

LOG NO: NOV 24 1993 RD.

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DIAMOND DRILL PROGRAM

GEOLOGICAL ASSESSMENT
KAMLOOPS

ASSESSMENT REPORT

Per

ON THE

ARROW PROPERTY

Slocan Mining Division
NTS 82K/5&12 , 82L/9&9
Latitude 50 30' Longitude 118 00'

FILED

E O L O G I C A L B R A N C H
A S S E S S M E N T R E P O R T

23,120

Owner & Operator:
Teck Corp.
#600,200 Burrard St.
Vancouver , B.C.
V6C 3L9

G.Evans
October 1993
Kamloops, B.C.

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1. INTRODUCTION

During 1993, a diamond drill program was conducted to test the "Ledge Horizon" Shuswap Zn-Pb-Ag mineralization over its strike length on the Arrow #3 claim block. This work tested the downdip potential of surface work conducted in 1992 which outlined the surface trend of the horizon. The purpose of the program was to try and outline a bulk tonnage target with open pit potential.

This property was staked to cover previously outlined Shuswap style Zn-Pb-Ag mineralization on strike with the Big Ledge deposit as part of a larger regional program .

This report describes the present program and results .

2. LOCATION AND ACCESS (Fig.1)

The Arrow claim block is located near the west shore of Arrow Lake approximately 65 kilometers south of the community of Revelstoke (82K/5&12 ,82L/8&9) 50 30'N and 118 00' West . The property can be accessed via Highway #23 south of Revelstoke and then taking the Shelter Bay logging road a further 18 kilometers south . At this point follow the Limekiln spur road for 3.1 kilometers to the Odin road which accesses much of the property .

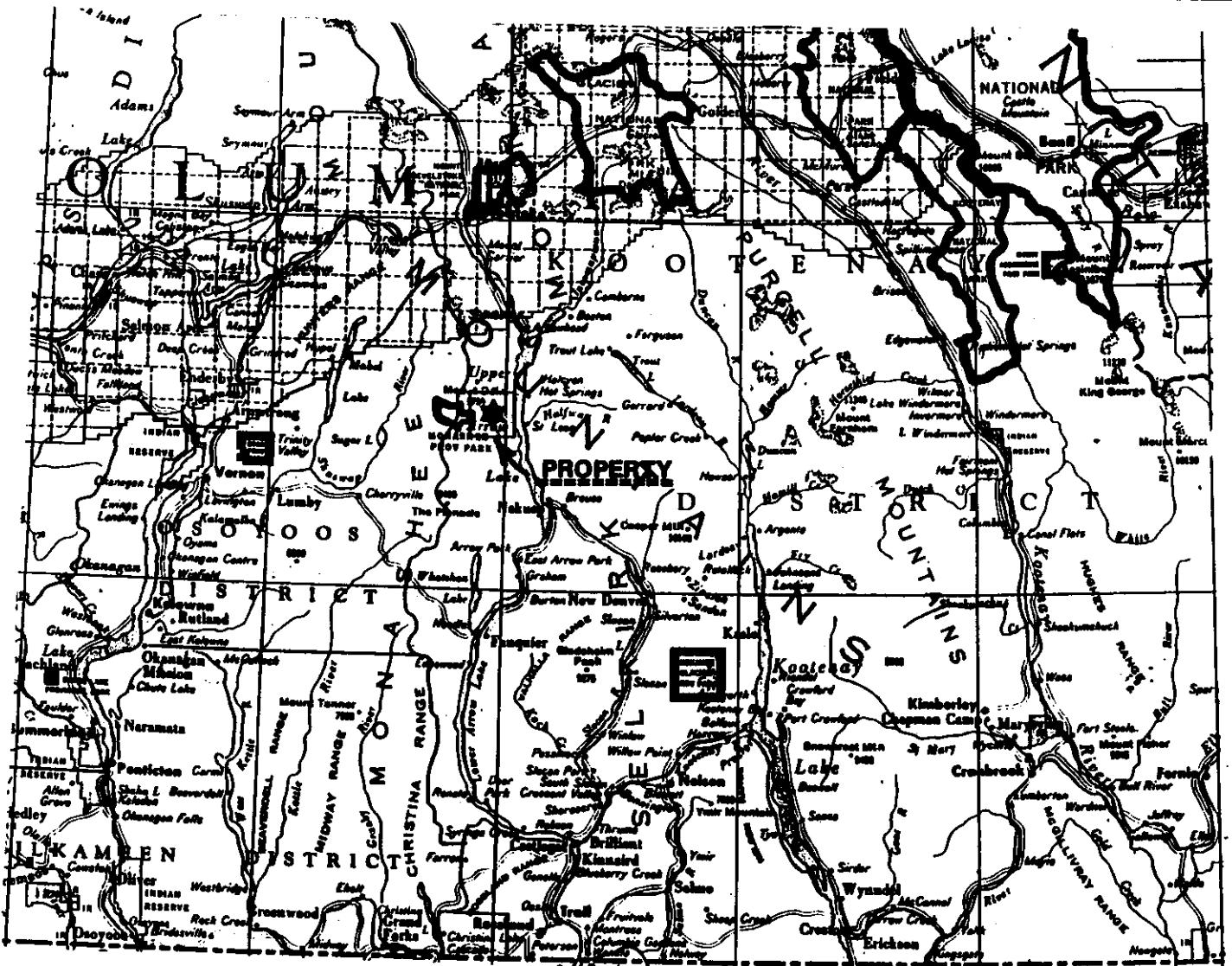
3. TOPOGRAPHY AND VEGETATION

The property is located west of Upper Arrow Lake and along the east of the Monashee mountain range . The eastern portion of the property is located along the western shore of Arrow lake at an elevation ranging from 500 -1100 meters . The western portions of the property are located to the west of Pingston creek along the base of the hill below Empress Lake with a maximum elevation of 1300 meters .

Vegetation consists of fir and cedar forest with open underbrush at lower elevations , changing to sub-alpine spruce forests at upper elevations . The main land use has been extensive logging . Rainfall is moderate-high in this area which is generally snow covered from October to April.

4. CLAIMS (Fig.2)

The Arrow claim group is located in the Slocan Mining Division and consists of 73 contiguous units . The property is owned by Teck Corporation of Vancouver . The pertinent data is included in the following table :



1:2,000,000

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LOCATION MAP

Fig. 1

ARROW CLAIM GROUP

Claim Name	Record #	No.of Units	Record Date	Expiry Date *
Arrow 1	304358	20	09/07/91	09/07/99
Arrow 2	304359	20	09/07/91	09/07/99
Arrow 3	305089	15	10/05/91	10/05/99
Arrow 4	305090	1	10/04/91	10/04/99
AR 1	313700	1	09/30/92	09/30/99
AR 2	313701	1	09/30/92	09/30/99
AR 3	313702	1	09/30/92	09/30/99
AR 4	313703	1	09/30/92	09/30/99
AR 5	313704	1	09/30/92	09/30/99
AR 6	313705	1	10/01/92	10/01/99
AR 7	313706	1	10/01/92	10/01/99
AR 8	313707	1	10/01/92	10/01/99
AR 9	313708	1	10/01/92	10/01/99
AR 10	313709	1	10/01/92	10/01/99
AR 11	313710	1	10/01/92	10/01/99
AR 12	313711	1	10/01/92	10/01/99
AR 13	313712	1	10/01/92	10/01/99
AR 14	313713	1	10/01/92	10/01/99
AR 15	313714	1	10/01/92	10/01/99
AR 16 Fr	313720	1	09/30/92	09/30/99
AR 17 Fr	313721	1	10/01/92	10/01/99

TOTAL = 73 units

* Expiry Date upon acceptance of this report .

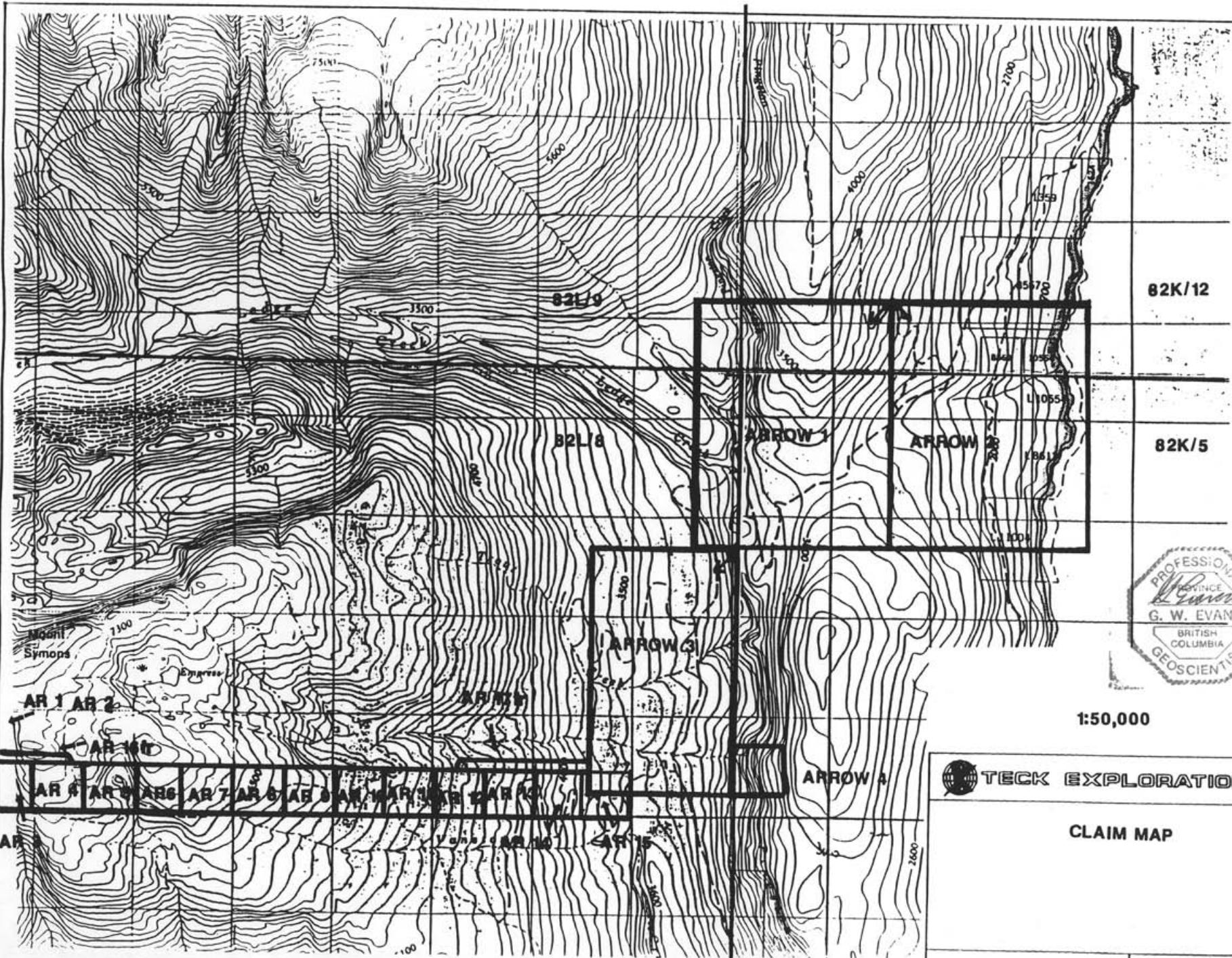


Fig. 2

5. PREVIOUS WORK and HISTORY

The property was staked on the basis of known Shuswap Zn-Pb-Ag style mineralization existing on open ground . Mineralization has been explored in this area since the 1890 's when the Big Ledge mineralization was identified near Empress Lake . Various groups worked portions of this mineralized horizon from the 1890's through 1928 including Consolidated Mining and Smelting Co., as underground work and trenching as well as diamond drilling .

In 1947 Cominco consolidated much of the area and actively explored the area including drilling from 1947 - 1966 . Since then several companies have explored peripheral areas including the Arrow property . These companies include :

1977- Metallgesellschaft and Cyrus Anvil Mining Corp . Mapped the geology in the area of the Arrow claims .

1980-1981- Esperanza Explorations conducted geochemical , geological and geophysical surveys in the area of the Arrow claims .

1988-1989- Noranda conducted geochemical and geological surveys over select portions of Arrow claims .

1991- Teck Corp. had the property staked .

1992- Teck geologically mapped the property and conducted a widespaced soil survey and magnetometer survey. This was followed up by a trenching program to expose the mineralization.

6. 1993 WORK

The following work was completed on the property :

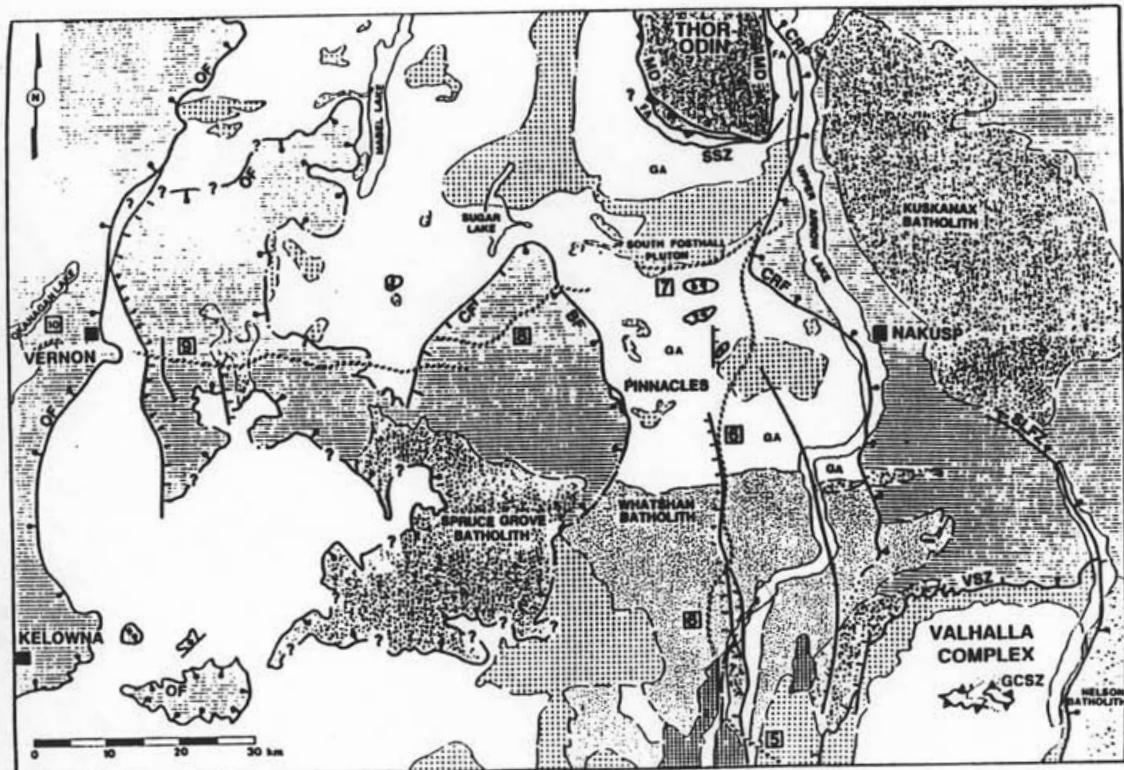
Nine diamond drill holes for a total of 943.6 meters tested the Ledge Horizon on the Arrow 3 claim. Split core samples (87 samples) from the "ledge" horizon were sent to the lab for 30 element ICP and 24 samples were also assayed for Zn. At the end of this program the drill pads, trails and 1992 trenches were reclaimed, fertilized and seeded with grass.

7. GEOLOGY

a) REGIONAL GEOLOGY

This area has seen a wide range of regional mapping with Bulletin 195 by J.E. Reesor and J.M. Moore (1:50,000 scale) providing the foundation along with more recent work by Sharon Carr and Ian Duncan adding further refinement . The area is largely underlain by Shuswap metamorphic rocks intruded by Eocene granodiorites and pegmatites .

