size in interstitial patches. Pleochroism is from light to medium/dark brown to reddish brown. A few flakes are replaced moderately by irregular patches of calcite and kaolinite.

Hornblende forms a few prismatic grains up to 1.5 mm long, and anhedral, equant grains averaging 0.2-0.3 mm in size in interstitial patches commonly associated with calcite. Alteration is complete to calcite, ankerite, and kaolinite. Associated with coarse hornblende grains, apatite forms moderately abundant grains, both as inclusions and along their borders. One hornblende(?) grain is replaced by a patch of very fine grained calcite and an intergrowth of extremely fine grained biotite and calcite. It contains a few grains of magnetite averaging 0.1-0.15 mm in size and one anhedral grain of apatite 0.25 mm across.

Magnetite forms disseminated grains averaging 0.1-0.2 mm in size. Alteration is complete to cryptocrystalline deep red-brown to opaque hematite.

Calcite forms interstitial grains averaging 0.1-0.2 mm in size and a few up to 0.3 mm across.

Muscovite forms slender flakes up to 0.1 mm long and a few up to 0.15 mm long intergrown with interstitial calcite.

Pyrite forms subhedral grains averaging 0.05-0.1 mm in size. A few slender lenses up to 0.15 mm long occur along biotite cleavage planes.

Apatite forms one anhedral prismatic grain 0.5 mm long and a few euhedral, prismatic grains up to 0.07 mm long associated with biotite. A few acicular grains are up to 0.3 mm long.

Zircon forms grains averaging 0.01-0.05 mm in size in interstitial patches.

A discontinuous veinlet up to 0.3 mm wide contains zones of cryptocrystalline sericite and others dominated by very fine to fine grained calcite with patches of ankerite/limonite.

Sample #6 142 Hornblende Biotite (Quartz) Diorite

Subhedral plagioclase is intergrown with anhedral hornblende and biotite, with minor interstitial quartz and K-feldspar. Alteration is weak to moderate, with plagioclase replaced by sericite-(epidote), biotite by chlorite-(Ti-oxide), and hornblende by tremolite/actinolite-calcite. The rock was granulated strongly in a breccia zone up to 1.5 mm wide. Late veinlets and replacement patches of calcite are mainly associated with the breccia zone. A few wispy veinlets are of chlorite-calcite.

plagioclase	70-75%	apatite	0.3%
hornblende	8-10	pyrite	0.2
biotite	5- 7	sphene	0.2
quartz	4- 5	chalcopyrite	minor
K-feldspar	4- 5	Ti-oxide	minor
magnetite	0.5	zircon	trace
breccia zone	3- 4		
veins, veinlets			
calcite	0.3		
chlorite-calcite	minor		

Plagioclase forms subhedral, prismatic grains averaging 1.5-2.5 mm in size and a few up to 4 mm long. Many grains are show prominent compositional growth zones from cores of An_{45-50} to rims of An_{22-25}. Finer grained plagioclase averaging 0.3-0.5 mm in size is intergrown with interstitial minerals. Alteration is slight to moderate to patchy zones of extremely fine grained sericite and minor flakes up to 0.08 mm long of muscovite, and is concentrated in the cores of the grains. A few grains also contain a patch averaging 0.07-0.15 mm in size of epidote.

Hornblende forms anhedral grains averaging 0.5-1.2 mm in size and a few up to 2.5 mm across. Some hornblende patches are intergrowths of two or more grains. Pleochroism is from light to medium slightly brownish green. Several grains are replaced slightly to completely by aggregates of very fine grained tremolite/actinolite and calcite.

Biotite forms ragged flakes averaging 0.5-0.8 mm in size and is concentrated in a few clusters up to 3 mm across of grains up to 1.5 mm in size. Smaller flakes commonly occur bordering hornblende. Pleochroism is from light to medium brown. A few grains are replaced moderately to completely by pseudomorphic, pale green chlorite. Intergrown with and along the margins of many biotite flakes are thin rims of hematite. Pyrite forms slender lenses averaging 0.3-0.5 mm long in *en echelon* textures along cleavage planes in several biotite flakes. Some other biotite grains contain moderately abundant lenses of Ti-oxide along cleavage.

Quartz and K-feldspar (microcline) form interstitial grains averaging 0.4-0.8 mm in size. Bordering some K-feldspar grains, plagioclase contains discontinuous zones averaging 0.02-0.05 mm wide of myrmekitic intergrowths of quartz in plagioclase.

Magnetite forms equant grains averaging 0.2-0.3 mm in size. It is concentrated moderately with hornblende. A few grains are replaced slightly by hematite.

