ARIS SUMMARY SHEET

District Geologist, Smithers — Off Confidential: 94.12.06

ASSESSMENT REPORT 23232 — MINING DIVISION: Omineca

PROPERTY: HD
LOCATION: LAT 54 27 00 LONG 126 39 00
UTM 09 6035917 652366
NTS 093L07E

CAMP: 041 New Nadina - Equity Area

CLAIM(S): H.D. 1-3
OPERATOR(S): Teck Corp.
AUTHOR(S): Thompson, G.R.
REPORT YEAR: 1993, 51 Pages
COMMODITIES
SEARCHED FOR: Zinc,Copper,Lead,Silver,Gold,Cadmium,Fluorite
KEYWORDS: Jurassic,Telkwa Formation,Lapilli tuffs,Rhyolites,Disseminations
Veinlets,Sphalerite
WORK
DONE: Drilling,Geological,Geochemical
DIAD 648.5 m 4 hole(s);NQ
Map(s) - 1; Scale(s) - 1:5000
PETR 10 sample(s)
SAMP 56 sample(s) ;ME
RELATED
REPORTS: 09849,10796,14157,18360,18911
MINFILE: 093L 203,093L 205

DIAMOND DRILLING ASSESSMENT REPORT

ON THE

H.D. MINERAL PROPERTY

Omineca Mining Division, British Columbia

93 L / 7E

Latitude 54° 27' N Longitude 126° 39' W

Owner: Teck Corporation

G. R. Thomson, P.Geo.

January 15, 1993

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LIST OF ILLUSTRATIONS

INTRODUCTION

Teck Exploration Ltd. carried out an exploration program on the H.D. property from September 28 to October 12,1993. The work was primarily centred around a diamond drill program on the H.D 1, H.D. 2 and H.D. 3 mineral claims.

The exploration program was directed towards the possibility of locating accumulations of volcanogenic massive sulphides. Work was directed towards previously untested surface mineralization and related geochemical soil anomalies.

Rock outcrops and mineral showings in the area of interest were mapped, with selected samples examined through thin section study.

LOCATION, ACCESS

The claim area is located approximately 5 kms north of Houston, in west central British Columbia. The claims cover the majority of the south facing slope of Mount Harry Davis, which reaches an elevation of 1250m.

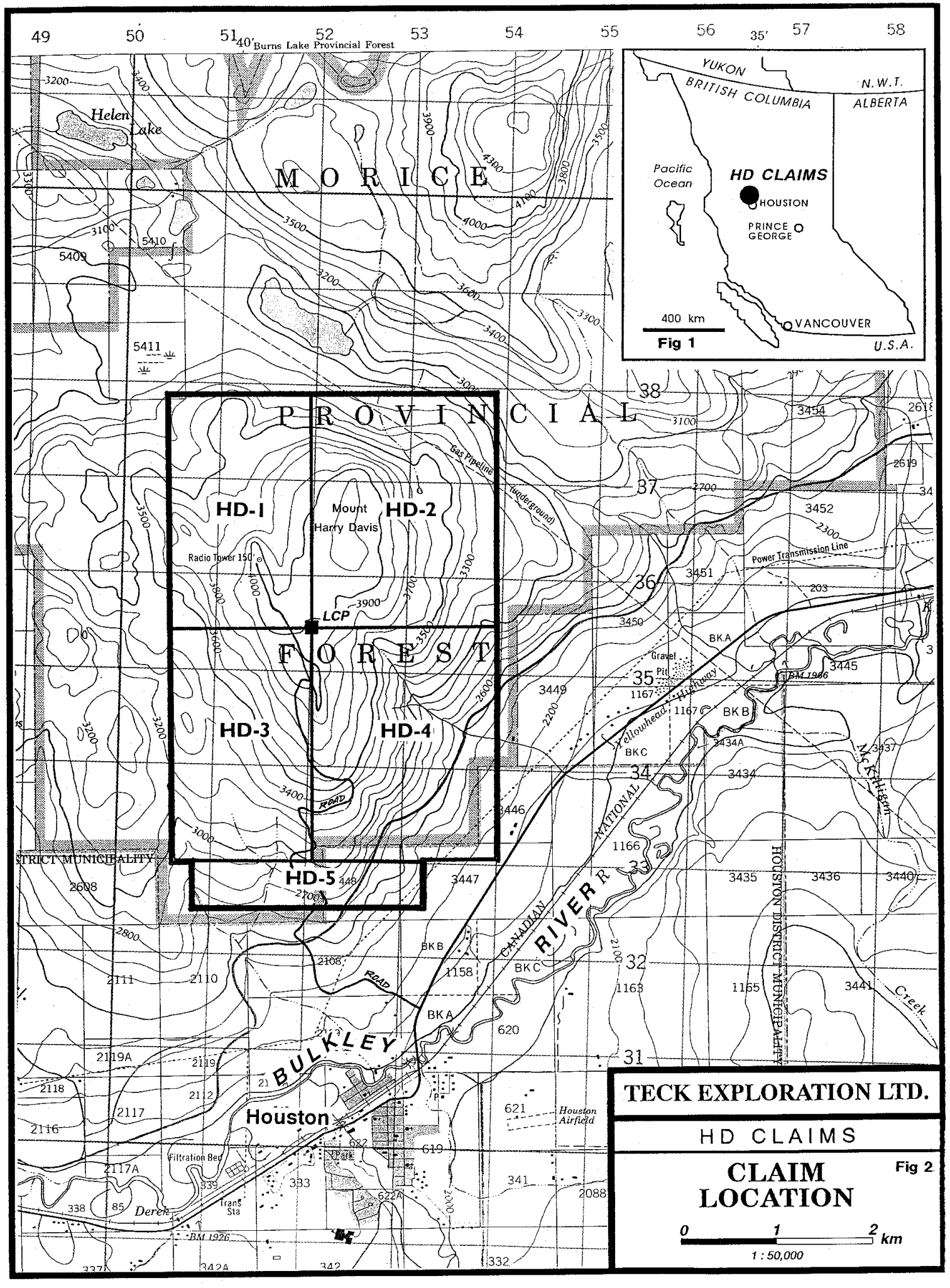
Access is obtained by means of Mount Davis Way and the North Road, the turnoff of which is one kilometre east of Houston. The main access road reaches to the top of Mount Harry Davis , terminating at a Department of Transport VOR facility. There are also short spur roads accessing two radio transmission towers, also located near the top of the mountain. As well, there are a number of old roads that were used for previous mineral exploration activity. These are mostly undriveable.

The property is entirely forested, and is drained by only a few very small creeks, which are insufficient for supplying water for drill programs.

CLAIMS

For the purpose of recording assessment, the HD Group is defined as follows:

Claim	Tenure No.	Units	Due Date
HD 1	238545	15	April 21/96
HD 2	238546	20	"
HD 3	238547	15	"
HD 4	238548	20	"
HD 5	240082	5	August 18/96



TECK EXPLORATION LTD.

HD CLAIMS

CLAIM LOCATION

Fig 2

0 1 2 km

1 : 50,000

The expiry year for all five claims will be extended to 1999 with the acceptance of this report. The present work program was carried out by Teck Exploration Ltd. under an option agreement dated September 21, 1993 with claim owners Wes Moll, Daniel Merkley and Gloria Merkley.

HISTORY

Numerous Zn-Pb and Cu-Ag showings are known to exist at widely scattered locations in road cuts, trenches and small hand-dug pits on Mt. Harry Davis. In 1982 , the HD 1-4 claims were staked over the showings with subsequent magnetometer, VLF-EM, and geochemical surveys conducted by the Endako Mines Division of Placer Development Ltd. In 1985, Eldor Resources Ltd. conducted a gravity survey over portions of the claims and drilled two short diamond drill holes with negative results. The HD 5 claim was staked in 1988, by Equity Silver Mines Ltd. to cover an area of new showings. Also in 1988, Equity carried out soil geochemical, and IP surveys over the HD 3 and 4 claims as well as 776.2 m of diamond drilling in 6 drill holes. None of the exploration programs to date have located mineralization of economic consideration.

GEOLOGY AND MINERALIZATION

Bedrock on the HD claims is part of the Telkwa Formation. These are the oldest rocks (Lower Jurassic) of the Hazleton Group. The Telkwa Formation consists of volcanic and sedimentary rocks related to island arc volcanism. Tipper and Richards (1976) assign rocks in the HD area to the "Babine Shelf Facies". These facies form transitions from non-marine volcanic rocks that underlie the Telkwa Range, 40 km to the west, to thick deposits of marine rocks in the vicinity of Babine Lake, some 50 km to the northeast. Rocks of the Babine Shelf Facies are described as "calc-alkaline basalt to rhyolite; subaerial and subaqueous flow, breccia and tuff; limestone, greywacke siltstone and shale" (Tipper and Richards, 1976)

Virtually all rock outcrops in the area of the 1993 drill program were of volcanic origin.

Chert has been located in two locations, both at the Hilltop showing area and approximately 700 m east of this area. At the Hilltop showing, the chert and carbonate rocks are mineralized with massive to laminated sphalerite. Overall, chert is very restricted in occurrence and is believed to be primary.

There are several variations of rocks of rhyolitic composition, across the property. Most of the rocks are of pyroclastic origin, matrix-supported and heterolithic.

Another important rhyolitic unit consists of a red tuff composed of red hematitic matrix, frequently displaying preferred orientation of pyroclasts and flattened pumice lapilli.

This is probably a subaerially erupted unit which is interbedded on various scales with non-hematitic rhyolitic tuff units.

A distinctive dacite porphyry occurs in extensive zones throughout the property. The rock is aphanitic, with a dark grey matrix and abundant euhedral plagioclase phenocrysts 1 to 2mm. The rock is massive and appears to be an intrusive porphyry.

Dark green, aphanitic andesite dykes occur frequently, but volumetrically are unimportant. They probably belong to the Endako Group of Tertiary Age.

Silicification, and carbonitization (the latter accompanied by numerous carbonate veinlets) were observed in drill holes, especially where elevated zinc values are present. Significant argillic or chloritic alteration was nowhere observed, either in outcrop or in drill core.

Rock attitudes are generally difficult to determine on the claim area, but generally strike from north to northwest and dip steeply east. Faults of various scale occur throughout the property and have a similar northerly trend. Fracture zones commonly provide loci for copper or zinc mineralization and carbonate veins on the HD property.

Two principal types of mineralization are present on the property: copper-silver-arsenic, and zinc-lead with enhanced (but uneconomic gold-silver moly). The copper-silver-arsenic showings have received almost all of the past exploration activities. It is the opinion of previous operators that Cu-Ag-As occurrences are small, fracture controlled, and unlikely to be economic.

Zinc has several modes of occurrence. In the chert-carbonate horizon exposed in the area known as the Hilltop Showings, brown, honey-coloured sphalerite occurs in the massive to laminated chert as irregular patches with fluorite inclusions. Discordant quartz or calcite veinlets (both +/- sphalerite) are also present. Showings in the Hilltop area which are not hosted by chert are similar to the Switchback Showings (described below), but with more abundant fluorite.

At the Switchback area, zinc occurs in silicified pyroclastic rocks of rhyolitic affinities. In thin section, sphalerite occurs as disseminated, ragged grains, usually less than 1 mm. These rocks contain a large number of very narrow carbonate veinlets, which sometimes carry sphalerite. Secondary carbonate is also disseminated throughout the matrix of these rocks. Rocks of this zone, are similar in appearance to those of the Tower Showing where zinc mineralization is found to occur in a silicified tectonic breccia.

Zinc occurrences in the Baseline area are clearly fracture controlled, and range from thin fracture coatings to a calcite-sulphide vein less than one meter in width. A similar such vein was encountered in drill hole HD-93-02 (Hilltop Showing area) at 175.6 to 176.4 m, which assayed 13.6 % Zn with anomalous values in copper, silver, cadmium and gold.

Two styles of mineralization exist (1) weak, syngenetic sulphides associated with cherts and carbonate rocks and (2) significant epigenetic zinc in quartz and carbonate veins and veinlets. Disseminated sphalerite occurrences may be related to silicification of felsic pyroclastics and tectonic breccias.

DIAMOND DRILL PROGRAM

The diamond drill program was carried out on the HD 1 and HD 2 mineral claims over the period October 5 to October 11, 1993. All drilling was of NQ size and totalled 648.5m in four drill holes from four separate drill sites. The drilling was carried out by L.D.S. Diamond Drilling Ltd. of Kamloops, B.C. As local drill water is not available on the property, Gallant Trucking of Kamloops was hired to haul water from the Bulkley River in Houston. Drill core is currently stored at the residence of Dan and Gloria Merkley, of Houston, B.C.

All drill holes were collared from existing roads. No new roads were constructed in the course of this drill program. Drill collar locations were surveyed in using a hip chain in conjunction with known road locations. Drill collar elevations were determined by a pocket altimeter.

The drill collar locations and surface projections of the drill holes are shown on Figure 3 at the back of this report. Drill core logs and drill core assay results are summarized in the appendix.

Particulars of the four drill holes is as follows:

HOLE NO.	DIP	AZIMUTH	LENGTH (m)
HD-93-01	-45	84°	114.9
HD-93-02	-45	135°	206.4
HD-93-03	-45	270°	148.4
HD-93-04	-45	60°	172.8

DRILL PROGRAM RESULTS

The drill program carried out by Teck Exploration Ltd. tested three zones of surface sulphide mineralization in an area of high zinc +/-cadmium soil

geochemistry. The rationale for drilling the four drill holes is as follows:

HD-93-01

This hole was drilled in an attempt to intersect a roadcut zinc mineralized quartz breccia zone, previously referred to as the Tower showing. This zone had not been previously successfully drilled. The breccias suggested a possible expression of a deeper seated mineralized volcanogenic vent structure. The drill hole intersected an upper zone of approximately 30m of variably brecciated orange to red (hematitic) rhyolitic quartz breccia with minor pyrite and no base metal sulphides. A more detailed description of the surface geology of this zone is presented on Figure 4 (" Geology of the Tower Showing").

HD-93-02

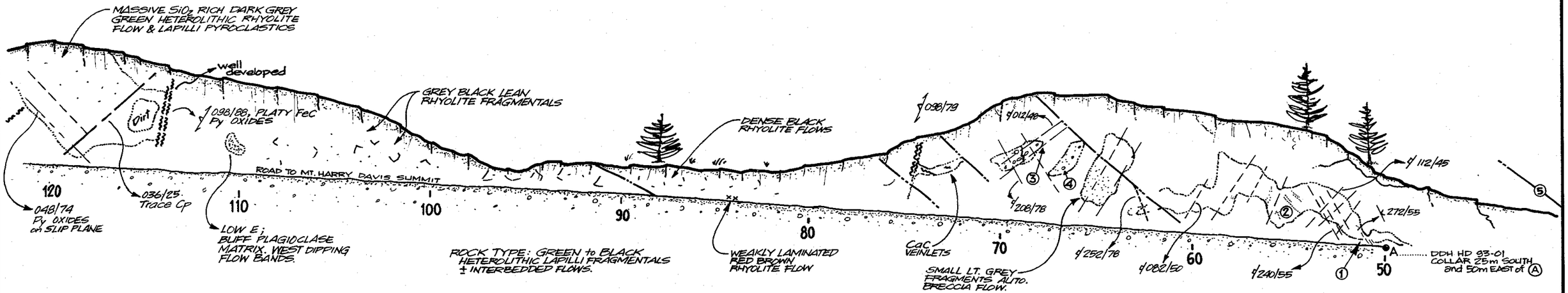
Drill hole #2 tested the western flank of a zone of a high coincident zinc and cadmium soil anomaly in the Hilltop mineral showing area. This drill hole was designed to determine the extent and style of mineralization in this previously untested area. A zone of weak to moderate quartz-carbonate alteration occurs from 72.2-88.4 m in rhyolitic tuffs. This zone contained numerous anomalous zinc values including a high grade interval of 3.4 % Zn from 85.3 to 86.4m. A weighted average of 0.78% Zn was returned across the interval 81.4 - 88.4m. There were also two distinct occurrences of high grade zinc assays related to quartz/carbonate veins lower in the hole, both across intervals less than one meter.

