

COMINCO LTD.

EXPLORATION
NTS: 82M/13E

WESTERN DISTRICT

DIAMOND DRILLING - 1980

CK PROPERTY

KAMLOOPS M.D., B.C.

RAFT RIVER AREA

LATITUDE: 51°54'W LONGITUDE: 119°34'W

WORK PERFORMED

9 JULY 1980 - 18 SEPTEMBER 1980

OWNER AND OPERATOR: COMINCO LTD.

Part 2
94

8317

28 OCTOBER 1980

M.R. MURRELL

TABLE OF CONTENTS

	<u>PAGE</u>
I INTRODUCTION.	1
II ACCESS.	1
III TOPOGRAPHY.	1
IV PROPERTY DEFINITION	1
V SUMMARY OF WORK DONE.	1
VI GEOLOGY	2
VII PURPOSE OF DRILLING PROGRAM	2
VIII INTERPRETATION OF 1980 DRILL RESULTS.	2
IX ATTACHMENTS	3
STATEMENT OF EXPENDITURES	- EXHIBIT "A"
STATEMENT OF QUALIFICATIONS	- EXHIBIT "B"
LOCATION MAP 1:50,000	- PLATE 1 (In pocket)
DRILL HOLE LOCATION 1: 5,000	- PLATE 2 (In pocket)
DRILL HOLE LOCATION 1: 5,000	- PLATE 3 (In pocket)
DRILL HOLE LOGS CK 80-1 to CK 80-15	

DIAMOND DRILLING ASSESSMENT REPORT

CK GROUP OF CLAIMS

KAMLOOPS MINING DIVISION

I INTRODUCTION

Location

The CK group of mineral claims are located in the Kamloops Mining Division, forty-three kilometres northeast of Clearwater, B.C. The property is on either side of the Raft River, centred on the junction of the Raft River with Kowalski Creek. It is 24 km long by 7 km wide.

II ACCESS

The town of Clearwater is located on the Trans Canada Highway, 130 km north of Kamloops. Access from Clearwater to the CK property is by 65 km of excellent gravel logging roads along the Raft River. Several logging roads provide access to some of the showings areas, but much of the property is accessible only by foot or helicopter.

III TOPOGRAPHY

Much of the CK group of claims consist of fairly steep tree and brush covered side hills. The higher portion is flat to rolling, containing scattered swampy areas.

IV PROPERTY DEFINITION

(a) History

- 1973 - Discovery of mineralized boulders and in-place mineralization by Andy Horne, Chase, B.C.
- 1974, 1975 - Optioned by Rio Tinto - Airborne EM; geochemistry, I.P., minor magnetometer work, and 7 diamond drill holes.
- 1976 - Sicintine Mines - backhoe trenching on one showing.
- 1977 - Optioned by Cominco Ltd.
- 1978 - I.P., magnetometer, VLF, minor geochemistry, Cat trenching, diamond drilling (20 holes).
- 1979 - Geological mapping (1:5,000, 1:10,000), I.P., magnetometer, large geochemical program, diamond drilling (18 holes).

V SUMMARY OF WORK DONE

B.Q. drilling totalled 1277.3 metres in 15 holes during 1980.

VI GEOLOGY

The claims are underlain by metasediments and intrusives of the Shuswap Metamorphic Complex. Exposure is quite poor over much of the claim group, but mapping has suggested that limy and siliceous calc-silicates, biotite gneisses, marbles, and pegmatite underlie the extensive overburden. Several showings have been found, most have an associated geochemical expression.

VII PURPOSE OF DRILLING PROGRAM

The diamond drilling program on the CK mineral claims was continued during 1980 field season. It's purpose was:

1. To test for possible structurally thickened zones of mineralization as interpreted from 1979 drilling.
2. To test for down dip continuity of surface exposures discovered in 1978.
3. To determine the lateral continuity of mineralization between previous intersections.
4. To determine the structure of the mineralized zone.
5. To determine the variability of the grade of the mineralized zone.
6. To help determine the economic significance of the mineralization on the property.

VIII INTERPRETATION OF 1980 DRILL RESULTS

Drilling in 1980 was carried out in three localities: the New Showing, the Main Boulder Area, and the Raft Synform.

(a) New Showing

Seven holes, totalling 561.4 meters, were drilled to further test the New Showing. The Pb/Zn mineralized horizon was intersected in all holes, and ranged from a thin 0.8m (of 28% combined Pb/Zn) to a thickness of 2.5m (of 10% Pb/Zn). The drilling has discounted a possible thickened fold theory in two localities, but has supported this theory at another (CK80-3). Other holes in the New Showing area have tended to confirm the existence of down dip Pb/Zn mineralization, and have helped to gain an interpretation of the structure. The New Showing is a long narrow mainly east dipping Zn/Pb body. The deformation is not as intense as interpreted in 1979, but variations in width and grade over short distances is now quite apparent.

(b) Main Boulder Area

Four holes totalling 361.8 metres were drilled in the Main Boulder Area. The main purpose was to test for down dip extensions of mineralization exposed at surface. In only one instance (Hole CK80-11) was Pb/Zn mineralization intersected. It graded 2.8% Pb/Zn over 0.33 metres.

The structural picture remains confused, and the problem of extensions of the surface mineralization still exists.

(c) Raft Synform

Four holes totalling 354.1 metres were drilled in this area. Previous geochemical sampling and I.P. had inferred a possible fold closure in this area. The first two holes (CK 80-12, 13) were drilled from the same set-up. They intersected minor Pb/Zn mineralization (ie: 0.45m of 2% Pb/Zn). The other two holes did not have intersections. Insufficient data exists to either confirm nor deny the fold theory.

The stratiform Pb/Zn mineralization is associated with a complexly folded relatively narrow belt of calc-silicate gneiss and carbonates enclosed within an overall envelope of metasediments and pegmatite. All form part of the highly metamorphosed Shuswap Metamorphic Complex.

The 1980 program has shown the mineralization on the CK program to be very extensive, but usually narrow. Much more drilling and testing is required to determine if portions of the mineralized body can be of economic size and grade.

IX ATTACHMENTS

- (a) Appendix "A" - Statement of Expenditures
- (b) Appendix "B" - Statement of Qualifications
- (c) Location Map - Scale 1:50,000
- (d) Drill Hole Location Maps - (2) - Scale 1:5,000

Report by: *M.R. Murrell*
M.R. Murrell
Project Geologist

Endorsed by: *Z.T. Nikic*
Z.T. Nikic
Senior Geologist

Approved for
Release by: *G. Harden*
G. Harden, Manager
Exploration
Western District

C A N A D A
PROVINCE OF BRITISH COLUMBIA
TO WIT:

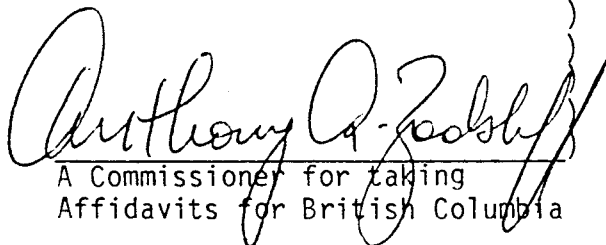
STATUTORY DECLARATION

I, ROBIN LAWSON WOODS, of the District of North Vancouver, in the Province of British Columbia, DO SOLEMNLY DECLARE THAT:

1. I am the Supervisor, Exploration and Foreign Accounting for Cominco Ltd., 2300 - 200 Granville Street, Vancouver, British Columbia, and, as such have knowledge of the facts deposed to herein.
2. Attached to this Statutory Declaration, as Schedule A, is a statement of expenditures indicating the expenditures charged by Cominco Ltd. to the CK Property account for the period January 1, 1980 to October 31, 1980.
3. The statement of expenditures referred to in paragraph 2 is true and accurate to the best of my knowledge, information and belief.
4. This Statutory Declaration is made in support of an application for credit as assessment work pursuant to the Mineral Act of British Columbia.

AND I make this solemn declaration conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

DECLARED before me at the City)
of Vancouver in the Province)
of British Columbia, this 12th)
day of November 1980)

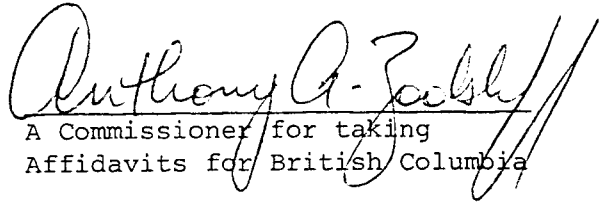

A Commissioner for taking
Affidavits for British Columbia

*Anthony Allen Zoobkoff
A Commissioner for taking
Affidavits for British Columbia.*



Robin Lawson Woods

This is Schedule A referred to
in the Statutory Declaration
of ROBIN LAWSON WOODS
declared before me this 12th day
of November, 1980.


A Commissioner for taking
Affidavits for British Columbia

Anthony Allen Zoobkoff
A Commissioner for taking
Affidavits for British Columbia.

STATEMENTS OF EXPENDITURES


CK PROPERTY

KAMLOOPS M.D., B.C.

JANUARY 1, 1980 TO OCTOBER 31, 1980

Geology	\$ 59,850
Linecutting	2,559
Geophysics	13,273
Geochemistry	16,045
Diamond drilling	104,565
Transportation	11,681
Access	10,898
Camp costs	8,394
Tenure	11,988
Option payment	20,000
Communications	2,164
Administrative services	24,142
	<hr/>
	\$285,559
	<hr/> <hr/>

Cominco Ltd.
Vancouver Office
November 12, 1980
Copies: Mining Recorder (2)
Senior Technician
File (2)


Robin Lawson Woods
Supervisor, Exploration
& Foreign Accounting

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

C K PROPERTY

KAMLOOPS, M.D., B.C.

STATEMENT OF EXPENDITURES

WORK PERFORMED JULY 5 - SEPT. 18, 1980

<u>TYPE OF WORK</u>	<u>DIRECT COST</u>	<u>CAMP COST</u>	<u>SUPERVISION & CORE LOGGING COSTS</u>	<u>TOTAL COSTS</u>
Drilling	\$ 104,565	\$ 5,950	\$ 37,600	\$ 148,115
Geochemistry	16,045	1,410	7,300	24,755
Road Const. & Acc. to Drill sites	10,898	1,034	4,950	16,882
Geophysics	15,832	-	-	15,832
	<u>\$ 147,340</u>	<u>\$ 8,394</u>	<u>\$ 49,850</u>	<u>\$ 205,584</u>

C K PROPERTY

WORK PERFORMED JULY 5 - SEPT. 18, 1980

<u>GROUPING</u>	<u>DRILLING</u>	<u>GEOCHEM.</u>	<u>ROAD</u>	<u>GEOPHYSICS</u>	<u>TOTAL</u>
CK80-1	\$ -	\$ 1,637	\$ 4,000	\$ -	\$ 5,637
2	-	4,852	-	744	5,596
3	-	7,906	-	930	8,836
4	-	7,021		10,044	17,065
5	40,896	-		-	40,896
6	29,586	1,733	2,176	3,525	37,020
7	72,700	1,052	-	-	73,752
	\$ 143,182	\$ 24,201	\$ 6,176	\$ 15,243	\$ 188,802

TOTAL VALUE OF WORK DECLARED

GR.ck 80 1-7	\$ 188,802
CK 79-3 Suppl.	3,000
CK 79-7	<u>8,700</u>
Cost Statement in Assessment Report to be Minimum.	<u>\$ 200,502</u>

<u>PAC APPLIED:</u>		<u>WORK APPLIED</u>		<u>WORK & PAC APPLIED</u>
Credit +	Applied			
\$ 37.000	\$	CK 80-1	\$ 3,400.00	\$ 3,400.00
-	304.00	80-2	5,596.00	5,900.00
	1,264.00	80-3	8,836.00	10,100.00
	3,735.00	80-4	17,065.00	20,800.00
	9,504.00	80-5	40,896.00	50,400.00
	7,156.00	80-6	36,844.00	44,000.00
	14,448.00	80-7	73,752.00	88,200.00
	\$ 36,411.00		\$ 186,389.00	\$ 222,800.00

Actual PAC Applied

\$ 36,411.00
- 37.00
<u>\$ 36,374.00</u>

Tenure Fees

N/G 7 @ \$5.00	\$ 35.00
Fees 5% of Assessment work value	<u>11,140.00</u>
	\$ 11,175.00



Handwritten signature

APPENDIX "B"

STATEMENT OF QUALIFICATIONS

I, MICHAEL RAY MURRELL, hereby declare that I was graduated from the University of Alberta with an Honours B.Sc. in geology during May 1966. During my undergraduate summers I was employed on geological programs by B.A. Oil (now Gulf Oil), and by a small mining company. Upon graduation I joined Cominco Ltd. and have been engaged in many aspects of mining exploration since that time.