Calcite forms a few patches from 0.5-1 mm in size of one or a few grains. Many patches are rimmed by thin overgrowths of sphene and ilmenite and contain inclusions of ilmenite averaging 0.05-0.1 mm in size. Associated with some of these is minor chalcopyrite.

(continued)

Apatite forms subhedral to euhedral grains averaging 0.1-0.15 mm in size and a few elongate grains up to 0.5 mm long.

Epidote forms one very fine grained, medium yellow patch associated with biotite.

Pyrite and minor chalcopyrite form a patch 0.8 mm across intergrown with hornblende and interstitial to an elongate euhedral apatite grain 0.3 mm long. Pyrite forms a few anhedral, in part skeletal grains averaging 0.1-0.3 mm in size in plagioclase and hornblende.

Sphene forms ragged grains averaging 0.03-0.08 mm in size, mainly as inclusions in biotite.

Chalcopyrite forms a few anhedral grains averaging 0.02-0.03 mm in size associated with hornblende.

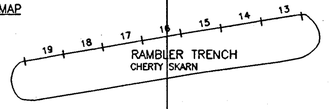
Zircon forms a few euhedral prismatic grains averaging 0.1 mm long enclosed in K-feldspar.

An irregular zone of cataclastic deformation up to 1.5 mm wide contains moderately to strongly granulated grains dominated by plagioclase and scattered replacement patches of calcite. A few biotite flakes in and near the zone contain tight crenulations in cleavage. Chalcopyrite forms a few patches up to 0.05 mm in size in the breccia matrix.

Calcite forms a few irregular veinlets up to 0.4 mm wide and replacement patches, mainly associated with the zone of cataclastic deformation; grain size averages 0.2-0.3 mm and ranges up to 1 mm.

A few wispy veinlets up to 0.05 mm wide of extremely fine grained to cryptocrystalline chlorite and calcite cut some hornblende grains.

INSET MAP



SAMPLE#	TYPE	Au, ppb	Cu, ppm
13	2X1m chip	180	960
14	2X1m chip	340	520
15	2X1m chip	100	510
16	2X1m chip	170	1300
17	2X1m chip	50	534
18	2X1m chip	30	140
19	2X1m chip	40	164
21	2X5m chip	200	1550
22	SK,Mag grab	5	88
23	SK,CP grab	4100	12000
24	SK,Py grab	140	178
25	SK,Py grab	30	165
26	SK,Py grab	190	6200
30	SK,Py grab	430	4000

0 1 2 3 4 5 metres SCALE 1:200

300.0 EL

200.0 EL

100.0 EL

0.0 EL

95-B-06

B-30

B-26

1

3

SECT1

SECT2

1122m. EL.

95-B-03

1114m. EL.

B-25

B-24

1112m. EL.

95-B-01

B-23

B-4-B-12

1102m. EL.

B-21

TO EHOLT

FAULT ZONE

95-B-02

B-22

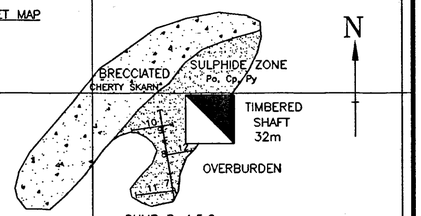
95-B-04

95-B-05

SECT1

3 1

INSET MAP



SAMPLE#	TYPE	Au ozlt	Cu%
JL95 B-4	PO grab	0.012	0.42
5	CP grab	0.160	10.80
6	Py grab	0.022	0.52
7	1.5m channel	0.084	2.00
8	1.5m channel	0.125	3.12
9	1.5m channel	0.144	2.68
10	1.5m channel	0.085	2.30
11	1.5m channel	0.050	1.54
12	1.5m channel	0.125	2.45

0 1 2 3 4 5 metres SCALE 1:200

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G. R. THOMSON GEOSCIENTIST

LEGEND

- 1 TERTIARY DYKES, SILLS–SYENITE, RHYODACITE, MONZONITE, DIORITE
- 3 TRIASSIC–CARBONIFEROUS/PERMIAN KNOB HILL GROUP–GREENSTONES, CHERT, LIMESTONE, SKARN, (BROOKLYN FM)?
- SHAFT
- TRENCH
- CONTACTS
- FAULTS
- ROADS
- CAMP
- OUTCROP BOUNDARY