HD-93-03

Drill hole #3 was drilled on a localized, but strong copper geochemical soil anomaly, in the vicinity of the B.C. Telephone microwave tower. The drill hole intersected a sequence of mostly rhyolitic lapilli tuffs, lesser porphyritic rhyodacites, and minor andesite dykes. There were no recognizable base metal sulphides observed in this drill hole.

HD-93-04

Drill hole #4, like drill hole #2, tested the strong coincident Zn-Cd soil anomaly in the Hilltop showing area. This drill



Structural Data

(1)... Yellow-grey-green SiO_2, Mn rind breccia rhyolite flow.
-discordant grey quartz ± sulphide stringers

(2)... Massive to faintly flow laminated brown-grey weathering rhyolite.
-weak foliation associated with CaC veinlets.
-flow laminations very irregular orientation. Modest west dip to subvertical.

(3)... Late stage CaC veinlets are discordant to black chert matrix supported limestone.

(4)... Light green fragments; black matrix, auto breccia flow, heavy Mn rind.

(5)... Red-brown hematite breccias at approximately 0+30 m.

TECK EXPLORATION LTD

HD CLAIMS

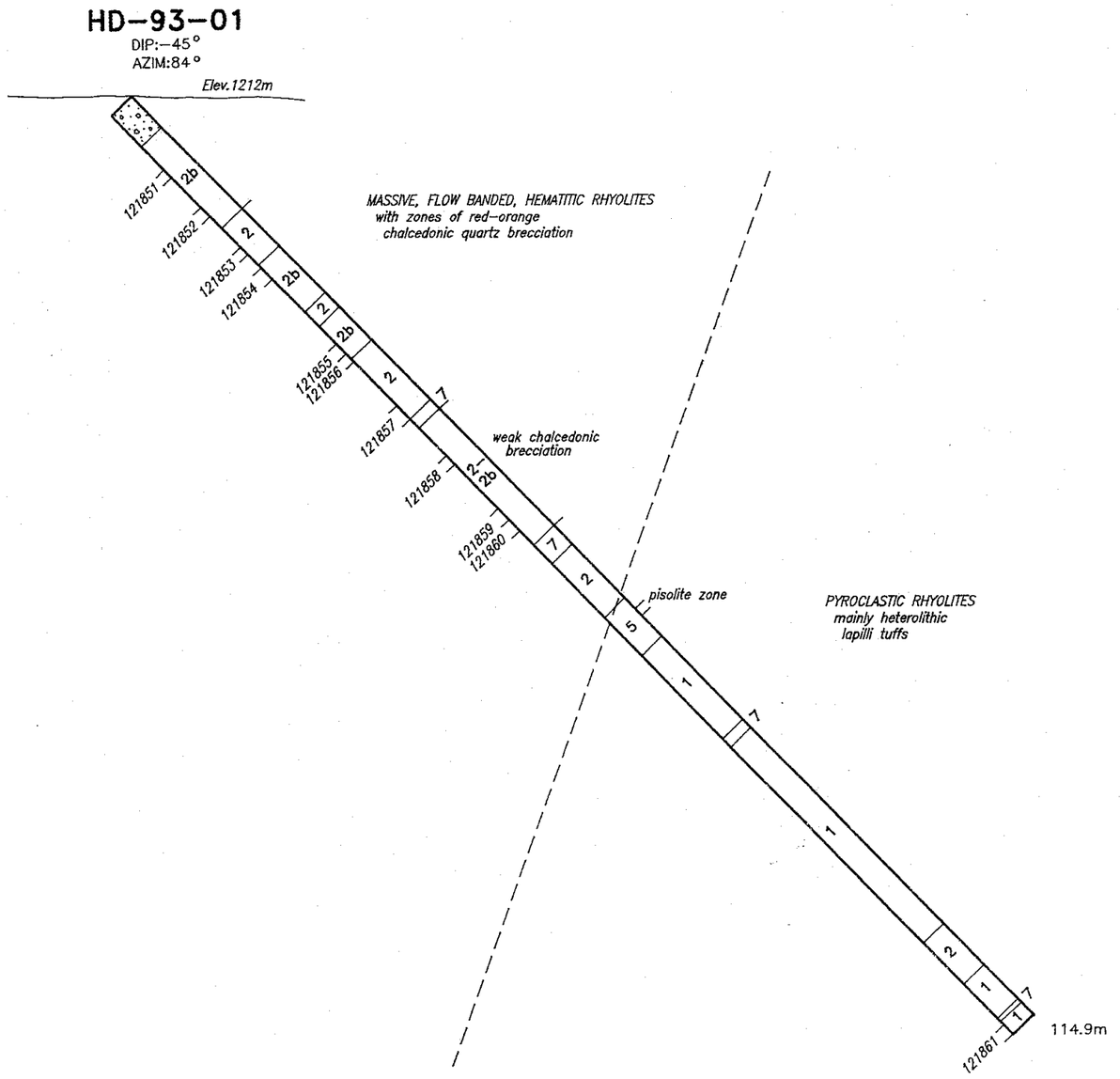
GEOLOGY of the TOWER ZONE

Fig 4

GEOLOGY BY: J.O	SCALE: 1:200
DRAWN BY: S.A.	DATE: DEC. 22, '93

W

E



LEGEND

TELKWA FORMATION—LOWER JURASSIC

- 1 — RHYOLITE LAPILLI TUFF—pale to medium grey or green buff; commonly pale green matrix with pink, cream to pale green lapilli frags. (heterolithic); matrix supported with variable degree of sorting
- 2 — RHYOLITE—massive, aphanitic, locally flow banded, microfractured
  - 2a — Flow banded—massive rhyolites, brown, orange, red with grey cryptocrystalline, chalcedonic quartz, matrix supported breccia
  - 2b — Rhyodacite—massive, pale green to brown groundmass with approx. 10% subhedral plagioclase phenocrysts (2–4mm)
- 3 — RHYOLITIC COARSE FRAGMENTAL—angular rhyolite frags. >64mm (blocks, bombs)
- 4 — RHYOLITE TUFF (Hematitic)—red hematitic groundmass
- 5 — RHYOLITE ASH TUFF—clasts mostly <2mm, sparse lapilli frags.

JURASSIC/YOUNGER

- 6 — ANDESITE TUFF—aphanitic, dark green, bedding occasionally discernible
- 7 — ANDESITE DYKES—aphanitic dark green, occasional epidote/chlorite alteration spots/bands
- 8 — ANDESITE PORPHYRY—med grain, subhedral plagioclase phenocrysts 2–4mm (approx. 30%) chloritic groundmass

121872...1.76% Zn
SAMPLE No.
ASSAY

Fig 5

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

H-D CLAIMS

DRILL HOLE SECTION
HD—93—01
SECTION ALONG AZIMUTH (84°)

0 5 10 15 20 25 metres

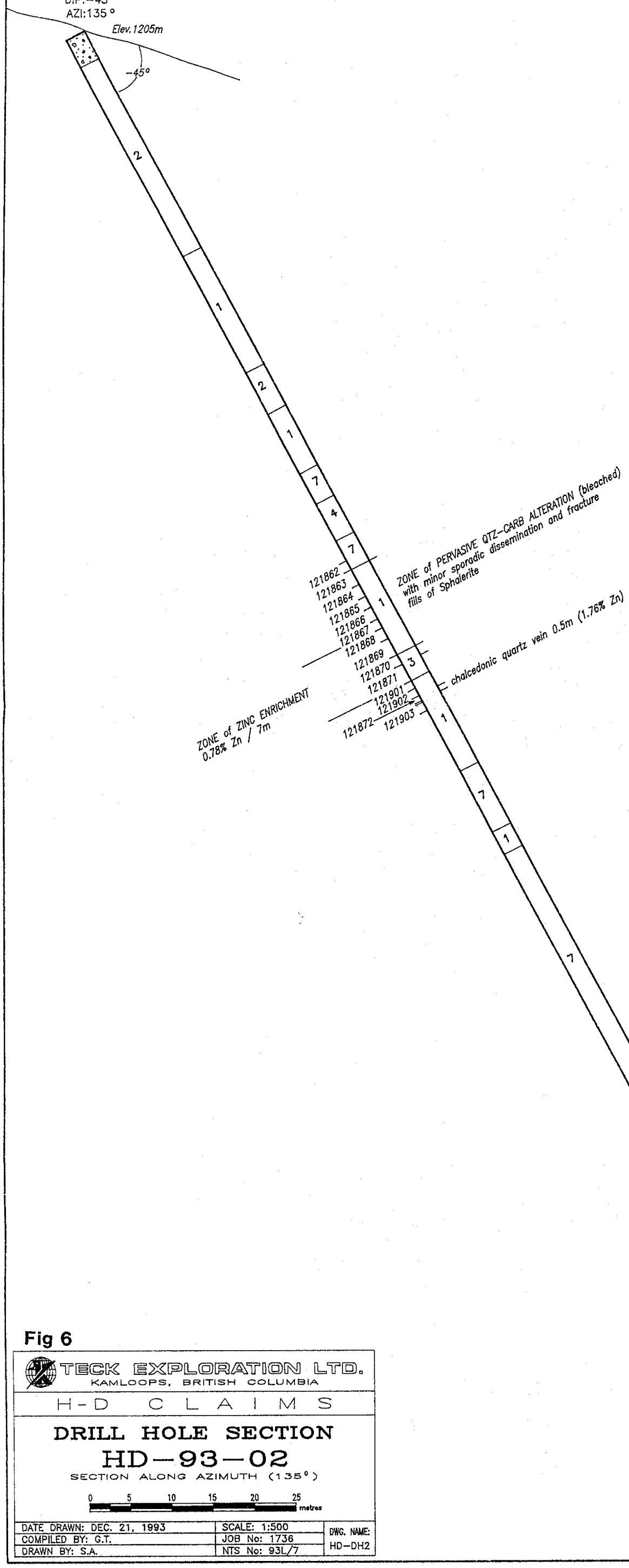
DATE DRAWN: DEC. 21, 1993	SCALE: 1:500	DWG. NAME:
COMPILED BY: G.T.	JOB No: 1736	HD—DH1
DRAWN BY: S.A.	NTS No: 93L/7	

NW

SE

HD-93-02

DIP:-45°
AZI:135°



LEGEND

TELKWA FORMATION—LOWER JURASSIC

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JURASSIC/YOUNGER

6 ANDESITE TUFF—aphanitic, dark green, bedding occasionally discernible

7 ANDESITE DYKES—aphanitic dark green, occasional epidote/chlorite alteration spots/bands

8 ANDESITE PORPHYRY—med grain, subhedral plagioclase phenocrysts 2—4mm (approx. 30%) chloritic groundmass

SAMPLE No. 121872 ... 1.76% Zn
ASSAY

Fig 6

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

H-D CLAIMS

DRILL HOLE SECTION
HD—93—02

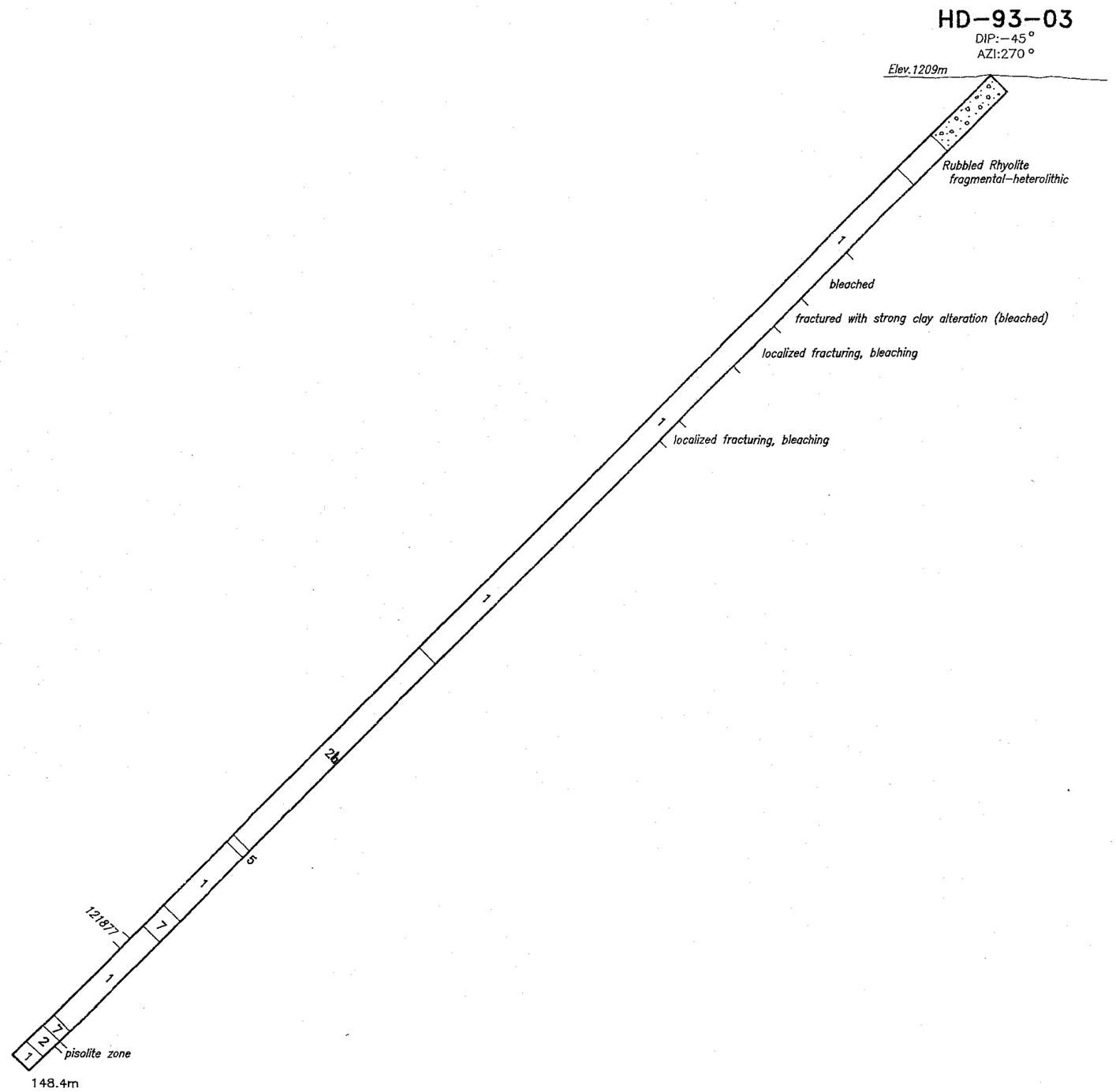
SECTION ALONG AZIMUTH (135°)