Dated this 30th day of October 1980
at Vancouver, British Columbia.

Signed: *M.R. Murrell*
M.R. Murrell
Project Geologist

Scale

Colour Plot
& Dips

Drill Hole Record


 1.1.
 CK

Property	CK Property	District	KAMLOOPS M.D.	Hole No.	CK80-1						
Commenced	11 JULY 1980	Location	NEW SHOWING	Tests at	63.1 M (-80.5°)	Hor. Comp.	11.0 M				
Completed	13 JULY 1980	Core Size	BQ	Corr. Dip	-80°	Vert. Comp.	62.1 M				
Co-ordinates	11,316.61 N, 10,039.05 E			True Brg.	239°	Logged by	MRMurrell				
Objective	TO TEST FOR POSSIBLE THICKENED FOLD IN HIGH GRADE ZnS MINERAL HORIZON, BENEATH THE NEW SHOWING.			% Recov.		Date	July 14, 1980				

Claim	CK 84
T Brg.	239°
Collar Dip	-80°
Elev.	1112.0 m
Length	63.1 m
Hole No.	CK80-1
Sheet	1

Metres From	Metres To	Description	Sample No.	Length	Analysis
0	6.1	Casing (Overburden).			
6.1	8.0	Broken rubbly material of differing rock types, likely still in overburden to this depth.			
8.0	16.9	Pegmatite, coarse grained grey and white, with slight creamish colouration. Minor biotite throughout, with local patches of coarse biotite. Minor garnets in small specks randomly scattered throughout.			
16.9	25.6	Siliceous calc-silicate - semi banded light green (diopside) and dark green (biotite) and soaked with silica throughout. Moderately foliated throughout varying from almost parallel over the first few metres to 25°, back to parallel, to about 40° at the end of the section. Contains a few thin bands of coarse pegmatite.			
25.6	26.8	Pegmatite, mottled, coarse grained grey and cream colour. Fuzzy bounded crystals. Gradational contact with the underlying rock type.			
26.8	38.5	Siliceous calc-silicate. Much like previous, but ratio of diopside to dark green (chlorite?) is variable so that locally it is almost all light green, and very locally is almost all dark green. Medium grained, speckled to moderately banded or foliated. Again soaked in silica. Pegmatite (biotite) at 32.1 to 32.9. Foliations: 27.5-20°, 29-50°, 30.5-40°, 34-50°, 37-55°, 39.9-40.2. Siliceous biotite green.			

Scale

Colour Plot
& Dips

Drill Hole Record



Property CK District KAMLOOPS M.D. Hole No. CK80-1

Commenced Location Tests at Hor. Comp.

Completed Core Size Corr. Dip Vert. Comp.

Co-ordinates True Brg. Logged by

Objective % Recov. Date

Metres From To	Description	Sample No.	Length	Analysis					Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-1	Sheet 2
38.5 40.1	Dyke - magnetic dark green, aphanitic, but speckled with darker fuzzy green to black specks.														
40.1 40.9	Siliceous biotite gneiss. Overall grey with very fine biotite grains throughout giving a moderate to poor foliation at 50°. Last 20 cm is a dark green dyke rock.														
40.9 41.5	Pegmatite - typical coarse grained, mottled, minor chlorite patches.														
41.5 47.7	Very coarse biotite gneiss - black and white. Well foliated, but locally crenulated folding is present. Quartz occasionally segregated from the biotite. Contains one band of light green limy calc-silicate cored by white marble at 42.7 to 43.1. Foliation averages 55° but can locally be up to 70°. Fault zone at 43.8 to 44.8: 1 metre of core is lost.														
47.7 51.2	Siliceous calc-silicate. Mottled, limy looking, but has no HCl reaction. Interlaced locally with typically coarse pegmatite and with creamy green speckled "pegmatized" calc-silicate. Overall colour is light green with faded orange-pink garnet to locally ochre. Siliceous throughout. Foliation only locally developed at 60°.														
51.2 51.7	Pegmatite - coarse grey and white - typical. Contains 5 cm band grey quartz at 45°.														
51.7 53.4	Mineralized zone. Mixed and gradational zone of siliceous calc-silicate, siliceous biotite gneiss, local pegmatite and marble. Contains a few narrow bands of disseminated to semi-massive fine grained "brown" sphalerite with galena grains.														

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	KAMLOOPS M.D.	Hole No.	CK80-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

From	Metres To	Description	Sample No.	Length metres	Analysis			
					Pb	Zn		
51.7	53.4	(Continued):-						
		51.7-51.95: Siliceous calc-silicate. Mottled to speckled cream, green and white. Foliation at 85°.						
		Contains a 1 cm band of fine grained sphalerite with magnetic pyrrhotite parallel to foliation at 80°. Sample 51.7 to 51.95	60018	0.25	002	022		
		51.95-52.65: Silicified biotite gneiss to 52.50, with diopside and containing a 2 cm band of high grade ZnS at 52.25, is mixed with coarse blk ZnS. Last 15 cm of this section is pegmatite. Sample 51.95 to 52.65	60019	0.7	009	039		
		52.65-53.05: Most massive section of mineralization consists of 10 cm of biotite green with disseminated pyrite with specks of PbS, followed by 5 cm of semi-massive pyrite, wispy fine grained ZnS, then 7 cm light green and white siliceous calc-silicate with minor disseminated ZnS grains, then 4 cm of massive typical fine grained high grade ZnS, followed by 6 cm pyritic calci-silicate, then finally 10 cm of massive typical ZnS mineralization. Foliation at 75-80°. Sample 52.65 to 53.05	60020	0.4	198	960		
		53.05-53.4 : White marble grading to siliceous calc-silicate. Sample 53.05 to 53.4	60021	0.35	001	001		
53.4	56.0	Siliceous biotite gneiss. Fine grained typical. Speckled throughout with fine grained biotite. Very local increase in biotite has associated small pink garnet. Few bands of coarse pegmatite over the last few metres, pegmatizes the adjacent biotite gneiss.						
56.0	59.5	Siliceous mottled calc-silicate with minor gradational bands of coarse biotite gneiss. Scattering of small creamy specks and minor pink garnets. Foliation best developed in the biotite gneiss at 60°.						

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. CK80-1 Sheet 3

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	KAMLOOPS M.D.	Hole No.	CK80-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. CK80-1 Sheet 4

From	Metres To	Description	Sample No.	Length	Analysis					
59.5	61.5	Coarse biotite gneiss with minor local interbands of siliceous calc-silicate. Foliation varies from 70° to 90° (average 75°). Small garnets locally present.								
61.5	62.8	Siliceous calc-silicate. Grey and light green, moderately foliated at 80°. Contains 1-2% disseminated pyrite, and locally on fracture films.								
62.8	63.1	Siliceous biotite gneiss. Typical fine grained biotitic dark grey. Has disseminated pyrite also, and is present in a few quartz veins as well as on chloritic fractures.								
		END OF HOLE - 63.1 M.								
		RESULTS:- The expected mineralized horizon was very low grade and thin. The structure infers a straight line projection from CK78-1 to CK79-6, so the hoped for structural thickening is not present at this location.								
		62.65 - 53.05	0.4m @ 1.98% Pb, 9.6% Zn							

Scale

Colour Plot
& Dips

Drill Hole Record



Property CK Property District Kamloops M.D. Hole No. CK80-2
 Commenced July 16, 1980 Location New Showing Area Tests at 92.1m (-69°), 45.7(-79°) Hor. Comp. 23.8 m
 Completed July 18, 1980 Core Size BQ Corr. Dip Vert. Comp. 89 m
 Co-ordinates 11,678 N, 9,902 E True Brg. 236° Logged by M.R. MURRELL
 Objective To test for possible thickened fold structure in high grade% Recov. Date July 18, 1980
 ZnS as interpreted from two on section holes.

Claim CK 48
 T Brg. 236°
 Collar Dip -75°
 Elev. 1151.2 m
 Length 92.1 m
 Hole No. CK 80-2
 Sheet 1

METERAGE		Description	Sample No.	Length	Analysis	
From	To				Pb	Zn
0	18.6	Casing - Overburden				
18.6	29.5	Coarse muscovite - biotite gneiss. Muddy green, grey and locally pink. Altered - bleached throughout and thus quite friable. Crenulation folding quite common locally, but overall the foliation would average 50°. Pegmatite present as coarse bands in only a few locations (i.e. 20.1 - 20.6). Graphite present on minor fractures parallel to foliation. Pyrite (cubic) present as small grains on only a few fractures.				
29.5	34.3	Silicified biotite gneiss - fine grained, altered and bleached to an overall muddy green colour much of it looks "pegmatized", a transitional type granular rock. Local short sections are coarser grained, but still altered. Chlorite common. Small fuzzy garnets locally present. Some sections quite broken. Foliation - 60 - 65°				
34.3	34.8	Pegmatite - First half is fine grained dioritic looking with green speckles. Latter half is more typical pegmatite, but intermixed with coarse altered biotite gneiss.				
34.8	44.8	Altered coarse grained biotite gneiss. Bleached and altered to a coarse foliated mixture of purple and muddy green, with local spotty pink garnets. Few minor coarse textured pegmatite sections with coarse clear muscovite. Quite fractured and sometimes foliation is contorted, but would average 65°.				
44.8	51.6	Silicified calc-silicate - granular white and green and looks quite limy, but no acid reaction is present. Contact with upper unit is quite gradational. Fine grained, granular to "sandy" appearance light green to white. Fairly massive with no foliation except where short bands of coarser biotite gneiss material is present. One very graphitic section at 47.5 - 47.9, followed by 30 cm very silicified calc-silicate with small cream coloured specules. Becomes more granular and more "marble-looking from 48.0 - 51.6				

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK-80-2
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

METERAGE		Description	Sample No.	Length	Analysis		Claim	T. Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To				Pb	Zn							
		Foliation - weak at 80° throughout											
51.6	52.6	Pegmatite - ill defined grain boundaries, med. grained, disseminated throughout with biotite. Becomes finer grained over the last third.											
52.6	59.2	Marble - Silicified. Medium grained, white (and grey). Rounded qtz. grains throughout Fairly massive, but faint foliation suggested at 35° through most of this section											
		56.7 - 57.3 - Coarser grain size, with 3% disseminated pyrite.											
		58.2 - 58.5 - Mineralized Sections - Contains several disseminated to semi massive sulphide bands consisting mainly of pyrrhotite, but intermixed with fine grained brown sphalerite and minor galena. Foliation at 60°	60022	0.3	036	430							
		Sample 58.2 - 58.5											
59.2	62.5	58.5 - 59.2 - Banded green and white limy calc-silicate. Foliation rolls at 35° - 65°. Silicified biotite gneiss - fine grained black and dark grey with local thin irregular streaks of disseminated garnets. Foliation varies from shallow (25°) to steep (50°) over sections 1 - 1½ m. long. Definite turn-over at 62.0, but turns back again at 62.4. Foliations - low to moderate - Indicates folding.											
62.5	64.0	Coarse muscovite - biotite gneiss. Muscovite is in speckled patches throughout likely indicating alteration (from biotite). Sericitization. Foliation varies from parallel to core at start to 35° at the end.											
64.0	65.0	Silicified calc-silicate. Granular grey with light green diopside (?) discolourations. Few thin limy sections. Foliation weak at 45°. Peppered through with fine grained disseminated pyrite.											
		Sample 64.0 - 65.0	60023	1.0	005	008							

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Hole No.	CK-80-2
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

METERAGE		Description	Sample No.	Length	Analysis			
From	To				Pb	Zn		
65.0	66.4	Mineralized Zone - 3 sections showing 3 different modes of mineralization						
		65.0 - 65.4 - Very coarse grained black sphalerite and granular galena mixed with 50% greenish grains of qtz. (and fd?). Central band of semi-massive pyrrhotite.						
		Sample 65.0 - 65.4	60024	0.4	520	230		
		65.4 - 65.8 - Typical fine grained purple-brown sphalerite shot through with 25% rounded qtz. and fd. grains. No galena visible except on a few small fractures. Higher grade at the top decreasing marginally to the end.						
		Sample 65.4 - 65.8	60025	0.4	440	238		
		65.8 - 66.4 - 15 cm of sili-calc-sil with minor diss. galena followed by 25 cm of banded qtz-calcite-flourite rock with thin disseminated bands of brown-orange sphalerite and granular galena much like that seen in holes CK-80-2 and 3 in the Main Boulder Area, and in outcrop in the same area, and on various occasions in other holes. Foliation at 45°						
		Sample 65.8 - 66.4	60026	0.6	094	175		
66.4	75.0	Marble - White, massive, medium to coarse grained. Quite silicified, so no great acid reaction						
		First metre has trace to decreasing amounts of pyrrhotite and graphite. Massive diopside band (8 cm) at 70.8. At 73.1 becomes actually a green granular limy calc-silicate, with variable amounts of fine green diopside. Foliation overall at 45°						
75.0	86.2	Coarse muscovite - sillimanite-biotite gneiss. Typical semi banded black and white. Locally crenulated and contorted. Laced through locally with bands of sill-like pegmatite to several cm wide. Most foliation 75° contains a few sections of fine grained silicified material, and one section (77.6 - 78.4) of almost intrusive looking rock. Pegmatite at 78.9 - 90.9.						