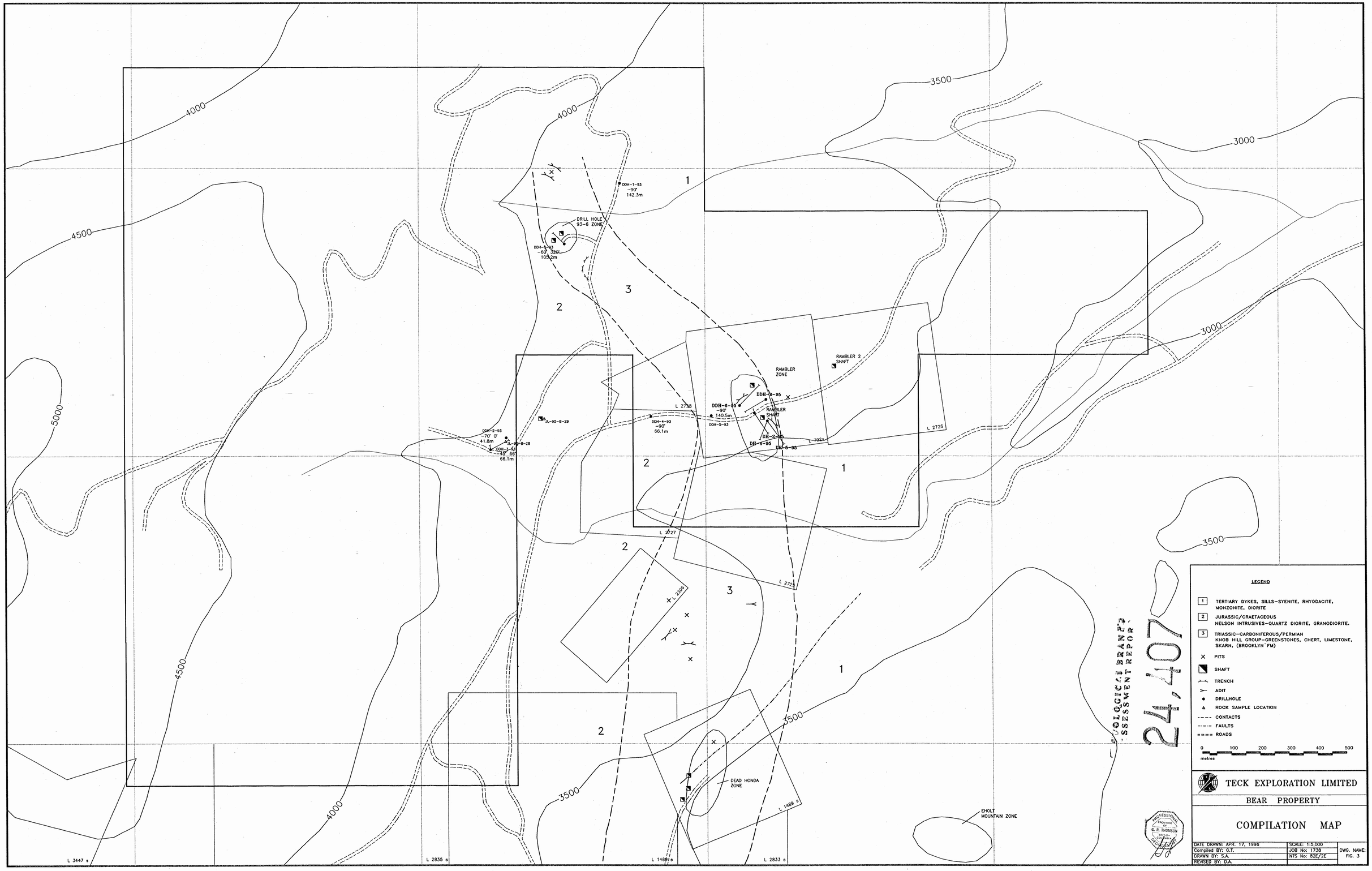
TECK EXPLORATION LIMITED

EHOLT PROPERTY; GREENWOOD M.D., B.C.