The Shuswap metamorphic rocks belong to the Proterozoic -Mesozoic amphibolite grade complex . Ages of the rocks in the area of the property are poorly understood but recent work by S.Carr suggests much of the thick sequence correlates with the Gold Range assemblage which hosts the Big Ledge deposit maybe of Cambrian age .



From Carr, 1989

LEGEND

UPPER CRUSTAL ZONE

[Hatched] MIDDLE JURASSIC NELSON INTRUSIVE SUITE: predominantly granodiorite

[White] PALEOZOIC - LOWER JURASSIC STRATIFIED ROCKS:

MIDDLE CRUSTAL ZONE

[Cross-hatched] LATE PALEOCENE - EARLY EOCENE LADYBIRD GRANITE SUITE: biotite granite, quartz monzonite, leucocratic pegmatite (also includes areas with pegmatite with <50% metamorphic rocks)

[Dotted] LATE CRETACEOUS WHATSHAN BATHOLITH (includes Cariboo Creek stock): hornblende biotite bearing K-feldspar megacrystic quartz monzonite, mafic hornblende biotite diorite

[White] LATE PROTEROZOIC - MESOZOIC AMPHIBOLITE FACIES METAMORPHIC ROCKS: FA = Fawn Lake assemblage; GA = Gold Range assemblage

BASEMENT ZONE

[Hatched] PROTEROZOIC CRYSTALLINE BASEMENT AND LATE PROTEROZOIC - (?) CAMBRIAN COVER GNEISSES

— GEOLOGIC CONTACT; MAPPED, COMPILED FROM PUBLISHED MAPS, ASSUMED

— Low - Moderate Angle Eocene Normal Fault (Pegs on Hanging Wall)

— Steep Eocene Normal Fault (Pegs on Hanging Wall)

— Steep Eocene Normal Fault; Sense of Displacement Uncertain

[Square] LITHOPROBE LINE

BF BEAVEN FAULT

CF CHERRYVILLE FAULT

CRF COLUMBIA RIVER FAULT

GCSZ GWILLIM CREEK SHEAR ZONES

MD MONASHEE DECOLLEMENT

OF OKANAGAN VALLEY - EAGLE RIVER FAULT SYSTEM

SLFZ SIOCAN LAKE FAULT ZONE

SSZ SLATE MOUNTAIN SHEAR ZONE

VSZ VALKYR SHEAR ZONE



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REGIONAL GEOLOGY

Fig.3

This region is located on the southern margin the Thor-Odin Dome and is separated from the high grade central gneiss complex by the Slate Mtn. Shear zone and the Monashee decollement . These structures were active during the peak of metamorphism resulting in active thrusting and later denudation of rocks in the area of the Arrow claims over migmatites and granitic gneisses in the core of the Thor-Odin dome .

Rocks of the Gold Range assemblage form a thick overlying sequence consisting of quartzites , marbles , pelites and biotite gneisses as well as amphibolites in various proportions . These rocks have a complex structural history with at least three phases of folding and several stages of faulting . Metamorphism in this area is dominated by sillimanite-almandine-orthoclase facies . It is believed the pegmatite dyke swarms and various granodiorite to monzonite intrusives are related to the Eocene Ladybird Pegmatite formed during the unroofing of the complex .

b) PROPERTY GEOLOGY

The property is dominated by biotite-sillimanite schists with lesser quartzites, marbles and calcsilicates . The NW corner of Arrow 1 is underlain by extremely mafic garnet bearing amphibolites believed to belong to the Proterozoic Fawn Lake assemblage . These rocks display intense deformation believed to relate to the Slate Mtn. shear zone .

Overlying this sequence is the Fawn Lake assemblage which displays less deformation. This assemblage strikes E-W to N-S with generally moderate to shallow dips to the south or east . The stratigraphy on the property consists of approx. 60% biotite-sillimanite schists (probably a pelitic mud with a tuffaceous mafic volcanic component as a protolith) interbedded with quartzites and amphibolites as well as the occasional marble unit . No tops evidence are preserved and using the "Ledge " horizon as a marker horizon no fold duplications are indicated (debatable as 93 work indicates) .

Along the southern edge of Arrow 1 & 2 large sill like bodies of pegmatite and Ladybird intrusives have flooded into the amphibolites and biotite schists without disturbing their orientations . The rest of the property has generally less than 10% Ladybird intrusives . In several places small Tertiary lamprophyre dykes were located with little or no metamorphism indicating they postdate all other events .

Several styles of folding are evident on the property on an outcrop scale . Compositional layering is very close to being parallel to bedding with isoclinal folds common along this axial plane . Limited lineation measurements indicate a shallow easterly plunge . Carr believes there are several stages of folding along this orientation related to the peak of metamorphism . Later broad folds can be seen along Upper Arrow Lake , warping the sequence on a 10-50 meter scale .

Faulting along the foliation is common with no true sense of offset . Late stage faults are apparent along N-S trends ie. Pingston Creek with a left lateral offset which in part maybe a rotational movement .

SHUSWAP ROCK UNIT DESCRIPTIONS

These units are subdivided into general ages but Shuswap rocks are ordered by lithology with no stratigraphic order:

SHUSWAP ROCKS (Proterozoic - Mesozoic)

Unit 1a) - Massive Amphibolite - A medium-coarse grained groundmass dominated by amphiboles with lesser amounts of biotite and plagioclase . Commonly contains varying amounts of .5-2.0 cm almandine garnets in layered amphibolites .

Unit 1b) - Amphibolite w/ Calc-silicate Laminations - The same amphibolite unit as 1a) with alternating bands of quartzites with diopside - tremolite and actinolite . Laminations generally on a one centimeter scale or less .

Unit 1c) - Amphibolite w/ Biotite Schist - The protolith of this unit is likely a mixture of mafic tuffs and pelitic sediments . The resultant metamorphic rock is a mixture of medium grained amphibolites containing an equal amount of micas (both biotite and muscovite) . This rocktype commonly contains sillimanite aggregates .

Unit 2) - Biotite Schist - Well laminated biotite with lesser muscovite bearing schists . Can contain quartzite laminations and occasionally 0.5 cm. almandine garnets . Commonly the surface is strongly gossanous due to the high iron content and trace amounts of disseminated pyrite and pyrrhotite are present .

Unit 3) - Biotite Gneiss - Matrix is dominated by finely laminated medium grained white - grey quartzite with 20-30% biotite schist laminations varying in thickness from 0.5-10.0 cm.

Unit 4) - Quartzite - Medium grained quartzite grains form beds 10-20 cm. in thickness , which display bedding with preferential weathering of certain beds due to change in grain size and carbonate content . Color varies from white to buff or a grey color . Minor rutile , biotite and muscovite grains are present .

Unit 4a) - Quartzite w/ Flake Graphite - Dull grey colored fine grained quartzite with trace-20% disseminated flake graphite grains . Commonly contains 2 - 10% disseminated pyrite and pyrrhotite with trace amounts of disseminated sphalerite .

Unit 4b) - Quartzite w/ Calcsilicate Laminations - Medium grained quartzite takes on a light green color with diopside in the matrix . Occasional laminations of calcsilicates consisting of diopside, tremolite and actinolite . Calcsilicates contain minor grains of rutile, muscovite and biotite .

Unit 5) - Marble - Marble units normally appear as grey massive weathered units grading to dark grey with increasing graphite component . Calcite grains are 1-3mm and bedding is usually apparent with graphitic beds or minor calcsilicate laminations . Occasionally flake graphite disseminations are present within the marble .

Unit 5a) - Calcsilicates +/- Marble - These rocks are a pale green color with beds and pods of marble preferentially eroded . The calcsilicates consist of impure quartzites containing diopside, amphiboles, biotite with minor rutile and muscovite.

JURASSIC ROCKS (above Columbia and Okanogan Faults)

Unit 6) - Argillite - Graphitic argillite and phyllite with strong slaty cleavage . Bedding is preserved with interbedded graywackes common .

Unit 6a) - Mafic Volcanics - Pervasive chlorite alteration to various mafic volcanic units with a strong schistosity developed . Remnant textures include laminated tuffs , vesicular flows and lappili tuffs .

TERTIARY LADYBIRD LEUCOGRANITE SUITE

Unit 7) - Pegmatites - Coarse grained dykes sills and small plugs of pegmatites are common throughout all rocktypes . Normally the rock is dominated by 0.5 - 1.0 cm. crystals of quartz, alkali feldspars and plagioclase . Varying lesser amounts of biotite, muscovite and tourmaline are also present.

Unit 7a) - Ladybird Granites - These form fine to medium grained stocks and plutons . Compositonally these rocks range from granite to quartz monzonite . Minerals consist of plagioclase alkali feldspar and quartz with access muscovite biotite and occasionally garnet.

EOCENE DYKES

Unit 8) - Lamprophyre Dykes - Occassional unaltered extremely mafic dykes are present . Matrix is a dark brown fine grained biotite , amphibole and mafic minerals with ocassional vesicles and calcite filled amygdules .

8. " LEDGE " HORIZON & MINERALIZATION

The " Ledge " horizon is a distinctive quartzite package that hosts the Zn-Pb-Ag mineralization accross the width of the property . This horizon can be traced for 1500 meters trending NE on the west side of Pingaton Creek and for a further 2500 meters through the central portion of Arrow 1 & 2 again trending NE . The horizon where exposed is surprisingly consistent with a 40 meter true thickness . A distinctive quartzite containing 2-20% flake graphite and trace to 10% disseminated sulphides (py,po,sp) is the dominant lithology with lesser massive sulphides , calcsilicates , marbles and rare biotite-sillimanite schists .

This horizon contains 5-75% sections of massive sulphides consisting of pyrrhotite, pyrite, sphalerite, galena and trace amounts of chalcopyrite . These multiple horizons have been the focus of previous work to assess the economic mineral potential . Generally near the sulphide zones the quartzite has a calcsilicate component and occasionally thin marble units are present . While the thickness of this horizon is unusually large in many respects it is a typical Shuswap style Zn-Pb-Ag system . The sulphides appear crudely zoned with Pb dominant sections associated with narrow marble horizons . The most common form of mineralization is massive fine grained-medium grained pyrrhotite with disseminated pyrite and sphalerite . The highest grade Zn mineralization appears related to medium grained semi-massive sulphides consisting of sphalerite and pyrite . Alteration is essentially absent which supports a possible syngenetic origin for this system which maybe a form of Sed-ex Zn-Pb system . The true thicknesses of the sulphide mineralization are often difficult to estimate due to the dip slope nature of the horizon exposed on the property .

9. 1993 DIAMOND DRILL PROGRAM

The Arrow 3 claim was selected for drill testing in 1993 because it has the most obvious mineralization directly on strike with Cominco's ground covering the extensive mineralized exposures. Nine holes were completed for a total of 943.6 meters of drilling. The "ledge" horizon was encountered in seven of the nine holes while the remaining two holes did not reach the required depth. The "ledge" horizon appears as a persistent horizon varying in thickness from 10-25 meters in thickness over the 650 meters of strike length that was drill tested.

In general the highest grades and thickest grades were encountered in the westernmost portions of the drilled area. This maybe due to proximity of an isoclinally folded antiform with a shallow NE plunge. Many of the Shuswap systems have higher thicker grade sections near F1 fold closures. There is a good possibility that the "upper" quartzite represents a upper limb of the "ledge" horizon, but there are some lithologic differences and mineralization is much weaker.

DRILL LOCATIONS

HOLE NO.	LINE	STATION	ELEVATION	AZIMUTH	DIP	LENGTH
A-1	2+73 E	1+80 S	3410 ft.	000	-45	78.0 m's
A-2	2+30 E	2+10 S	3410 ft.	000	-45	80.8 m's
A-3	2+70 E	2+75 S	3420 ft.	000	-45	108.2 m's
A-4	4+10 E	2+95 S	3405 ft.	000	-55	97.9 m's
A-5	5+50 E	2+00 S	3345 ft.	000	-55	151.2 m's
A-6	3+25 E	3+50 S	3410 ft.	000	-70	184.8 m's
A-7	8+50 E	0+56 S	3060 ft.	000	-45	87.2 m's
A-8	7+00 E	1+10 S	3140 ft.	000	-45	87.2 m's
A-9	8+95 E	0+35 N	3010 ft.	000	-70	68.3 m's
						TOTAL = 943.6 m's

DRILL HOLE SUMMARIES

A-1

This hole tested the downdip extension of Trench #5C excavated in 1992. The drill hole encountered a similar sequence to that exposed in the trench with hangingwall and footwall sequences consisting of dominantly biotite-silliminite schists with calc. silicate and quartzite interbeds. The entire section appears to be a homoclinal? sequence dipping approximately 30 degrees to the south. The mineralization appears confined to typical "ledge" horizon sequence consisting of graphitic quartzites with lesser calc-silicates and marble beds. Erratic massive-semi massive sulphides (po-py-sp-ga) were encountered over the 24 meter apparent thickness with maximum zinc values of 13.4% Zn over 0.3m's.

A-2

The western end of the horizon was tested adjacent to the the Ledge property with this hole. A similar sequence to A-1 was encountered with 5-12 meter thick marble interbeds intersected in the upper hangingwall and lower footwall sequence dominated again by biotite-silliminite schist. The "ledge" horizon was intersected over a true width of 15 meters with a central core containing pods of massive to semi-massive sulphides in a siliceous to calc silicate gangue. Maximum grades attained are up to 10.4% Zn over 1.0 meter in these sulphide lenses.

A-3

This hole tested the downdip extension of the horizon approximately 70 meters downdip from A-1 and approximately 100 meters downdip from Trench 5C. The sequence persists to this depth with similar mineralization within sulphide lenses (po-py-sp-ga). Maximum grades include 9.5% Zn over 1.0 meter.

A-4

A previously unknown graphitic bearing quartzite horizon was encountered in this hole and the hole was shut down too early to intersect the "ledge" horizon which should occur ~ 50 meters further down dip. The hole encountered a thick marble sequence near the top of the hole (part of the Empress marble?) and continued through a biotite-silliminite sequence before encountering a 45 meter thick weakly mineralized quartzite horizon. This unit is strongly faulted and contains disseminated graphite with up to 2% disseminated pyrrhotite and up to 6% pyrite. In general this horizon resembles a thick weakly mineralized equivalent of the "ledge" horizon but further work revealed this horizon structurally overlies the well mineralized "ledge" horizon.

A-5

This hole intersected the quartzite horizon mentioned in A-4 but was later deepened to intersect the "ledge" horizon which occurs 30 meters stratigraphically below the "upper" quartzite. A typical biotite-silliminate schist sequence forms the footwall and hangingwall sequence to the "ledge" horizon in this hole. Isoclinal folds are apparent in some of the drill holes and the possibility that the upper quartzite unit was a fold equivalent of the "ledge" horizon remains a possibility. The sequence seen in A-5 could well reflect an isoclinal antiform identified at Empress Lake with gross scale hangingwall and footwall sequences appearing very similar. The "upper" quartzite sequence is once again strongly faulted potentially reflecting an axial planar fault near the nose of the fold. Only weak mineralization is present in the "upper" quartzite while the "ledge" horizon contains significantly more sulphides. In A-5 the highest Zn values consist of 4.82% Zn over a 3.0 meter interval.

A-6

This hole was planned to test the relationship between the two quartzite horizons at depth between A-4 and A-5. Unfortunately the hole did not resolve this question clearly and if anything created extra questions. The hole encountered a 35 meter thick sequence of weakly mineralized "upper" quartzite which was strongly faulted parallel to the foliation. The "ledge" intersection consists of a 9 meter interval of quartzite which was only very weakly mineralized with minor pyrrhotite and pyrite. If the upper quartzite is an antiformal equivalent of the "ledge" horizon this hole indicates the grades decrease markedly down the limbs away from the main fold closure.

A-7

This hole was terminated before encountering the "ledge" horizon. A 23 meter section of the upper quartzite was intersected with graphitic quartzite containing intervals of up to 2% po and 4% py. This horizon is strongly faulted parallel to the foliation.