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					CK 80-2	3

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District		Hole No.	80-2	Claim	
Commenced		Location		Tests at		T Brg.	
Completed		Core Size		Corr. Dip		Collar Dip	
Co-ordinates		True Brg.		Logged by		Elev.	
Objective		% Recov.		Date		Length	
METERAGE	Description	Sample No.	Length	Analysis			
From 86.2 - 90.0	To Transitional silicified calc-silicate and silicified biotite gneiss. Light green, grey and white, with minute biotite flakes throughout. Moderate overall foliation, but granular texture as well. Few thin minor limy sections. Pyrite disseminated evenly throughout at ~ 4-5%, and as a few larger irregular splashes. Minor graphite as trace flakes also seen. Foliation well developed and constant at 60°.						
90.0 - 92.1	Silicified biotite gneiss. Silicification not well developed. Biotite medium grain sized. No black and white banding developed. Seems actually to fall between the coarse biotite gneiss and silicified biotite gneiss category. Foliation suggested by slight grain size differences at 60°.						
	End of Hole at 92.1						
	Mineralized zone at 65.0 - 66.4 Not structurally thickened as was thought. Mineralization is on a straight line projection from adjacent holes.						
	58.2 - 58.5 0.3m @ 0.36% Pb, 4.3% Zn						
	65.0 - 65.8 0.8m @ 4.8 % Pb, 23.4% Zn						

Scale

Colour Plot
& Dips

Drill Hole Record

File
CK
80-11-13

Property	CK	District	Kamloops M.D.	Hole No.	CK-80-3
Commenced	July 18/80	Location	New Showing	Tests at	57.5 ⁰ (36) 58.0 ⁰ (72) Hor. Comp. 39 m
Completed	July 20/80	Core Size	B.Q.	Corr. Dip	57.2 ⁰ Vert. Comp. 60.5 m
Co-ordinates	11525.7N, 9982.6E	True Brg.	239 ⁰	Logged by	M.R. Murrell
Objective	To test for possible down-plunge mineralization within an % Recov.			Date	July 31, 1980
	inferred parasitic fold south of CK 78-7.				

METERAGE From To	Description	Sample No.	Length	Analysis	
0 - 6.3	Casing - overburden				
6.3 - 8.3	Pegmatite gradational to orthogneiss, few broken chunks of biotite gneiss, but possibly overburden blocks.				
8.3 - 14.6	Siliceous calc-silicate. Dark green grains set in a matrix of lighter green diopside, all soaked with white quartz. Fairly massive, but subtle banding or foliation is sometimes present, i.e. at 8.8 - 65 ⁰ , 12.2 - 45 ⁰ , and local overturning is present. Banding is parallel to core at 14.6.				
14.6 - 15.7	Pegmatite - mixed with coarse biotite gneiss. Pegmatite is typical grey and white then patchy biotite gneiss is slightly altered. Gradational contact at top, but sharp contact at the bottom.				
15.7 - 23.9	Siliceous calc-silicate, with a few minor short sections of siliceous biotite gneiss. Gradational and interbanding common, but most bands are about 1 metre long. Colour of the calc-silicate is much as previous, depending on amount of enclosed biotite. Gneiss is not well segregated, but banding is of moderate intensity. Foliation is at 45 ⁰ throughout.				

Claim	CK 48
T Brg.	239 ⁰
Collar Dip	-56.0 ⁰
Elev.	1129.2 m
Length	72.1 m
Hole No.	CK 80-3
Sheet	1

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Hole No.	CK 80-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

METERAGE	Description	Sample No.	Length	Analysis				
				Claim	T Brg.	Collar Dip	Elev.	Length
From To								
23.9 - 33.2	Amphibolite with a few zones of pegmatite. Fine to medium-grained dark green to black speckled with fuzzy white to grey plagioclase.							
	Pegmatite present at: 26.9 - 29.0 - Coarse-grained typical, with minor biotite gneiss. 31.6 - 32.0 - Typical, with minor pink garnet.							
33.2 - 42.2	Coarse sillimanite - biotite gneiss. Black and white, very well banded. Foliation quite variable and changeable throughout the length, varying from almost parallel to locally 65°. Coarse pegmatite with garnet common over the first metre. Minor section of fine-grained sil. biotite gneiss also present. At 39.6 - 40.0 is very fine-grained (aphanitic) mud-like limestone. Contains "flow-banded" creamy yellow diopside(?) as well. Foliation at 55° in the limestone, variable elsewhere.							
42.2 - 53.1	Mottled limy calc-silicate with a few bands of pegmatite and minor marble. Most is light green and white with mottled patches of orange garnet throughout. Sometimes the garnet(?) takes on a dark brownish colouration. Marble occasionally forms where garnet and diopside contact is low. No well defined foliation, but in the marble a suggestion of 55-60° is present. Very mottled appearance over the last 4 metres.							
53.1 - 56.4	Marble - Sugary white texture grading to speckled green due to enclosed diopside. Locally siliceous. Contains a narrow mineralized section (3 cm). Foliation is moderately developed at 50°.							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-3	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-3 Sheet 3
Commenced		Location	Tests at	Hor. Comp.						
Completed		Core Size	Corr. Dip	Vert. Comp.						
Co-ordinates			True Brg.	Logged by						
Objective			% Recov.	Date						
XXXX METERAGE	Description	Sample No.	Length m	Analysis		Pb	Zn			
From To										
	55.0 - 55.04 - "High grade ZnS" - Mixed, fine-grained pyrite and brown sphalerite with white quartz islands at 55° to core axis.									
	Sample 55.0 - 55.04	60503	0.04	186		120				
56.4 - 57.6	Siliceous Calc-Silicate - Dark green and dark orange mottled in large irregular patches. Hard and massive, soaked in quartz. No foliation.									
57.6 - 64.7	Pegmatite - Coarse-grained, dark grey quartz and light cream-yellow to faint green feldspar. Scattered minor amounts of biotite, muscovite, and local traces of disseminated pyrite.									
	Sample 64.45 - 64.7	60046	0.25	003		0.5				
64.7 - 67.2	Mineralized Zone - Consists of few thin and one wider band of typical brown fine-grained, high-grade ZnS mineralization, with interbeds of dark grey-green siliceous pyritic calc-silicate.									
	64.7 - 64.85 - Typical high-grade, with quartz islands. Cuts at 35°.									
	Sample 64.7 - 64.85	60027	0.15	340		235				
	64.85- 65.0 - Dark olive-green to grey, siliceous calc-silicate with disseminated pyrite, trace ZnS.									
	Sample 64.85- 65.0	60043	0.15	009		039				
	65.0 - 65.3 - Siliceous calc-silicate with bands and patches of typical brown ZnS mineralization.									
	Sample 65.0 - 65.3	60028	0.3	059		9.3				
	65.3 - 65.5 - Siliceous calc-silicate with one 5 cm patch of coarse black ZnS with pyrite.									
	Sample 65.3 - 65.5	60044	0.2	005		2.1				

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-3
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

% Recovery	METERAGE		Description	Sample No.	Length m	Analysis			
	From	To				Pb	Zn		
	65.5	65.8	Siliceous calc-silicate with wispy stringers and veins of brown ZnS. Sample 65.5 - 65.8	60029	0.3	120	630		
	65.8	66.5	Typical fine-grained massive high grade brown ZnS with quartz islands. Sample 65.8 - 66.5	60030	0.7	370	220		
	66.5	67.1	Coarse-grained white marble with a few flecks of ZnS. Few fractures have small rhombo quartz on faces. Sample 66.5 - 67.1	60045	0.6	001	012		
	67.1	67.2	4 cm wide vein of coarse black ZnS cuts at 50° in marble. Sample 67.1 - 67.2	60031	0.2	008	141		
	67.2	69.4	White Marble - Clean white, medium-grained granular except for a few flecks of graphite. Central 0.6 metres is a siliceous mottled yellow-grey siliceous calc-silicate with trace disseminated pyrite. Foliation suggested at 35°.						
	69.4	72.1	Muscovite - sillimanite-biotite gneiss. Grey and black. Banded but not well segregated. Crenulated folding common. Foliation overall is approximately 65° but variable over short sections. A few pegmatite sections present, and at 71.8 the biotite gneiss is pegmatized.						
	72.1		End of Hole - 2.5 m @ 1.5% Pb, 8.8% Zn						
			Mineralized Section - 64.7 - 66.5 - A few thin (0.15 m) sections and one wider section (0.7 m) of typical fine-grained brown ZnS.						

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-3	Sheet 4
-------	--------	------------	-------	--------	-----------------	---------

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Kamloops M.D.	Hole No.	CK 80-4		
Commenced	July 20, 1980	Location	New Showing Area	Tests at	77° (61.9)	Hor. Comp.	12.8 m
Completed	July 21, 1980	Core Size	B.Q.	Corr. Dip	-78.5°	Vert. Comp.	63.0 m
Co-ordinates	10012.0E			True Brg.	239°	Logged by	M.R. Murrell
Objective	To test for down-dip ZnS mineralization beneath a poor intersection at the northern end of the exposed New Showing.				% Recov.	Date	July 30/80

Claim	CK 84
T Brg.	239°
Collar Dip	-80°
Elev.	1116.1 m
Length	61.9 m
Hole No.	80-4
Sheet	1

From	To	Description	Sample No.	Length	Analysis	
					Pb	Zn
0	15.2	Casing - overburden.				
15.2	17.0	Broken bedrock (pegmatite) and miscellaneous float. Casing shoe was not likely set into solid bedrock.				
17.0	47.0	Pegmatite - Long stretch of pegmatite varying in an undulatory fashion throughout, with no distinguishing features setting of major differences. Subtle variations include short sections with trace amounts of garnet, variations in grain size, etc. No biotite build-ups, but at 27.3 - 27.5 there is an enclosed block of siliceous biotite gneiss (Foliation at 40°). A few broken sections, and the possibility of a small fault at 43.7. Last two metres of this section contain coarse light green feldspars.				
47.0	48.5	Mineralized Zone - Two narrow bands of typical black high-grade separated by pyritic pegmatite and streaky galena mineralization.				
	47.0 - 47.25	- Coarse black ZnS semi-massive, with coarse PbS, minor brown fine-grained ZnS in a dark green pyritic quartzite.				
		Sample 47.0 - 47.25	60032	0.25	2.5	170
	47.25 - 47.6	- Siliceous calc-silicate with banded and streaky PbS and ZnS with clear quartz and probable fluorite. Pyrite present semi-massive and disseminated in a foliated manner at 40°.				
		Sample 47.25 - 47.6	60033	0.35	110	4.4
	47.6 - 48.0	- Pegmatite with green feldspars mixed with minor siliceous biotite-gneiss.				