DRILL HOLE PLAN

RAMBLER SHOWINGS AREA AND DRILL PLAN

DATE DRAWN: APR. 24, 1996	SCALE: 1:1,000	DWG. NAME: FIG. 4
Compiled BY: G.T.	JOB No: 1738	
DRAWN BY: J.L. & G.T.	NTS No: 82E/2E	
REVISED BY: D.A.	FIG. 4	



LEGEND

1. TERTIARY DYKES, SILLS–SYENITE, RHYODACITE, MONZONITE, DIORITE
2. JURASSIC/CRAETACEOUS NELSON INTRUSIVES–QUARTZ DIORITE, GRANODIORITE.
3. TRIASSIC–CARBONIFEROUS/PERMIAN KNOB HILL GROUP–GREENSTONES, CHERT, LIMESTONE, SKARN, (BROOKLYN FM)

- × PITS
- SHAFT
- TRENCH
- ADIT
- DRILLHOLE
- ▲ ROCK SAMPLE LOCATION
- CONTACTS
- FAULTS
- ROADS

0 100 200 300 400 500 metres

GEOLOGICAL BRANCH
ASSESSMENT REPORT

24,407

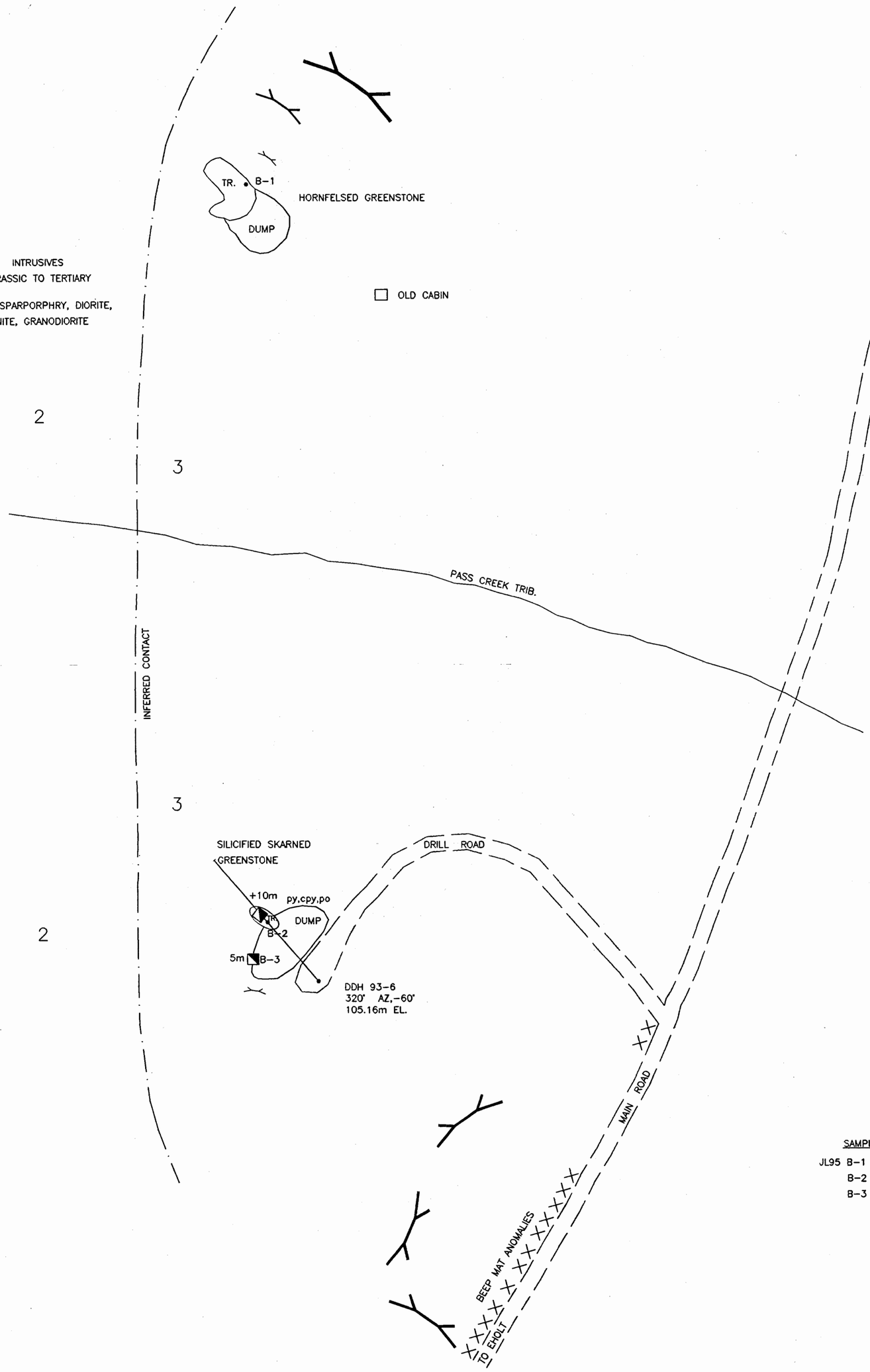
TECK EXPLORATION LIMITED

BEAR PROPERTY

COMPILATION MAP

DATE DRAWN: APR. 17, 1996	SCALE: 1:5,000	DWG. NAME: FIG. 3
Compiled BY: G.T.	JOB No: 1738	
DRAWN BY: S.A.	NTS No: 82E/2E	
REVISED BY: D.A.		