A-8

Both the "upper" quartzite and the "ledge" horizon were intersected in the hole. The "ledge" horizon consists of a 10 meter interval with lenses of massive to semi-massive sulphides dominated by pyrite with lesser po,sp. Grades of the mineralization in both A-8 and A-9 have markedly decreased ie. A-8 maximum 3.2% Zn over 1.0 meters. The net result is that better widths and grades are indicated towards the Cominco Big Ledge property immediately west of the area drilled. The reason for this remains unknown and maybe; related to distance from a possible antiformal closure or a primary sedimentation feature or some unrecognized structural feature.

A-9

The hole is the eastern most hole drilled in the program. This hole tested the down dip extension of the "ledge" horizon from previous surface exposure in trench #4. The "ledge" horizon was intersected over a 12 meter interval with only low values in semi-massive sulphides (1.2% Zn over 1.6 m's). The grades in this section appear to be decreasing down dip which supports the antiformal model with higher and thicker values near the fold nose.

TABLE OF MINERALIZED INTERSECTIONS

HOLE #	INTERVAL	WIDTH	Zn %	Pb %	Ag (g/t)
A-1	14.1 - 40.6 m's	26.5 m's	0.95%	nil	2.0 g/t
includes	15.3 - 15.5 m's	0.3 m's	13.40%	tr	3.6 g/t
includes	24.7 - 26.2 m's	1.5 m's	3.04%	0.16%	3.5 g/t
A-2	29.0 - 44.7 m's	15.7 m's	1.93%	nil	2.0 g/t
includes	31.7 - 38.1 m's	6.4 m's	2.90%	0.30%	3.0 g/t
includes	33.9 - 34.9 m's	1.0 m's	10.40%	0.31%	7.2 g/t
A-3	70.6 - 88.8 m's	18.2 m's	1.58%	nil	2.0 g/t
includes	71.4 - 76.8 m's	5.4 m's	2.90%	0.30%	3.0 g/t
includes	75.3 - 76.3 m's	1.0 m's	9.50%	0.60%	7.1 g/t
A-5	91.9 - 114.0m's	22.1 m's	1.02%	nil	0.3 g/t
includes	91.9 - 98.0 m's	6.1 m's	3.00%	tr	0.4 g/t
includes	95.0 - 98.0 m's	3.0 m's	4.82%	0.10%	0.7 g/t
A-8	68.3 - 78.8 m's	10.5 m's	0.60%	nil	0.6 g/t
includes	68.3 - 69.3 m's	1.0 m's	3.20%	tr	1.6 g/t
A-9	46.2 - 58.7 m's	12.5 m's	0.30%	nil	0.2 g/t
includes	49.2 - 50.8 m's	1.6 m's	1.20%	tr	0.4 g/t

10. CONCLUSIONS AND RECOMMENDATIONS

The "ledge" horizon is a persistent horizon over the 650 meters of strike drilled in the 1993 program. Due to true widths of only 10-25 meters with lower than anticipated values (maximum 1.58% Zn over 18.2 m's) there is no open pit potential in this portion of the property. Narrower high grade intervals (ie 10.4% Zn over 1.0m) maybe potential targets in structurally controlled areas. The possibility of a NE trending shallow NE plunging overturned antiform (F1 fold) which structurally thickens the mineralization remains and requires further investigation.

At this time mineralization in the drilled area appears to be increasing in thickness and grade towards the west into the Big Ledge property. On the Arrow property other portions of the "ledge" horizon on Arrow # 1 & 2 require drilling to assess the potential.

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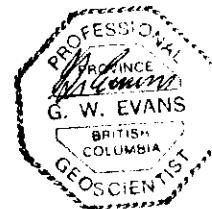
APPENDIX 1

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I , Graeme Evans , do certify that:

- 1) I am a geologist and have practiced my profession for the last eleven years .
- 2) I graduated from the University of British Columbia , Vancouver , British Columbia with a Bachelor of Science degree in Geology (1983).
- 3) I am a member in good standing with the APEGBC as a professional geoscientist.
- 4) I was actively involved and supervised the Arrow program and authored the report herein.
- 5) All data contained in this report and conclusions drawn from it are true and accurate to the best of my knowledge.
- 6) I hold no personal interest, direct or indirect in the Arrow property which is the subject of this report .



Graeme Evans

**Graeme Evans
Project Geologist
November , 1992**

APENDIX II
Cost Statement

STATEMENT OF EXPENDITURE

1. CORE LOGGING

Graeme Evans (Project Geologist)
18 Days @ \$292./day
(May 5-14, May 18-25) \$ 5256.00

2. ANALYTICAL COSTS

87 Drill Core Samples for 30 element ICP
@ Echo-Tech Labs \$ 10.28 /sample \$ 894.36

24 Drill Core Samples for Zn assay
@ Echo-Tech Labs \$ 6.70 /sample \$ 160.80

4. TRANSPORTATION

20 Days @ \$70 /Day \$ 1400.00

6. FOOD & ACCOMMODATION

20 Man Days @ \$ 70/day \$ 1400.00

7. DIAMOND DRILLING

Atlas Drilling
943.6 m's NQ DDH @ \$41.53/m \$39187.71

8. TRENCH & DRILL PAD RECLAMATION

50 hours cat time (D-6)
@ \$71.25/hr \$ 3562.50

Grass seeding
(labour plus seed & fertilizer cost) \$ 620.00

9. REPORT

Report Writing G.Evans
6 days @ \$292/day \$ 1752.00

Drafting 8 days S. Archibald
@ 190/day \$ 1520.00

10. FIELD & OFFICE SUPPLIES

TOTAL \$54,533.37

APENDIX III
Certificate of Analysis

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

TECK EXPLORATION ETK 93-119
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

1, 1993

ATTENTION: GRAEME EVANS

ES IN PPM UNLESS OTHERWISE REPORTED

31 ROCK SAMPLES RECEIVED MAY 23, 1993
PROJECT #:1719

1

DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	NO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	X	ZN
- 122151	.2	2.97	5	4	275	5	1.03	<1	27	171	19	3.66	1.48	<10	1.08	231	2	.05	44	370	12	<5	<20	26	.34	<10	56	<10	20	57
- 122152	.2	1.25	5	8	65	<5	10.10	5	6	37	49	2.16	.27	10	3.09	336	6	.01	14	>10000	216	5	<20	393	.03	10	47	<10	14	1886
- 122153	.2	1.13	5	6	110	<5	7.99	1	5	84	33	1.48	.48	<10	2.55	255	16	.01	26	6120	56	5	<20	248	.04	10	279	<10	14	227
- 122154	9.4	.33	5	<2	60	15	2.70	71	14	81	70	13.38	.06	<10	.32	223	18	<.01	16	5070	2374	<5	<20	19	.01	40	31	<10	4	>10000
- 122155	1.0	1.23	5	2	45	<5	5.95	27	4	57	13	2.49	.21	<10	1.05	149	9	.04	10	7400	522	<5	<20	148	.02	10	60	<10	12	>10000
- 122156	7.2	.42	5	<2	65	<5	2.74	156	18	27	94	>15	.06	<10	.29	434	6	<.01	14	5460	3096	<5	<20	72	.01	40	11	<10	2	>10000
- 122157	.4	.74	10	8	70	<5	11.52	6	3	30	32	1.02	.25	10	4.58	392	4	.01	6	7880	160	5	<20	410	.01	<10	73	<10	11	2774
- 122158	3.4	1.10	10	2	60	<5	2.53	22	9	99	52	7.46	.22	<10	.51	196	15	.02	31	2270	932	<5	<20	49	.03	10	156	<10	3	>10000
- 122159	.6	.97	10	6	65	<5	8.26	2	4	37	48	2.00	.28	<10	2.16	244	5	.01	13	7280	316	5	<20	237	.02	10	105	<10	11	884
- 122160	.8	.80	5	2	40	<5	10.51	28	5	40	40	2.32	.28	10	3.72	383	5	.01	10	9400	450	5	<20	212	.02	10	88	<10	13	5544
- 122161	.2	.78	15	8	40	<5	10.65	5	4	26	53	2.81	.24	<10	4.45	364	3	.02	9	8210	218	5	<20	206	.02	20	57	<10	11	1397
- 122162	<.2	.97	5	2	105	<5	9.84	2	3	35	18	1.31	.34	10	2.08	428	6	.03	8	4150	112	5	<20	209	.04	<10	79	<10	13	1739
- 122163	.2	3.46	5	2	95	<5	1.62	<1	25	112	19	3.54	1.38	<10	.97	196	1	.03	39	370	14	<5	<20	43	.27	<10	49	<10	14	76
- 122164	<.2	1.78	5	2	210	<5	.62	<1	21	149	11	3.11	.67	<10	.97	249	5	.01	39	390	10	<5	<20	22	.17	<10	36	<10	12	65
- 122165	1.0	1.35	5	2	60	<5	2.36	6	13	99	44	6.40	.35	<10	1.10	162	16	.02	39	1860	278	<5	<20	27	.06	<10	283	<10	5	4116
- 122166	6.8	.63	10	<2	105	<5	4.47	93	15	37	178	>15	.08	<10	.63	300	9	<.01	19	3430	1266	<5	<20	103	.02	30	82	<10	1	>10000
- 122167	1.2	1.37	5	<2	60	<5	9.75	3	5	62	23	2.11	.45	10	2.38	311	6	<.01	15	>10000	1212	5	<20	354	.03	<10	138	<10	15	1707
- 122168	6.0	.63	10	<2	65	10	3.14	60	17	103	96	>15	<.01	<10	1.08	191	9	<.01	17	3200	542	<5	<20	85	.01	40	65	<10	<1	>10000
- 122169	.4	1.74	10	<2	55	<5	8.57	<1	7	67	64	2.13	.43	10	2.55	266	8	.01	22	>10000	42	5	<20	246	.04	<10	114	<10	16	331
- 122170	12.4	.45	10	<2	65	5	1.89	144	14	20	131	>15	<.01	<10	.89	213	5	<.01	23	2150	>10000	<5	<20	58	.01	40	52	<10	<1	>10000

TECK EXPLORATION BTR 93-119

ECO-TECH LABORATORIES LTD.

JUNE 1, 1993

PAGE 2

ET#	DESCRIPTION	AG	AL(%)	AB	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	MA(%)	MI	P	PB	SB	SM	SR	TI(%)	U	V	W	X	ZN
21 - 122171		1.8	.19	10	<2	55	<5	.71	99	11	9	115	>15	.01	<10	.25	244	3	<.01	16	1360	368	<5	<20	25	.01	30	24	<10	<1 >10000	
22 - 122172		1.6	1.06	5	<2	50	<5	3.23	86	12	71	80	10.34	.24	<10	1.04	383	10	.01	22	5560	314	<5	<20	100	.02	20	57	<10	5 >10000	
23 - 122173		.2	1.00	10	8	50	<5	10.68	2	4	33	32	1.52	.21	<10	4.42	327	4	.01	10	5540	76	5	<20	362	.02	<10	68	<10	9 1073	
24 - 122174		2.6	.87	5	2	30	5	2.98	10	10	111	51	9.39	.08	<10	.79	183	17	.01	17	6780	1226	<5	<20	110	.02	30	83	<10	7 >10000	
25 - 122175		.4	1.58	5	4	45	<5	3.51	<1	6	114	44	2.13	.24	<10	.78	172	21	.01	48	740	44	<5	<20	76	.05	<10	322	<10	6 246	
26 - 122176		1.4	.87	5	2	45	<5	9.83	6	5	47	57	2.47	.31	10	3.63	320	7	<.01	16	7610	376	5	<20	289	.03	<10	106	<10	11 2180	
27 - 122177		.2	.85	5	2	90	<5	3.66	2	5	66	32	1.62	.15	10	1.12	121	4	.01	10	3810	130	<5	<20	104	.03	<10	56	<10	7 848	
28 - 122178		.2	.33	10	4	45	<5	9.77	3	5	19	40	2.64	.12	<10	3.15	295	5	<.01	10	4710	64	5	<20	338	.01	10	30	<10	8 1975	
29 - 122179		.2	.44	5	10	55	<5	10.94	8	4	21	24	2.40	.25	<10	5.06	425	3	<.01	5	4910	250	5	<20	277	.01	10	30	<10	6 2420	
30 - 122180		.2	.88	5	2	40	<5	10.48	6	5	53	32	2.84	.12	<10	2.16	447	6	<.01	18	5420	262	<5	<20	203	.01	10	120	<10	10 2588	
31 - 122181		.2	2.17	5	2	85	<5	4.11	<1	15	76	19	2.66	.24	<10	.90	337	1	.02	24	550	12	<5	<20	106	.05	<10	24	<10	6 84	

C DATA

EPRAT #:

1 - 122151	.2	2.74	5	2	245	<5	.90	<1	25	155	17	3.34	1.38	<10	1.03	210	1	.04	40	320	8	<5	<20	25	.31	<10	51	<10	15	53
STANDARD 1991 -	1.2	1.74	50	4	105	<5	1.72	<1	19	60	80	3.67	.35	<10	.95	684	<1	.01	22	620	18	5	<20	60	.10	<10	70	<10	11 63	

NOTE: < = LESS THAN
 > = GREATER THAN

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

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

TECK EXPLORATION ETK 93-122
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

JUNE 4, 1993

ATTENTION: GRAEME EVANS

VALUES IN PPM UNLESS OTHERWISE REPORTED

9 ROCK SAMPLES RECEIVED MAY 28, 1993
PROJECT #:1719

ET#	DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	X	ZN
1 - 122201		1.0	2.20	10	<2	60	<5	2.60	20	7	123	23	3.37	.24	10	.55	281	8	.05	19	1380	372	<5	<20	65	.07	<10	106	<10	8	>10000
2 - 122202		2.1	.44	20	<2	85	10	.63	40	19	35	110	>15	.05	<10	.15	323	5	.01	28	1920	344	<5	<20	22	.01	40	72	<10	<1	>10000
3 - 122203		.6	1.21	15	4	55	<5	1.90	3	8	109	44	3.85	.21	<10	.57	127	17	.02	42	1140	46	<5	<20	39	.05	<10	289	<10	6	1507
4 - 122204		.4	1.26	5	4	75	<5	1.41	2	7	162	53	1.89	.32	<10	.68	99	26	.02	53	410	36	<5	<20	21	.04	<10	358	<10	4	388
5 - 122205		.4	1.01	15	4	80	<5	1.72	<1	7	130	36	1.65	.15	<10	.71	96	25	.01	49	380	44	<5	<20	21	.05	<10	318	<10	5	198
6 - 122206		.2	1.08	15	2	75	<5	7.06	2	4	94	33	1.61	.23	<10	.93	208	17	.01	32	8570	172	<5	<20	107	.03	<10	191	<10	13	553
7 - 122207		3.0	.50	15	4	195	5	6.95	14	17	16	98	>15	.01	<10	.40	226	3	<.01	25	2000	278	10	<20	99	.01	20	39	<10	<1	>10000
8 - 122208		.8	.72	15	6	55	<5	12.34	2	5	49	25	3.02	.16	<10	.54	170	12	.01	25	1280	190	<5	<20	150	.02	<10	141	<10	7	1541
9 - 122209		1.0	1.10	10	4	50	<5	8.95	14	4	38	18	2.17	.25	10	2.07	317	7	.02	14	3350	992	5	<20	165	.01	<10	55	<10	9	3115

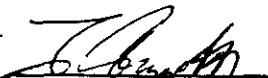
QC DATA

REPEAT #:

1 - 122201	1.2	2.00	10	2	55	<5	2.40	18	7	112	21	3.18	.22	<10	.50	259	8	.04	18	1320	344	<5	<20	60	.06	<10	96	<10	7	>10000
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STANDARD 1991 -	.8	1.59	80	4	100	<5	1.61	<1	18	67	71	3.45	.31	<10	.89	634	<1	.01	21	610	20	5	<20	55	.10	<10	65	<10	10	64
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NOTE: < = LESS THAN
> = GREATER THAN


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

SC93/TECK

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

JUNE 1, 1993

TECK EXPLORATION LTD. ETK 93-118
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