0 5 10 15 20 25 metres

DATE DRAWN: DEC. 21, 1993	SCALE: 1:500	DWG. NAME: HD-DH2
COMPILED BY: G.T.	JOB No: 1736	
DRAWN BY: S.A.	NTS No: 93L/7	

W

E



LEGEND

TELKWA FORMATION—LOWER JURASSIC

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2b Rhyodacite—massive, pale green to brown groundmass with approx. 10% subhedral plagioclase phenocrysts (2—4mm)

3 RHYOLITIC COARSE FRAGMENTAL—angular rhyolite frags. >64mm (blocks, bombs)

4 RHYOLITE TUFF (Hematitic)—red hematitic groundmass

5 RHYOLITE ASH TUFF—clasts mostly <2mm, sparse lapilli frags.

JURASSIC/YOUNGER

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8 ANDESITE PORPHYRY—med grain, subhedral plagioclase phenocrysts 2—4mm (approx. 30%) chloritic groundmass

SAMPLE No. — 121872...1.76% Zn — ASSAY

Fig 7

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

H-D CLAIMS

DRILL HOLE SECTION
HD—93—03
(SECTION ALONG E—W AZIMUTH)

0 5 10 15 20 25 metres

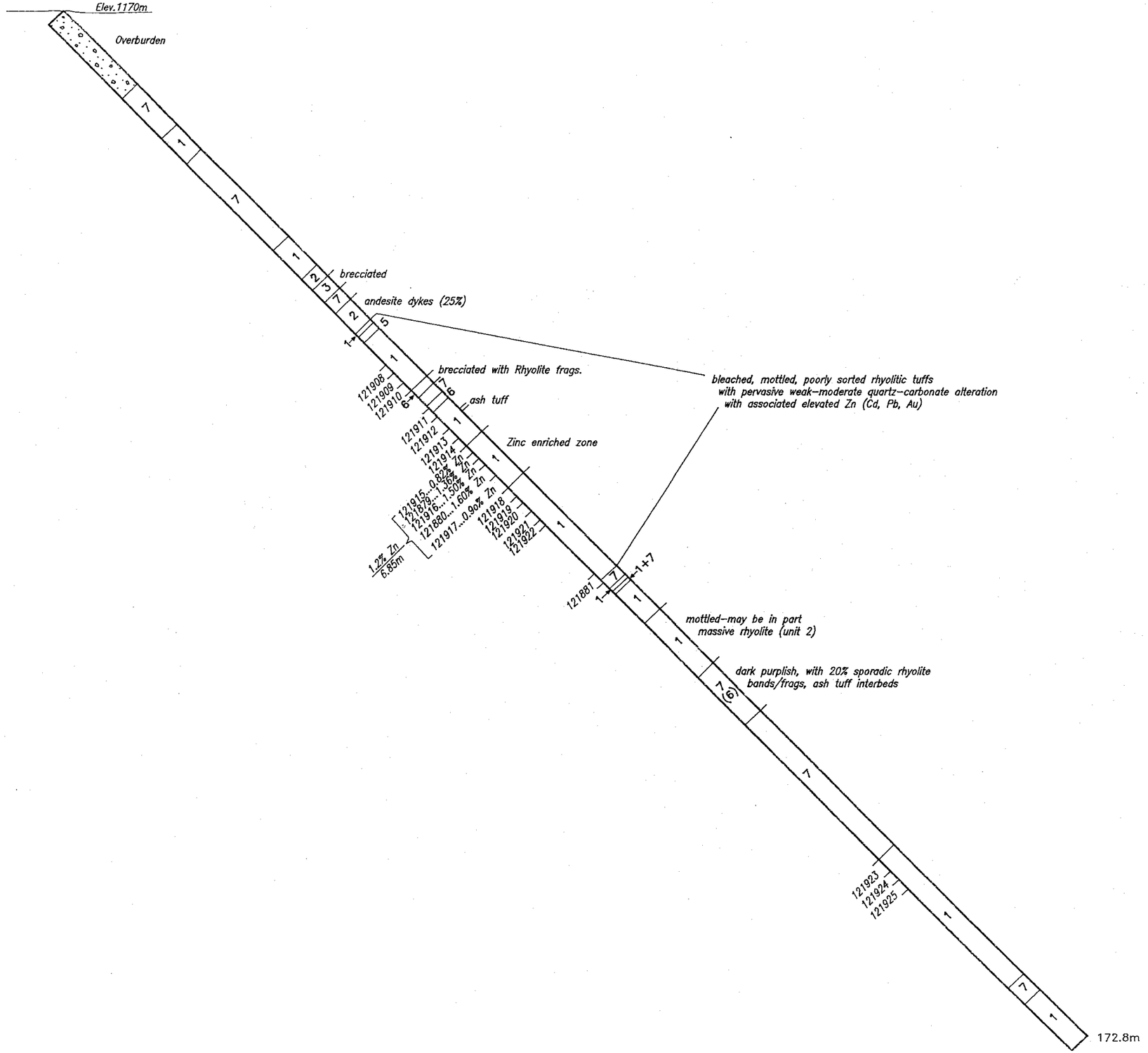
DATE DRAWN: DEC. 21, 1993	SCALE: 1:500	DWG. NAME: HD-DH3
COMPILED BY: G.T.	JOB No: 1736	
DRAWN BY: S.A.	NTS No: 93L/7	

SW

HD-93-04

DIP:-45°
AZIM:60°

NE



LEGEND

TELKWA FORMATION-LOWER JURASSIC

1 RHYOLITE LAPILLI TUFF-pale to medium grey or green buff; commonly pale green matrix with pink, cream to pale green lapilli frags. (heterolithic); matrix supported with variable degree of sorting

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2a Flow banded-massive rhyolites, brown, orange, red with grey cryptocrystalline, chalcedonic quartz, matrix supported breccia

2b Rhyodacite-massive, pale green to brown groundmass with approx. 10% subhedral plagioclase phenocrysts (2-4mm)

3 RHYOLITIC COARSE FRAGMENTAL-angular rhyolite frags. >64mm (blocks, bombs)

4 RHYOLITE TUFF (Hematitic)-red hematitic groundmass

5 RHYOLITE ASH TUFF-clasts mostly <2mm, sparse lapilli frags.

JURASSIC/YOUNGER

6 ANDESITE TUFF-aphanitic, dark green, bedding occasionally discernible

7 ANDESITE DYKES-aphanitic dark green, occasional epidote/chlorite alteration spots/bands

8 ANDESITE PORPHYRY-med grain, subhedral plagioclase phenocrysts 2-4mm (approx. 30%) chloritic groundmass

121872...1.76% Zn
SAMPLE No.
ASSAY

Fig 8

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

H-D CLAIMS

DRILL HOLE SECTION
HD-93-04
SECTION ALONG AZIMUTH (60°)

0 5 10 15 20 25 metres

DATE DRAWN: DEC. 21, 1993	SCALE: 1:500	DWG. NAME: HD-DH4
COMPILED BY: G.T.	JOB No: 1736	
DRAWN BY: S.A.	NTS No: 93L/7	

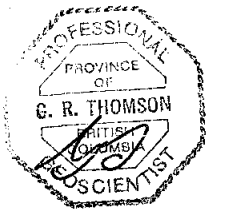
hole, as with the others, were drilled from road accessible locations. This drill hole tested the soil anomaly closer to it's higher value core. The hole encountered a zone of weak to moderate quartz-carbonate alteration (as in hole #2) from 52.4-93.7m. Associated with this alteration zone are numerous anomalous zinc values. The interval from 57.2 to 84.3m was entirely sampled. Of the 17 samples taken for assay over this interval, only 3 samples assayed less than 1000 ppm Zn. There was also a higher grade core from 70.75 to 77.6m (6.85m) averaging 1.2% Zn.

SUMMARY AND RECOMMENDATIONS

As with all previous operators on the HD property, the Teck 1993 diamond drill program failed to locate economic concentrations of base or precious metals.

The Teck exploration program sought to locate a source of syngenetic style, shallow water, volcanogenic massive sulphides. The subeconomic, epigenetic vein style of zinc mineralization returned by the 1993 Teck drill program, makes it unlikely that the HD property hosts a massive sulphide body of economic size.

The source of the extensive lead-zinc-cadmium soil geochemical anomalies has been explained by this drill program. All of these anomalies are related to structurally controlled lead-zinc vein systems. Although these zones are of significant width, they are low grade. Continued exploration for this target type is not warranted.



APPENDIX 1

COST SUMMARY

A. SALARIES		
G. Thomson (Geologist)	20 days @ $271.87/day	$5437.40
J. Oliver (Geologist)	7 days @ $329.54 "	2306.78
D. Nikirk (Technician)	10 days @ $195.80 "	1958.00
		9702.18
B. LIVING COSTS (Motel, Meals) - 4 man weeks; Houston, B.C.		2432.38
C. TRANSPORTATION (Truck, gas, airplane flight- J. Oliver)		1426.15
D. DRILLING (L.D.S. Diamond drilling Ltd.) 2108' NQ core @ $10.00/foot		24001.60
E. ASSAYING (Rossbacher Laboratory Ltd.) - 56 core samples assayed for gold geochem. and 30 element ICP; 8 zinc assays from above samples		949.53
F. WATER TRUCK RENTAL (Gallant Trucking, Kamloops)		6389.60
G. REPORT PREPARATION - 7 days @ $271.87/day		1903.09
H. THIN SECTION STUDY (J. Oliver)- 2 days @ 329.54/day		659.08
I. THIN SECTION PREPARATION (Vancouver Petrographics)		289.75
J. DRAFTING (S. Archibald) 3 days @ 217.50/day		652.50
		$48,405.86

APPENDIX 2

REFERENCES

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BCMEMPR- Geology in B.C.: 1977-1981(122-124)

BCMEMPR- Geological Fieldwork, Paper 1978-1 (66)

APPENDIX 3

CERTIFICATE OF QUALIFICATIONS

Gregory R. Thomson, P. Geo.

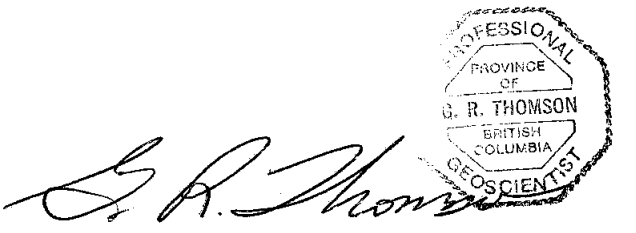
I hereby certify that:

1. I graduated from the University of British Columbia in 1970 with a B.Sc. 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 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: 1736
Type of Analysis: ICP

Certificate: 93202
Invoice: 50015
Date Entered: 93-10-21
File Name: TEK93202.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
A	121851	9	6	19	180	0.2	2	1	1667	1.15	9	5	ND	ND	15	1	2	6	5	1.09	0.03	18	38	0.21	143	0.01	0.39	0.02	0.30	0.11	8	1	60
A	121852	25	11	13	2018	0.2	3	6	1792	1.29	41	5	ND	ND	14	8	3	1	4	1.03	0.03	17	39	0.32	88	0.01	0.36	0.01	0.27	0.08	7	1	110
A	121853	3	46	8	93	0.1	2	5	1113	0.96	24	5	ND	ND	13	1	4	3	2	1.04	0.03	20	34	0.31	103	0.01	0.52	0.02	0.27	0.10	8	1	30
A	121854	2	21	10	53	0.2	2	6	1776	1.32	21	5	ND	ND	19	1	6	2	4	1.33	0.03	20	40	0.37	399	0.01	0.35	0.02	0.27	0.10	10	1	20
A	121855	2	3	10	39	0.2	3	7	1808	1.28	41	5	ND	ND	31	1	7	2	6	1.29	0.03	21	41	0.38	513	0.01	0.36	0.03	0.27	0.11	11	1	10
A	121856	13	3	11	32	0.2	3	7	1216	1.09	43	5	ND	ND	19	1	6	1	5	1.08	0.03	21	50	0.38	232	0.01	0.37	0.02	0.28	0.11	10	1	20
A	121857	3	4	13	65	0.2	5	13	2162	1.51	21	5	ND	ND	38	1	5	1	6	2.43	0.03	18	22	0.92	256	0.01	0.51	0.03	0.32	0.11	12	1	5
A	121858	65	5	14	33	0.2	3	10	1732	0.96	16	5	ND	ND	27	1	6	1	3	1.27	0.03	19	46	0.41	140	0.01	0.27	0.05	0.25	0.09	13	1	40
A	121859	4	3	13	64	0.2	2	9	2015	1.37	17	5	ND	ND	25	1	8	1	5	1.23	0.03	26	37	0.39	212	0.01	0.30	0.05	0.27	0.11	12	1	5
A	121860	3	3	10	55	0.2	3	11	1781	1.13	15	5	ND	ND	28	1	8	1	4	1.20	0.03	20	43	0.45	223	0.01	0.30	0.05	0.25	0.10	11	1	5
A	121861	1	3	8	116	0.3	2	4	1292	1.89	6	5	ND	ND	18	1	1	5	17	0.57	0.03	20	42	0.42	363	0.01	0.86	0.03	0.25	0.12	2	1	20
A	121862	5	58	146	1302	0.5	35	19	2944	4.21	17	5	ND	ND	35	8	4	4	58	1.83	0.06	8	37	1.75	232	0.01	2.77	0.05	0.25	0.09	7	1	5
A	121863	3	58	17	308	0.4	5	4	1618	1.51	14	5	ND	ND	49	2	1	4	9	1.87	0.03	15	33	0.94	275	0.01	0.58	0.10	0.15	0.08	4	1	5
A	121864	5	89	12	393	0.4	2	3	1499	1.55	17	5	ND	ND	25	2	1	4	6	1.50	0.03	20	28	0.47	104	0.01	0.63	0.10	0.15	0.08	4	1	5
A	121865	4	90	10	541	0.3	4	6	1499	2.03	13	5	ND	ND	22	3	1	3	10	0.85	0.04	23	31	0.54	109	0.01	0.86	0.11	0.15	0.08	6	1	5
A	121866	4	54	11	265	0.3	3	5	1597	1.91	13	5	ND	ND	23	1	1	3	7	1.12	0.04	13	24	0.43	75	0.01	0.54	0.09	0.14	0.08	5	1	5
A	121867	4	92	11	418	0.3	3	5	1792	1.96	14	5	ND	ND	23	2	1	3	9	1.03	0.04	15	26	0.49	73	0.01	0.60	0.10	0.15	0.09	4	1	5
A	121868	4	167	10	4155	0.3	10	19	4696	3.68	13	5	ND	ND	53	16	3	3	59	2.62	0.07	15	12	1.14	507	0.01	1.18	0.09	0.15	0.08	2	1	5
A	121869	4	22	10	1170	0.2	12	21	5712	4.69	15	5	ND	ND	39	6	5	5	85	1.90	0.08	17	6	1.60	367	0.01	2.89	0.09	0.20	0.10	9	1	5
A	121870	3	483	8	27581	2.2	3	8	3362	1.81	5	5	ND	ND	50	114	2	1	14	3.61	0.04	18	18	0.40	208	0.01	1.11	0.05	0.30	0.12	1	1	50
A	121871	3	26	9	3692	0.8	5	6	4112	1.95	2	5	ND	ND	50	15	1	1	20	4.60	0.04	17	33	0.46	260	0.01	1.10	0.08	0.25	0.11	1	1	20
A	121872	289	102	8	16663	2.4	4	11	5464	2.22	2	5	ND	ND	54	72	1	1	12	5.72	0.03	14	30	0.54	97	0.01	1.18	0.03	0.17	0.09	1	1	40
A	121873	13	128	10	645	0.6	4	5	1358	1.30	19	5	ND	ND	33	3	1	4	3	0.99	0.03	9	49	0.31	556	0.01	0.42	0.06	0.20	0.08	3	1	5
A	121874	8	4302	88	84050	9.8	11	18	4644	6.68	229	5	ND	ND	76	387	75	1	53	4.42	0.03	8	9	2.01	113	0.01	0.53	0.01	0.14	0.07	3	1	1900
A	121875	2	1292	13	998	0.9	7	17	3014	4.87	111	5	ND	ND	29	5	10	2	37	1.55	0.06	5	15	1.12	132	0.01	0.60	0.08	0.14	0.06	4	1	10
A	121876	2	128	11	515	0.4	5	12	2167	3.61	14	5	ND	ND	13	2	5	1	34	0.79	0.05	13	30	0.64	167	0.01	1.53	0.12	0.09	0.08	6	1	20
A	121877	2	733	18	204	1.5	4	10	1347	1.82	32	5	ND	ND	13	1	3	2	13	0.86	0.03	13	29	0.57	97	0.01	1.11	0.10	0.15	0.10	6	1	5
A	121878	1	49	26	285	0.6	9	10	3020	2.66	2	5	ND	ND	103	2	1	1	28	6.58	0.04	8	18	2.47	100	0.01	0.56	0.06	0.20	0.08	1	1	5
A	121879	10	16	296	12604	1.9	5	6	1972	1.54	14	5	ND	ND	32	87	4	1	18	2.06	0.04	25	45	0.73	57	0.01	0.80	0.08	0.14	0.07	1	1	60
A	121880	6	23	199	15536	1.6	6	9	3704	2.52	12	5	ND	ND	61	124	2	1	26	3.04	0.04	19	31	1.39	58	0.01	0.44	0.06	0.08	0.06	1	1	20
A	121881	1	389	34	760	0.6	9	7	2781	2.53	16	5	ND	ND	50	6	1	4	26	3.52	0.05	12	19	0.93	52	0.01	0.73	0.06	0.09	0.07	2	1	20
A	121882	2	29	9	111	3.2	7	10	674	2.87	12	5	ND	ND	41	2	5	2	77	1.28	0.03	7	29	1.81	817	0.08	2.93	0.20	1.40	0.08	9	1	5