PROFESSIONAL ENGINEER PROVINCE OF BRITISH COLUMBIA G. R. THOMSON



SAMPLE#	TYPE	Au ozit	Cu%
JL95 B-1	PY grab	0.032	0.14
B-2	PY grab	0.038	0.20
B-3	PY grab	0.030	0.06

LEGEND

2 JURASSIC/CRAETACEOUS
NELSON INTRUSIVES—QUARTZ DIORITE, GRANODIORITE.

3 TRIASSIC—CARBONIFEROUS/PERMIAN
KNOB HILL GROUP—GREENSTONES, CHERT, LIMESTONE, SKARN, (BROOKLYN FM)

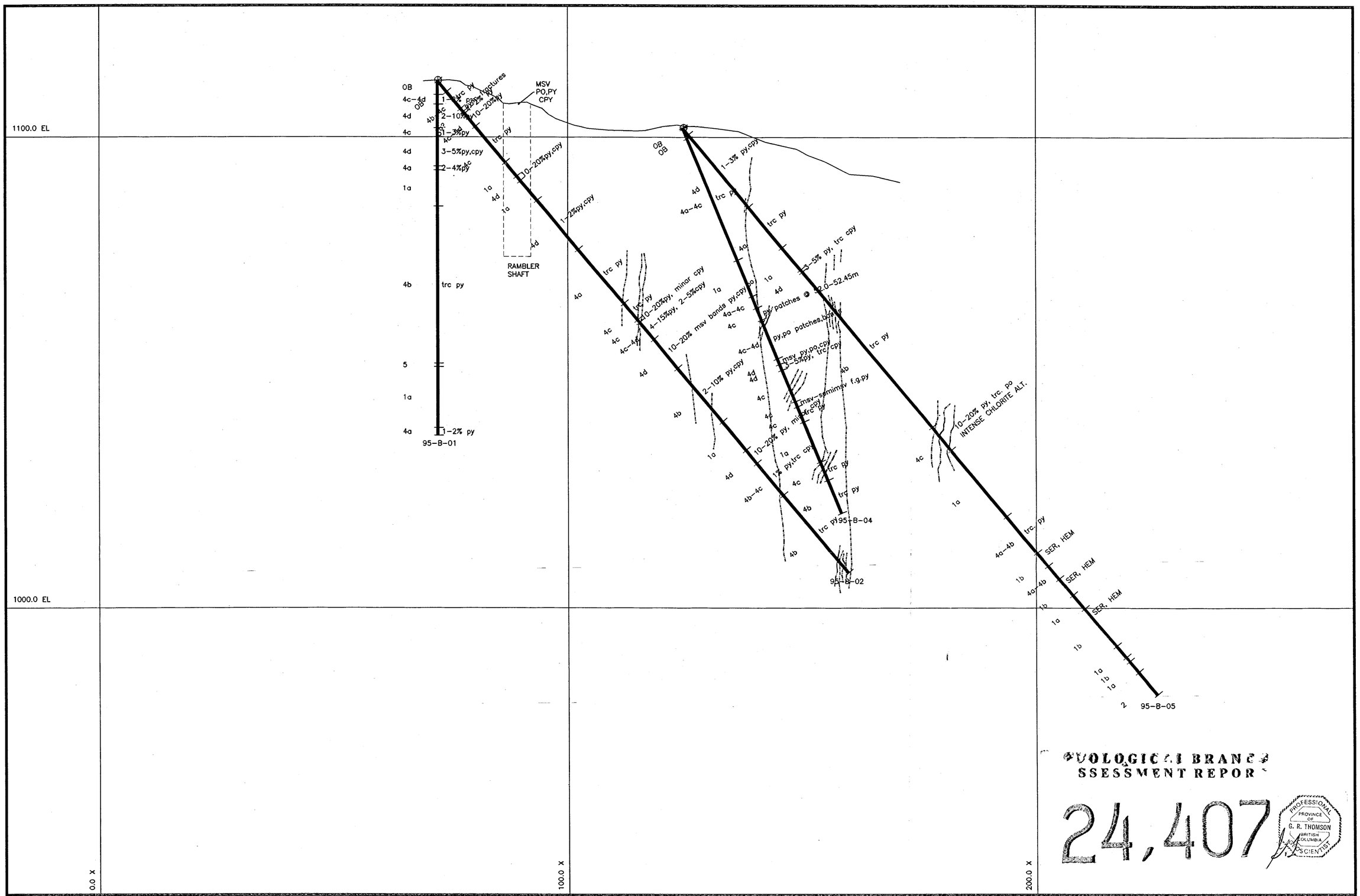
SHAFT
TRENCH
DRILLHOLE
CONTACTS
CREEK
ROADS

TECK EXPLORATION LIMITED

BEAR PROPERTY, B.C. GREENWOOD M.D.