VALUES IN PPM UNLESS OTHERWISE REPORTED

PAGE 1

23 ROCK SAMPLES RECEIVED MAY 23, 1993
PROJECT #:1719

ET#	DESCRIPTION	Ag	Al(%)	As	B	BA	Bi	Ca(%)	CD	CO	CR	CU	Fe(%)	K(%)	La	Mg(%)	Mn	Mo	Na(%)	NI	P	Pb	SB	SM	SR	Ti(%)	U	V	W	Y	Zn
1 - 122101		<.2	2.87	10	4	100	5	1.43	<1	21	103	13	3.53	.92	<10	1.17	353	1	.05	36	340	12	<5	<20	24	.15	<10	40	<10	10	64
2 - 122102		<.2	1.62	5	2	60	<5	1.79	<1	16	95	9	3.19	.26	<10	1.13	303	2	.01	29	430	10	<5	<20	37	.06	<10	33	<10	6	254
3 - 122103		3.6	1.30	20	<2	55	10	3.81	197	15	26	61	12.22	.14	10	.86	454	5	<.01	10	2720	370	<5	<20	13	.01	20	20	<10	1	>10000
4 - 122104		.2	.85	5	4	55	<5	9.30	5	5	18	21	1.29	.22	10	2.63	238	12	<.01	11	6500	168	5	<20	532	.01	<10	41	<10	9	1927
5 - 122105		<.2	1.60	10	2	70	<5	9.06	<1	5	44	48	1.70	.23	10	2.68	239	9	.02	17	>10000	28	5	<20	372	.03	<10	58	<10	13	96
6 - 122106		1.0	1.42	10	6	50	<5	8.60	1	7	41	74	2.87	.20	20	2.27	194	9	.03	20	>10000	496	5	<20	557	.02	10	99	<10	19	673
7 - 122107		6.2	.15	5	<2	45	<5	8.69	9	2	15	23	1.37	.10	<10	3.29	219	13	<.01	4	3690	9730	10	<20	344	<.01	<10	9	<10	4	2798
8 - 122108		1.0	1.16	15	2	50	<5	8.28	4	6	47	86	1.41	.28	10	2.69	307	6	.01	18	>10000	96	5	<20	512	.02	<10	122	<10	14	2168
9 - 122109		.6	1.52	15	4	55	<5	7.28	2	8	55	41	2.30	.38	10	2.95	267	7	.01	26	4940	88	5	<20	416	.03	<10	113	<10	10	924
10 - 122110		5.4	.16	15	<2	40	5	2.26	30	9	67	51	10.44	<.01	<10	.36	223	7	<.01	9	3740	2676	<5	<20	101	.01	20	14	<10	1	>10000
11 - 122111		.8	.18	10	<2	15	<5	3.27	32	4	164	10	1.96	<.01	<10	.22	132	11	<.01	5	>10000	236	<5	<20	158	.01	30	13	<10	10	>10000
12 - 122112		2.2	.25	15	4	60	10	1.48	<1	9	64	91	>15	<.01	10	.10	71	7	<.01	16	5770	286	<5	<20	48	.01	40	41	<10	5	2362
13 - 122113		.8	.44	10	4	35	<5	.61	<1	3	108	19	2.69	.04	<10	.07	40	3	.01	7	1340	322	<5	<20	71	<.01	<10	1	<10	3	278
14 - 122114		1.0	1.01	10	8	30	<5	9.32	1	4	40	46	2.43	.18	10	2.41	262	3	.03	12	>10000	480	5	<20	511	.01	20	79	<10	19	704
15 - 122115		.6	1.63	10	4	40	<5	7.30	<1	8	91	131	2.35	.29	10	2.03	193	6	.01	31	>10000	74	5	<20	320	.03	10	198	<10	19	379
16 - 122116		.4	.81	15	4	25	<5	10.26	<1	3	39	76	1.11	.24	10	4.08	358	3	<.01	13	>10000	80	5	<20	367	.02	<10	101	<10	15	482
17 - 122117		.2	.88	5	8	45	<5	10.24	1	4	41	83	1.55	.25	10	4.42	355	3	<.01	20	7400	108	5	<20	404	.02	<10	83	<10	14	603
18 - 122118		.8	2.23	15	4	45	<5	5.08	<1	11	68	81	2.74	.35	10	1.41	123	8	.02	43	>10000	64	<5	<20	249	.03	<10	204	<10	17	347
19 - 122119		6.8	1.01	10	<2	35	5	5.66	7	11	42	25	6.22	.04	10	.77	170	8	<.01	13	3570	6686	5	<20	130	.01	10	51	<10	4	5215
20 - 122120		.4	.77	5	2	55	<5	9.06	4	5	47	33	3.00	.22	10	2.95	314	9	.01	17	6260	246	5	<20	194	.02	<10	98	<10	10	1930

RE 2

DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(t)	K(%)	LA MG(%)	MN	NO	RA(%)	NI	P	PB	SB	SM	SR	TI(%)	U	V	W	X	ZN	
- 122121	.4	.51	10	4	75	<5	12.00	14	2	13	23	1.67	.19	10	4.69	453	3	.01	3	8210	444	5	<20	233	.01	<10	11	2842		
- 122122	<.2	2.05	10	4	70	<5	6.37	<1	10	87	23	1.95	.11	10	.57	219	10	.05	23	1440	14	<5	<20	106	.02	<10	20	<10	6	47
- 122123	<.2	3.93	20	8	125	<5	5.37	<1	16	76	18	2.29	.83	<10	1.01	436	1	.04	22	390	10	<5	<20	115	.17	<10	31	<10	13	34

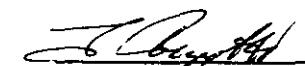
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EAT #:

- 122101	<.2	2.73	10	4	90	<5	1.37	<1	21	99	12	3.38	.88	<10	1.11	340	1	.05	35	340	14	<5	<20	23	.15	<10	39	<10	10	68
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NDARD 1991 -	1.2	1.73	45	4	105	<5	1.73	<1	19	59	80	3.70	.34	<10	.98	696	<1	.01	21	640	16	5	<20	55	.09	<10	69	<10	10	69
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? : < = LESS THAN
 > = GREATER THAN


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

/TECK

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10041 EAST TRANS CANADA HWY.
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PHONE - 604-573-5700
FAX - 604-573-4557

TECK EXPLORATION LTD. ETK 93-127
350, 272 Victoria Street
KAMLOOPS, B.C.
V2C 2A2

JUN 11, 1993

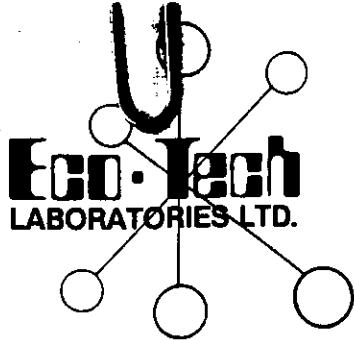
ATTENTION: GRAEME EVANS

VALUES IN PPM UNLESS OTHERWISE REPORTED

25 CORE SAMPLES RECEIVED JUNE 4, 1993
PROJECT #1719

RE 1

DESCRIPTION	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	X	ZN
- 122210	.4	1.35	10	6	55	5	8.09	4	5	52	39	1.71	.06	10	.16	281	12	.07	15	1180	306	5	20	106	.01	10	21	10	8	788
- 122211	.2	1.55	10	6	55	5	13.02	1	7	41	39	1.90	.23	10	1.28	331	14	.05	26	5180	56	5	20	306	.02	10	39	10	13	88
- 122212	.2	.64	10	2	95	5	3.66	9	33	26	124	>15	.12	10	.46	129	7	.03	32	5620	290	5	20	67	.02	30	50	10	4	>10000
- 122213	.6	.24	5	2	60	5	3.20	18	11	20	75	11.88	.02	10	.14	105	5	.01	21	2170	260	5	20	10	.01	20	11	10	3	>10000
- 122214	.2	.64	5	2	45	5	14.83	1	3	13	27	1.66	.31	10	6.13	638	5	.01	8 >10000	120	10	20	260	.01	10	43	10	13	524	
- 122215	.2	1.66	10	2	45	5	4.13	1	7	60	54	2.32	.24	10	.72	201	11	.01	23	2780	48	5	20	58	.03	10	64	10	10	334
- 122216	.2	1.27	20	2	40	5	7.20	1	7	74	68	2.60	.07	10	.26	324	30	.01	40	1860	52	5	20	112	.02	10	121	10	10	82
- 122217	.2	1.72	5	2	60	5	5.23	1	6	67	45	1.85	.28	10	1.24	230	10	.03	20	4000	42	5	20	87	.03	10	49	10	8	54
- 122218	.2	1.24	15	2	55	5	9.36	1	6	61	47	1.69	.07	10	.63	306	15	.02	25	3020	56	5	20	135	.01	10	84	10	9	30
- 122251	.4	.82	5	2	40	5	5.85	36	9	49	63	6.74	.25	10	1.30	207	7	.01	23	6050	510	5	20	142	.03	10	103	10	9	>10000
- 122252	.2	1.72	15	2	55	5	7.52	2	8	55	76	2.72	.33	10	1.86	186	8	.01	26 >10000	126	5	20	267	.03	10	91	10	15	863	
- 122253	1.2	.63	5	2	60	10	2.57	54	16	68	26	14.24	.08	10	.46	140	9	.02	13	5830	1650	5	20	76	.02	30	52	10	3	>10000
- 122254	.2	.41	5	2	65	10	2.06	59	16	46	36	>15	.05	10	.42	188	8	.01	13	4540	440	5	20	53	.01	30	49	10	1	>10000
- 122255	.2	1.24	5	2	50	5	7.03	2	11	50	53	2.63	.41	10	2.54	237	13	.01	30	2960	140	5	20	233	.04	10	102	10	6	810
- 122256	.2	.58	10	10	75	5	9.25	15	3	33	49	1.23	.14	10	3.36	260	4	.01	13	8200	100	5	20	541	.01	10	89	10	10	3418
- 122257	.2	1.24	10	2	60	5	7.32	4	7	65	95	2.06	.26	10	1.45	169	8	.01	31 >10000	66	5	20	389	.03	10	164	10	15	1455	
- 122258	.2	.32	5	2	30	5	11.34	17	2	20	25	1.12	.13	10	4.32	387	4	.01	5	6480	180	5	20	459	.01	10	16	10	8	5720
- 122259	.2	.78	5	6	55	5	10.02	1	5	43	88	1.38	.28	10	3.44	290	3	.01	20 >10000	68	5	20	426	.02	10	94	10	19	576	
- 122260	.6	1.13	15	2	45	5	2.43	18	10	101	80	6.95	.21	10	.56	145	18	.01	44	4640	730	5	20	101	.03	10	204	10	7	>10000
- 122261	.2	1.00	15	2	50	5	1.80	2	7	105	35	1.79	.24	10	.62	95	26	.01	55	920	90	5	20	41	.04	10	329	10	5	673
- 122262	.4	1.15	10	2	35	5	1.69	1	7	110	41	2.16	.16	10	.85	114	25	.01	54	1330	130	5	20	36	.04	10	300	10	4	424
- 122263	.4	.95	10	2	35	5	12.41	3	4	27	61	2.38	.12	10	3.39	392	5	.01	16	9170	220	10	20	245	.01	10	81	10	10	1212
- 122264	.4	1.12	15	2	60	5	8.50	14	9	41	53	3.41	.31	10	1.82	267	7	.01	21	8570	220	5	20	221	.03	10	97	10	11	3277
- 122265	.4	.47	5	2	60	5	11.15	5	3	20	30	3.13	.20	10	4.40	442	3	.01	6	5800	226	10	20	220	.01	10	29	10	10	2418
- 122266	.2	1.94	25	4	100	5	14.96	1	9	28	21	2.44	.14	10	.64	465	4	.04	20	4180	40	5	20	268	.02	10	13	10	9	117



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10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700
Fax (604) 573-4557

JUNE 1, 1993

CERTIFICATE OF ASSAY ETK 93-118

TECK EXPLORATION LTD.
350, 272 VICTORIA STREET
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

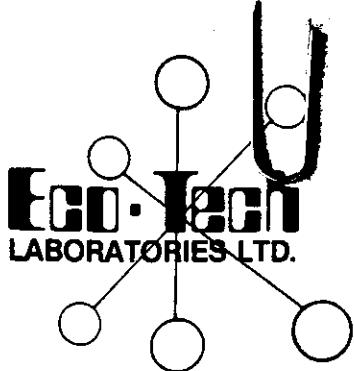
SAMPLE IDENTIFICATION: 23 ROCK samples received MAY 23, 1993

PROJECT #: 1719

ET#	Description	Zn (%)
3 -	122103	13.40
10 -	122110	3.20
11 -	122111	2.80

Bol mtn
per FRANK J. PEZZOTTI, A.Sc.T.
B.C. Certified Assayer

SC93/TECK



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ENVIRONMENTAL TESTING

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Fax (604) 573-4557

JUNE 1, 1993

CERTIFICATE OF ASSAY ETK 93-119

TECK EXPLORATION LTD.
350, 272 VICTORIA STREET
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

SAMPLE IDENTIFICATION: 31 ROCK samples received MAY 23, 1993

PROJECT #:1719

ET#	Description	Zn (%)
4 -	122154	5.20
5 -	122155	1.80
6 -	122156	10.40
8 -	122158	2.00
16 -	122166	6.20
18 -	122168	4.40
20 -	122170	9.60
21 -	122171	9.40
22 -	122172	4.80
24 -	122174	1.40

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

per

SC93/TECK



LABORATORIES LTD.

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Fax (604) 573-4557

JUNE 4, 1993

CERTIFICATE OF ASSAY ETK 93-122

TECK EXPLORATION LTD.
350, 272 VICTORIA STREET
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

SAMPLE IDENTIFICATION: 9 ROCK samples received MAY 28, 1993
PROJECT #: 1719

ET#	Description	ZN (%)
1 -	122201	1.76
2 -	122202	4.06
7 -	122207	1.78


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

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ENVIRONMENTAL TESTING

10041 E. Trans Canada Hwy., R.R. #2, Kamloops, B.C. V2C 2J3 Phone (604) 573-5700
Fax (604) 573-4557

JUNE 11, 1993

CERTIFICATE OF ASSAY ETK 93-127

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TECK EXPLORATION LTD.
350, 272 VICTORIA STREET
KAMLOOPS, B.C.
V2C 2A2

ATTENTION: GRAEME EVANS

SAMPLE IDENTIFICATION: 25 CORE samples received JUNE 4, 1993

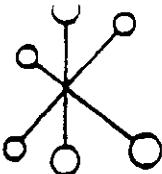
PROJECT #:1719

ET#	Description	Zn (%)
3 -	122212	1.04
4 -	122213	1.57
10 -	122251	2.23
12 -	122253	4.16
13 -	122254	5.68
19 -	122260	1.61

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

SC93/TECK

APPENDIX IV
Analytical Procedures



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING
10041 East Trans Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 573-5700 Fax 573-4657

GEOCHEMICAL LABORATORY METHODS

SAMPLE PREPARATION (STANDARD)

1. Soil or Sediment: Samples are dried and then sieved through 80 mesh sieves.
2. Rock, Core: Samples dried (if necessary), crushed, riffled to pulp size and pulverized to approximately -140 mesh.
3. Humus/Vegetation: The dry sample is ashed at 550 C. for 5 hours.

METHODS OF ANALYSIS

All methods have either canmet certified or in-house standards carried through entire procedure to ensure validity of results.

1. MULTI ELEMENT ANALYSES

- (a) ICP Packages (6,12,30 element).

Digestion	Finish
-----	-----

Hot Aqua Regia	ICP
----------------	-----

- (b) ICP - Total Digestion (24 element).

Digestion	Finish
-----	-----

Hot HClO ₄ /HNO ₃ /HF	ICP
---	-----

- (c) Atomic Absorption (Acid Soluble)

Ag*, Cd*, Cr, Co*, Cu, Fe, Pb*, Mn, Mo, Ni*, Zn.

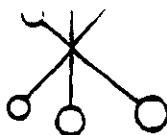
Digestion	Finish
-----	-----

Hot Aqua Regia	Atomic Absorption * = Background corrected
----------------	---

- (d) Whole Rock Analyses.

Digestion	Finish
-----	-----

Lithium Metaborate fusion	ICP
------------------------------	-----



ECO-TECH LABORATORIES LTD.