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: 1736
Type of Analysis: ICP

Certificate: 93219
Invoice: 50029
Date Entered: 93-11-05
File Name: TEK93219.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
A	121901	2	7	11	506	0.3	2	4	2598	1.53	16	5	ND	ND	38	3	3	1	10	2.44	0.03	18	18	0.34	132	0.01	0.39	0.04	0.30	0.01	2	1	5	
A	121902	2	13	11	312	0.4	2	4	2451	1.52	16	5	ND	ND	37	1	3	1	9	2.23	0.03	18	24	0.34	369	0.01	0.59	0.05	0.28	0.01	1	1	5	
A	121903	4	4	12	220	0.3	3	7	2141	1.96	15	5	ND	ND	35	1	4	1	9	1.54	0.04	18	20	0.55	307	0.01	0.76	0.05	0.26	0.01	5	1	5	
A	121904	28	7	9	84	0.5	1	5	945	1.28	15	5	ND	ND	20	1	1	1	2	0.70	0.03	20	40	0.27	272	0.01	0.31	0.04	0.26	0.01	4	1	20	
A	121905	13	3	10	63	0.6	2	3	1000	1.38	15	5	ND	ND	24	1	4	1	2	1.64	0.02	21	29	0.34	116	0.01	0.33	0.05	0.20	0.01	3	1	20	
A	121906	4	1001	16	239	0.5	5	10	1690	3.64	119	5	ND	ND	30	3	14	1	21	1.11	0.04	5	26	0.91	221	0.01	0.46	0.04	0.19	0.01	6	1	10	
A	121907	1	850	19	111	0.4	2	5	1320	1.76	109	5	ND	ND	30	2	13	1	7	1.65	0.02	11	40	0.73	174	0.01	0.27	0.04	0.19	0.01	3	1	30	
A	121908	41	26	15	819	0.8	4	5	1815	1.85	22	5	ND	ND	18	7	3	1	19	0.88	0.03	25	36	0.60	65	0.01	0.30	0.07	0.12	0.01	2	1	20	
A	121909	21	13	93	1254	0.6	4	6	1750	1.92	30	5	ND	ND	21	11	5	1	9	1.07	0.04	22	34	0.65	59	0.01	0.38	0.05	0.16	0.01	1	1	5	
A	121910	13	6	48	899	0.4	3	5	1413	1.61	28	5	ND	ND	21	8	2	1	6	0.83	0.04	28	28	0.53	48	0.01	0.40	0.04	0.14	0.01	1	1	5	
A	121911	8	23	366	1607	0.6	5	6	1152	1.62	44	5	ND	ND	25	14	9	2	9	0.83	0.04	18	22	0.58	89	0.01	0.43	0.04	0.26	0.01	1	1	20	
A	121912	7	46	365	2352	0.6	10	7	1766	2.07	35	5	ND	ND	35	21	9	1	21	1.26	0.05	13	42	0.84	120	0.01	0.36	0.06	0.14	0.01	1	1	5	
A	121913	4	4	48	1151	0.5	4	5	2011	2.17	14	5	ND	ND	15	9	6	2	23	0.74	0.07	23	24	0.69	54	0.01	0.49	0.06	0.14	0.01	2	1	5	
A	121914	7	3	22	1089	0.8	3	4	1717	1.75	12	5	ND	ND	19	11	6	1	17	0.90	0.04	20	33	0.68	50	0.01	0.42	0.07	0.10	0.01	1	1	5	
A	121915	14	16	150	8228	1.0	4	5	2228	2.17	12	5	ND	ND	28	61	4	1	22	1.28	0.03	18	31	0.77	44	0.01	0.42	0.05	0.09	0.01	1	1	110	
A	121916	2	13	180	13612	1.0	4	8	3848	2.85	12	5	ND	ND	18	101	9	1	32	1.09	0.05	26	24	1.19	58	0.01	1.41	0.04	0.10	0.01	1	1	100	
A	121917	4	18	197	8828	0.8	4	10	3435	3.05	16	5	ND	ND	34	68	4	1	39	1.28	0.11	20	13	0.94	64	0.01	0.50	0.03	0.12	0.01	1	1	5	
A	121918	1	4	107	2772	0.6	25	17	4536	4.11	21	5	ND	ND	44	21	6	4	62	1.64	0.10	14	27	1.28	68	0.01	0.65	0.05	0.12	0.01	1	1	5	
A	121919	2	22	78	4322	0.5	7	11	3217	2.99	13	5	ND	ND	20	35	4	1	35	0.65	0.06	24	20	0.73	70	0.01	0.56	0.04	0.12	0.01	1	1	5	
A	121920	1	22	82	5435	0.4	5	7	2696	2.14	11	5	ND	ND	51	42	1	1	24	4.21	0.04	13	17	0.87	57	0.01	0.34	0.04	0.10	0.01	1	1	5	
A	121921	1	6	24	772	0.6	5	6	2250	2.05	11	5	ND	ND	45	6	1	3	19	3.68	0.03	19	22	0.73	46	0.01	0.36	0.05	0.10	0.01	1	1	5	
A	121922	4	5	72	2591	0.5	7	7	2348	2.42	16	5	ND	ND	28	18	1	1	26	1.25	0.04	18	24	0.71	63	0.01	0.40	0.04	0.12	0.01	1	1	90	
A	121923	5	187	14	199	0.6	2	8	2060	2.05	30	5	ND	ND	49	3	1	2	18	3.19	0.03	21	26	1.31	68	0.01	0.36	0.04	0.16	0.01	1	1	80	
A	121924	1	20	10	76	0.4	2	5	897	0.96	24	5	ND	ND	18	1	3	1	8	1.30	0.02	12	44	0.57	39	0.01	0.26	0.04	0.14	0.01	4	1	20	
A	121925	7	5	9	68	0.4	2	3	1000	1.10	16	5	ND	ND	26	1	1	1	9	2.77	0.03	15	30	0.46	45	0.01	0.28	0.06	0.10	0.01	2	1	10	

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: 1736
Type of Analysis: Assay

Certificate: 93219 A
Invoice: 50029
Date Entered: 93-11-07
File Name: TEK93219.A
Page No.: 1

PRE FIX	SAMPLE NAME	% Zn
P	121870	3.40
P	121872	1.76
P	121874	13.60
P	121879	1.36
P	121880	1.60
P	121915	0.82
P	121916	1.50
P	121917	0.90

CERTIFIED BY : J. Rossbach

APPENDIX 5

DRILL LOGS

TECK EXPLORATION LTD.

HD PROPERTY **PROJECT #1736** **HOLE NO. HD-93-01** **PAGE: 1 of 2**

NTS: 93L/7E
CLAIM: HD-2
ELEVATION: 1212 m
GRID COORD:
LOGGED BY: G.T.

DATE COLLARED: 5/10/93
DATE COMPLETED: 6/10/93
DATE LOGGED:

DEPTH	DIP	AZ
	-45°	84°

LENGTH:114.9 m
DEPTH OF OVB: 3.96 m
CASING REMAINING:
WATERLINE LENGTH:
PROBLEMS:

CORE SIZE: NQ

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
0-3.96	Overburden													
3.96-10.53	Rhyolite breccia: matrix supported, pink/orange ang. frags., corroded rims, gray-buff chalcedonic matrix, locally hematite darkened, 20-60% silica matrix.			silicif,hem	tro. v.f.g.py. in matrix	121851	7.0	8.0	1.0	180				60
10.53-14.12	as above; weak - mod. brecciated w. 5-10 % grey chalcedonic quartz veinlets/breccia matrix.					121852	11.6	12.9	1.3	2018				110
14.12-19.0	Rhyolite: aphanitic, massive, orange brown-pale green, prominent flow banding, minor localized irreg.qtz-carb veinlets w. tro. py +/- hem, weak autobrecciation.			wk. clay, carb		121853	16.55	17.55	1.0	93				30
19.0-24.6	Rhyolite breccia: bright orange to orange brown frags.,greenish grey chalcedonic qtz matrix, 5-20 %, locally hematitic, < 5% qtz-carb vnlts.				tro. py.	121854	19.3	20.65	1.35	53				20
24.6-26.52	Rhyolite: aphanitic w. prominent flow banding, devitrification texture, greenish brown-brown orange.													
26.52-30.6	Rhyolite breccia: orange-brick red frags.,grey to drk. grey chalcedonic matrix, hem. vnlts and matrix fill.					121855 121856	28.67 30.1	30.1 31.0	1.43 0.90	39 32				10 20
30.6-38.1	Rhyolite: aphanitic, orange to pale green, wk. - mod. brecciated w. pale green chalcedonic matrix/ vnlts, wk. autobrecciation.					121857	36.5	38.2	1.7	85				5
38.1-39.0	Andesite (dyke): aphanitic, pale green grey, amygdaloidal.	L.cont(sharp)30 °												

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
39.0-53.9	Rhyolite: aphanitic, mottled, flow banded, autobrecciated, brown-pink orange to yellow grn, wk. local hematization, wk. local chalcedonic brecc'n; green andesite dyke @ 45.8-46.1 m.				Mo 65 ppm	121858 121859 121860	42.85 49.45 50.9	43.85 50.7 52.2	1.0 1.25 1.3	33 64 55				40 5 5
53.9-56.15	Andesite (dyke): med. to drk. green, aphanitic, wkly amygdaloidal, sharp contacts.	U.Cont 70° L.Cont 20°												
56.15-63.0	Rhyolite: aphanitic, med to pale green, pale brownish pink, flow banded, locally autobrecciated, minor chalcedonic qtz flooding +/- hem.													
63.0-64.45	Rhyolitic lapilli tuff: heterolithic, pink to green rhy. matrix w. 20-30% green, red lapilli frags, rounded to 2.0 cm.													
64.45-67.8	Rhyolitic crystal ash tuff: med grey green ash matrix w. localized bands and clusters of plag. crystal frags to 1.0 cm.; oval pisolites @ 64.45-65.18 m.													
67.8-78.23	Rhyolitic lapilli tuff: heterolithic, pale brown-med green groundmass, frags pale green to brick red (hem), rounded, 1-3 mm, lapilli locally to 2.0 cm.													
78.23-78.93	Andesite (dyke): aphanitic, green.	U.Cont 80° L.Cont 70°												
78.93-84.5	Rhyolitic lapilli tuff: as above @ 67.8-78.23, heterolithic, mod. sorted.													
84.5-103.67	Rhyolitic lapilli tuff: pale green to pinkish brown (mottled), general decrease in frags. w. increased aphanitic matrix, lapilli frags. 5-10%, wht, grn, red, intense pistachio green alt. @ 102.62-103.4 m.													
103.67-108.8	Rhyolite: aphanitic, pink brown to grey brown, msv. to 105.3 m, porphyritic w. 10-20% plag. phenos, 1-3 mm from 105.3-107.1 m.													
108.8-113.3	Rhyolitic lapilli tuff: heterolithic, pink brown -pale green, mottled, 5-10 % scattered lapilli frags, conspicuous dark hem. clots and replacements to 1.0 cm.													
113.3-113.65	Andesite (dyke): med green, sharp contacts.													

TECK EXPLORATION LTD.