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-4
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

XXXXX From	METERAGE To	Description	Sample No.	Length	Analysis		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-4 Sheet 2
					Pb	Zn						
		Sample 47.6 - 48.0	60034	0.4	010	011						
		48.0 - 48.2 - High-grade ZnS - fairly typical fine-grained brownish ZnS, with darker quartz eyes. Metamorphosed but not remobilized.										
		Sample 48.0 - 48.2	60035	0.2	300	162						
		48.2 - 48.5 - Silicified calc-silicate changing to coarse biotite gneiss. Calc-silicate contains foliated disseminated pyrite and a few narrow streaks PbS, ZnS. Dark muddy green colour overall.										
		Sample 48.2 - 48.5	60036	0.3	005	014						
		48.5 - 49.0 Coarse muscovite-biotite gneiss - Not well banded. Grey and black, with pegmatite bands. Foliation at 55°.										
		49.0 - 51.5 Pegmatite - Cream-white and grey with fine-grained white muscovite in small amounts scattered throughout, and trace amounts of small pink garnets randomly distributed.										
		51.5 - 61.4 Coarse biotite gneiss - Not well banded, but variable throughout due to amount of muscovite, local pegmatization (alteration), intermixing with pegmatite, and foliation. Pegmatization pronounced over the first 4 metres of core. Foliation: 51.5 - 53.0 - 45°										
		53.0 - 60.0 - Essentially parallel to core, but broad undulatory folding is present (3-4 folds total).										
		60.0 - 61.4 - 50°										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Kamloops M.D.	Hole No.	CK 80-5
Commenced	July 23, 1980	Location	New Showing	Tests at	58.0°(31.8) 56.5°(90.5) Hor. Comp. 48.5
Completed	July 23, 1980	Core Size	B.Q.	Corr. Dip	-57.6° Vert. Comp. 76.5 m
Co-ordinates	11230.5N, 10120.0E			True Brg.	239° Logged by MRM
Objective	To test for down-dip mineralization encountered in Hole CK 78-4.			% Recov.	Date July 30/80

Claim	CK 84
T Brg.	239°
Collar Dip	-58°
Elev.	1109.2
Length	90.5
Hole No.	CK80-5
Sheet	1

From	To	Description	Sample No.	Length	Analysis
0	19.5	Casing - Overburden			
19.5	25.0	Pegmatite - White, broken, chalky and mushy. Looks much like fault zone material, but is likely just due to surface weathering.			
25.0	27.5	Siliceous Calc-Silicate - Light green diopside specks with darker green grains all soaked in a matrix of translucent grey quartz. Minor pyrite disseminated throughout. First metre is bleached and altered by proximity to the pegmatite. Foliation moderately developed and constant at low angle - 10-15° throughout.			
27.5	34.7	Pegmatite - Very coarse-grained, cream-yellow and grey. Grains are large and rounded. Occasional grey quartz vein. First 1.5 metres is orthogneiss with foliation at 55° weakly developed.			
34.7	40.1	Siliceous Calc-Silicate - Much as previous. Darker grains could be hornblende or biotite-chloritized. Banding moderately developed, and most is parallel to the core suggesting very little section is being cut. Foliation parallel to core.			
40.1	43.6	Spotted Dyke - Aphanitic dark and light green, with irregular dark green spots throughout. Massive and hard. No structure apparent, except for slight bleaching at chilled margins.			

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No. CK 80-5	
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length	Analysis				
43.6	51.8	Siliceous Calc-Silicate - Much as previous, but gradually loses its dark green constituent so by the end of the section it is unstructured light green only. Central part has a couple of 20 cm bands of coarse pegmatite, and pegmatite interlaces the calc-silicate for about one metre. Foliation approximately 25° over most of the section.							
51.8	53.6	Pegmatite - Typical coarse-grained white and grey. Few scattered biotite patches. No foliation.							
53.6	60.5	Coarse biotite gneiss - Black and white but not well foliated except for the last few metres. Contains a few short sections of siliceous calc-silicate. Broken, possible fault zone at 57.5. Foliation over last part fairly constant at 45-50°.							
60.5	69.9	Marble with minor short sections of pegmatite and local limy calc-silicate. Marble is medium grained, sugary granular throughout greyish-white with small rounded quartz grains.							
	60.5 - 61.5	Limy calc-silicate, banded green and white, fine-grained. Foliation 15°.							
		Grading to mottled with orange.							
	61.5 - 62.6	Marble							
	62.6 - 63.1	Pegmatite, coarse, with some marble.							
	63.1 - 65.2	Marble, with a 20 cm band of pegmatite at 63.8, gradational contact.							
	65.2 - 65.7	Pegmatite - very coarse, muddy green and cream colour.							
	65.7 - 69.9	Marble - granular, much as previous. Foliation at 55°.							

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Hole No.	CK 80- 5
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length m	Analysis			
					Pb	Zn		
69.9	72.7	Limy calc-silicate - Mottled orange and dark green with white. Garnet intimately mixed with diopside in irregular patches and streaks, white calcite is interstitial. Many short (10 cm) sections are siliceous, non-calcareous. Foliation over the first part is 35 ^o , but indistinguishable over the latter part.						
72.7	76.8	Marble, containing a mineralized zone - Marble is much as before - granular grey - white, but no green diopside speckles. Has pyrite in trace amounts disseminated throughout, with occasional thin disseminated bands (Total approximately 1-2%).						
	75.5 - 75.7	Short mineralized section in pegmatite consisting mainly of fine-grained meandering pyrite with rounded and stretched out smears of coarser black sphalerite and interstitial quartz grains.						
	Sample 75.5 - 75.7		60047	0.2		011	9.0	
76.8	80.0	Siliceous biotite-gneiss and Fault Zones - Pegmatized and broken throughout. No foliation deciphered. Mainly a mud seam (fault gouge) from 78.4 to 79.4. Amount and direction of displacement, if any, are unknown.						
80.0	82.8	Mineralized Zone - Siliceous pyritic calc-silicate with three significant bands of high-grade mineralization.						
	80.0 - 80.3	Fine-grained, brownish sphalerite mixed with pyrite specks and rounded quartz eyes and cut by a few pyritic fractures (at low angles). Top few cm is coarse black ZnS.						

Sample 80.0 - 80.3

60048 0.3

305

166 211-0437

Hole No. CK80- 5 Sheet 3

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Hole No.	CK 80-5
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

XXXXX From	METERAGE To	Description	Sample No.	Length	Analysis	
					Pb	Zn
	80.3 - 81.3	Dark green-grey, medium-grained, silicified pyritic calc-silicate disseminated throughout with fine-grained pyrite (5%) and locally minor amounts of black sphalerite. Sample 80.3 - 81.3	60049	1.0	018	065
	81.3 - 81.7	High-grade ZnS mineralization. Varies from disseminated black ZnS at the start (10 cm), then 20 cm semi-massive with pegmatite, then 10 cm of more typical h.g. (which is first coarse black, then fine-grained brown), finally 10 cm of pyrite with disseminated brown ZnS. Sample 81.3 - 81.7	60050	0.4	265	140
	81.7 - 81.95	Mixed ochre coloured siliceous pyritic calc-silicate and minor marble with trace disseminated black ZnS. Sample 81.7 - 81.95	60501	0.25	050	2.5
	81.95- 82.8	Massive typical h.g. brown ZnS with quartz islands and disseminated to vein-like pyrite. Last 20 cm is patchy black in marble. Sample 81.95 - 82.8	60502	0.85	395	233
	82.8 - 85.3	Limy Calc-Silicate mixed with coarse pegmatite. Overall mottled with large patches of white calcite and quartz, green diopside and orange garnet. No distinct boundaries between rock types nor mineral grains. No sulphides present.				
	85.3 - 87.7	Coarse biotite-gneiss - Black and white, with only subtle banding displayed. Contains a 30 cm wide band of pegmatite at the start that gives some alteration.				

Claim

T Brg.

Collar Dip

Elev.

Length

Hole No. CK80-5 Sheet 4

Scalp

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Hole No.	CK 80-5
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length	Analysis					
					Claim	T Brg.	Collar Dip	Elev.	Length	
		Thin band of garnetiferous biotite-gneiss at the end. Foliation at 50° throughout.								
87.7	90.5	Pegmatite - Typical very coarse-grained, but fd. is the light green colour so often found adjacent or near high-grade zones on the CK								
		END OF HOLE - 90.5								
		Mineralized Section are:								
		75.5 - 75.7 - 0.2 m @ 0.11% Pb, 9.00% Zn								
		80.0 - 82.8 - 2.8 m @ 2.0 % Pb, 9.5 % Zn								
		inc. - 0.85 m @ 3.95% Pb, 23.3 % Zn								

Hole No. CK80-5 Sheet 5

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Kamloops M.D.	Hole No.	CK 80-6
Commenced	July 24, 1980	Location	New Showing Area	Tests at	80 ⁰ (108.2) 79 ⁰ (14.3) Hor. Comp. 20.0 m
Completed	July 29, 1980	Core Size	B.Q.	Corr. Dip	-79.3 ⁰ Vert. Comp. 106.0 m
Co-ordinates	11018.0N, 10214.3E			True Brg.	58 ⁰ Logged by M.R. Murrell
Objective	To help define the geometry of the excellent mineralized intersection found in hole CK 78-6.			% Recov.	Date July 29, 1980

Claim	CK 84
T Brg.	58 ⁰
Collar Dip	-80 ⁰
Elev.	1103.3 m
Length	108.2 m
Hole No.	CK80-6
Sheet	1

XXXXX METERAGE From To	Description	Sample No.	Length	Analysis
0 - 9.0	Casing - overburden.			
9.0 - 12.0	Limy Calc-Silicate, with a few minor marble bands and minor pegmatite. Overall is mottled light green and orange with occasional irregular white streaks. The white marble bands are slightly silicified and streaked with diopside and minor biotite. Foliation overall at 40 ⁰ .			
12.0 - 15.9	Pegmatite - Typical coarse-grained grey and white. First metre has 5% coarse patchy diopside and pyrrhotite. One area may have been a hornblende dyke. Minor lithographic appearance toward the end. No foliation. Possible small fault at 12.4.			
15.9 - 19.8	Coarse Biotite-Gneiss - Fairly typical, but banding is not pronounced. Local sections "pegmatized", especially the last half metre. Crenulation folding occasional. Overall foliation at 65 ⁰ but somewhat variable.			
19.8 - 20.5	Limy calc-silicate with a thin band of marble - Almost all is massive light green diopside, with minor irregular quartz and a few creamy wisps. Marble is typical, speckled with dark green diopside, and minor patchy pyrrhotite.			
20.5 - 27.1	Coarse biotite-sillimanite gneiss - typical. Banding quite pronounced. Foliation varies from steep at the start of the section (60-70 ⁰) to shallow at the end (35-40 ⁰) and there are a few areas parallel to core, and a few turn-overs.			

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-6
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

XXXXX METERAGE From To	Description	Sample No.	Length	Analysis				
				Claim	T Brg.	Collar Dip	Elev.	Length
27.1 - 28.0	Pegmatite - Coarse, dark grey and white. Rounded grains. Very slight greenish tinge. Few scattered pink garnets, and minor muscovite.							
28.0 - 30.3	Coarse biotite-gneiss - Much like previous. Black and white. Moderately foliated at 60° but variable. Local minor garnet.							
30.3 - 31.9	Siliceous calc-silicate and marble - First 20 cm are hard, massive, light green diopside with mottled garnet and creamy spicules, gradually mixed with pegmatite. Last part is typical marble speckled with biotite and diopside, grading to siliceous calc-silicate with a few thin marble bands, and containing a few blebs to patches of irregular pyrrhotite. Foliation at 60°.							
31.9 - 35.9	Orthogneiss (pegmatite) - White, massive with up to 20% dark black flecks of biotite in an augen-like foliated arrangement. Foliation constant and excellent at 50°. Biotite often takes on a slight brownish colouration.							
35.9 - 42.4	Mixed Siliceous calc-silicate and siliceous biotite-gneiss. Usually quite intermixed in very narrow bands, but occasional section wider. Calc-silicate is dark green and light green with grey quartz. Medium-grained, splotchy. Pyrrhotite present as minor disseminated patch. Central metre is fine-grained, siliceous biotite-gneiss which contains 5-10% pyrrhotite, and which is foliated at 20°. Overall foliation is at 55-60°, but local contortions are quite common.							

Hole No. CK80-6 Sheet 2

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District		Hole No.	CK 80-6	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK80-6Sheet 3
Commenced		Location		Tests at		Hor. Comp.											
Completed		Core Size		Corr. Dip		Vert. Comp.											
Co-ordinates				True Brg.		Logged by											
Objective				% Recov.		Date											
EXAMINER METERAGE	Description	Sample No.	Length	Analysis													
From To																	
42.4 - 57.9	Pegmatite - Quite typical, but overall variable. Very coarse-grained, mottled creamy yellow and white. Rounded grains. Occasional garnet, occasional biotite patch, odd section is lithographic-looking. No foliation.																
57.9 - 58.9	Siliceous Biotite-Gneiss - Fine-grained, dark grey and black, grading to coarser-grained, more typical of the coarse biotite-gneiss. Foliation subtle but appears parallel to core at start and about 45° at the end.																
58.9 - 75.0	Pegmatite - Much as previous, but small pink garnets are scattered in trace amounts indiscriminately throughout. Contains a few short sections of pegmatized biotite-gneiss (60.0 - 60.5; 65.3 - 65.8), and a few probable fault zones such as at 63.1 and 66.2. Foliation in biotite-gneiss at 60°. Fault at 74.7 - 75.0.																
75.0 - 77.2	Coarse Biotite-Gneiss - Fairly massive, mainly black with minor grey (quartz). No banding apparent. Cut by a few random quartz veins, and a few late-stage fractures. Foliation suggested at 45°. First 30 cm is bleached.																
77.2 - 80.3	Pegmatite - Typical coarse-grained cream and grey. Contains a 40 cm band of bleached biotite-gneiss with foliations at 50°.																
80.3 - 85.6	Coarse Biotite-Gneiss - black and grey. Poorly banded to almost massive. Few local patches of pegmatite. Garnets not present except for a few at 82.9. Foliation at 60° but over the last few																

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District		Hole No.	CK 80-6	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No. CK80-6 Sheet	4
Commenced		Location		Tests at		Hor. Comp.											
Completed		Core Size		Corr. Dip		Vert. Comp.											
Co-ordinates		True Brg.		Logged by													
Objective		% Recov.		Date													
XXXXX METERAGE	Description	Sample No.	Length	Analysis													
From To																	
	metres is contorted and folded in broad (30 cm) folds.																
85.6 - 86.8	Pegmatite - Coarse-grained, typical. Slight orange tinge. Trace pyrite as films on a few low angle fractures. Few irregular biotite patches.																
86.8 - 89.4	Coarse biotite-gneiss, with local silicified sections. Much as previous. Foliation semi-parallel to core axis with a few broad open folds, but foliation at start is 40°, at end is 40°. Patchy pyrite at lower contact.																
89.4 - 92.0	Pegmatite - Pure white, fine-grained. Contains a few in-folds of biotite gneiss with patchy pyrite and muscovite-sillimanite.																
92.0 - 94.6	Coarse biotite-muscovite-sillimanite gneiss with a central metre of typical pegmatite. Moderate to well banded with undulatory to broad open folding. Much is parallel to core axis. Crenulation folding at end is within 60° overall foliation.																
94.6 - 95.2	Garnet Amphibolite Dyke - Dark green background with up to 40% - pink fuzzy garnets in clusters and smears. Impregnated with pegmatite.																
95.2 - 97.0	Coarse Biotite-Sillimanite-Muscovite Gneiss - Black and grey-white. Well banded and foliated throughout, but crenulation folding and overturning common. Most common foliation is at 60°, however. Few minor pegmatite zones (10 cm thick).																