BEAR NORTH SHOWINGS AREA
DRILL HOLE 93-6 AREA

DATE DRAWN: MAY. 3, 1996	SCALE: 1:1000	DWG. NAME: FIG. 5
Compiled BY: J.L.	JOB No: 1738	
DRAWN BY: D.A.	NTS No: 82E/2E	
REVISED BY:		



Geological Legend (Eholt Property)

TERTIARY

Penticton Group (Dykes, sills, intrusions)

1a Syenite

1b. Monzonite

1c. Rhyodacite

Volcaniclastic

2. Rhyodacite crystal tuff

JURASSIC and CRETACEOUS

Nelson Plutonic Rocks

3. Diorite, quartz diorite, granodiorite

CARBONIFEROUS or PERMIAN (TRIASSIC)

Knob Hill Group (Brooklyn Fm.)

Greenstone–(Cherty to non siliceous, aphantic)

4a. Non–fragmental, non to weakly skarned/mineralized

4b. Non–fragmental, weak to mod. skarned/mineralized

4c. Fragmental, non to weakly skarned/mineralized

4d. Fragmental, mod. to strongly skarned/mineralized

N.B. (Skarns contain variable concentrations of garnet, calcite, chlorite, epidote, quartz, clinopyroxene and tremolite/actinolite with associated sulphides–py,po,cpy,sphal)

Minerals (Alteration)	Minerals (Primary)	Sulphides
actinolite(act)	biotite	chalcopyrite(cpy)
		pyrrhotite(po)
		pyrite(py)
		sphalerite(sphal)
chalcedony(cdy)		
calcite(calc)	hornblende(horn)	
chlorite(chlor)	K–feldspar(kspar)	
tremolite(trem)	plagioclase(plag)	
epidote(epid)	quartz(qtz)	
garnet(garn)		
hematite(hem)		
magnetite(mag)	pyroxene(pxn)	
sericite(ser)		