HD PROPERTY | **PROJECT #1736** | **HOLE NO. HD-93-02** | **PAGE: 1 of 3**

NTS: 93L/7E
CLAIM: HD 1
ELEVATION: 1205 m
GRID COORD:

DATE COLLARED: 06/10/93
DATE COMPLETED: 08/10/93
DATE LOGGED:

LOGGED BY: G.T.
CORE SIZE: NQ

DEPTH	DIP	AZ
	-45°	135°

LENGTH: 206.35 m
DEPTH OF OVB: 3.96 m
CASING REMAINING:
WATERLINE LENGTH:
PROBLEMS:

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
0-3.96	Overburden													
3.96-30.5	Rhyolite: massive, aphanitic, buff to pale green, strongly microfract'd, conspicuous quartz brecciation/veining, vuggy @ 13.4-17.0 m.,minor drk hairline hem. vnlts, minor wht qtz vnlts to 1.0 cm @ 17.0-23.7 m.	sharp L.cont. 70°												
30.5-46.25	Rhyolitic lapilli tuff: heterolithic, green, buff, red angular frags, brownish red groundmass w. localized med. green patches, minor local qtz-carb. vnlts.			hem.										
46.25-52.0	Rhyolite: massive, aphanitic, brown, microfractured w. wht clay fillings													
52.0-59.8	Rhyolitic lapilli tuff: altered, mottled, pale green sericitic matrix w. variable size pinkish frags, blocks, minor localized qtz infilling			clay, seric hem, chlor										
59.8-64.3	Andesite (dyke): aphanitic, med. green, 5% carbonate microvnlts up to 1.0 cm.													
64.3-69.52	Rhyolitic lapilli tuff: Brick red (hem) groundmass, heterolithic round-ang frags., variably colored w. conspicuous felsic replacement by epidote			hem, epidote										
69.52-73.3	Andesite (dyke): med. green, aphanitic, 3-5 % calcite microvnlts, sharp lower contact					121862	72.2	73.3	1.1	1302	8		58	

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
73.3-83.0	Rhyolite: mottled, buff to med. green, microfract'd, sporadic blebs, microvnlts drk sphalerite (1-3 mm, < 0.5%), gradational lower contact			wk-mod qtz, carb	trc. diss/fract fills sphal.	121863 121864 121865 121866 121867 121868	73.3 75.3 76.9 78.3 80.0 81.4	75.3 76.9 78.3 80.0 81.4 83.2	2.0 1.6 1.4 1.7 1.4 1.8	308 393 641 266 418 4155	2 2 3 1 2 16		58 89 90 54 92 167	
83.0-86.33	Rhyolite; less altered than above , msv. bright green, minor qtz-carb vnlts and microfracturing, hem. fract. fills					121869	83.2	86.3	2.1	1170	8		22	
86.33-89.32	Rhyolitic coarse fragmental: heterolithic w. variable size ang. frags. (lapilli, blocks), orange, pink, green frags w. dark to bright green groundmass				1-2 % diss/fract fills drk. sphal, trc cpy	121870 121871 121901	86.3 88.4 88.4	88.4 88.4 89.36	1.1 2.0 0.96	3.4 % 3892 506	114 15 3		483 26 7	
89.32-101.4	Rhyolitic lapilli tuff: mottled, buff-med green groundmass, lapilli 2-10 mm w. buff, green , brwn frags; green chalcedonic banded qtz vn @ 91.08-91.55 w. 1-2 % diffuse pale brwn sphal.	Vn. 10-20° to C.A.			289 ppm Mo	121902 121872 121903	89.35 91.03 91.6	91.03 91.6 93.05	1.68 0.57 1.45	312 1.76 % 220	1 72 1			
101.4-109.8	Andesite (dyke): med. green, aphanitic, pervasive wht. calcite microvnlts (~3%), local broken sections													
109.8-112.7	Rhyolitic lapilli tuff: mixed pale green to pinkish brown groundmass , sericitized, well sorted, heterolithic felsic frags, 3-8 mm , preferentially sericitized.			sericite+/-chlor(mod-strong)										
112.7-148.08	Andesite (dyke): continuous zone of med. green, aphanitic, locally reddish brwn zones, local epidote patches, vnlts, local cataclastic zones, 2-3 % calcite microvnlts													
148.08-150.3	Rhyolitic lapilli tuff: heterolithic, cream/orange frags.,2-5 mm, cream and pale pink @ 148.08-148.84 m., conspicuous ang. red jasperoidal frags, 2-5 mm set in grey browm matrix w. trc cpy. @ 148.84-150.3 m				trc cpy	121873	148.8	150.4	1.6	645				
150.3-152.4	as above , beige w. approx. 5% scattered ang. felsic lapilli to 5 mm													
152.4-164.25	Andesite (dyke): med to light green, aphanitic, interbedded mottled rhyolite @ 153.2-153.7	L.Cont @ 90°												

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
154.25-172.22	Rhyolitic lapilli tuff: pinkish brown to buff, green, red, buff frags, 3-5 mm, 1-5 %, trc. hem. microvnlts					121904 121905	163.7 165.2	165.2 166.73	1.5 1.53	84 63				
172.22-175.7	Andesite (dyke): med green, aphanitic, dk green chlor. speckling, 30 cm plag porph band @ 173.8-174.1, bleached, alt. lower contact 175.3-175.7 m													
175.7-178.36	Carbonate-Quartz-Hematite Vein: dark semimsv spec. hem w. red jasperoidal frags cut by approx. 20% wht qtz-carb vnlts, hematite intermixed w. sphal, cpy			qtz-carb-hem (veining)	Hem,sphal, cpy (semimsv)	121874	175.6	176.4	0.8	13.6 %	387	88	4302	1900 Au 9.8ppm Ag
176.36-178.92	Rhyolitic coarse fragmental: mottled, buff green groundmass w. variable size pinkish brown rhyol. frags			clay (mod)		121906 121907	176.4 177.9	177.9 178.92	1.5 1.02	239 111	3 2		1001 860	10 30
178.92-184.2	Rhyolitic coarse fragmental to lapilli tuff: green to pink groundmass w. variable size brownish pink rhy. frags.													
184.2-185.55	Andesite (dyke): med green, aphanitic w. chlor. speckling, 5% carbonate vnlts													
185.55-187.1	Rhyolite: massive, pinkish, microfractured, 2-3% qtz vnlts													
187.1-190.09	Andesite (dyke): med to bright green, localized epidote patches w. qtz veining margins													
190.09-200.05	Rhyolitic ash tuff: mixed pink, green to brwn grn, approx 5-10% lapilli tuff interbeds, cpy blebs across 10 cm @ 190.6 m, minor qtz vnlts subparallel to core axis @ 195.0-200.05 m			epid-mod.		121875	190.4	191.11	0.71	988				
200.05-205.0	Andesite plag. porphyry: plag. phenos. 2-4 mm, subhedral, 30% w. green chlor. groundmass, interbedded dk. green ash tuff layers @ 200.25-200.35, 200.95-201.55, 201.95-202.7 m				0.3 % f.g. py									
205.0-208.35	Rhyolitic lapilli ash tuff: green to brownish w. sparse red hematitic to pale felsic frags				trc. diss py,cpy	121876	205.0	208.35	1.35	515			128	
208.35	E.O.H.													

TECK EXPLORATION LTD.

HD PROPERTY | **PROJECT #1736** | **HOLE NO. HD-93-03** | **PAGE: 1 of 3**

NTS: 93L|7E
CLAIM: HD 1
ELEVATION: 1209 m
GRID COORD:
LOGGED BY: G.T.

DATE COLLARED: 08/10/93
DATE COMPLETED: 09/10/93
DATE LOGGED:

DEPTH	DIP	AZ
	-45°	270°

LENGTH: 148.44 m
DEPTH OF OVB: 9.14 m
CASING REMAINING:
WATERLINE LENGTH:
PROBLEMS:

CORE SIZE: NQ

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
0-9.14	Overburden													
9.14-~11.4	Rhyolitic Tuff:broken weathered rubble, f.g. purplish w. strong limonitic fract. coatings, locally banded. (possibly surface boulders)													
~11.4-~14.4	Rhyolitic fragmental: grey green, heterolithic, 50% ang. frags. to 3.0 cm.,pale green, buff, red (hem) frags, limon. stained sfcs, partially rubbled.													
14.4-24.76	Rhyolitic lapilli tuff: heterolithic, mixed felsic buff, purplish, red, dark purpl ang. frags, 2-20 mm, approx 30-40% lapilli size frags.													
24.76-31.6	R.L.T.: as above w. overall bleaching, w. weak to mod. pervasive clay alt'n of felsic groundmass. (red hematitic frags unaffected)													
31.6-35.27	Rhyolitic lapilli tuff: continuation of above zone w. intense white clay alt'n, strongly fract'd, red hem. fract. coatings.													
35.27-41.7	Rhyolitic lapilli tuff: med to coarse grain, heterolithic, green to red brown, local bleached zones (clay alt), localized fracturing, mod. brkn throughout.													
41.7-45.8	Rhyolitic lapilli tuff: heterolithic, dark green matrix w. conspicuous brick red ang. lapilli to 3.0 cm (20%) w. approx. 10 % wht felsic frags to 0.5 cm, strongly fract @ 42.35-42.65 m.													
45.8-49.8	Rhyolitic lapilli tuff: med. green heterolithic, mixed light colored felsics, red to drk. purple ang. to round lapilli to 1.0 cm. (20-50 % vol)													

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE NO.	SAMPLE DATA FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
49.8-52.8	R.L.T.: as above w. pervasive bleaching of felsic groundmass, red to dark hematitic frags. are unaltered, localized patches of non bleached tuffs, locally red frags. to 5.0 cm, minor local fracturing +/- clay/gouge seams.													
52.8-60.9	R.L.T.: med to drk green matrix, 10-30 % lsp. frags, 1-2 cm, locally to 5.0 cm, mostly felsic-cream to pale orange w. minor red ang. frags.													
60.9-71.2	R.L.T.: pale green to pale purplish brwn, 10-20% ang. purplish brown frags. to 1.0 cm w. approx 20% cream/pale green ang. frags. to 3.0 cm, microfract. groundmass.													
71.2-86.92	R.L.T.: 30-60% ang. frags., med to drk green, heterolithic, locally sparse fragment zones, mixed pale green, cream, minor purplish brown, conspicuous sporadic red frags (2-5 cm) @ 72.4-76.0, local buff (bleached) zones, 10-30 cm.													
86.92-116.05	Rhyolite Porphyry (Rhyodacite) : msv, pale to med grey green to pale grey brown, microfractured, amorphous plag. phenos, 2-4 mm, 10-15%, limonitic fract coatings, sporadic hairline qtz-carb vnlts, w. minor hem. microvnlts, bleached @ 114.05-116.06 m.													
116.05-116.95	Rhyolitic ash tuff: mixed aphenitic pale purple, pale green.	bedding 60°												
116.95-125.5	R.L.T. : med to drk green matrix, pale felsic, red and dark lapilli frags, < 1.0 cm, 30-50%, local purplish alt. bands surrounding chalcedonic qtz vnlts from 116.95-117.58, red hem. fract. coatings.	sharp L.cont. 30°												
125.5-128.45	Andesite (dyke): med green, aphanitic, minor calc. microvnlts, approx 1% chlor. spots, 1-2 mm, bleached @ 125.5-126.0 w. hem. microvnlts, fractured throughout.													
128.45-142.34	R.L.T. : heterolithic, mixed angular felsic and red (hem) frags, 3-5 mm , 40-60 %, minor qtz microvnlts.					121877	130.9	132.4	1.5	204				
142.34-143.67	Andesite (dyke): as above w. approx 5% carbonate and chalc. qtz vnlts.													

DDH NO. HD-93-03

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
143.67-146.4	Rhyolite: msv., buff to pinkish orange, microfractured; conspicuous pisolite zone in buff rhyolites @ 143.67-144.67, pisolites ovate, 1-1.5 cm, 10-20%, slightly foliate, drk rims w. pale cream colored cores.													
146.4-148.44	R.L.T. : heterolithic, w. mixed red, cream ang. frags. to 1.0 cm, 40 %, green groundmass w. buff bleaching @ 147.56-148.44 m.													
148.44	E.O.H.													

TECK EXPLORATION LTD.

HD PROPERTY | **PROJECT #1736** | **HOLE NO. HD-93-04** | **PAGE: 1 of 3**

NTS: 93L/7E
CLAIM: HD 3

DATE COLLARED: 09/10/93
DATE COMPLETED: 11/10/93

DEPTH	DIP	AZ
	-45°	60°

LENGTH:172.82 m
DEPTH OF OVB: 12.8 m

ELEVATION: 1170 m
GRID COORD:

DATE LOGGED:

LOGGED BY: G.T.
CORE SIZE: NQ

CASING REMAINING:
WATERLINE LENGTH:
PROBLEMS:

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
0-12.8	Overburden													
12.8-19.5	Andesite (dyke): pale grey green, aphanitic, conspicuous red hematitic microfract's, approx. 1% bright green chlor. alt spots, 1-3 mm , minor qtz carb vnlts			hem										
19.5-23.57	Rhyolitic lapilli tuff: heterolithic, light purplish brown, mixed light, dark green, purpl. red, ang frags to 1.0 cm, 10-30% lapilli frags; andesite dyke @ 19.92-20.42, sharp irreg. lower cont.			hem										
23.57-38.12	Andesite (dyke): med to drk grey green, aphanitic, mod fract'd, pervasive red hem. fract. fillings/coatings, minor qtz-carb vnlts, 1-2 mm, rare epidote patches , 5-10 cm			hem										
38.12-43.2	Rhyolitic lapilli tuff: mottled, light beige, mod. dissected by 2-3 mm wht to pale green chalcedonic qtz vnlts, qtz flooding, localized vuginess, crowded frag. texture, cream, red, minor purple, 2-4 mm			mod. silic.		121878	41.0	42.6	1.6	285				
43.2-44.96	Rhyolite: buff to light brown, aphanitic, microfract'd, minor chalcedonic wht qtz vnlts, 2-3 mm													
44.96-47.1	Rhyolite breccia: pale green ash tuff matrix, 30%, zone of 3-10 cm. ang. purplish to brwn rhy. frags. w. irreg. interbed of pale green ash tuff, sporad. chalcedonic vnlts to 1.0 cm.													
47.1-48.8	Andesite (dyke): mottled, buff to pale green, strongly dissected by hairline hem. +/- chalced. vnlts.													
48.8-52.45	Rhyolite: brown to drk grey, cut by irreg. pale green to buff, aphanitic bleached andesites (25% and.)													