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District		Hole No.	CK 80-6	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK80-6	Sheet	5
Commenced		Location		Tests at		Hor. Comp.													
Completed		Core Size		Corr. Dip		Vert. Comp.													
Co-ordinates		True Brg.		Logged by															
Objective		% Recov.		Date															
XXXX METERAGE	Description	Sample No.	Length	Analysis	Pb	Zn													
97.0 - 98.8	Marble grading to a mixture of siliceous calc-silicate and siliceous biotite-qneiss (contact at 98.1). Marble is rather typical sugary textured with dark green diopside speckles, and interspersed with 5 cm bands of limy calc-silicate (diopside). Contacts not well defined, but foliation suggested at 45°.																		
98.8 - 99.4	Pegmatite - Very coarse. Grey quartz and light green feldspar, shot throughout by patchy black biotite. Few healed fractures. No sulphides apparent.																		
	Sample 98.8 - 99.4	60037	0.6	003	029														
99.4 - 100.3	Mineralized Zone - Consists of four distinct bands of mineralization.																		
	99.4 - 99.6 - Pegmatite as previous with disseminated bands and patches of interstitial coarse black sphalerite, minor galena, and irregular patchy fine-grained pyrite.																		
	Sample 99.4 - 99.6	60038	0.2	050	126														
	99.6 - 99.9 - Typical fine-grained brown h.g. sphalerite with numerous small rounded quartz islands. Contains a 7 cm section of fine-grained pegmatite(?) with veins of black ZnS and pyrite.																		
	Sample 99.6 - 99.9	60039	0.3	480	215														
	99.9 - 100.1 - Fine-grained siliceous calc-silicate with 5% disseminated pyrite and black grains of disseminated ZnS. Few minor low angle fractures.																		
	Sample 99.9 - 100.1	60040	0.2	051	22														
	100.1 - 100.3 - Massive brown fine-grained ZnS much as previous, with small white quartz islands. Bottom 3 cm is black coarse ZnS.																		

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-6
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

XXXXX From	METERAGE To	Description	Sample No.	Length m	Analysis		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-6 Sheet 6
					Pb	Zn						
		Sample 100.1 - 100.3	60041	0.2	340	235						
100.3	102.0	Mixed siliceous biotite-gneiss and siliceous calc-silicate. Slightly altered black and grey biotite-gneiss. Segregation banding locally present, with foliation at 40° increasing to 60°. Calc-silicate in narrow bands grades to limy by the end of the section.										
		Sample 100.3 - 100.8	60042	0.5	006	014						
102.0	104.8	Marble - Sugary textured grey-white gradually grading to crystalline white. Quartz blebs common throughout the first 3/4. Minor graphite flecks in the white marble. Foliation only suggested at 45°.										
104.8	108.2	Orthogneiss (Pegmatite) - Massive, medium-grained white and grey, speckled throughout with 15% minute black biotite flakes to give a moderate but constant foliation of 55° throughout.										
		108.2 - End of Hole										
		Mineralized Zone - 99.4 - 100.3 2 narrow h.g. ZnS Zones. - 0.9 m @ 2.6% Pb, 15.7% Zn										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Kamloops, M.D.	Hole No.	CK 80-7
Commenced	July 29, 1980	Location	New Showing Area	Tests at	44.0 ⁰ (20.4)46 ⁰ (50.9) Hor. Comp. 36.5 m
Completed	Aug. 1, 1980	Core Size	BQ	Corr. Dip	44.6 ⁰ Vert. Comp. 36.0 m
Co-ordinates	11017.5 N; 10214.5 E			True Brg.	58 ⁰ Logged by M.R. Murrell
Objective	To test for a possible up-dip extension of an excellent intersection obtained in hole CK 78-6			% Recov.	Date Aug. 3, 1980

Claim	CK 84
T Brg.	58 ⁰
Collar Dip	-44 ⁰
Elev.	1103.3 m
Length	54.0 m
Hole No.	CK 80-7
Sheet	1

METERAGE		Description	Sample No.	Length Metres	Analysis				
From	To								
0	10.4	Casing - Overburden							
10.4	11.1	Mixed rock types - changes rapidly from pegmatized biotite gneiss to mottled pegmatite to siliceous green diopside calc-silicate No foliation.							
11.1	20.3	Coarse biotite gneiss transitional throughout its length to silicious biotite gneiss, with short sections of intermixed pegmatite and ore section of orthogneiss							
		11.1 - 13.3 - Coarse bio gneiss in segregation banding. Mainly coarse black, with varying white bands. Fractures with mud at 13.0. Foliation constant at 65 ⁰ .							
		13.3 - 13.9 - Pegmatized altered biotite gneiss and fine grained pegmatite. Coarse and quite blocky at the lower end.							
		13.9 - 17.0 - Finer grained siliceous biotite gneiss, some banding, intermixed with short sections of pegmatite. Most foliation is parallel or at very low angles to the core.							
		17.0 - 17.9 - Orthogneiss, changing to coarse pegmatite. Foliation at 30 ⁰ .							
		17.9 - 20.3 - Coarser biotite gneiss, but no banding. Transitional to sil. bio. gneiss. Mixed over the first half with undulatory pegmatite.							
20.3	22.4	Limy calc-silicate. Mottled green and orange with white, and interbanded with several 10 - 20 cm wide bands of speckled white and green marble. One narrow limestone band is very fine grained and porous, mud-like looking much like a similar band in hole CK 80-6.(Marker?) Foliation only present in the marble bands at 65 ⁰ .							
22.4	27.3	Siliceous Calc-Silicate with minor siliceous biotite gneiss. Vaguely banded dark green, light green and minor grey white. Local build-ups of biotite to produce the gneiss.							

Scale

Colour Plot
& Dips

Drill Hole Record



Property		District	Hole No. CK 80-7		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK 80-7	Sheet 2
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates		True Brg.	Logged by								
Objective		% Recov.	Date								
METERAGE		Description	Sample No.	Length Metres	Analysis						
From	To				Pb	Zn					
		Becomes "quartz-soaked" and has minor disseminated pyrite over the last 0.5 m. Foliation Constant at 60°.									
27.3	46.8	Pegmatite - Coarse grained creamy white and grey to dark grey. Rounded to angular grains. Minor fuzzy small garnets locally, tr. biotite in patches. A few changes in colour and texture, for example at 38.7 the pegmatite becomes less coarse grained and more uniform in colour. Instead of the stark dark grey and cream it becomes a muddy white and light grey with usually ill-defined grain boundaries. Quite typical overall, however.									
46.8	47.5	Siliceous biotite gneiss grading quickly to greenish pegmatite. The biotite gneiss is actually quite coarse grained, but no banding is in evidence.									
47.5	48.4	Mineralized Zone - Two bands of typical high grade separated by a pegmatized (?) siliceous calc-silicate.									
		47.5 - 47.65- Mixed fine grained brown ZnS with disseminated black coarser ZnS grains and fine pyrite in a pegmatized siliceous ground mass. Some of the mineralization appears cross cutting - possible remobilization									
		Sample 47.5 - 47.65	60504	0.15	180		178				
		47.65- 48.10- Pegmatized (?) siliceous calc-silicate with a few wispy disseminated streaks of ZnS with minor pyrite. Foliation at 55°.									
		Sample 47.65 - 48.10	60505	0.45	008		08				
		48.1 - 48.25- Typical h.g. fine grained brown ZnS with qtz islands. Top contact is interlaced with white and green calc. silicate over 3 cm. Bottom contact is against a 10 cm wide pyritic siliceous biotite gneiss. Contacts are at 40°.									

Scale

Colour Plot
& Dlog

Drill Hole Record



Property	CK	District	Hole No.	CK 80-7			Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet	
Commenced		Location	Tests at		Hor. Comp.									
Completed		Core Size	Corr. Dip		Vert. Comp.									
Co-ordinates			True Brg.		Logged by									
Objective			% Recov.		Date									
METERAGE		Description	Sample No.	Length	Analysis									
From	To				Pb	Zn								
		Sample 48.1 - 48.25	60506	0.15	265	165								
		48.25- 48.40- Pyritic siliceous biotite gneiss. Fine grained dark green to black peppered with pyrite. Last half is coarse pegmatite with a few streaks and minor spots of galena.												
		Sample 48.25 - 48.40	60507	0.15	050	007								
48.4 - 49.5		Coarse biotite gneiss again is transitional to siliceous biotite gneiss. Medium grained biotite flakes set in a matrix of dark qtz and fd. First 25 cm is coarse pegmatite, and a few minor pegmatite patches with pyrite are present in the section. Foliation at the start is 65 - 70°, at the end is 40°.												
49.5 - 50.8		Banded green and white limy calc-silicate. The bands are 1 cm wide each. Green grains are mainly fine grained diopside and qtz. White is marble speckled with fine grained diopside (Sugary texture). Minor folding in evidence, but foliation overall is 45°.												
50.8 - 52.4		Marble - Light grey to white depending on qtz content medium grained, sugary texture. Minor pyrite in trace amounts disseminated randomly throughout. Few flecks of graphite present. Foliation weak at 60°.												
52.4 - 54.0		Limy calc-silicate with marble. Green and white with local grey where qtz is in more evidence. Banding variable but weak intensity. Usually at 45 - 50°. Few minor wispy bands of pyrite. Trace amounts of graphite present and one wispy band at 53.1 is apparent. Marble present as granular white over the last 20 cm.												
		End of Hole - 54.0												
		Mineralized intersection - Two 15 cm wide bands 47.65 to 48.25												
		0.75 m @ 05% Pb, 7.5% Zn												

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District	Kamloops M.D.	Hole No.	CK 80-8
Commenced	August 3, 1980	Location	Main Boulder Area	Tests at	50.3m(-43°), 118.9m(-44°) Hor. Comp. 86.3 m
Completed	August 6, 1980	Core Size	B.Q.	Corr. Dip	-44° Vert. Comp. 83.4 m
Co-ordinates	12256.9N 9058.0E	True Brg.	238°	Logged by	M.R. Murrell
Objective	To test the "East Arm" of an I.P. anomaly north of a mineralized surface showing.		% Recov.	Date	Aug. 6/80

Claim	CK
T Brg.	238°
Collar Dip	-45°
Elev.	1081.6 m
Length	120.1 m
Hole No.	CK80-8 Sheet 1

XXXX METERAGE		Description	Sample No.	Length	Analysis				
From	To								
0	20.7	Casing - overburden							
20.7	51.5	Pegmatite - Wide section of pegmatite, typical, but variable subtly throughout from coarse-grained white, to coarse-grained grey and cream-white with trace to patchy garnet, to creamy green colour (42.4-46). Becomes quite broken after 38.0 and recovery locally is quite poor. 0.6 metres of core missing at 41.8 - 42.4 that shows Fault Gouge or white mud. A thin tremolite(?) band is present at 46.4.							
51.5	52.4	Siliceous Calc-Silicate - Dark green and light green speckled, with local small pink garnets. Fine to medium-grained. Somewhat broken, and the last 30 cm is fault gouge.							
52.4	55.7	Faulted Pegmatite - Rock varies from fine-grained non-descript through coarse-grained bleached pegmatite through a 30 cm section of slightly limy pyritic calc-silicate to a finer grained greenish (chloritic from altered biotite) pegmatite. Foliation in the short calc-silicate band is 75°. Several sections, varying in width, of fault gouge, broken core, or slickensides.							
55.7	58.7	Mottled siliceous calc-silicate with a few thin marble sections, and several hair line fractures of calcite. Much of the white, green and orange mottled calc-silicate has a weak banding to it at angles from 40° to 55°. Most is soaked with quartz.							