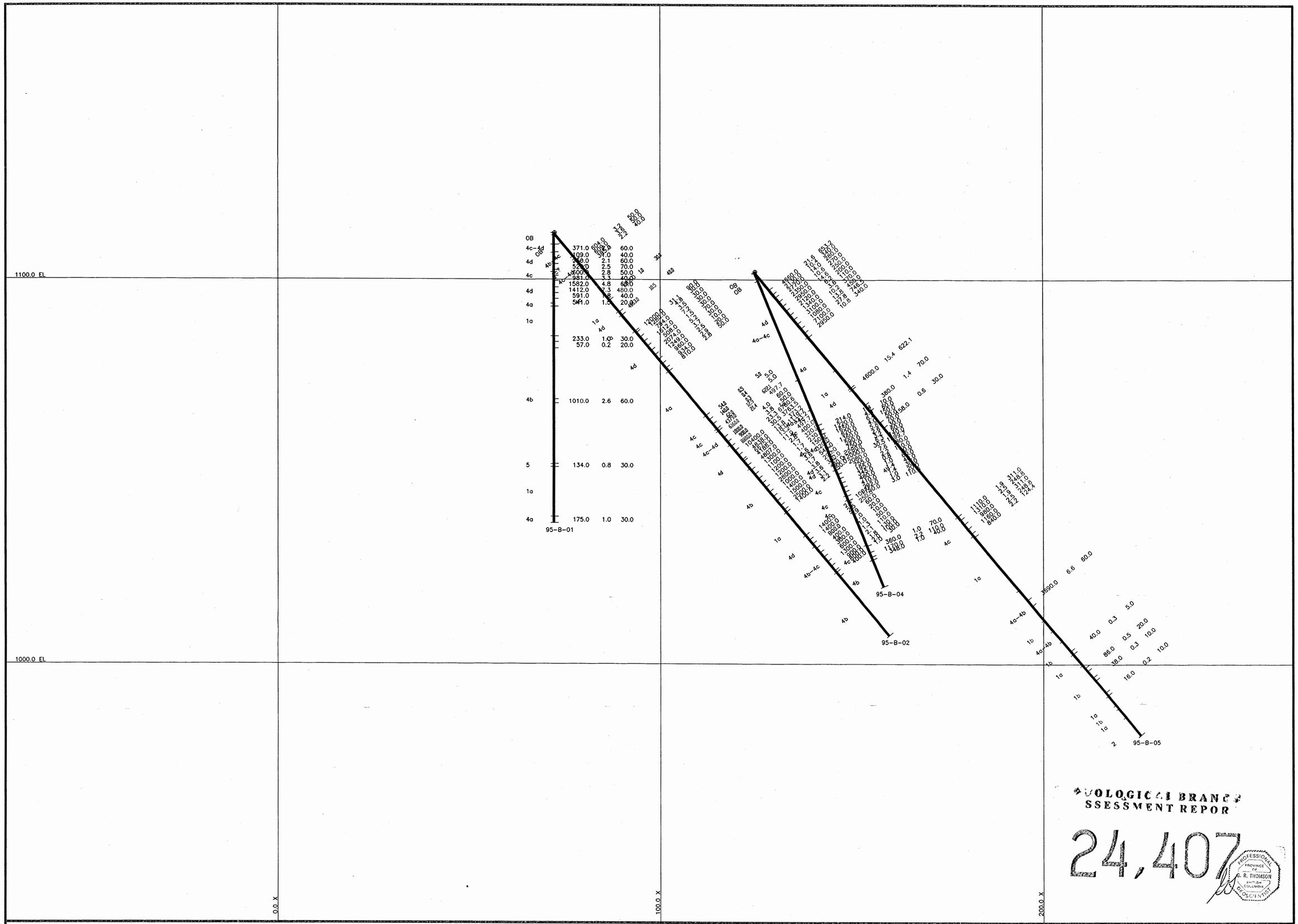
–·–·– Fault/Fracture Zone

TECK EXPLORATION LIMITED

EHOLT PROPERTY; GREENWOOD M.D., B.C.

DRILL SECTION 1 (95–B–01, 02, 04, 05)
RIGHT SIDE: SULPHIDES;
LEFT SIDE: LITHOLOGY

DATE DRAWN: APR. 24, 1996	SCALE: 1:500	DWG. NAME: FIG. 6
Compiled BY: G.T.	JOB No: 1738	
DRAWN BY:	NTS No: 82E/2E	
REVISED BY: D.A.		



Geological Legend (Eholt Property)