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
52.45-61.58	Rhyolitic lapilli ash tuff: drk. grey matrix w. mainly wht-cream felsic ang. frags, 5-10 mm, 10-20%, sporadic pale green ash tuff frags./fillings; 52.85-53.62 mostly pale green banded ash tuff, thinly banded, ~ 1mm, irregular coarsening @ 53.36-53.95 m	60°bedding				121908 121909 121910	57.2 58.6 60.05	58.6 60.05 61.55	1.4 1.45 1.5	819 1254 899	7 11 8			
61.58-62.85	Andesitic ash tuff, breccia: pale green, mostly f.g. w. ang. drk green mav rhyolitic frags, irregular, brecciated													
62.85-64.4	Andesite (dyke): med to drk green, aphanitic, approx. 3% chlor. spots to 3.0 cm., grad. lower contact	sharp U.Cont 30°												
64.4-65.34	Andesite ash tuff: pale grey green,					121911	64.3	66.14	1.84	1607	14	368		
65.34-75.7	Rhyolitic lapilli tuff: dark grey to grey green groundmass, variable size frags, mostly felsic-cream/brown, poorly sorted w. frags. to 1.0 cm, black carbonaceous ang. frags @ 70.0-70.3 m; ash tuff layer @ 67.4-67.7 m; 2-5% coarse purple fluorite @ 72.8-73.0 m	40°- bedd'g of ash tuff		Qtz-carb (mod)	minor diss/fract fills of diffuse pale brwn sphal.	121912 121913 121914 121915 121879 121916 121880	66.14 68.2 69.6 70.75 72.0 73.0 74.0	68.2 69.6 70.75 72.0 73.0 74.0 75.5	2.06 1.4 1.15 1.25 1.0 1.0 1.5	2352 1151 1089 0.82% 1.36% 1.50% 1.60%	21 9 11 61 87 101 124	365 48 22 150 296 180 199		 110 60 100 20
75.7-93.67	R.L.T. : predom. buff to cream groundmass, sporad. chalced. vnlts, 5% w. minor vuginess @ 92.67-93.67; cream ash tuff layers @ 77.7-78.35, 78.9-79.05,86.25-87.35, localized narrow zones of qtz brecciation			Qtz-carb (mod)	minor diss/fract fills of diffuse pale brwn sphal.	121917 121918 121919 121920 121921 121922 121881	75.5 77.6 79.0 80.1 81.38 83.0 84.43 92.2	77.6 79.0 80.1 81.38 83.0 84.43 93.7	2.1 1.4 1.1 1.28 1.62 1.43 1.5	0.90% 2772 4322 5435 772 2591 760	68 21 35 42 6 18	197 107 78 82 24 72		
93.67-95.07	Andesite (dyke): aphanitic, med. green, strongly frac'd along calcite vnlts													
95.07-95.47	Rhyolite lapilli tuff: dark green matrix, heterolithic w. red/cream frags to 0.5 cm, 10% lap. frags.													
95.47-96.12	R. L. Tuff, Andesite: contact along fractured 2 cm wide qtz-carb vn, contact follows core axis													

DEPTH (meters) FROM/TO	DESCRIPTION	STRUCTURE ANGLES	STRUCTURE VEINS	ALTERATION	METALLIC MINERALS (%)	SAMPLE DATA SAMPLE NO.	FROM	TO	LENGTH (meters)	RESULTS Zn (ppm)	Cd (ppm)	Pb (ppm)	Cu (ppm)	Au (ppb)
96.12-100.8	R.L.T. : heterolithic, drk green matrix w. reddish brown, cream frags.													
100.8-110.2	R.L.T. : mottled, buff colored, fragments pervasively obscured by mottling (may be in part msv rhyolite), sporadic wk. chalced. vnlts													
110.2-118.0	Andesite: Dyke/Ash tuff, dark purplish, aphanitic, w. sporadic rhyolite bands/frags, 5-10 cm, pale green ash tuff interbeds (80 % andesite, 20% ash tuff,rhy. frags)													
118.0-140.45	Andesite (dyke): med green, aphanitic, pervasive qtz-carb vnlts, hairline to 5 mm, 5%, pervasive weak red hem. fract. coatings, rare epidote alt. spots, dark purple lower contact													
140.45-150.94	R.L.T. : cream to brown groundmass, conspicuous microfracturing w. rehealed alteration haloes, heterolithic - cream, red frags to 1.0 cm (~50 % vol), minor chalced. qtz vnlts.					121923 121924 121925	140.46 142.34 143.7	142.34 143.7 145.39	1.89 1.36 1.69	199 76 68				
150.94-162.2	R.L.T. : drk green to brown, minor bleached zones, multiple microfract's w. rehealed haloes, 1-2 mm, sporadic wht chalcedonic qtz veining to 1.0 cm, < 10 % scattered lapilli frags to 1.0 cm, red, brown, beige													
162.2-164.9	Andesite (dyke): aphanitic, med-drk green, approx 2-3 % qtz-carb vnlts, trc. hem. microvnlts													
164.9-172.82	R.L.T. : as in previous section @ 150.94-162.2 m													
172.82	E.O.H.													

APPENDIX 6

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 appropriate.

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 sublimated 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 7

PETROGRAPHIC THIN SECTION STUDY
(J. OLIVER)

Petrographic Report, Selected Rock and Drill Core Samples
Mount Harry Davis, Houston, B.C.

Oct. 28, 1993

Jim Oliver

Seven rock and drill core samples are examined in this report. Most of the samples have been selected so that additional data may be obtained concerning the nature of widespread zinc-copper and lead mineralization in the Mount Harry Davis area.

Harry Davis Sample TS-1: Main Breccia Tower Occurrence (Sample 4430)

The following comments relate to the nature of the spectacular breccias developed along the VRF road or the Tower Road Occurrence. The sample contains 3.09% Zn, <-.2ppm Ag, and 0.56% Pb.

1. Low temperature, less than 80 degree C, quartz is associated with fracture controlled hematite.

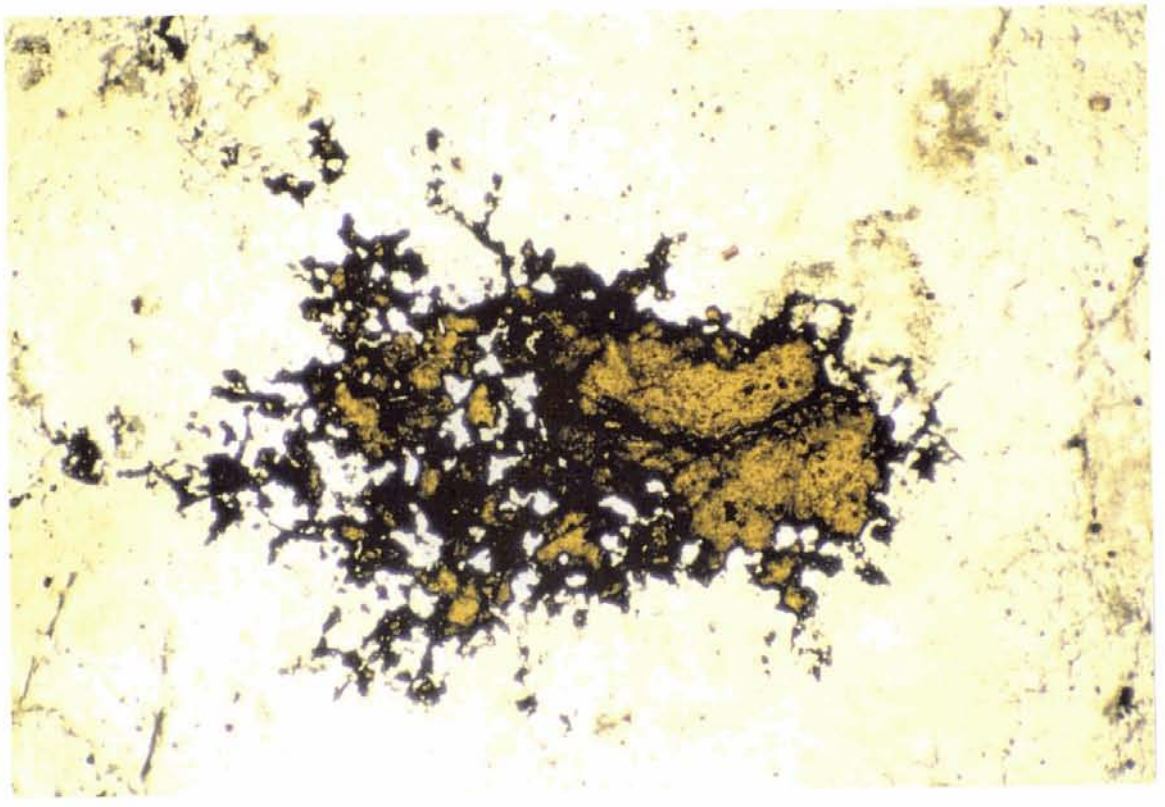
2. There is a moss to brown-green opaque phase, it's weakly anisotropic. This mineral phase is sphalerite. The sulphide has an unusual distribution in that it occurs as very irregular knots and aggregates sometimes associated with galena. The thin section also contains cryptocrystalline goethite or hydrated iron oxide (lepidocrocite) it may rim sphalerite.

3. Weak chalcopyrite disseminations develop internal to the main sulphide phase. Both mineral are associated with low temperature quartz or calcite.

4. There is an abundance of a clear low relief isotropic vein related mineral. The mineral is fluorite.

5. The nature of breccias are definitively secondary. These are related to discordant calcite and quartz replacement zones. The primary lithology is a subareal felsic flow. Re-sorbed phenocrysts are common and the matrix is quenched.

6. The sample contains very limited secondary calcite and sericite. This felsic volcanic rock has not been extensively sericitized. Much of green cast to this rock may be due to the release of cadmium from both fluorite and sphalerite.



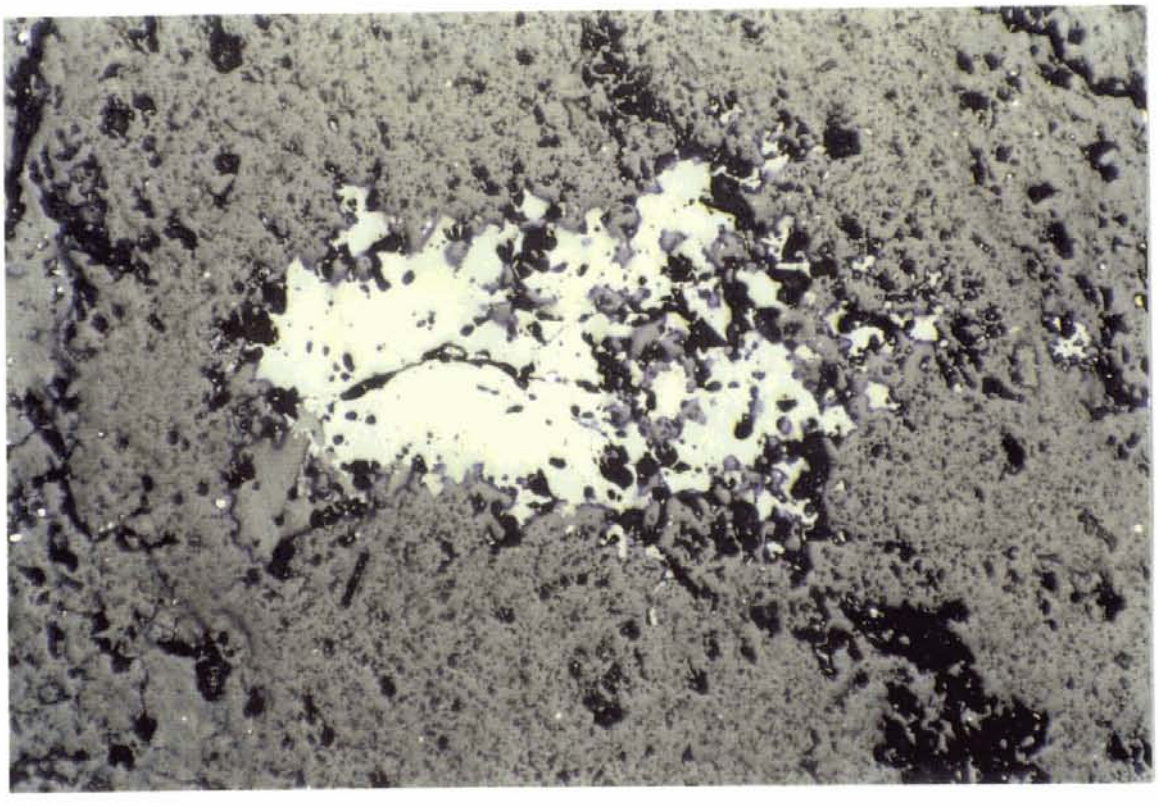


Plate 1. Brown amorphous quartz can be noted in the upper right hand corner of this sample. The brown mineral is isotropic under x-polarized light and under reflected light is sphalerite. 25X, plane polarized light, field of view 2.5 mm.

Plate 2. The identical field of view to Plate 1. Very small chalcopyrite inclusions are noted within the main sulphide phase, sphalerite. 25X, reflected light, field of view 2.5 mm.

Harry Davis DDH 1 @ 15 m's

At the top of DDH 1 a broad interval of spectacular dark black on grey to angular red breccias are developed. Hand specimen data suggested some of the black quartz could be caused by the presence of finely disseminated sulphides. Thin sections of this material indicate the following:

1. The black matrix to the breccias is caused by extremely fine grained, nearly aphanitic quartz, which may locally contain irregularly distributed opaque phases. These are typically not related to fine grained sulphides, Plate 3.

2. The very classy black on grey to red-grey highly angular breccias are well developed throughout this interval. The reddish color of some fragments may be due to higher potassium feldspar contents. It is not related to a change in hematite density from fragments to the breccia matrix.

3. The black quartz matrix is cut by calcite - quartz microveinlets. These are associated with hematite and oxides but seldom with pyrite. The disparate spatial relations between pyrite and hematite are shown on Plate 4. Very fine grained pyrite is present at low, < 0.5% levels, within the rock matrix. Virtually no other sulphide phases are present.

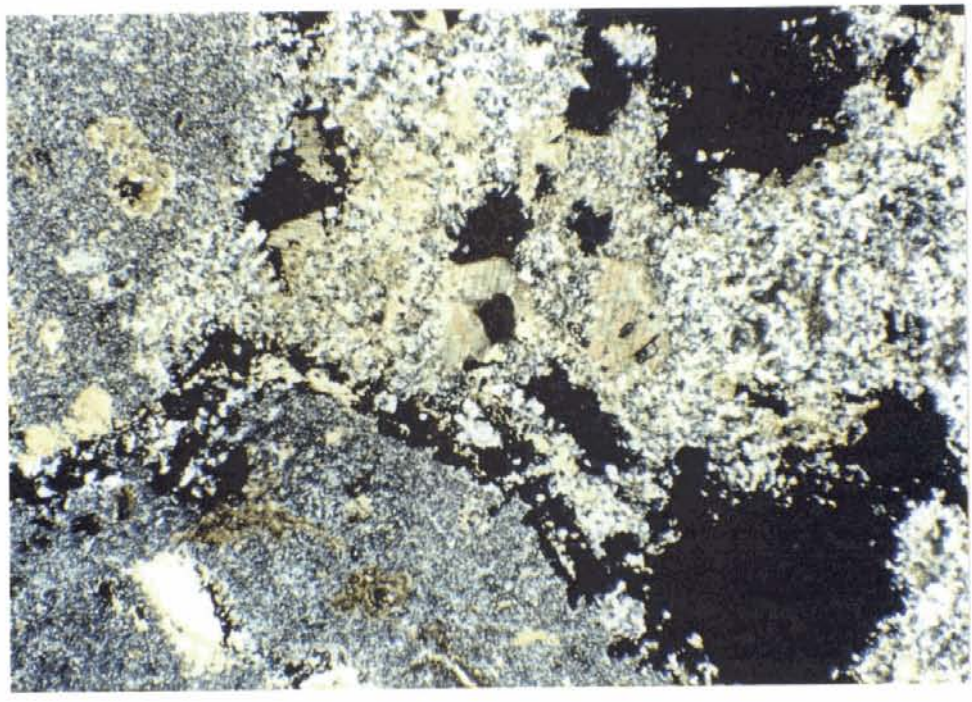


Plate 3. The rock protolith is a dark grey, very fine grained chert or aphanitic rhyolite. This is shown on the left half of this plate. The very fine grained quartz contains very limited sulphide or oxide phases. On the right half of the plate, discordant calcite veinlets cut both the fine black quartz and the coarser grained fragment. These veinlets may be associated with hematite and hydrous iron oxides. Crossed Polars, 12.5X, field of view 5.0 mm.