ASSAYING - ENVIRONMENTAL TESTING

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2. Antimony

Digestion -----

Finish -----

Hot aqua regia

ICP

3. Arsenic

Digestion -----

Finish -----

Hot aqua regia

Hydride generation - A.A.S.

4. Barium

Digestion -----

Finish -----

Lithium Metaborate

ICP

5. Beryllium

Digestion -----

Finish -----

Hot aqua regia

Atomic Absorption

6. Bismuth

Digestion -----

Finish -----

Hot aqua regia

Atomic Absorption
(Background Corrected)

7. Chromium

Digestion -----

Finish -----

Sodium Peroxide
Fusion

Atomic Absorption

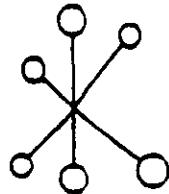
8. Fluorine

Digestion -----

Finish -----

Lithium Metaborate
Fusion

Ion Selective Electrode



ECO-TECH LABORATORIES LTD

ASSAYING • ENVIRONMENTAL TESTING

10041 East Trans-Canada Hwy., Kamloops, B.C. V2C 2J3 (604) 873-5700 Fax 873-45

9. Gallium

Digestion

Finish

Hot HClO₄/HNO₃/HF

Atomic Absorption

10. Germanium

Digestion

Finish

Hot HClO₄/HNO₃/HF

Atomic Absorption

11. Mercury

Digestion

Finish

Hot aqua regia

Cold vapor generation -
A.A.S.

12. Phosphorus

Digestion

Finish

Lithium Metaborate
Fusion

ICP finish

13. Selenium

Digestion

Finish

Hot aqua regia

Hydride generation -
A.A.S.

14. Tellurium

Digestion

Finish

Hot aqua regia
Potassium Bisulphate
Fusion

Hydride generation - A.A.S.
Colorimetric or I.C.P.

APPENDIX V

Drill Logs

TECK EXPLORATION LTD.

NTS: 82L/8
 CLAIM: Arrow 3
 ELEVATION: 3410'
 GRID COORD: True
 LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 18/05/93
 DATE COMPLETED: 18/05/93
 DATE LOGGED:
 CORE SIZE: NQ
 NORTHING: 2+75S
 EASTING: 2+70E

PROJECT #1719

DEPTH
0'
156'
DIP
-45°
-45°

HOLE NO. A-1

AZ
000
LENGTH: 78.0m
DEPTH OF OVB: 6.7m
CASING REMAINING: None
WATERLINE LENGTH: 200'
PROBLEMS: None

PAGE: 1 of

DEPTH (meters)	DESCRIPTION	STRUCTURE			METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA			RESULTS			
		FROM/TO	ANGLES	VEINS			FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)
0 - 6.7	Overburden												
6.7 - 9.8	Garnet Bearing Blot Schist - CA @ 45° to C.A. - 5% 0.5-1.0cm alman garn in fgr blot matrix well lam	fol'n 45° to C.A.			10% lam QV's	1-2% Py in QV's							
9.8 - 11.2	Quartzite & Calc-Sil - fol'n @ 45° to C.A. - granular qtz in light green calc-sil matrix - 20cm marble bed - 10% blot lam	fol'n 45° to C.A.				1% po blebs tr pale sp? blebs							
11.2 - 14.1	Garnet Bearing Blot Schist - well lam blot w/ 1-2% 1cm gar by end C.A. @ 50-60°	fol'n 50° to C.A.			7-8% lam QV's		122101	13.1	14.1	1.0	(64)	(12)	<.2
LEDGE HORIZON START													
14.1 - 15.3	Light Green Qtz w/ 15% Garn Blot Schist - occas. garn. light green w/calc st. - occas. amphibole	fol'n 70° to C.A.			2-3% irreg. QV's	3% po wnts + blebs, tr sp	102	14.1	15.3	1.2	(254)	(10)	<.2
15.3 - 15.6	Semi Mass Po, Py, Sp - 40% QV + Qtzite - Po+Sp fgr early (swirled) + fgr - clots of later py and bottom 5cm 50% sp w/ calcite blackjack					35% Po 15% Sp 10% Py	103	15.3	15.6	0.3	13.4%	(370)	3.6

DEPTH (meters)	DESCRIPTION	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS			
		ANGLES	VEINS			SAMPLE NO.	FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)
FROM/TO													
15.6 - 20.6	Well laminated marble-calc-sil qtz - strong carb component w/ calc. sil. bands + minor biot-phlog bands - dark grey lam = 5% graphite	lam @ 70° to C.A.			diss, blebs + vnlts of 2-3% po, 1% sp, 1% py	104 105 106	15.6 17.1 18.6	17.1 18.6 20.6	1.5 1.5 2.0	(1927) (96) (673)	(168) (28) (496)	.2 <.2 1.0	
20.6 - 22.0	Marble Bed - recrystallized marble w/phlog flakes				2% ga blebs 1% sp blebs 3% po blebs 1% py blebs	107	20.6	22.0	1.4	(2790)	.97%	6.2	
22.0 - 23.5	Otz w/ Bio Sch + Carb - light green otz w/ bio sch beds (30%) Interst carb in qtz	lam @ 70° to C.A.			1-2% sp vnlts 2-3% po vnlts tr-1% py blebs	108	22.0	23.5	1.5	(2168)	(96)	1.0	
23.5 - 24.7	Marble + Bio Schist mixed marble + bio schist beds	bed @ 60-70° to C.A.			2% py blebs 1% sp tr sp	109	23.5	24.7	1.2	(924)	(88)	0.6	
24.7 - 25.6	Quartzite w/ Semi Mass Sulph - white quartzite contorted by folding w/ minor biot lam + sulph blebs to 3cm	bed 40-20° to C.A.			25% fgr po blebs, 5% bi sp on margins 6-7% py blebs tr ga grains	110	24.7	25.6	0.9	3.2%	.27%	5.4	
25.6 - 26.2	Laminated Quartzite	bed 60-70° to C.A.			5% bi sp lam 2% py	111	25.6	16.2	0.6	2.80%	(236)	0.8	
26.2 - 26.8	Graphitic Otz w/ Semi Mass Sulph no fabric - occas. px xtal				30% fgr po blebs, 5% py blebs, 2% sp w/po	112	26.2	26.8	0.6	.24%	(206)	2.2	
26.8 - 28.8	Pegmatite dyke in Otz. - coarse grained - Feld xtals to 2cm - occas. gm mica				3% po blebs 1% py blebs R bn 1cm sp? bleb	113	26.8	28.8	2.0	(278)	(322)	0.8	
28.8 - 35.9	Otz-Marble-Bio Sch - in even amounts, w/ beds every 30-50cm - rare 10cm peg dykes	bed 60-70° to C.A.			5-6% PO, 1-2% py tr sp, 1-2% po, 1% py tr 1% sp lam rare ga xtals	114 115 116 117 118	28.8 30.3 31.8 33.3 34.8	30.3 31.8 33.3 34.8 35.9	1.5 1.5 1.5 1.5 1.1	(704) (379) (482) (600) (108) (347)	(480) (74) (80) (603) (108) (64)	1.0 0.6 0.4 0.2 0.8	

TECK EXPLORATION LTD.

NTS: 82L/8
 CLAIM: Arrow 3
 ELEVATION: 3410'
 GRID COORD: True
 LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 18/05/93
 DATE COMPLETED: 19/05/93
 DATE LOGGED:
 CORE SIZE: NO
 NORTHING: 2+75S
 EASTING: 2+70E

PROJECT #1719

DEPTH 0m
 DIP -45°
 156' -45°

HOLE NO. A-2

AZ 000
 LENGTH: 80.8m
 DEPTH OF OVB: 3.05m
 CASING REMAINING: None
 WATERLINE LENGTH:
 PROBLEMS: None

PAGE: 1 of
 80.8m
 3.05m
 None
 None

DEPTH (meters)	DESCRIPTION	STRUCTURE			METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA			RESULTS			
		FROM/TO	ANGLES	VEINS			FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)
0 - 3.1	Overburden												
3.1 - 3.5	Garnet Bearing Bio Schist - 10% 5-10cm garnets in well lam matrix	fol'n @ 50° to C.A.			None								
3.5 - 8.8	Marble - lam marb w/ 5% blot lam + beds - occas. rounded frag 5-10cm slump flow?	bed @ 60° to C.A.			tr po blebs • disseminated								
8.8 - 29.0	Garnet Bearing Bio-Sillim Schist - well lam w/ 5-8% 1cm garn - 10% 20-30cm calc sil lam - occas. patches up to 30% garn - rare conform peg vnt - contact w/ Ledge Horizon very sharp	bed @ 60° to C.A. 20m bed @ 70° to C.A. 25m fol'n @ 70° to C.A.				151	27.5	29.0	1.5	(57)	(12)	.2	
	BEGINNING OF LEDGE HORIZON												
29.0 - 31.7	Graphitic Qtz + Marble - 70% lam graph qtz w/ occas. bio lam - 30% 10-20cm marble beds	lam @ 70° to C.A.			5% Po blebs + vnlts. 1% Py disseminated tr sp	152 153	29.0 30.5	30.5 31.7	1.5 1.2	.19% (227)	(216) (56)	.2 .2	
31.7 - 32.3	Qtz w/ Semi Mass Sulph - remobilized sulphides flow around frags of wt Qtz	lam @ 60° to C.A.			20% fr po blebs, 10% lam sp. 3-4% py blebs	154	31.7	32.3	0.6	5.2%	.24%	9.4	

TECK EXPLORATION LTD.

NTS: 82L/8
 CLAIM: Arrow 3
 ELEVATION: 3420'
 GRID COORD: True
 LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 19/05/93
 DATE COMPLETED: 20/05/93
 DATE LOGGED:
 CORE SIZE: NQ
 NORTHING: 2+75S
 EASTING: 2+70E

PROJECT #1719

DEPTH 0' 176'
 DIP -45° -45°
 AZ 000

HOLE NO. A-3

LENGTH: 108.2m
 DEPTH OF OVB: 21.4m
 CASING REMAINING: None
 WATERLINE LENGTH:
 PROBLEMS: None

PAGE: 1 of

DEPTH (meters)	DESCRIPTION	STRUCTURE			METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA			RESULTS			
		ANGLES	VEINS	ALTERATION			FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)
FROM/TO													
0 - 21.4	Overburden												
21.4 - 39.6	Hematitic Chl Schist - strong weathering w/ hem oxid'n of py - some clay gouge zones + 2% OVB's - ground very broken w/ 70-90% recovery (avg 80%) - well lam chl matrix	lam 50-60° to C.A.			1-2% py blebs								
39.6 - 52.3	Garnet Bearing Chl-Seric Schist - well lam chl-seric matrix w/ 5% lam garnets - portions a bx w/ 1-2cm round chl + seric frags - 1-2% late OVB's	lam @ 60° to C.A.			no sulphides								
52.3 - 55.3	Marble w/ Bio Qtz - xtalling marble w/ occas. 5cm round biot-gtz frag - minor phlog	lam 60° to C.A.			tr dissempy								
55.3 - 70.6	Garnet Bearing Bio-Sil Schist w/ Calc-Sil - well lam w/ 10% Calc-Sil Beds, 5% Peg veins - 5% 5-1.0cm garnets	lam 50° to C.A.			1% po blebs w/ peg veins	164	69.6	70.6	1.0	(85)	(10)	<2	
70.6 - 71.4	START OF LEDGE HORIZON Graphitic Quartzite - dark grey graphitic qtz w/ remob sulph blebs + vrfts	lam @ 60° to C.A.			3-4% diss py 5% po blebs 1% sp on severges	165	70.6	71.4	0.8	.41%	(278)	1.0	

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA			RESULTS				
		ANGLES	VEINS				FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)	Other
71.4 - 71.7	Qtz + Mass Sulphides - fgr mass po w/ 5-10cm round Qtz eyes - Sulphides remobilized and x-cut strat.				60% fgr po 10% fgr bj sp on margins 1% py	166	71.4	71.7	0.3	6.2%	.13%	8.8		
71.7 - 73.7	Graphitic Qtz + Marble - well lam w/ 30% 20-30cm marble beds	bedding 70° to C.A.			2% py blebs 1% sp blebs 1% po blebs	167	71.7	73.7	2.0	.17%	.12%	1.2		
73.7 - 74.0	Qtz w/ Semi Mass Sulph - Qtz w/ blebs + vnts of remob mass sulph - some 1cm round qtz frags - some chl ah ^o @ sulph				30% fgr po blebs, 10% py blebs, 5-6% sp on margin of po	168	73.7	74.0	0.3	4.4%	(542)	8.0		
74.0 - 75.3	Graphitic Qtz + Marble - well lam Qtz w/ 20% 10-20cm marble beds	bedding 60-70° to C.A.			3% dissem py 1% dissem po tr sp	169	74.0	75.3	1.3	(331)	(42)	0.4		
75.3 - 75.8	Qtz + Mass Sulph - remob mass sulphides w/ Qtz + Chl round frags				70% fgr po 10% py blebs 10% sp blebs	170	75.3	75.8	0.5	9.5%	>1.0%	12.4		
75.8 - 76.3	Qtz w/ Sulphides - siliC ₂ Qtzite w/ bio lam	lam @ 60-70° to C.A.			2-3% sp lam 1-2% py dissem	171	75.8	76.3	0.5	9.4%	(368)	1.8		
76.3 - 76.8	Mass Sulph + Qtz - light green qtz w/ sp rich zones + po blebs w/ round qtz augen				15-20% bj sp 40% po blebs 1-2% py	172	76.3	76.8	0.5	4.8%	(314)	1.6		
76.8 - 78.8	Marble + Qtz w/ Sulphides - 60% marble, 40% blot qtz	lam 50-70° to C.A.			tr 1% sp 2% po blebs	173	76.8	78.8	2.0	.11%	(76)	.2		
78.8 - 79.5	Qtz w/ Sulphides - graphitic grey Qtz w/ 15%+ Sulph veinlets				7-8% py blebs 5-6% po vnts 3-4% sp vnts tr ge	174	78.8	79.5	0.7	1.40%	.12%	2.6		

TECK EXPLORATION LTD.

NTS: 82L/8
CLAIM: Arrow 3
ELEVATION: 3405'
GRID COORD: True
LOGGED BY: G. Evans

ARROW PROPERTY
DATE COLLARED: 20/05/93
DATE COMPLETED: 21/05/93
DATE LOGGED:
CORE SIZE: NQ
NORTHING: 2+95S
EASTING: 4+10E

PROJECT #1719

HOLE NO. A-4

PAGE: 1 of
97.9m
3.7m
None

TECK EXPLORATION LTD.