Note:
Drillhole 92-B-04 is not in the same plane as 95-B-01, 02, & 05

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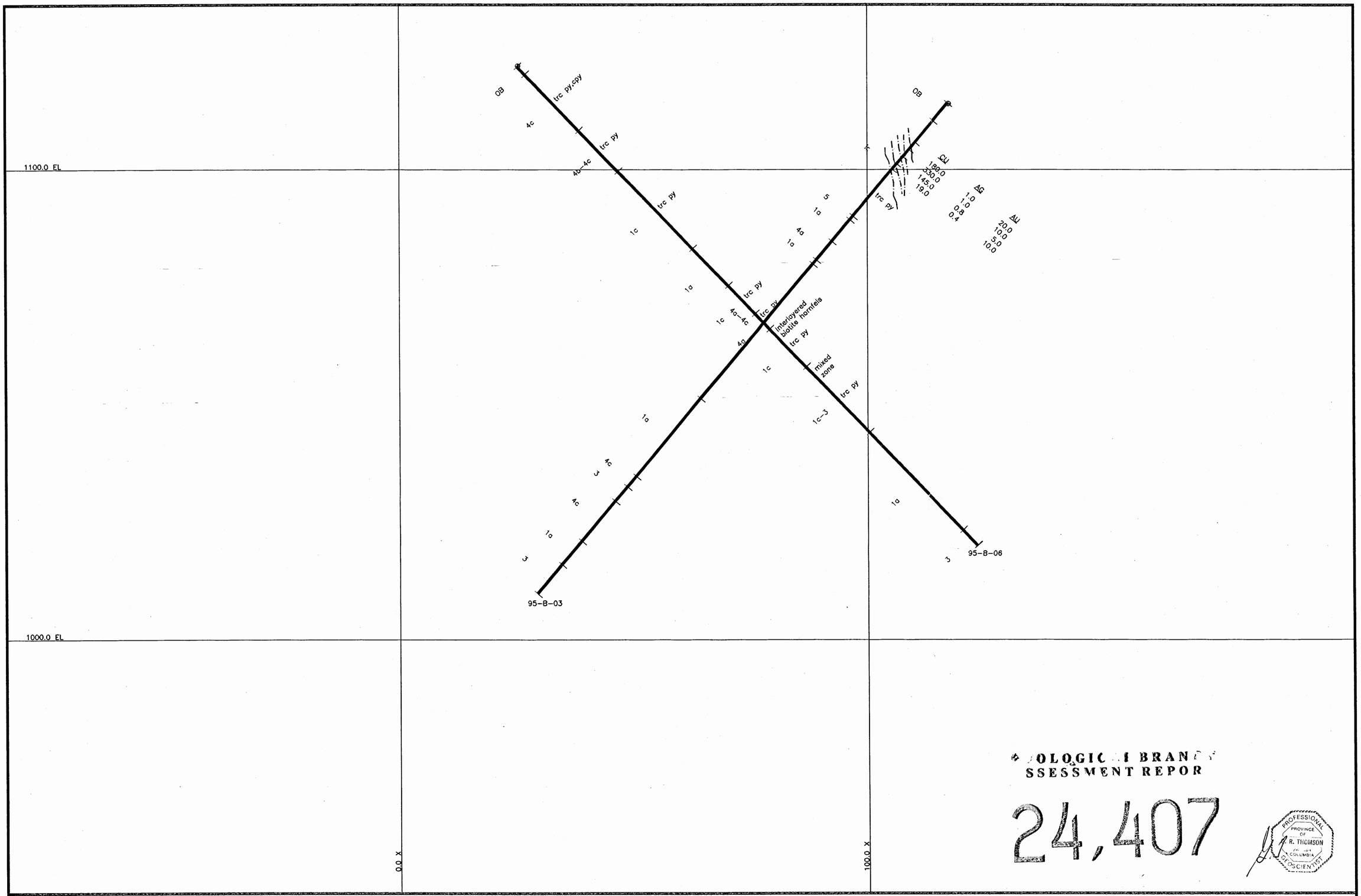
Minerals (Alteration)	(Primary)	Sulphides
actinolite(act)	biotite	chalcopyrite(cpy)
		pyrrhotite(po)
		pyrite(py)
		sphalerite(sphal)
chalcedony(cdy)		
calcite(calc)	hornblende(horn)	
chlorite(chlor)	K–feldspar(kspar)	
tremolite(trem)	plagioclase(plag)	
epidote(epid)	quartz(qtz)	
garnet(garn)		
hematite(hem)		
magnetite(mag)	pyroxene(pxn)	
sericite(ser)		

TECK EXPLORATION LIMITED

EHOLT PROPERTY; GREENWOOD M.D., B.C.

DRILL SECTION 1
RIGHT SIDE: CU PPM; AG PPM; AU PPB
LEFT SIDE: LITHOLOGY

DATE DRAWN: APR. 26, 1996	SCALE: 1:500	DWG. NAME: FIG. 6A
Compiled BY: G.T.	JOB No: 1738	
DRAWN BY:	NTS No: 82E/2E	
REVISED BY: D.A.		



PROFESSIONAL GEOSCIENTIST — PROVINCE OF BRITISH COLUMBIA — R. THOMSON

Geological Legend (Eholt Property)

TERTIARY

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- 4d. Fragmental, mod. to strongly skarned/mineralized

N.B. (Skarns contain variable concentrations of garnet, calcite, chlorite, epidote, quartz, clinopyroxene and tremolite/actinolite with associated sulphides–py,po,cpy,sphal)

Minerals (Alteration)	Minerals (Primary)	Sulphides
actinolite(act)	biotite	chalcopyrite(cpy)
		pyrrhotite(po)
		pyrite(py)
		sphalerite(sphal)
chalcedony(cdy)		
calcite(calc)	hornblende(horn)	
chlorite(chlor)	K–feldspar(kspar)	
tremolite(trem)	plagioclase(plag)	
epidote(epid)	quartz(qtz)	
garnet(garn)		
hematite(hem)		
magnetite(mag)	pyroxene(pxn)	
sericite(ser)		

Fault/Fracture Zone

TECK EXPLORATION LIMITED

EHOLT PROPERTY; GREENWOOD M.D., B.C.

DRILL SECTION 2 (95–B–03, 06)
RIGHT SIDE: CU PPM, AG PPM, AU PPB
LEFT SIDE: LITHOLOGY

DATE DRAWN: APR. 26, 1996	SCALE: 1:500	DWG. NAME: FIG. 7
Compiled BY: G.T.	JOB No: FIG. 7	
DRAWN BY:	NTS No: 82E/2E	
REVISED BY: D.A.		