Scale

Colour Plot
& Dips

Drill Hole Record



METERAGE		Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
From	To											
58.7	59.2	Fault Zone - Ground up rock and mylonitic brown-grey reconsolidated crud. Has 20 cm of apple green talc (?) or tremolite.									CK 80-8	2
59.2	60.4	Siliceous Calc-silicate - Dark green grains in a green-grey ground mass. and disseminated throughout with creamy small spicules. Has occasional garnet and minor local trace pyrite. Forliation weak at 60°.										
60.4	64.0	Bleached siliceous biotite gneiss and minor siliceous calc-silicate. Fine grained muddy purple brown throughout via bleached biotite. Overall fairly massive and has not been broken too much. Cut occasionally by thin calcite bands. Sequence is disrupted by a few narrow (20 - 30 cm) bands of dark green and light green semi-banded siliceous calc-silicate units, whose foliation is at 40°. No graphite appears present, but pyrite is found on several fractures.										
64.0	72.5	Pegmatite - Creamy white and grey with scattered small blotches of chloritized biotite and at least one fracture surface lined with graphite. Quite broken between 68.5 and 69.5 and may be a fault zone.										
72.5	81.8	Mixed siliceous calc-silicate, siliceous biotite gneiss and pegmatite. Most of the biotite gneiss is bleached and altered, but a central section (80.5 - 81.1) is fresh, black and unaltered. Calc-silicate is medium green, fine grained, quartz soaked and massive. It contains local disseminated to patchy pyrrhotite in trace amounts only.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	Hole No.	CK 80-8
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

METERAGE		Description	Sample No.	Length	Analysis				
From	To								
		The pegmatite looks more like a qtz. vein with minor pyrrhotite, and patchy chlorite. Foliation locally displayed at 45°.							
81.8	83.5	Pegmatite - Coarse grained, but grain boundaries are indistinct. Overall white and creamy white with up to 5% chlorite (altered biotite). Somewhat fractured, but no faulting.							
83.5	100.5	Bleached siliceous biotite gneiss with numerous sections of pegmatite and occasional fault-altered sections of siliceous calc-silicate (?). Entire section is altered either due to proximity of pegmatite, but more likely to the nearby presence of a large fault (probably paralleling Kowalski Creek). See also Hole CK 79-13. Consists mainly of short sections of muddy purple-brown bleached siliceous biotite gneiss - fine grained separated by irregular bands of chloritic pegmatite. Several green and white mottled to patchy sections could have been calc-silicate but now is altered and contorted beyond concrete definition. Could represent old, healed fault zones (?). Several thin (0.5 m) pegmatite zones - typical. Foliation - None really present - Indistinct.							
100.5	102.1	Pegmatite - Mainly grey fine grained black speckled orthogneiss grading to coarse grained grey and white pegmatite. Even though there is up to 8% small biotite flakes in the orthogneiss, there is no distinct foliation developed. Narrow bands of alteration (bleaching) affect the core at 65°, however.							

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK	District		Hole No.	CK 80-8	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK 80-8	Sheet	4
Commenced		Location		Tests at		Hor. Comp.													
Completed		Core Size		Corr. Dip		Vert. Comp.													
Co-ordinates		True Brg.		Logged by															
Objective		% Recov.		Date															
METERAGE	Description		Sample No.	Length	Analysis														
From	To																		
102.1	108.0	Altered siliceous biotite gneiss with minor sections of siliceous calc-silicate, and very minor pegmatite. Bleaching common but not ubiquitous throughout - seems somewhat selective. Calc-silicate section is mainly in the first metre as dark green massive granular core with speckles of lighter green diopside. Few broken zones with slicken sides indicates faulting of unknown magnitude. Foliation not well developed, but at 45° at start, perhaps 30° at the end and parallel at the very end.																	
108.0	111.9	Pegmatite - Medium grained, rounded granules. Interstitial biotite altered to muscovite at 5% common. Core is a muddy brown speckled colour, but becomes coarser and more typical towards the end of the section.																	
111.9	120.1	Siliceous biotite gneiss locally transitional to coarse biotite gneiss, and a few very minor thin sections of siliceous calc-silicate. Most is unaltered, but the last metre is intensely altered, with coarse muscovite present. Several broken zones: 116.4 - 116.7; 117.0 - 117.1; 117.5 - 117.7 Presence of light green fd. in the pegmatite at 116.8 similar to that seen adjacent to high grade ZnS on surface and in other core dictated the hole be drilled deeper; but this effect was lost in the next run. End of Hole at 120.1 m No mineralized intersection. Possibly the I.P. reacted to the wide, major fault zone (?).																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Kamloops Mining Division	Hole No.	CK 80-9		
Commenced	6 August 1980	Location	Main Boulder Area	Tests at	None	Hor. Comp.	--
Completed	8 August 1980	Core Size	BQ	Corr. Dip	-90 ⁰	Vert. Comp.	55.2 m
Co-ordinates	11972.6N, 9131.1E	True Brg.	--	Logged by	MRMurrell		
Objective	To test for possible down-plunge anticlinal extension		% Recov.	Date	18 August/80		
	of mineralization seen at surface.						

Metres From	Metres To	Description	Sample No.	Length	Analysis
0	3.0	Casing, overburden.			
3.0	4.2	Pegmatite, creamy white and rusty weathered. Coarse grained. Scattered garnet - oxidized.			
4.2	24.6	Siliceous biotite gneiss with local coarse grained biotite gneiss and minor pegmatite. Much is transitional between the two gneiss types. Alteration (bleaching) is fairly common, as random sections 0.5 to 2 metres long. Otherwise colour, grain size, etc is typical. Foliation fairly constant in the siliceous biotite gneiss sections, but broad open folding and fairly tight crenulated folding is common in the coarser grained, banded gneiss. Pegmatite only present as a few narrow (20 cm-40 cm) bands, but locally the gneiss appears "pegmatized". Often the bleached zones show coarse contorted muscovite. Garnets in minor amounts are locally present. Foliation: 9.0-40 ⁰ , 14.0-70 ⁰ , 15-80 ⁰ , 16-20-broad, open folds (30 ⁰), 23-55 ⁰ , 24-65 ⁰ .			
24.6	28.2	Pegmatite, coarse grained creamy yellow and white, with local greenish tinge to the fd, and along numerous fracture, slickenside surfaces. Medium grained pink-red quartz present as several narrow disseminated bands, cutting at right angles to the core axis.			
28.2	48.3	Coarse grained biotite gneiss, usually bleached, with a few siliceous biotite gneiss sections, and a few thin pegmatite sections. 28.2-30.1 Siliceous biotite gneiss - first 0.5 m slightly pegmatized. 30.1-30.4 Garnetiferous with a 2 cm siliceous-calc-silicate band @ 50 ⁰ . 30.4-31.4 Bleached, coarse muscovite-biotite gneiss, Foliation at 50 ⁰ . 31.4-31.7 Coarse pegmatite. 31.7-32.9 Bleached siliceous-biotite-gneiss. Broken zone at the start. Foliation at 60 ⁰ overall, but one parallel section. 32.9-33.2 Coarse grey and cream pegmatite.			

Claim	CK 3
T Brg.	--
Collar Dip	-90 ⁰
Elev.	1106.5 m
Length	55.2 m
Hole No.	CK80-9 Sheet 1

Scale

Colour Plot
& Dips

Drill Hole Record



Property CK Property District Kamloops Mining Division Hole No. CK 80-9

Commenced Location Tests at Hor. Comp.

Completed Core Size Corr. Dip Vert. Comp.

Co-ordinates True Brg. Logged by

Objective % Recov. Date

Metres From To	Description	Sample No.	Length	Analysis				
				Claim	T Brg.	Collar Dip	Elev.	Length
28.2 48.3	(continued):- 33.2-39.4 Very coarse muscovite-biotite gneiss. Completely bleached and altered. Foliation at 65° at the start, then is a series of rolls, open type, on the order of 1/4 metre long. Some crenulated folds. Locally fd grains have taken on a greenish (jade-like) colouration. 39.4-40.1 Siliceous biotite gneiss grading almost to a siliceous calc-silicate appearance. Mottled green and orange-pink. 40.1-46.3 Bleached coarse biotite gneiss. Foliation variable, but would be 50° on the average. Much rolling and turning over, and local crenulations. Intermixed with pegmatite, including a 25 cm quartz band at 43.6-43.85. 46.3-46.9 Green dyke - Ochre green, fine grained massive. 46.9-48.3 Coarse bleached biotite-muscovite gneiss as previous.							
48.3 51.2	Aphanitic green dyke. Massive - Ochre green. Non magnetic. Has a central 1 m band of altered bleached biotite gneiss that has pyrite on fracture surface. Much of this section is completely broken, indicating probable faulting.							
51.2 54.5	Altered bleached siliceous biotite gneiss gradational to coarse bleached biotite gneiss. Very broken indicating fault action, but no gouge is present. Foliation at 85-90°. First 20 cm is dark green amphibolite followed by 0.7 m of coarse pegmatite.							
54.5 55.2	Pegmatite, medium grained chalky yellow-white rounded grains fd. in grey quartz matrix. Quite broken. Greenish film on some fracture surfaces.							

Scale

Colour Plot & Dip

Drill Hole Record



Property CK Property District Kamloops Mining Division Hole No. CK 80-9

Commenced Location Tests at Hor. Comp.

Completed Core Size Corr. Dip Vert. Comp.

Co-ordinates True Brg. Logged by

Objective % Recov. Date

Claim
T Brg.
Collar Dip
Elev.
Length
Hole No. CK80-9 Sheet 3

From	To	Description	Sample No.	Length	Analysis
55.2		END OF HOLE. Rods stuck and broke off, leaving 37 metres of rods, core barrel, tube, back end, and part of overshot down the hole.			
		This hole did not go as far as planned, but the lack of encouragement (mineralization, carbonates, calc-silicates) seems to indicate we are not near the inferred thickened anticlinal hinge zone. With this theory and a shallow plunge, mineralization should have been intersected before this depth.			
		No mineralization - no samples cut.			

Scale

Colour Plot
& Signs

Drill Hole Record



Property	CK Property	District	Kamloops M.D.	Hole No.	CK 80-10		
Commenced	August 8, 1980	Location	Main Boulder Area	Tests at	102.4 m (-44 ⁰)	Hor. Comp.	73.0 m
Completed	August 13, 1980	Core Size	B.Q.	Corr. Dip	-44.5	Vert. Comp.	71.8 m
Co-ordinates	11880.3H 9112.5E			True Brg.	146 ⁰	Logged by	M.R. Murrell
Objective	To test for possible down-dip extension of surface mineralization at the south end of the Main Boulder Area.			% Recov.		Date	Aug. 13/80

Claim CK-3
T Brg. 146⁰
Collar Dip -45⁰
Elev. 1112.8 m
Length 102.4 m
Hole No CK80-10 Sheet 1

Footage From To	Description	Sample No.	Length	Analysis			
0 - 16	Casing - overburden.						
16 - 17.1	Casing - altered siliceous biotite-gneiss. May still be overburden - fine-grained, dark grey-black and massive. Last 20 cm is a dark green spotted dyke. Foliation at 50 ⁰ .						
17.1 - 28.4	Siliceous graphitic biotite-gneiss - with one short section of siliceous calc-silicate fine-grained, dark grey-brown. Graphite disseminated at 1-2% over 17.1 - 21.0. 21.0 - 21.5 - Pegmatite 21.5 - 22.3 - Siliceous biotite-gneiss with dark green colour - looks somewhat like siliceous calc-silicate. 22.3 - 23.2 - Siliceous calc-silicate. Mixed light green diopside and dark green grains. Soaked in grey quartz. Foliation at 45 ⁰ . 23.2 - 26.4 - Graphitic siliceous biotite-gneiss, much as previous, but graphite up to 3% locally as disseminations throughout. Fine-grained, dark grey-black with interstitial quartz. Few local disseminated pyrite bands. Foliation only locally at 45 ⁰ . 26.4 - 26.8 - Dark green aphanitic dyke. 26.8 - 28.4 - Graphitic (3%) siliceous biotite-gneiss, much as previous, with foliations at 50 ⁰ but varying locally to 30 ⁰ .						