NTS: 82L/8
CLAIM: Arrow 3
ELEVATION: 3345'
GRID COORD: True
LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 21/05/93
DATE COMPLETED: 02/06/93
DATE LOGGED:
CORE SIZE: NQ
NORTHING: 2+00S
EASTING: 5+50E

PROJECT #1719

<u>DEPTH</u>	<u>DIP</u>
0'	-55°
146'	-58°
455'	-62°

HOLE NO. A-5

AZ LENGTH: 151.2m

000 DEPTH OF OVB: 2.1m

CASING REMAINING: None

WATERLINE LENGTH

PROBLEMS: Deepened to Reach Ledge Horizon

DEPTH (meters)	DESCRIPTION	STRUCTURE		ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA				RESULTS				
		ANGLES	VEINS			SAMPLE NO.	FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)	Other
FROM/TO														
55.2 - 57.5	Garnet Bearing Sill-Blo Schist - 5% 1cm garnets - well lam bio sill sch (sill to 1cm) w/ minor quartzite	lam @ 70° to C.A.			no sulph									
57.5 - 61.2	Quartzite + Marble - well lam Qtz-Mar in 10-20cm beds - biot-phlog lam @ 57.5-59.1m, Deformed + silic ^d section	lam @ 50-70° to C.A.			57.5-59.1m 5% Po blebs 1-2% Py blebs									
61.2 - 91.9	Garnet Bearing Bio-Sill Schist - well lam w/ sill to 1cm - 5% 1 cm garnets - 5% conform peg + qtz veins - occas. seric qtz and marble bed to 40cm - rare calc sill bed (10-15cm)	lam @ 70° to C.A.			tr dissem py									
START OF LEDGE HORIZON														
91.9 - 95.0	Graphic Quartzite + Marble w/ Sulphide - 60% well lam graphic qtz w/ 15-20% flake graphite - 40% 10-20cm marble beds	lam @ 70° to C.A.			avg 6-7% po blebs + veins 1-2% sp vnlts 3-4% diss py	251 252	91.9 93.4	93.4 95.0	1.5 1.6	2.23% (863)	(510) (126)	0.4 0.2		
95.0 - 98.0	Graphitic Qtz + Mass Sulphides - well lam Qtz w/ 15% graphite - contorted beds w/ round qtz - frags - mainly py mass veins - 10cm vnlts of 50% sp - 10% po blebs peripheral to py zones	lam 50-80° to C.A.			30-35% mass py avg 5-6% sp 10% po blebs	253 254	95.0 96.5	96.5 98.0	1.5 1.5	4.16% 5.68%	0.17% (440)	1.2 0.2		
98.0 - 104.8	Marble + Graphitic Qtz - 60% 10-80cm marble beds w/ lam bio + phlog - 40% graph qtz beds 20-60cm well lam	lam @ 85° to C.A.			avg 3-4% sp vnlts 5% po blebs 2-3% py blebs + disseminated	255 256 257 258 259	98.0 99.5 101.0 102.5 103.7	99.5 101.0 102.5 103.7 104.8	1.5 1.5 1.5 1.2 1.1	(810) 0.34% (100) (86) 0.15%	(140) 0.2% (160) 0.2 (576)	0.2 0.2 0.2 0.2 0.2		
104.8 - 108.6	Graphic Qtz w/ Sulph - very finely lam w/ 10-15% graphite flakes - black	lam @ 85° to C.A.			104.8-105.8m 20% po blebs 3-4% py blebs 2% sp	260 261 262	104.8 105.8 107.2	105.8 107.2 108.6	1.0 1.4 1.4	1.61% (673) (423)	(730) (90) (130)	0.6 0.2 0.4		

TECK EXPLORATION LTD.

NTS: 82L/8
CLAIM: Arrow 3
ELEVATION: 3410'
GRID COORD: True
LOGGED BY: G. Evans

ARROW PROPERTY

ARROW PROPERTY PROJECT #1719

DATE COLLARED: 22/05/93

DATE COMPLETED: 25/05/93

DATE LOGGED:

CORE SIZE: NO

NORTHING: 3±50S

EASTING: 3+25E

PROJECT #1719

DEPTH

0' -7

182' -7

606

HOLE NO. A-6

AZ LENGTH:

000 DEPTH OF

CASING R

WATERLINE

PROBLEMI

PAGE: 1 of 1

184.8m

9.8m

None

TECK EXPLORATION LTD.

NTS: 82L/8
 CLAIM: Arrow 3
 ELEVATION: 3140'
 GRID COORD: True
 LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 26/05/93
 DATE COMPLETED: 27/05/93
 DATE LOGGED:
 CORE SIZE: NQ
 NORTHING: 1+10S
 EASTING: 7+00E

PROJECT #1719

DEPTH 000m
 DIP -45°

HOLE NO. A-8

AZ 000 LENGTH: 87.2m
 DEPTH OF OVB: 3.1m
 CASING REMAINING:
 WATERLINE LENGTH:
 PROBLEMS:

PAGE: 1 of

DEPTH (meters)	DESCRIPTION	STRUCTURE			METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA			RESULTS			
		ANGLES	VEINS	ALTERATION			FROM	TO	LENGTH (meters)	Zn% (ppm)	Pb% (ppm)	Ag (g/t)	Fe (%)
FROM/TO													
0 - 3.1	Overburden												
3.1 - 11.2	Marble - clean white marble w/ minor phlog lam - 20% 20-40cm biot-sil beds		Iam 60-70° to C.A.				no sulphides						
11.2 - 20.1	Garnet Bearing Biot Sill Schist - well lam w/ 10-15% 1cm sill grains - 3-5% 1cm garnets - 5% 10cm marble beds		Iam 60° to C.A.				no sulphides						
20.1 - 40.3	Graphitic + Sericitic Quartzite @ 20.1-41.0m, strong fault zone w/ core strongly broken and gouge ● 20.1-29.4m, Sericitic Qtzite - well lam w/ 4% QVs in a nose of a fold ● 29.4-40.3m, Graphitic Quartzite - 15-50% Graphite in Quartzite - This is the core of the fault w/ strong clay + graphite gouge		24.5 27.6m C.A. 0° in fold				20.1-29.4m 2-3% diss fgr py						
		32m, 50° lam to C.A.				1-2% fgr py dissem							
40.3 - 51.7	Marble - coarse clean marble w/ minor biot + phlog lam - 20% Qtz + Bio Sill Sch Laminations		Iam @ 70° to C.A.			Qtz contains 2% po blebs							

TECK EXPLORATION LTD.

NTS: 82L/8
CLAIM: Arrow 3
ELEVATION: 3010'
GRID COORD: True
LOGGED BY: G. Evans

ARROW PROPERTY

DATE COLLARED: 31/05/93
DATE COMPLETED: 01/06/93
DATE LOGGED:
CORE SIZE: NQ
NORTHING: 0+35N
FASTING: 8+95F


PROJECT #1719

DEPTH DIP

HOLE NO. A-9

AZ LENGTH: 68.3m
000 DEPTH OF OVB: 18.3m
CASING REMAINING: None
WATERLINE LENGTH:
PROBLEMS: None

PAGE: 1 of



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GEOLOGICAL BRANCH
ASSESSMENT REPORT

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

ARROW PROPERTY

DRILL HOLE
LOCATION MAP

0 50 100 150 200 250

DATE DRAWN: MAY 18, 1983

DRAWN BY: [Signature]

REVIEWED BY: [Signature]

APPROVED BY: [Signature]

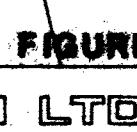


FIGURE 4

LEGEND

EOCENE DYKES

- 8 Lamprophyre Dykes

LADYBIRD INTRUSIVES

- 7a Granodiorite - Monzonite
7 Pegmatite

JURASSIC ROCKS

- 6 Argillite
6a Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

- 5a Calc-Silicates +/- Marble
5 Marble +/- Graphite Laminations
4b Quartzite with Calc-Silicate Beds
4a Quartzite with Flake Graphite (5-20%)
4 Quartzite +/- 20% Biotite Schist Laminations
3 Biotite Gneiss (Quartzite with Biotite Schist Laminations)
2 Biotite Schist

MAFIC VOLCANICS

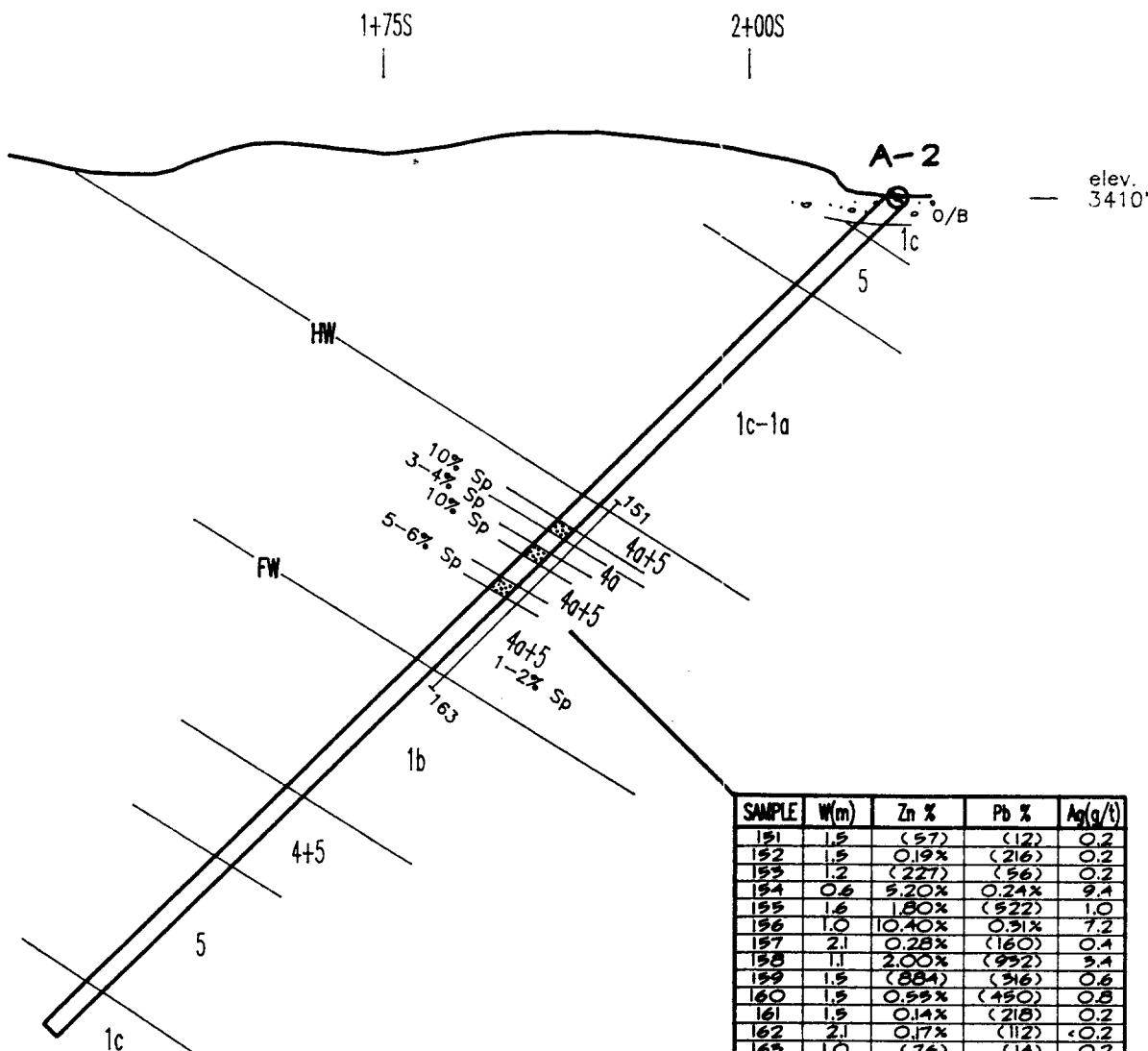
- 1c Amphibolite with Biotite Schist (to 50:50)
1b Amphibolite with Calc-Silicate Laminations
1a Massive Amphibolite

MINERALIZATION

- DS Disseminated Sulphides
SM Semi-Massive Sulphides
MS Massive Sulphides

SYMBOLS

- Contacts
- Faults
- Normal Fault
- Thrust Fault
- Shear Zone
- Lineation
- Joints
- Foliation, Bedding
- Antiform
- Isoclinal Antiform
- Synform
- Isoclinal Synform

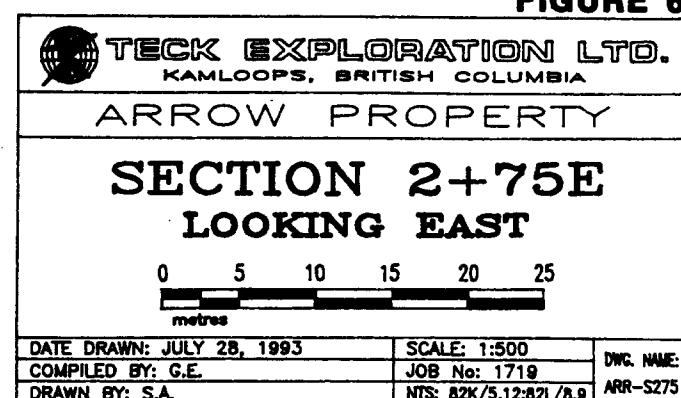
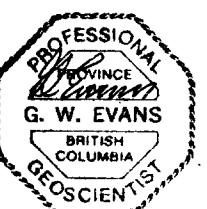
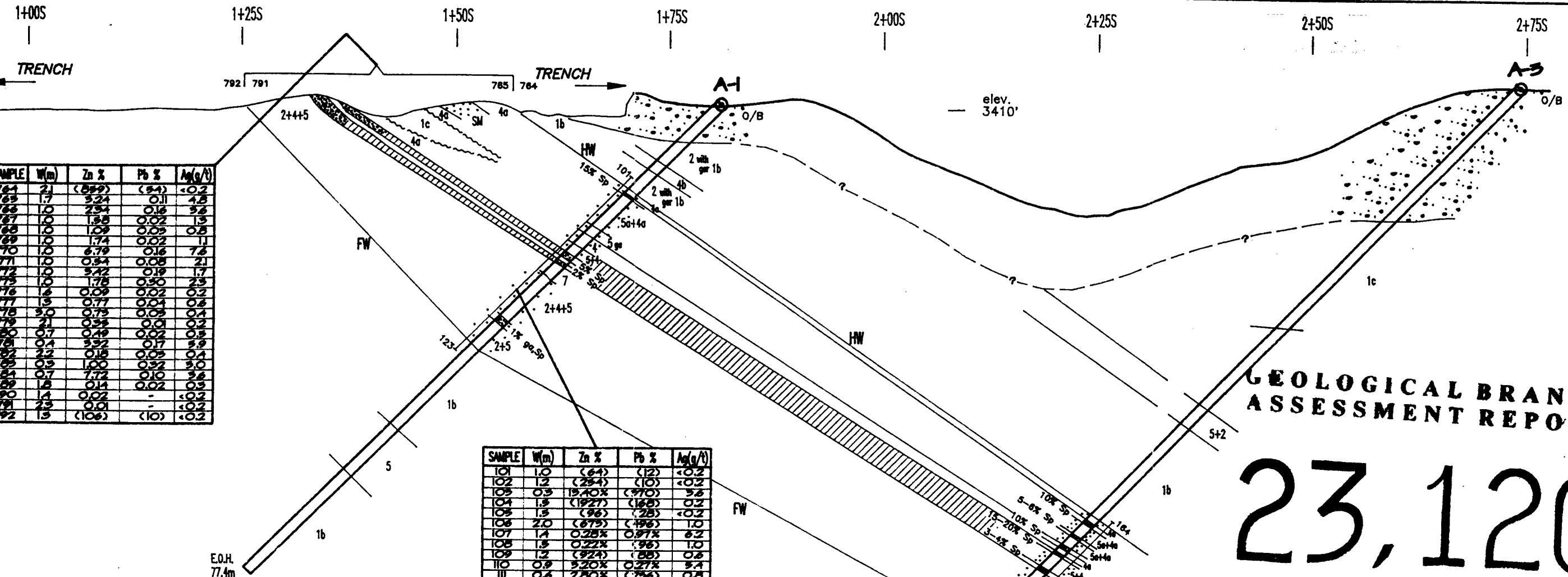


GEOLOGICAL BRANCH ASSESSMENT REPORT

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FIGURE 5

TECK EXPLORATION LTD.	
KAMLOOPS, BRITISH COLUMBIA	
ARROW PROPERTY	
SECTION 2+30E	
LOOKING EAST	
0 5 10 15 20 25	
metres	
DATE DRAWN: JULY 22, 1993	SCALE: 1:500
COMPILED BY: G.E.	JOB No: 1719
DRAWN BY: S.A.	NTS: 82K/5,12:82L/8,9



LEGEND

EOCENE DYKES

LADYBIRD INTRUSIVES

JURASSIC ROCKS

6 Argillite
6a Magic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

SEDIMENTS

- 5d** Calc-Silicates +/- Marble
- 5** Marble +/- Graphite Laminations
- 4b** Quartzite with Calc-Silicate Beds
- 4a** Quartzite with Flake Graphite (5-20%)
- 4** Quartzite +/- 20% Biotite Schist Laminations
- 3** Biotite Gneiss (Quartzite with Biotite Schist Laminations)
- 2** Biotite Schist