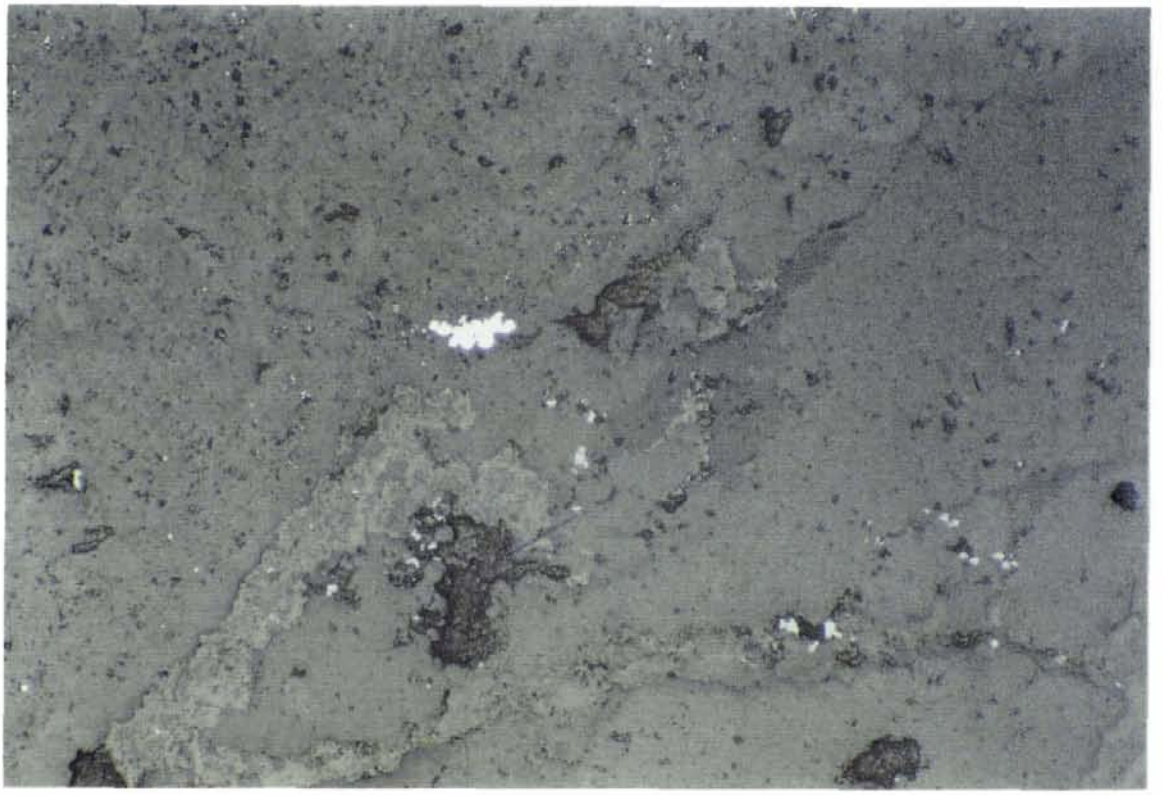


Plate 4. The bright white mineral near the centre of the field of view is pyrite. The duller grey mineral is sphalerite. The very low sulphide or oxide content of the fine grained quartz phase is particularly obvious. Virtually all of the sphalerite is spatially related to calcite veinlets. 25X Reflected Light. Field of view 2.5 mm's.

Harry Davis Tower Showing, Sample TS-5: Hematitic Chert

The sample is taken from a brilliant red hematitic quartz rich rock. It contains 2.36% Zn, 0.11% Cu, 202 ppm cadmium and 0.56% Pb. The question is, is this rock an exhalite? A thin section of this sample reveals the abundant, bright red chalcedonic quartz is formed by contamination of quartz with an opaque oxide phase, hematite.

The sample contains abundant vein sets of fluorite. The 70 degree cleavages, very low refractive index and isotropic nature are diagnostic of this mineral. Plates 5 and 6.

Locally fluorite, limonite, sphalerite and hematite all co-exist, Plate 5. Most of the sphalerite and specularite in the rock are related to secondary veinlets and fractures. There is no evidence for primary syngenetic sulphide development.

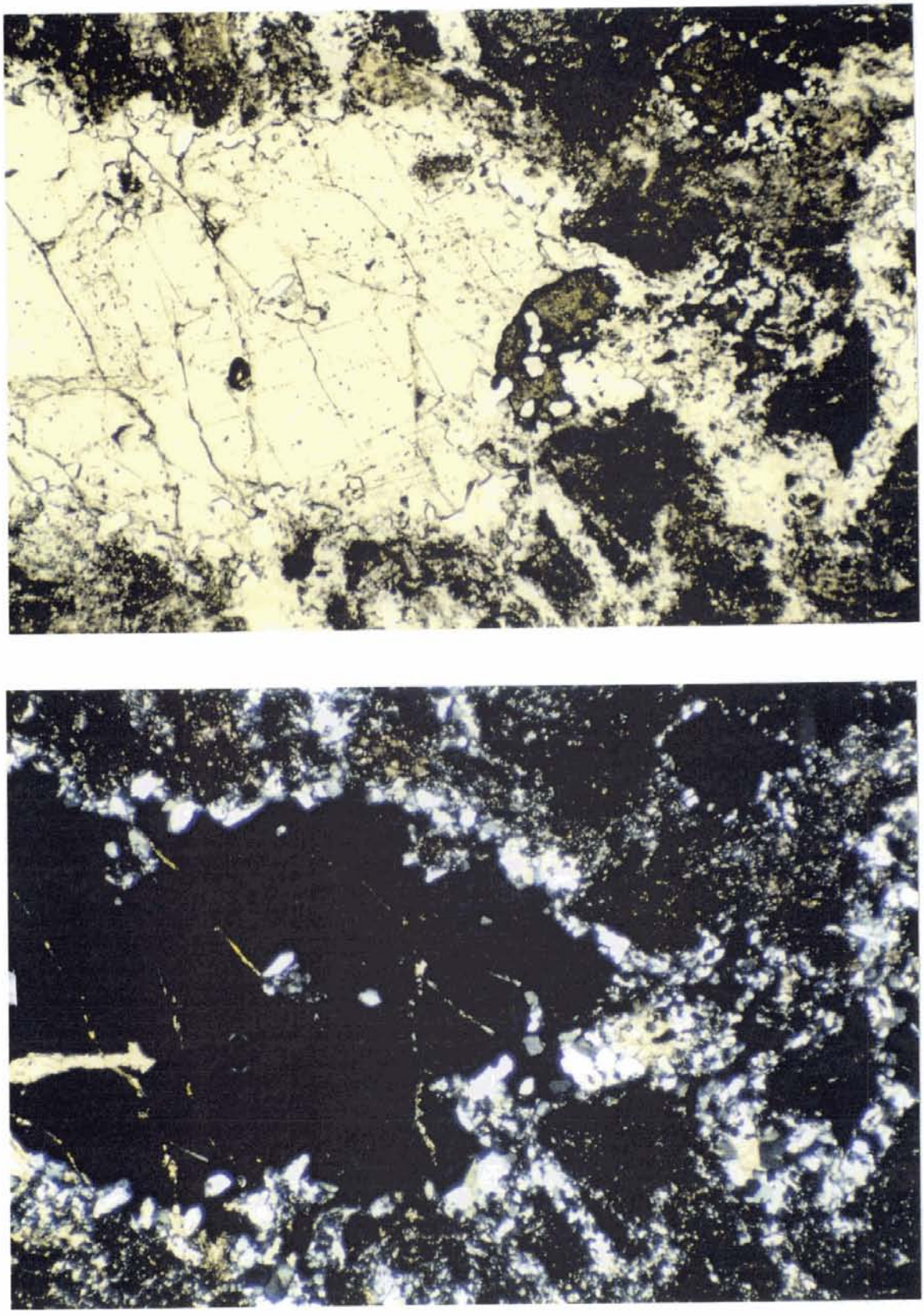


Plate 5(a and b). Seventy degree cleavages and the isotropic nature of the fluorite in this sample are clearly visible. An irregular dull brown-green zone of sphalerite is present near the centre of the field of view. The veins are discordant to the dull black matrix of the rock. The opaque matrix is typically formed from disseminated hematite. Plane and cross polarized light, 25X field of view 2.5 mm.

Harry Davis Tower Showing: Sample TS - 3, sulphidized carbonate rock

An important rock sample.The sample contains 5.37% Zn. Stratigraphically the principle question is whether the abundant carbonate in this rock is primary or secondary? Thin section data suggests the following:

1. Much of the carbonate in this rock is in the form of ragged carbonate crystals which are most often discordant to the primary rock fabric.

2. Laminated sulphides are in reality weakly developed hydrated Fe oxides in microvienlets. Pyrite as a sulphide phase is very weakly developed.

3. Fluorite remains a significant, vein related, mineral phase.

4. Much of the rock matrix is composed of a very fine grained felsic dust tuff, superimposed across this are the coarse carbonate rhombs, Plate 6.

5. Within the well defined quartz - hematite segregations, there is no consistent bedding orientation. The laminations are either soft sediment features or are discordant veinlets.

6. Strongest sulphide development, but still weak, is associated with areas of strongest secondary carbonate development, Plate 7.

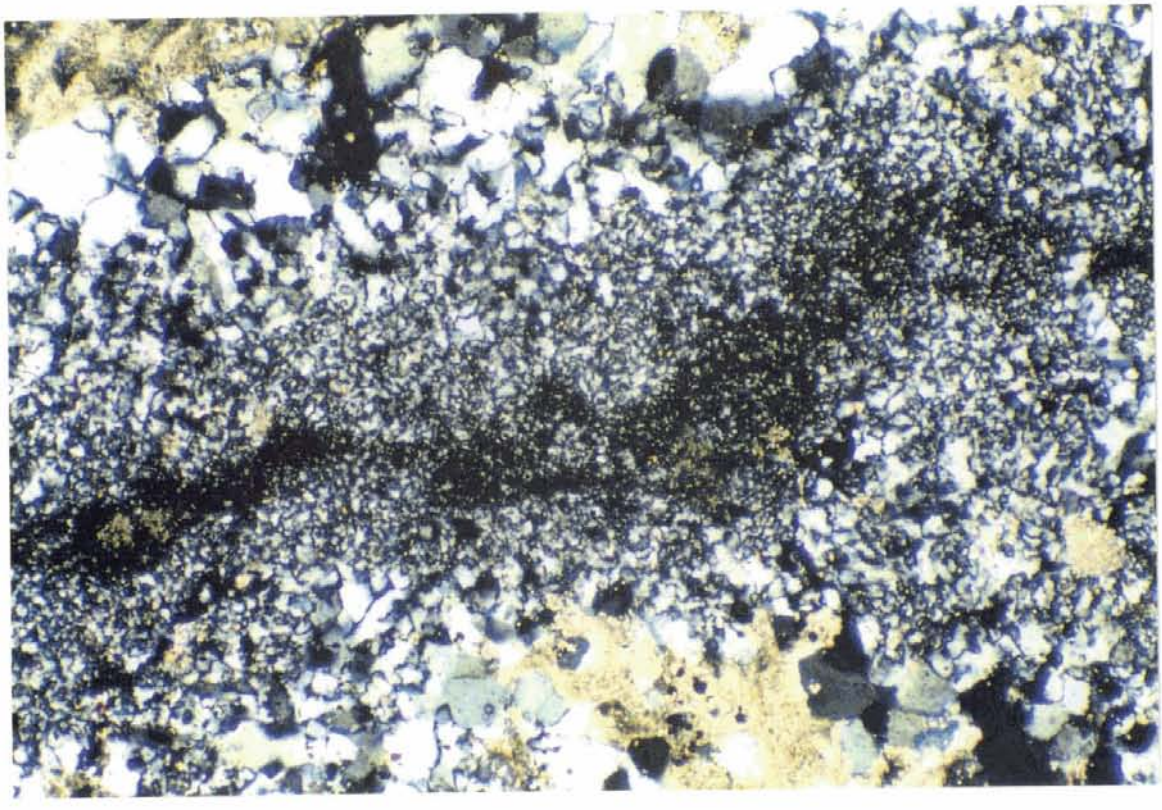


Plate 6. One of the "sulphide" bands noted in hand specimen in this sample is shown on this plate. The lamination is caused by a hematite rich microveinlet and is not a primary feature. Some of the pale buff secondary carbonates in this rock are shown on the extreme upper and lower corners of this plate. Much of the rock is composed of these minerals. 25X field of view 2.5 mm, crossed polars.

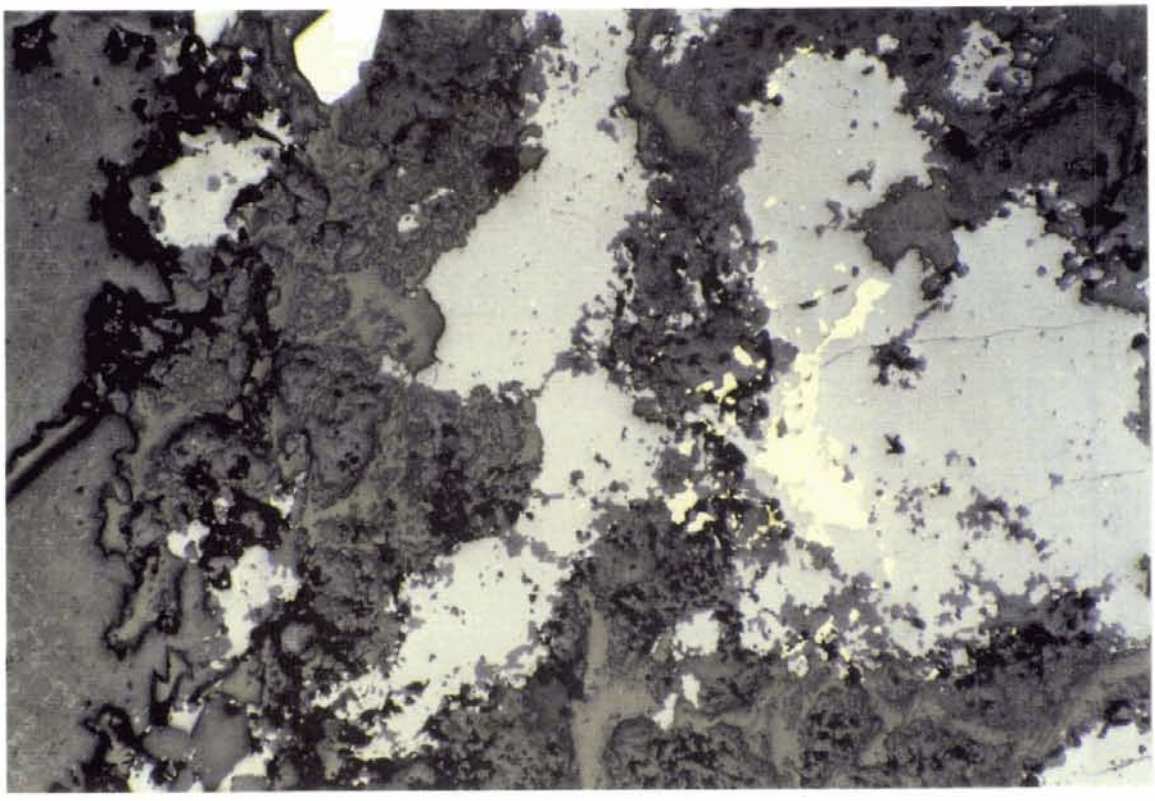


Plate 7. Chalcopyrite develops internally to sphalerite and hematite in this sample. The oxide and sulphide phases are contained within a carbonate rich veinlet. The wall rock contact is on the extreme left hand side of the plate. 50X, Reflected light, field of view 1.25 mm.

Harry Davis Sample DDH 2 @ 81.8 m's

Significant features of this thin section include:

1. The net content of hydrated iron oxides significantly decreases in this rock.

2. The sample contains abundant sub-parallel orientated rail type microveinlets, sphalerite and lesser chalcopyrite may form as vein selvedges, Plates 8 and 9.