Colour Plot
& Dip

Drill Hole Record



Property	CK PROPERTY	District	KAMLOOPS M.D.	Hole No.	CK 80-10
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No
-------	--------	------------	-------	--------	---------

METERAGE From To	Description	Sample No.	Length	Analysis					
28.4 - 29.3	Siliceous calc-silicate - Semi-banded light grey, dark green grains, in a matrix of muddy white quartz. Foliation at 40°. Few specks of disseminated pyrite locally are present.								
29.3 - 36.8	Graphitic siliceous biotite-gneiss - Most is typical grey to dark grey, fine-grained, but no well developed foliation. Graphite is common as 1% disseminated flakes throughout, but locally (i.e. 32.6) can be as high as 4-5%. Becomes quite quartz rich after this (32.6) so that grey white streaks almost parallel to the core is common. Weak foliation throughout at 50°, at the bottom is 20-30°. Minor pyrite as films on fracture surfaces. 35.8 - 36.3 is biotitic pegmatite.								
36.8 - 43.3	Dark muddy green dykes. Aphanitic to fine-grained. Has numerous criss-crossing calcite filled fractures. Varies in grain size through its length. Texture also from aphanitic to rounded grains. Several broken zones may be representing local faulting on a minor scale. The dyke is lighter coloured and quite calcitic over the last metre.								
43.3 - 55.0	Siliceous biotite-gneiss with one short section of siliceous calc-silicate. Most has the muddy ochre-brown colour characteristic of the fault zone alteration of the main boulder area. Graphite is not present. Contains a few 20 cm wide calcite zones - likely a late fracture filling feature, one encloses a large (1 cm) wide pyrite grain. Most of the foliation cross-cuts at 50°, but at 51.0 - 52.0 is essentially parallel to core, contacting with a thin pure white marble band. 52.4 - 53.3 - Mottled siliceous calc-silicate - patchy dark green, light green and white.								
	Small cream spicules throughout. First 20-30 cm quite limy. Garnet only common								

Scale

Colour Plot
& Dips

Drill Hole Record



Property CK PROPERTY District KAMLOOPS M.D. Hole No. CK 80-10
 Commenced Location Tests at Hor. Comp.
 Completed Core Size Corr. Dip Vert. Comp.
 Co-ordinates True Brg. Logged by
 Objective % Recov. Date

Rock From	METERAGE To	Description	Sample No.	Length	Analysis				
					Claim	T Brg.	Collar Dip	Elev.	Length
	53.3 - 55.0	Unaltered, fine-grained, siliceous biotite-gneiss with calc-silicate overtones, otherwise typical. Bleached over the last 30 cm on contact with the underlying pegmatite. Foliation - suggested at 45°.							
	55.0 - 65.8	Pegmatite - coarse rounded grains. Chalky yellow-green rounded fd., with grey quartz quite fractured and locally broken, but no definite indications of faulting. Local garnet clusters as small pink fuzzy grains.							
	65.8 - 69.6	Altered siliceous biotite-gneiss, local siliceous calc-silicate, and a thin dyke unit, minor pegmatite. No distinct foliation in the gneiss unit, but the thin calc-silicate unit and the contact with the dyke has foliations at 45°. Gneiss is actually coarser-grained than most in this hole, but no segregation banding is present. The aphanitic dyke is typical, slightly washed up, possible minor faulting.							
	69.6 - 72.8	Siliceous calc-silicate, bull quartz vein, and minor siliceous biotite-gneiss.							
	69.6 - 70.0	Mixed mottled green and orange siliceous calc-silicate and a thin (10 cm) band of speckled white and green marble. Foliation at 45°.							
	70.0 - 70.5	Black siliceous biotite-gneiss.							
	70.5 - 72.0	White quartz with a few thin pyrrhotite lined fractures, and a few thin bands of patchy white and cream pyrrhotite bearing limy calc-silicate.							

Hole No. CK80-1 Sheet 3

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK PROPERTY	District	KAMLOOPS M.D.	Hole No.	CK 80-10
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

METERAGE From To	Description	Sample No.	Length	Analysis					
				Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-10 sheet 4
72.8 - 74.3	Marble - White granular, but speckled throughout with medium-grained grains of medium green diopside, and rounded quartz grains. Some foliation parallel to core inferring this is not a wide unit.								
74.3 - 79.6	Siliceous Calc-Silicate - Most is mottled dark green and light green soaked with quartz, but some (i.e. 76 - 76.6) is mottled with coarse orange garnet. An occasional band of white marble (10 cm) is also present. First 40 cm is banded green and white @ 50°. Becomes more marble rich toward a probable minor fault at 77.5. Contains a 0.5 m pegmatite band at 78.3 - 78.8.								
79.6 - 89.4	Limy Calc-Silicate - Mixed mottled and contorted green blotchy calc-silicate and inter "fragmental" white granular marble. Quite limy throughout. No foliation to a suggestion of low angle foliation rolling back and forth. At 81.9 it becomes less limy, and speckled marble is not present beyond this point, but the core is still reactive to HCl. Most is then mottled to very slightly banded, with foliations varying from 45° to almost parallel locally. Pyrrhotite, although not always present, is found in trace amounts as minute disseminations, or as a few 10 cm wide semi-massive patchy bands.								
89.4 - 90.2	Mixed pegmatite and marble - White, almost pure quartz pegmatite, and coarse white diopside speckled marble. Trace pyrrhotite on 55° fractures in the pegmatite.								

Scale

Colour Plot
& Pipe

Drill Hole Record



Property	CK	District	KAMLOOPS M.D.	Hole No.	CK 80-10
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

From	To	Description	Sample No.	Length	Analysis				
					Claim	T Brg.	Collar Dip	Elev.	Length
90.2	99.4	Siliceous biotite-gneiss often transitional to coarse biotite-gneiss, and locally bleached to a brown-ochre colour. Black-grey otherwise. Banding dependant on amount of segregation, variable between 25 ⁰ and 45 ⁰ , would average perhaps 30 ⁰ . Contains a pegmatite section which grades to orthogneiss at 93.5 to 94.3. Streaky graphite present in a quartz vein at 98.1.							
99.4	101.0	Siliceous calc-silicate - speckled but semi-banded. Light green (fine-grained) and dark green (coarse-grained) in a white quartz matrix. Locally biotite is present. Small creamy specks scattered randomly throughout in 1% amounts. Trace disseminated pyrrhotite, garnet.							
101.0	102.4	Siliceous biotite-gneiss - much as previous. Locally bleached. Cut by quartz rich pegmatite. Foliation at 45 ⁰ .							
		End of Hole - 102.4.							
		No mineralization was encountered. Either the surface showing is not bedrock (or slightly disturbed bedrock) or, the structure is more complicated than anticipated so that the hole did not reach the mineralized horizon.							

Hole No: CK80-10 Sheet 5

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	KAMLOOPS M.D.	Hole No.	CK 80-11
Commenced	August 15, 1980	Location	Main Boulder Area	Tests at	61m(-75°), 84.10m(-74°)
Completed	August 18, 1980	Core Size	B.Q.	Corr. Dip	74.9°
Co-ordinates	12245.5N 9005.0E			True Brg.	238°
Objective	To test for the extension of a high-grade surface showing to the north, by testing a "North Plunging Syncline" theory.		% Recov.	Date	Aug. 19/80

Claim	CK 23
T Brg.	238°
Collar Dip	-75°
Elev.	1100.1 m
Length	84.1 m
Hole No.	CK80-11
Sheet	1

Rock	METERAGE	Description	Sample No.	Length	Analysis
From	To				
0	14.0	Casing - overburden.			
		Note: Almost all the rock sections in this hole have been variously altered and/or bleached so that they don't resemble the "type" rock in other holes. It is inferred this is due to the proximity of a large fault. (Perhaps one running up Kowalski Creek?) As such, the rock types are often difficult to assign, and some sections may be open to dispute.			
14.0	20.1	Siliceous calc-silicate. Overall a dark green colour, set in dark green-grey quartz. Medium-grained. First part is pegmatized. A few short sections could have been biotite-gneiss, but now all the biotite has been chloritized, so that it is dark green in colour. Much of this core is broken, likely indicating fault action, especially at 18.4 - 18.9. Foliation: varies from 30° to 45°.			
20.1	35.5	Graphitic and pyrrhotitic altered biotite-gneiss with minor short sections of dark green siliceous calc-silicate. Quite broken over much of this interval. Siliceous biotite-gneiss is dark grey-green to somewhat ochre-green-brown (bleached) and usually contains perhaps 2% graphite as very fine disseminations throughout. Graphite also present as smears on numerous fracture surfaces, some of them slickensided. Pyrrhotite is present in several semi-massive bands, usually with an increase in disseminated graphite (3-5%) and mixed with fine-grained pyrite. These bands can be up to 30 cm wide, and can be closely spaced.			

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK	District	KAMLOOPS M.D.	Hole No.	CK 80-11	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK80-11 <th>Sheet</th> <td>2</td>	Sheet	2
Commenced		Location		Tests at		Hor. Comp.													
Completed		Core Size		Corr. Dip		Vert. Comp.													
Co-ordinates		True Brg.		Logged by															
Objective		% Recov.		Date															
From	METERAGE To	Description	Sample No.	Length	Analysis														
		Sample 29.0 - 30.0	60510	1.0	Pb	Q01	Zn	Q06											
		Foliation - Average 45°, but is 65° over the last metre.																	
35.5 - 40.6		Pegmatized siliceous calc-silicate. Light grey to white quartz, semi-banded, with light green fine-grained diopside grains, speckled with darker green grains. Occasional section contains bleached biotite flakes. Grain size coarsens and darkens, and becomes more banded toward the end so that it could almost be called a banded amphibolite over the last 0.5 metres. Foliation at 55° at start, 45° at end.																	
40.6 - 43.3		Pegmatite - Overall white, plagioclase, with minor grey quartz, and has numerous grains of pink orthoclase over much of the central section. It is unusual for pink orthoclase to occur in the core to date.																	
43.3 - 47.3		Fault Zone - Consists mainly of dark green, fine-grained streaky (laminated looking) amphibolite and a few short sections of white pegmatite, with much broken core, fault gouge, and green mushy faulted amphibolite. Impression is that the fault is very steep, cutting the core at 30°(?). Much is brecciated and rehealed. Some is mildly calcareous. Foliation - 30°.																	
47.3 - 48.5		Pegmatite - Creamy white and grey. Slightly pitted, otherwise quite typical.																	
48.5 - 52.4		Hornblende - garnet dyke (amphibolite) - streaky, dark green. Fine-grained, hornblende grains scattered through an aphanitic white matrix, containing clusters and disseminations of pink garnets																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-11							
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	Metres To	Description	Sample No.	Length	Analysis						
48.5	52.4	up to 0.5 cm wide. Foliation or banding varies from 55° at the start to 35° at the end. (Continued) Local variations includes some parallel to core foliation.									
52.4	55.3	Pegmatite - Chalky white and grey, with a few dark granular hornblende patches. Some feldspar takes on a light green colour towards the end, and is mixed with orthoclase.									
55.3	57.5	Mottled silicious calc-silicate - Irregular-ragged edged mottles of pink-white garnet in light green to dark green diopside and hornblende, quartz is not abundant, but ratio of the constituents is quite variable, as is grain size. Pyrrhotite as blebs occasionally present, usually in the darkest green portions of the core. Foliation suggested at 30° to core axis.									
57.5	61.5	Pegmatite - Chalky white and grey as previous, locally broken and slickensided (poss.-minor fault). Orthoclase present only over 20 cm at the end. Contains a central 30 cm band of coarse mottled silicious calc-silicate as above. Few blebs of pyrrhotite are present over latter portions of this section.									
61.5	62.7	Slightly limy calc-silicate. Dark green, fine grained, with irregular eyes of white-grey plagioclase and quartz. Much of the core is broken. No foliation is discernable.									
62.7	65.1	Fault zone in pegmatite. Only 1.1 metres of core recovered over this 2.4 metre section. Most was apparently lost at 63.1 - 64.5 (Fault Zone). Pegmatite is fairly massive white and									

 Claim
 T Brg.
 Collar Dip
 Elev.
 Length
 Hole No.
 CK 80-11

Sheet 3

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-11	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						CK80-11	4
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Footage	Description	Sample No.	Length	Analysis							
From To				Pb		Zn					
62.7 - 65.1	grey grading to yellow green with grey. Much is broken.										
(Continued)											
65.1 - 66.0	Marble - Fine grained white streaked with 3-4% dark green diopside grains. Somewhat silicious. Garnet and diopside development at 65.8 to make it locally a limy calc-silicate. Foliation constant at 65°.										
66.0 - 70.0	Bleached silicious biotite gneiss. Medium-grained, slightly banded, bleached to the common ochre-brown colour. Contains a central 20 cm section of silicious calc-silicate with streaky quartz that looks much like the Pb mineralized section in CK 79-3. The lower contact of this bleached unit looks similar, and may contain trace ZnS.										
	Sample 69.85 - 70.0	60511	0.15	003		050					
70.0 - 76.6	Silicious calc-silicate with local limy sections, with a zone of bleached biotite gneiss, and two narrow zones of black sphalerite mineralization.										
	70.0 - 70.9 Banded limy calc-silicate, somewhat silicified, with trace disseminated pyrrhotite										
	70.9 - 72.5 Bleached and broken silicious biotite gneiss. Foliation at 60°.										
	72.5 - 74.6 Coarse grained dark green and white silicious calc-silicate. Could almost be called an amphibolite. Minor garnet. Trace Pyrrhotite.										
	74.6 - 76.6 Typical mottled silicious calc-silicate, with a few thin limy sections and containing two thin sections of sphalerite.										
	75.35- 75.4 A few streaky bands of black (recrystallized) sphalerite in irregular quartz veins in silicious calc-silicate.										