MAFIC VOLCANOES

MAFIC VOLCANICS

- 1c** Amphibolite with Biotite Schist (to 50:50)
- 1d** Amphibolite with Calc-Silicate Laminations
- 1e** Massive Amphibolite

MINERALIZATION

MINERALIZATION

DS		Disseminated Sulphides
SM		Semi-Massive Sulphides
MS		Massive Sulphides

SYMBOLS

- Contacts**
 - Faults**
 - Normal Fault**
 - Thrust Fault**
 - Shear Zone**
 - Lineation**
 - Joints**
 - Foliation, Bedding**
 - Antiform**
 - Isoclinal Antiform**
 - Synform**
 - Isoclinal Synform**

3425S

3+50S

elev.
3410' —

E.O.H.
184.8m

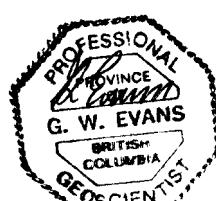
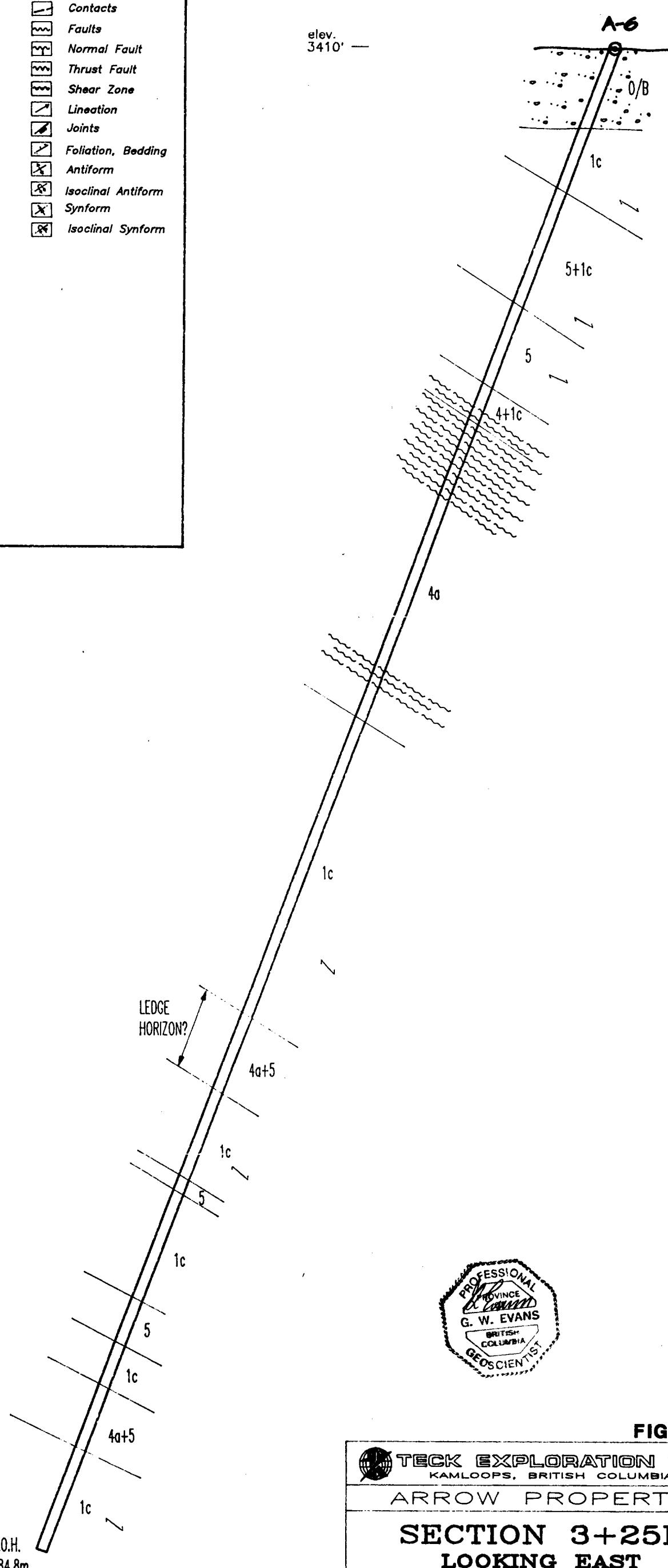
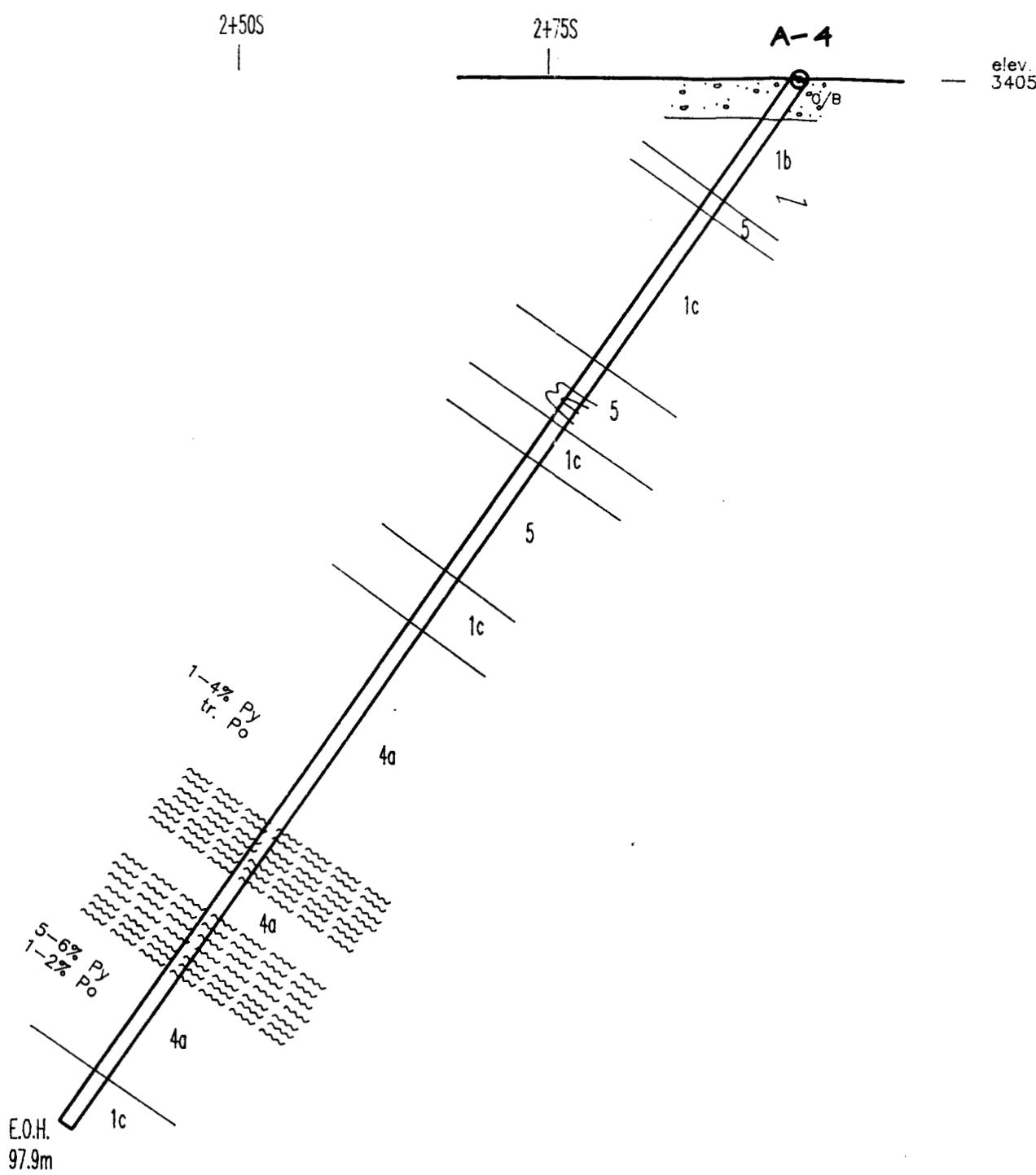


FIGURE 7

FIGURE 7



LEGEND

EOCENE DYKES

8 Lamprophyre Dykes

LADYBIRD INTRUSIVES

7a Granodiorite - Monzonite

7 Pegmatite

JURASSIC ROCKS

6 Argillite

6a Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

5a Calc-Silicates +/- Marble

5 Marble +/- Graphite Laminations

4b Quartzite with Calc-Silicate Beds

4d Quartzite with Flake Graphite (5-20%)

4 Quartzite +/- 20% Biotite Schist Laminations

3 Biotite Gneiss (Quartzite with Biotite Schist Laminations)

2 Biotite Schist

MAFIC VOLCANICS

1c Amphibolite with Biotite Schist (to 50:50)

1b Amphibolite with Calc-Silicate Laminations

1a Massive Amphibolite

MINERALIZATION

DS Disseminated Sulphides

SM Semi-Massive Sulphides

MS Massive Sulphides

SYMBOLS

— Contacts

— Faults

— Normal Fault

— Thrust Fault

— Shear Zone

— Lineation

— Joints

— Foliation, Bedding

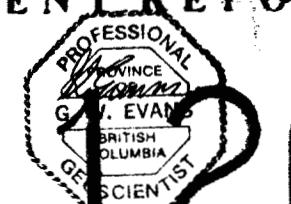
— Antiform

— Isoclinal Antiform

— Synform

— Isoclinal Synform

GEOLOGICAL BRANCH ASSESSMENT REPORT



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FIGURE 8

	TECK EXPLORATION LTD. KAMLOOPS, BRITISH COLUMBIA
ARROW PROPERTY	
SECTION 4+10E LOOKING EAST	
DATE DRAWN: JULY 20, 1993	SCALE: 1:500
COMPILED BY: G.E.	JOB No: 1719
DRAWN BY: S.A.	NTS: 82K/5,12;82L/8,9
DWG. NAME: ARR-SEC4	

LEGEND

EOCENE DYKES

- 8** Lamprophyre Dykes

LADYBIRD INTRUSIVES

- 7a** Granodiorite - Monzonite
- 7** Pegmatite

JURASSIC ROCKS

- 6** Argillite
- 6a** Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

- 5a** Calc-Silicates +/- Marble
- 5** Marble +/- Graphite Laminations
- 4b** Quartzite with Calc-Silicate
- 4a** Quartzite with Flake Graphite
- 4** Quartzite +/- 20% Biotite
- 3** Biotite Gneiss (Quartzite with Biotite Schist Laminations)
- 2** Biotite Schist

MAFIC VOLCANICS

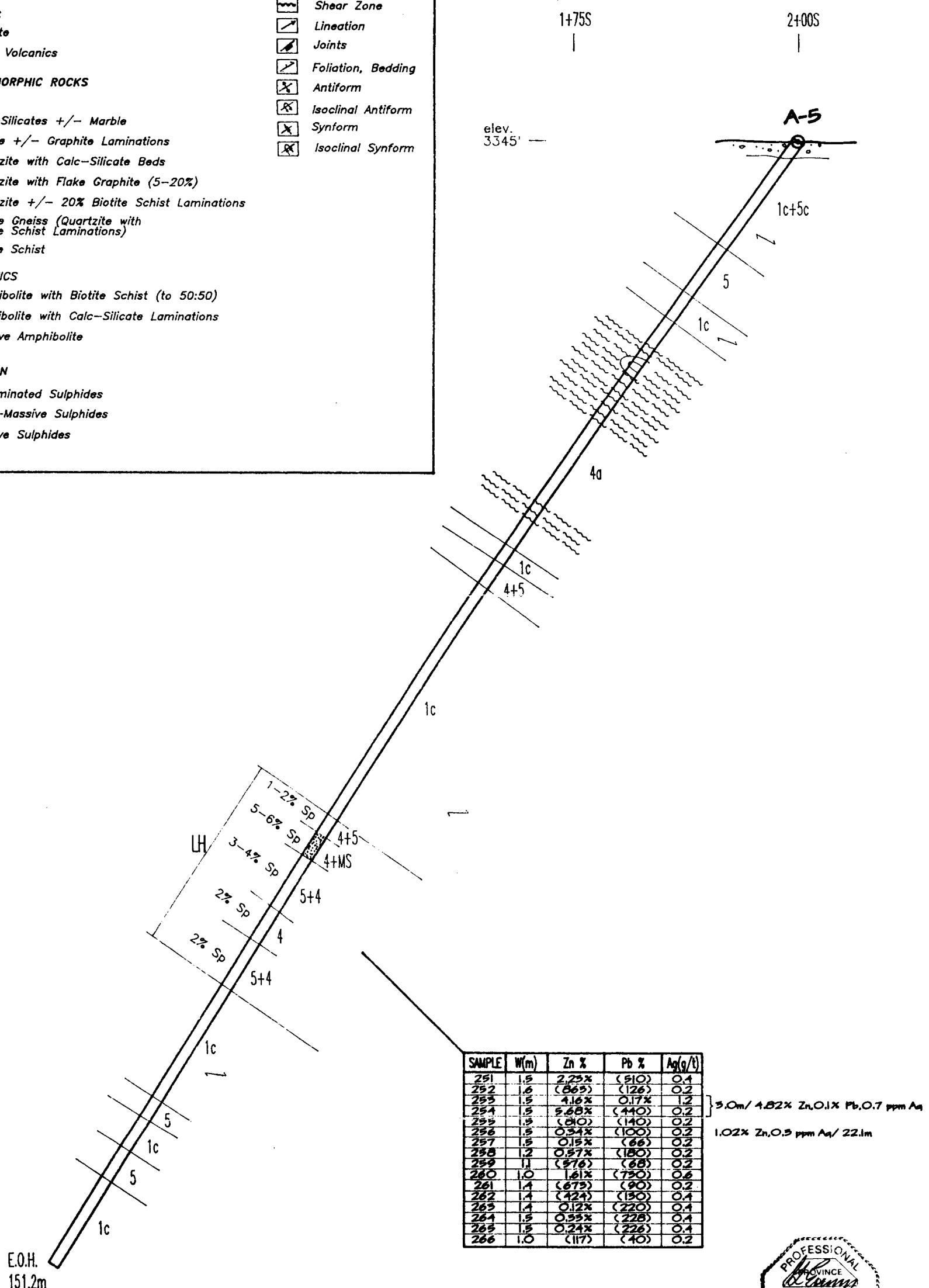
- 1c** Amphibolite with Biotite Schist
- 1b** Amphibolite with Calc-Silicate
- 1a** Massive Amphibolite

MINERALIZATION

- DS** Disseminated Sulphides
- SM** Semi-Massive Sulphides
- MS** Massive Sulphides