3. Discrete disseminations of chalcopyrite, rimmed by hematite, develops in association with a pervasively altered mafic mineral phase. Pseudomorphs suggest the original form may have been biotite.

4. Few if any quartz phenocryst are present. Sodic feldspar is particularly well developed. The embayed form, lack of fragmentation, and fresh appearance of many of the feldspars suggest the rock is a subareal flow of dacitic composition.

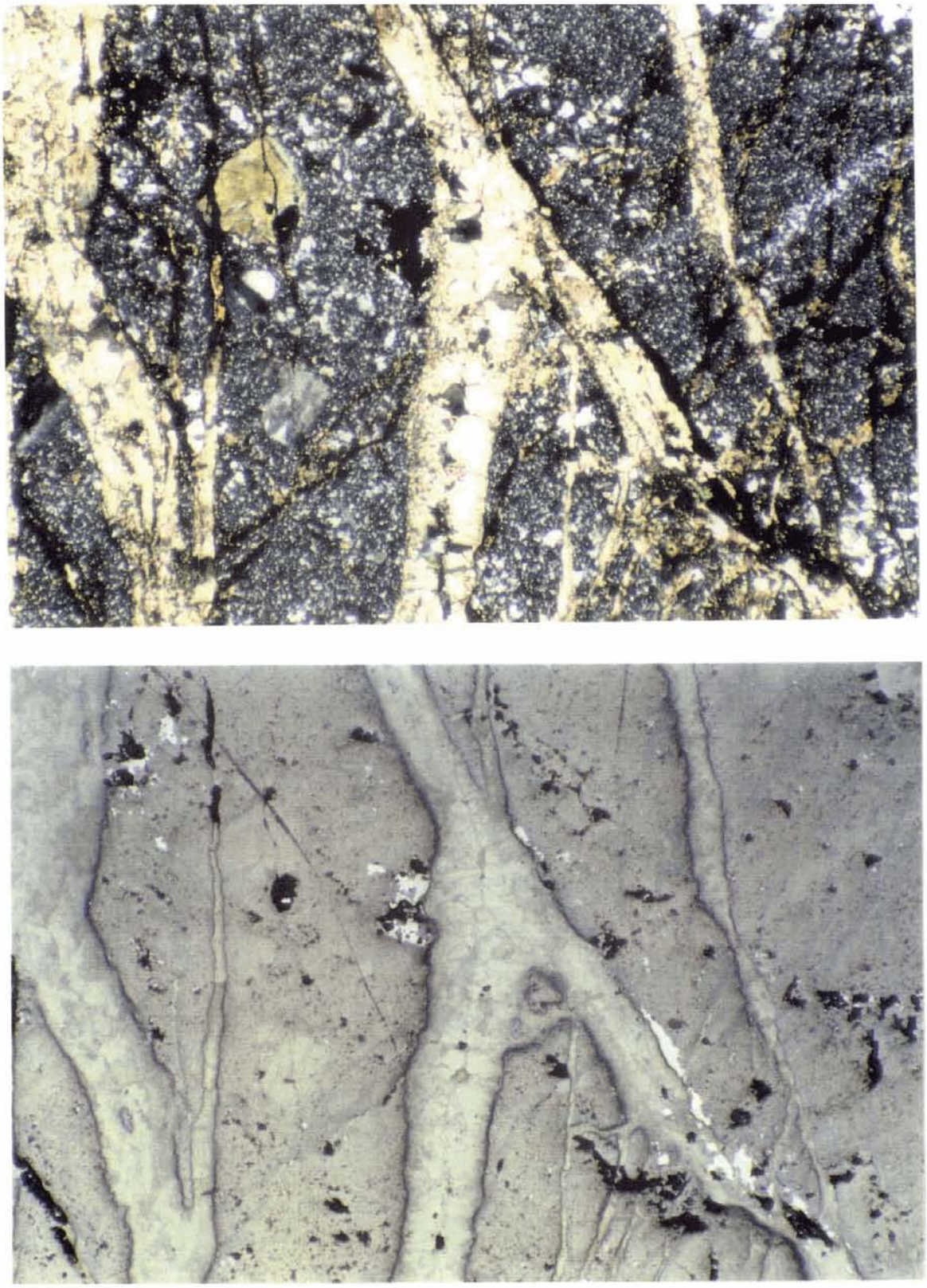


Plate 8. Much of the mineralization in this interval is related to the presence of abundant stockwork veinlets. These are both calcite and quartz veinlets. Alteration external to the vein margins is extremely limited. Sphalerite and lesser chalcopyrite track the vein margins. 25X Crossed polars, field of view 2.5 mm.

Plate 9. Same field of view as is shown in Plate 8. Sphalerite is the dominant sulphide phase and is definitively vein related. 25X, Reflected light, field of view 2.5 mm.

Harry Davis Sample DDH 2 @ 200.6 m's.

The sample is interpreted on its hand specimen characteristics to be a high level porphyritic intrusion. The thin section taken from this interval does not display intrusive rock textures. Plate 10 illustrates the strongly porphyritic nature of this rock. In this plate, very large sodic feldspars, with weakly developed granophyric textures are entirely embayed within a quenched matrix. These data will only support a porphyritic flow origin for this rock. Very weakly developed trachytic (flow related) textures are sometimes noted. Aligned hematite and chlorite lamella again support the flow origin for this rock.

Alteration levels are typically quite low. Weakly developed calcite veinlets cut both the crowded phenocrysts and the matrix. The rock contains the highest percentage of chlorite of any of the samples examined. The rock has been subject to low grade, sub-greenschist, metamorphism. The amount of chlorite suggests that the original mafic content of this rock was significant. Compositionally I would place the sample in an andesite field.

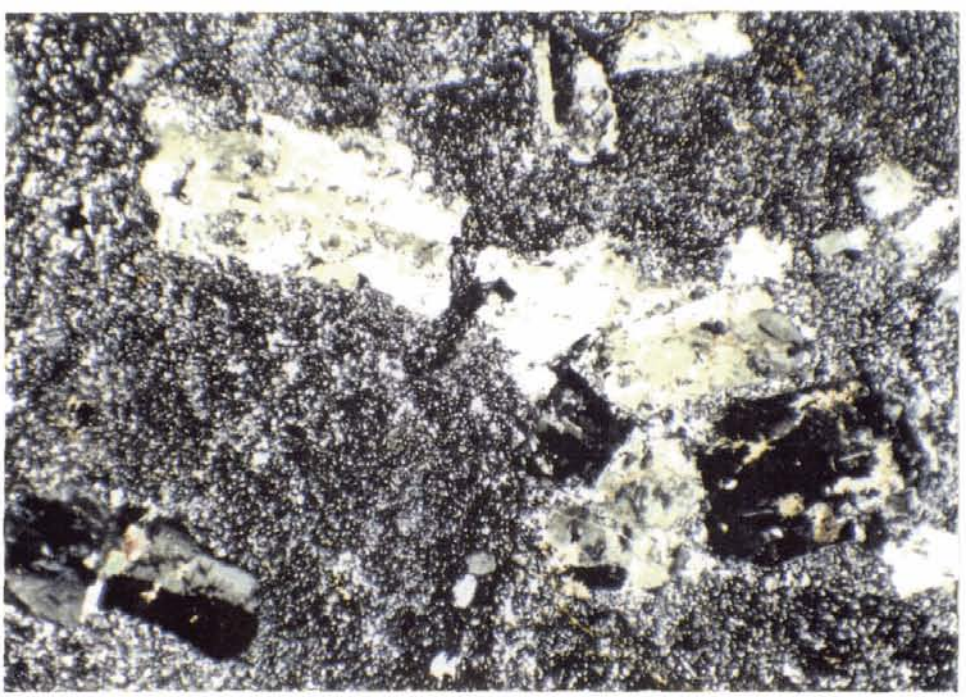


Plate 10. The presence of megacrystic feldspar phenocrysts and a quenched rock matrix conclusively illustrate that this rock is a porphyritic flow and not a subvolcanic intrusion. 25X, field of view 2.5 mm, Crossed Polars.

Harry Davis Sample DDH 3 @ 144.1 m

The sample is taken through an interval of core which contain several small, < 1.0cm, oval concretions or accretions. Church originally mapped some of these rocks as accretionary lapilli. The thin section through this rocks supports the original definition and again suggests that these rocks are subareal ash falls. This textural feature is not caused by crystal infillings or internal growths (amygdales or ocellar textures) but is caused by concentrically arranged sorting from a coarser fragment core to a finer ash fragment rim, Plate 11. No reaction rim occurs at the accretionary lapilli contact. This rock likely formed from a cold, not hot, subareal ash fall.

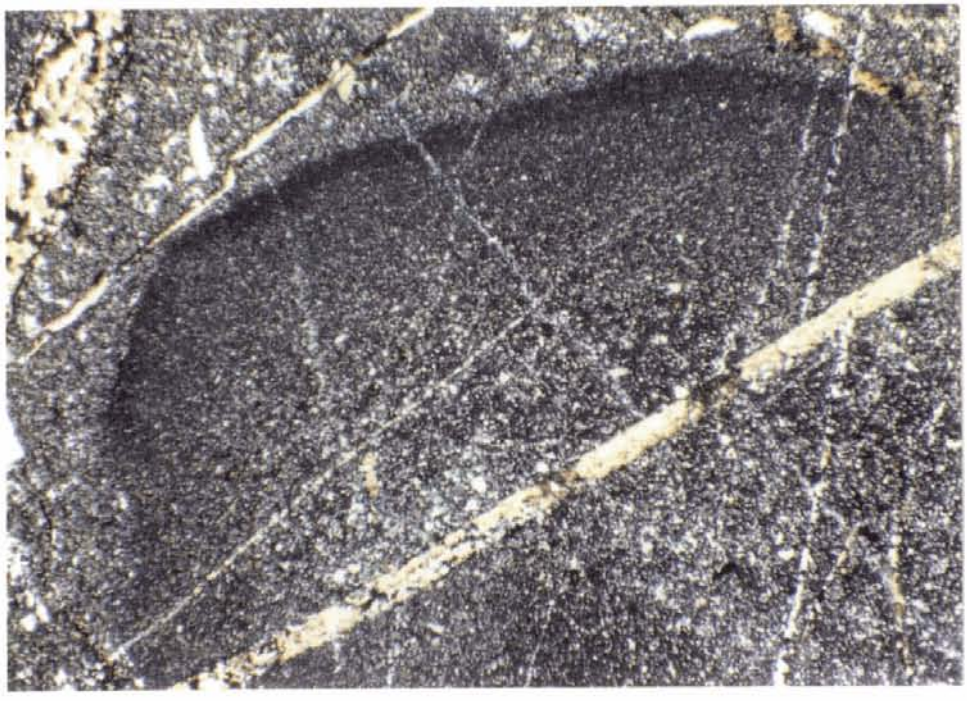
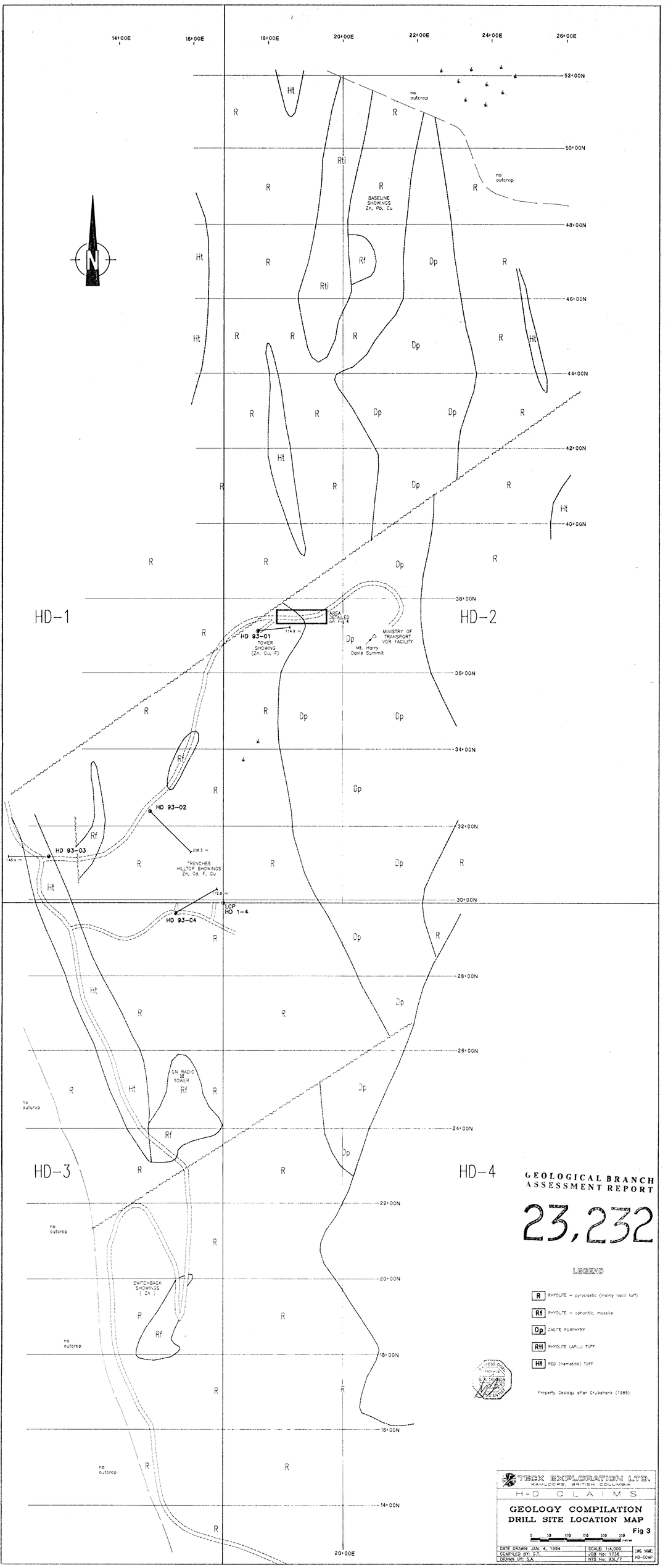


Plate 11. Half of a 0.5 cm accretionary lapilli is shown on this photograph. The internal sorting of small broken fragments and lack of a reaction rim are particulary. 25X, crossed polars, field of view 2.5 mm's.



GEOLOGICAL BRANCH
ASSESSMENT REPORT

23,232

LEGEND

- R — RHYOLITE - pyroclastic (mainly lapili tuff)
- Rf — RHYOLITE - aphanitic, massive
- Dp — DACITE PORPHYRY
- RH — RHYOLITE LAPILLI TUFF
- Ht — RED (Hematitic) TUFF

Property Geology after Cruikshank (1985)

TECK EXPLORATION LTD.
KAMLOOPS, BRITISH COLUMBIA

H-D CLAIMS

GEOLOGY COMPILATION
DRILL SITE LOCATION MAP

Fig 3

0 50 100 150 200 250 metres

DATE DRAWN: JAN. 4, 1994	SCALE: 1:4,000	DWG. NAME
COMPILED BY: S.T.	JOB No: 1736	HD-COMP
DRAWN BY: S.A.	NTS No: 93L/7	