SYMBOLS

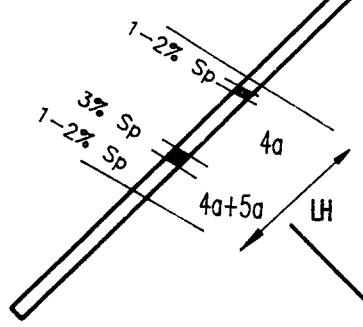
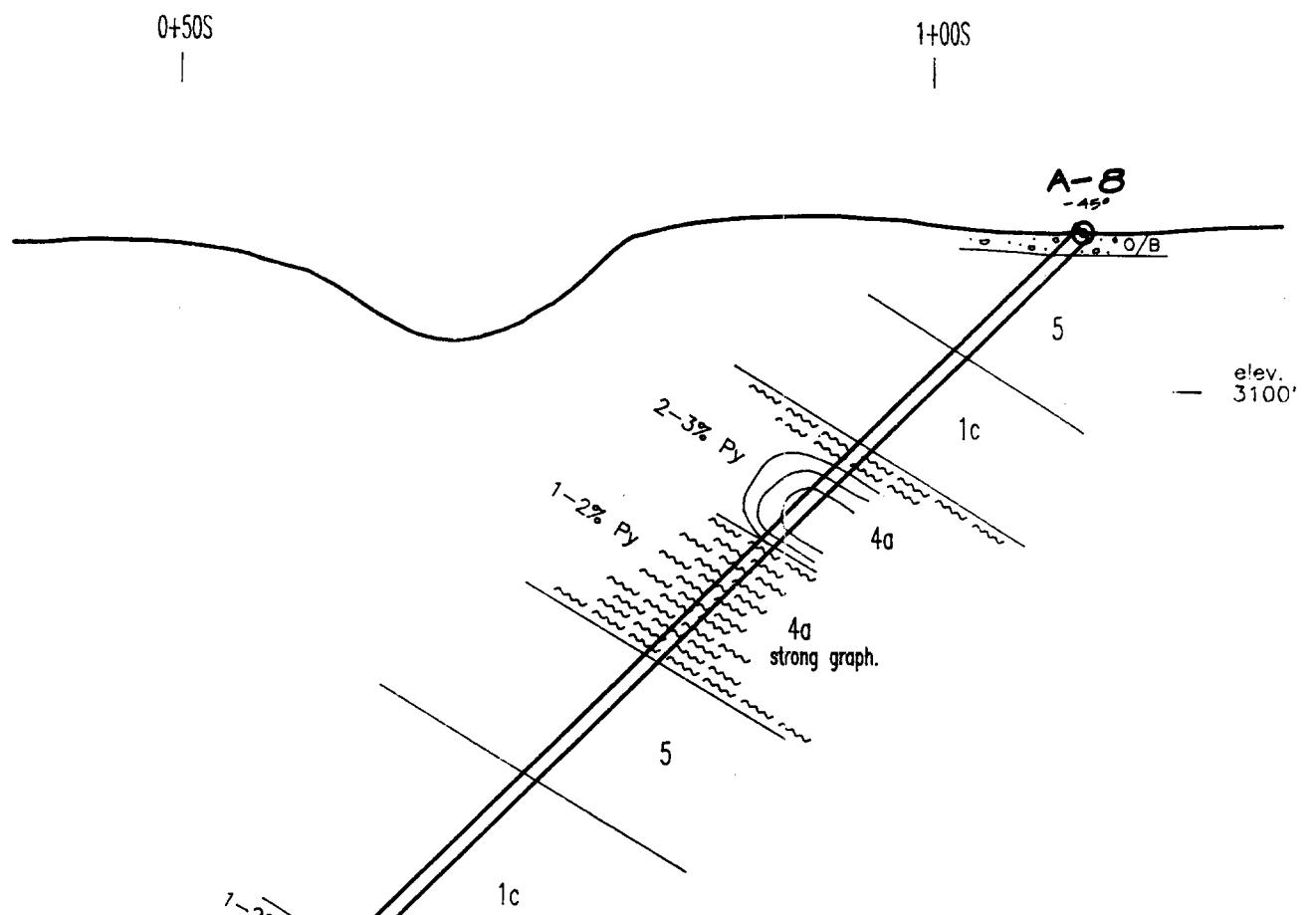
- [] *Contacts*
- [] *Faults*
- [] *Normal Fault*
- [] *Thrust Fault*
- [] *Shear Zone*
- [] *Lineation*
- [] *Joints*
- [] *Foliation, Bedding*
- [] *Antiform*
- [] *Isoclinal Antiform*
- [] *Synform*
- [] *Isoclinal Synform*



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FIGURE 9



SAMPLE	Wt(m)	Zn %	Pb %	Ag(g/t)
201	0.7	1.76%	(372)	1.0
202	0.9	1.06%	(344)	2.1
203	1.9	0.15%	(46)	0.6
204	1.5	(388)	(36)	0.4
205	1.5	(198)	(44)	0.4
206	1.0	(553)	(172)	0.2
207	0.8	1.78%	(278)	3.0
208	1.5	0.15%	(190)	0.8
209	1.7	0.31%	(992)	1.0

LEGEND

EOCENE DYKES

- 8 Lamprophyre Dykes

LADYBIRD INTRUSIVES

- 7a** *Granodiorite - Monzonite*
7 *Pegmatite*

JURASSIC ROCKS

- 6** Argillite
 - 6a** Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

- 5a** Calc-Silicates +/- Marble
 - 5** Marble +/- Graphite Laminations
 - 4b** Quartzite with Calc-Silicate Beds
 - 4a** Quartzite with Flake Graphite (5-20%)
 - 4** Quartzite +/- 20% Biotite Schist Laminations
 - 3** Biotite Gneiss (Quartzite with Biotite Schist Laminations)
 - 2** Biotite Schist

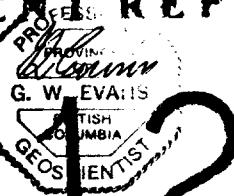
MAFIC VOLCANICS

- 1c** Amphibolite with Biotite Schist (to 50:50)
 - 1b** Amphibolite with Calc-Silicate Laminations
 - 1a** Massive Amphibolite

MINERALIZATION

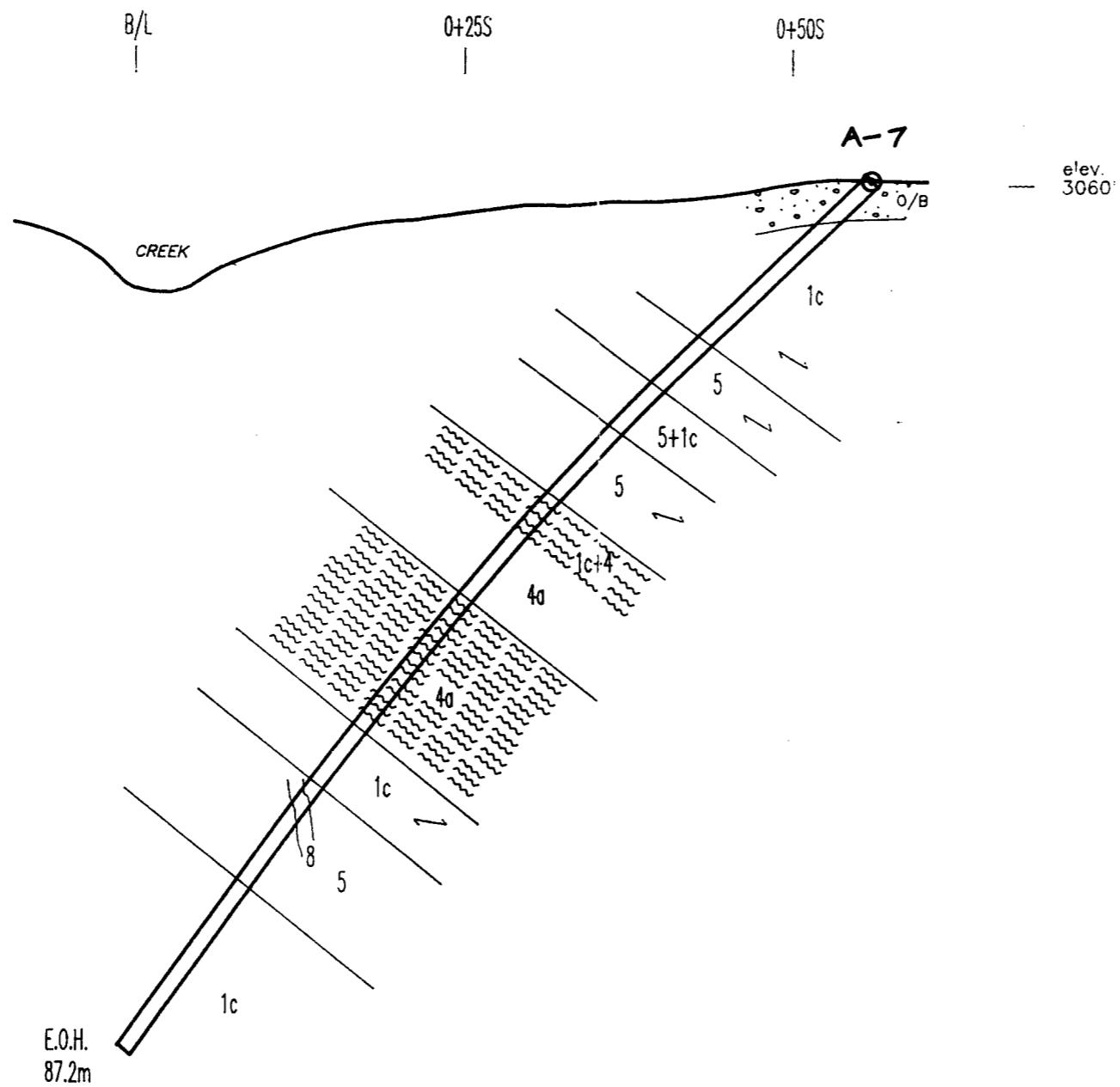
- DISSEMINATION**

 - DS *Disseminated Sulphides*
 - SM *Semi-Massive Sulphides*
 - MS *Massive Sulphides*



A large, bold, black number "23,120" is overlaid on a geological assessment report cover. The cover features the title "GEOLOGICAL BRANCH ASSESSMENT REPORT" at the top, followed by a circular stamp. The stamp contains the text "PROFESSIONAL", "PROVINCIAL", "GEOLOGIST", "G. W. EVANS", "BRITISH COLUMBIA", and "GEO-SCIENTIST".

FIGURE 10



LEGEND

EOCENE DYKES

8 Lamprophyre Dykes

LADYBIRD INTRUSIVES

7a Granodiorite - Monzonite

7 Pegmatite

JURASSIC ROCKS

6 Argillite

6a Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

5a Calc-Silicates +/- Marble

5 Marble +/- Graphite Laminations

4b Quartzite with Calc-Silicate Beds

4a Quartzite with Flake Graphite (5-20%)

4 Quartzite +/- 20% Biotite Schist Laminations

3 Biotite Gneiss (Quartzite with Biotite Schist Laminations)

2 Biotite Schist

MAFIC VOLCANICS

1c Amphibolite with Biotite Schist (to 50:50)

1b Amphibolite with Calc-Silicate Laminations

1a Massive Amphibolite

MINERALIZATION

DS Disseminated Sulphides

SM Semi-Massive Sulphides

MS Massive Sulphides

SYMBOLS

— Contacts

— Faults

— Normal Fault

— Thrust Fault

— Shear Zone

— Lineation

— Joints

— Foliation, Bedding

— Antiform

— Isoclinal Antiform

— Synform

— Isoclinal Synform

GEOLOGICAL BRANCH ASSESSMENT REPORT

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FIGURE 11

	TECK EXPLORATION LTD.	
		KAMLOOPS, BRITISH COLUMBIA
ARROW PROPERTY		
SECTION 8+50E LOOKING EAST		
DATE DRAWN: JULY 20, 1993		SCALE: 1:500
COMPILED BY: G.E.		JOB No: 1719
DRAWN BY: S.A.		NTS: 82K/5,12;82L/8,9
DWG. NAME:		ARR-SEC8

LEGEND

EOCENE DYKES

8 Lamprophyre Dykes

LADYBIRD INTRUSIVES

7a Granodiorite - Monzonite

7 Pegmatite

JURASSIC ROCKS

6 Argillite

6a Mafic Volcanics

SHUSWAP METAMORPHIC ROCKS

SEDIMENTS

5a Calc-Silicates +/- Marble

5 Marble +/- Graphite Laminations

4b Quartzite with Calc-Silicate Beds

4a Quartzite with Flake Graphite (5-20%)

4 Quartzite +/- 20% Biotite Schist Laminations

3 Biotite Gneiss (Quartzite with Biotite Schist Laminations)

2 Biotite Schist

MAFIC VOLCANICS

1c Amphibolite with Biotite Schist (to 50:50)

1b Amphibolite with Calc-Silicate Laminations

1a Massive Amphibolite

MINERALIZATION

DS Disseminated Sulphides

SM Semi-Massive Sulphides

MS Massive Sulphides

SYMBOLS

Contacts

Faults

Normal Fault

Thrust Fault

Shear Zone

Lineation

Joints

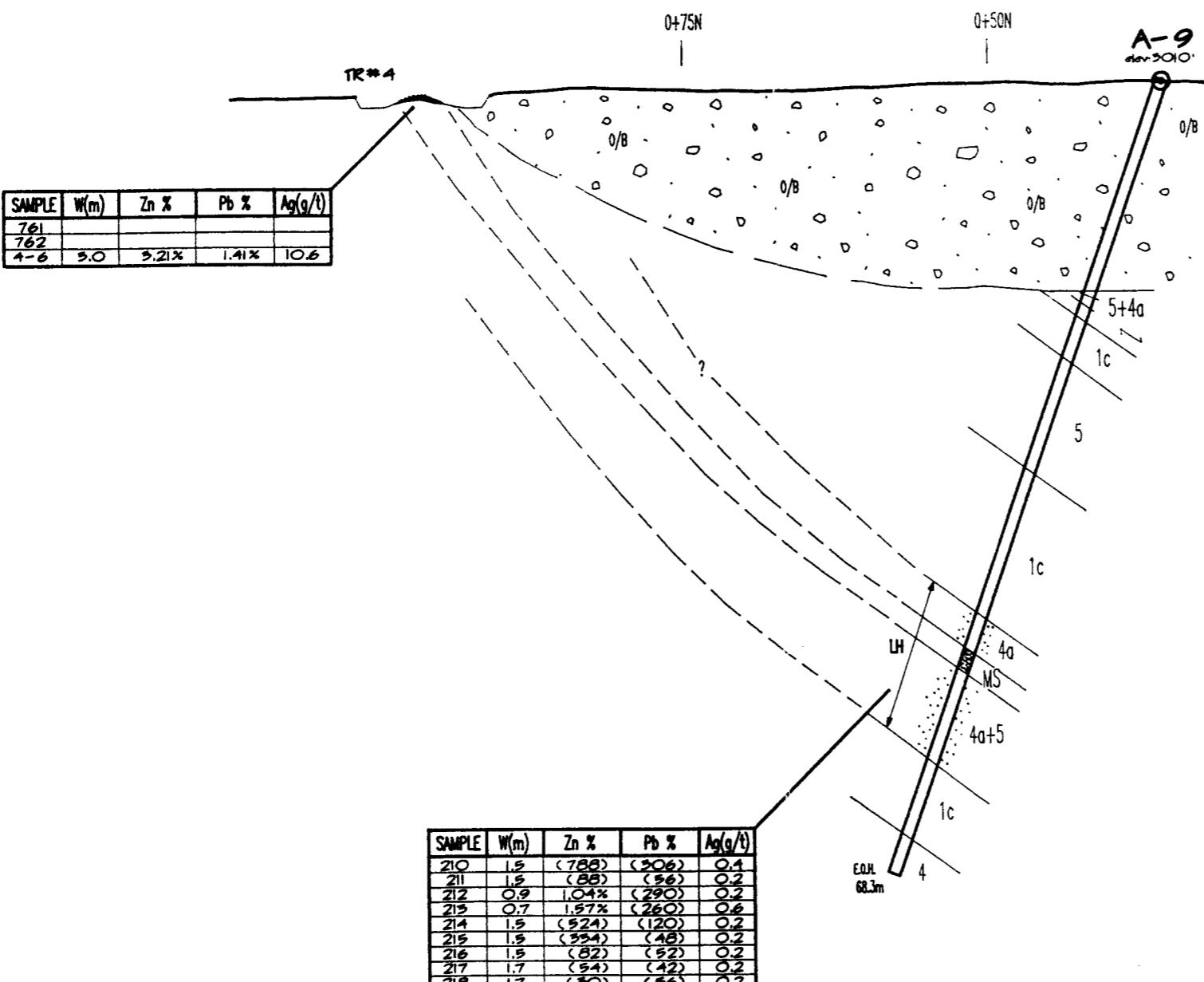
Foliation, Bedding

Antiform

Isoclinal Antiform

Synform

Isoclinal Synform



GEOLOGICAL BRANCH ASSESSMENT REPORT

23,120

FIGURE 12

TECK EXPLORATION LTD.	
KAMLOOPS, BRITISH COLUMBIA	
ARROW PROPERTY	
SECTION 9+00E	
LOOKING EAST	
metres	
0 5 10 15 20 25	
DATE DRAWN: JULY 20, 1993	
SCALE: 1:500	
COMPILED BY: G.E.	
JOB No: 1719	
DRAWN BY: S.A.	
NTS: 82K/5,12;82L/8,9	
DWG. NAME: ARR-SEC9	