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District		Hole No.	CK 80-11	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK 80-11	Sheet	5
Commenced		Location		Tests at		Hor. Comp.													
Completed		Core Size		Corr. Dip		Vert. Comp.													
Co-ordinates		True Brg.		Logged by															
Objective		% Recov.		Date															
From	Metre To	Description	Sample No.	Length	Analysis														
					Pb		Zn												
	75.35-75.40	(Continued)																	
		Sample 75.35 - 75.40	60512	0.05	-001		115												
	75.40-75.65	Typical unmineralized silicious calc-silicate																	
		Sample 75.40 - 75.65	60513	0.25	-001		014												
	75.65-75.68	Massive black ZnS band, cutting at 45°.																	
		Sample 75.65 - 75.68	60514	0.03	-001		105												
76.6 - 84.1		Pegmatite - Fine to medium grained, speckled to spotted pegmatite. Grey and white, with minute bleached biotite flecks scattered throughout till 81.4, after which it looks like more typical coarse grained white pegmatite with a few fracture zones. Last 10 cm is bleached bio-gneiss.																	
		END OF HOLE - 84.1 m																	
		Mineralized section - two thin (3 cm) massive black coarse grained ZnS sections of 75.35 - 75.68.																	
		75.35 - 75.68 0.33 m @ -0.01% Pb, 2.8% Zn.																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Kamloops, M.D.	Hole No.	CK 80-12
Commenced	August 22nd, 1980	Location	Raft Synform	Tests at	None
Completed	August 28th, 1980	Core Size	B.Q.	Corr. Dip	-45 ⁰
Co-ordinates				True Brg.	273 ⁰
Objective	To test for Zn/Pb mineralization near the inferred fold closure of the Raft Synform. Inferred by geology, geochemistry and geophysics.			% Recov.	
				Logged by	M.R. Murrell
				Date	Sept. 7, 1980

Meterage		Description	Sample No.	Length	Analysis				
From	To								
0	3.0	Casing							
3.0	3.8	Graphitic Silicious biotite gneiss - Dark grey and black, fine-grained, minute flakes of graphite at 2-3% disseminated evenly throughout. Somewhat broken due to surface weathering. Pyrite films on fracture surfaces. Foliation not distinguished.							
3.8	6.9	Pegmatite- Medium grained, grey and creamy with indistinct grain boundaries. Locally disseminated black biotite grains. Contains a central 20 cm band of graphitic sil bio gneiss. Much is oxidized to yellow-brown colour (surface weathering).							
6.9	9.8	Graphitic and pyritic silicious biotite gneiss - Dark grey to almost black, fine-grained. Graphite is not evenly distributed, but appears as disseminated build-ups locally. Short sections have eye-like plag-grains, a result of partial pegmatization(?). Foliation at 60 ⁰ to 70 ⁰ . Pegmatite from 8.8 to 9.8.							
9.8	13.0	Coarse muscovite-biotite gneiss grading slowly to graphitic silicious biotite gneiss. First half is coarse grained silvery-green to grey, passes through a broken (fault?) oxidized zone at 11.0 to 11.5 and is finer grained graphitic (3-4%) thereafter foliation is 40 ⁰ to 45 ⁰ throughout.							
13.0	19.8	Orthogneiss, or possibly a pegmatized biotite gneiss. Fine-grained grey and speckled throughout by very fine foliated black biotite grains at 45 ⁰ . Does not look like the typical							

Claim	Park 1
T Brg.	273 ⁰
Collar Dip	-45 ⁰
Elev.	1603 m
Length	77.1m
Hole No.	CK80-12
Sheet	1

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-12	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						CK80-12	2
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	Meterage To	Description	Sample No.	Length	Analysis						
13.0	19.8	(Continued) orthogneiss seen in other holes in that it has a darker overall colour, and a higher percentage (5-7%) of biotite. Also has a few narrow (5 cm) cross cutting greenish alteration bands.									
19.8	20.5	Silicious calc-silicate - Interbanded to locally almost laminated dark green and light green. The light green portions are composed of diopside and quartz, whereas the darker green is mainly amphiboles and quartz and could more properly be called an amphibolite. Other sections beyond this section are quite similar and could be referred to as interbanded calc-silicate and amphibolite, but for consistency will be called banded silicious calc-silicate. Foliation well pronounced at 50°.									
20.5	26.6	Pegmatite - biotitic. Grey and white medium-grained. Ill defined grain boundaries. Biotite as disseminated coarse patches and scattered grains, gives the pegmatite a weak foliation at 55°. Has a few short silicious biotite gneiss sections.									
26.6	30.7	Mixed silicious biotite gneiss and silicious calc-silicate. Section starts off as mainly silicious bio gneiss with minor calc-silicate, but reverses the order throughout the length. Sil biotite gneiss is fairly typical, massive, black, is fine-grained to locally medium-grained, has no graphite, but locally has small amounts of disseminated pyrite. Sil calc-silicate is moderately banded light green and grey, locally having dark green (amphibolite) bands. One short section has minute garnets. Contains 0.5 m pegmatite.									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-12	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at							CK80-12	3
Completed		Core Size	Corr. Dip								
Co-ordinates			True Brg.								
Objective			% Recov.								
From	To	Description	Sample No.	Length	Analysis						
26.6	30.7	(Continued) Foliation is constant and consistent at 60°.									
30.7	31.4	Pegmatite - Coarse, white and creamy yellow, with slight tinge of green, minor biotite.									
31.4	33.5	Silicious calc-silicate with a few minor bands of limy calc-silicate. Overall is fine-grained and light green with a few dark green bands. Minor creamy speckles. Disseminated to somewhat patchy pyrrhotite in trace amounts locally. The limy sections are 5-10 cm wide, white with dark green disseminated diopside. Weathered fracture zone at 31.7 - 32.0 may be a minor fault. Foliation at 70°.									
33.5	46.6	Pegmatite - Medium to coarse-grained, grey and cream yellow. Local greenish tinge, but minor. Much of the core is slightly oxidized on surface to yellow-brown colour. Some build-ups of massive grey quartz, such as 43.2 - 44.0. Small biotite grains randomly scattered throughout, and occasioned pyrrhotite blebs are present, but minor.									
		36.9 - 37.8 Fine grained silicious biotite gneiss - black and dark grey with local greenish alteration. Foliation at 70°.									
46.6	53.4	Silicious calc-silicate grading through a banded mixture of silicious calc-silicate and amphibolite gneiss, to a silicious biotite gneiss.									
		46.6 - 48.3 Silicious calc-silicate - Mainly light green and grey, but slightly banded with darker green amphibole grains. Irregular patchy garnet locally, varies									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK80-12
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length	Analysis				
					Claim	T Brg.	Collar Dip	Elev.	Length
	46.6 - 48.3	from whitish pink to almost blood red. (Con't.)							
	48.3 - 52.2	Interbanded light green sil calc-silicate and amphibolitic. Thin bands to almost laminations - Few 10 cm wide slightly limy sections. Pyrrhotite is disseminated at 5% between 51.3 and 51.7. Foliation 75°.							
	52.2 - 53.4	Silicious biotite gneiss. Fine-grained dark grey and black, typical. Has blebby disseminated bands at pyrrhotite at 52.9 - 53.0.							
	53.4 - 54.1	Pegmatite - Coarse-grained grey and cream white, irregular, ill defined grains. No foliation.							
	54.1 - 60.9	Mixed silicious biotite gneiss and silicious calc-silicate. Both are fairly typical, but are mixed so that sometimes individual rock bands are 2-3 cm wide, sometimes as much as 20-30 cm wide. Garnet present in the calc only locally in minor amounts. Foliation consistent and constant throughout at 80°.							
	60.9 - 65.5	Partially pegmatized silicious biotite gneiss. Mainly medium to light grey colour, fine grained, with much higher quartz-plagioclase content than usual for bio-gneiss, but no segregation banding. Minor local muscovite and garnet. Foliation constant at 75°, but often is not well developed.							
	65.5 - 68.3	Silicious calc-silicate changing to limy calc-silicate, with a few thin (10 cm) beds of grey fine-grained silicious marble, and containing three narrow bands of fine-grained ZnS							

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No. CK80-12		Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-12	Sheet 5
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length	Analysis						
65.5	68.3	(Continued)			Pb	Zn					
		mineralization.									
		65.5 - 66.9 Silicious calc-silicate (light green to dark green with disseminated garnet) and a few thin bands of graphitic silicious biotite gneiss. Foliation at 65°.									
		Sample 66.4 - 66.9	60515	0.5	0.01	0.03					
		66.9 - 66.93 2 cm wide band of very fine grained brown high-grade ZnS, minor pin point specks of quartz enclosed.									
		Sample 66.9 - 66.93	60515	0.03	2.00	12.00					
		66.93 - 67.20 Silicious calc-silicate and greenish pegmatite. Minor trace amounts of graphite, but no ZnS visible.									
		Sample 66.93 - 67.20	60517	0.27	0.03	0.19					
		67.20 - 67.35 Mainly a very fine grained grey white limestone (slightly graphitic?) with minute quartz specks. At either boundry is fine grained brown ZnS. The top band is about 2 cm wide, but slightly irregular and interbedded with white limestone, followed by 2 cm of green quart rich calc-silicate before the sharp contact with the marble. The lower band is only 0.5 cm wide immediately against the limestone, and against a lower pyritic and graphitic 2 cm band of silicious calc-silicate (?).									
		Sample 67.20 - 67.35	60518	0.15	0.68	2.13					
		67.35 - 67.65 Goes from the graphitic band mentioned above through an 8 cm wide grey speckled marble zone, through a granular black and white eye-like gneiss. No apparent ZnS.									

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	Hole No.	CK80-12
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length	Analysis					
					Claim	T Brg.	Collar Dip	Elev.	Length	
		67.35 - 67.65 Sample 67.35 - 67.65 (Cont'd.)	60519	0.30	0.01	0.03				
		67.65 - 68.3 Granular pegmatite changing to granular grey silicious calc-silicate, somewhat banded, with foliation at 75°.								
		68.3 - 77.1 Coarse muscovite-biotite gneiss grading through black soft eye-like biotite gneiss to a black silicified biotite gneiss. Contains a 40 cm band of mixed marble and calcareous calc-silicate at 70.1 - 70.5. Segregation banding is not present, and foliation fairly constant (at 70°), but minor crenulation folding is present. From 74.1 to 75.9 only 0.5 m of core is recovered - Possibly was a broken-up mylonitic calc-silicate, in a fault zone? Core is quite broken beyond this point - wedged the core tube - drilling problems, so hole was shut down.								
		END OF HOLE - 77.1 m								
		Mineralization - 3 thin (2cm, ½cm) bands in a limy section between 66.9 and 67.35 (0.45m).								
		66.90 - 67.35 0.45m of 0.38% Pb, 1.6 % Pb.								

 Hole No.
CK80-12
Sheet
6

Scale.

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Kamloops, M.D.	Hole No.	CK 80-13
Commenced	August 28, 1980	Location	Raft Synform Area	Tests at	65.9 m (-73°)
Completed	September 1, 1980	Core Size	B.Q.	Corr. Dip	-72°
Co-ordinates				True Brg.	273°
Objective	To further test the Raft synform by extending the inter-section obtained in CK 80-12.			% Recov.	
				Date	Sept. 8, 1980

Claim	Park 1
T Brg.	273°
Collar Dip	-70°
Elev.	1603 m
Length	84.1 m
Hole No.	CK 80-13
Sheet	1

From	To	Description	Sample No.	Length	Analysis
0	3.0	Casing			
3.0	7.6	Pegmatite - Coarse granular to subrounded grains of feldspar and quartz. Quite broken and discoloured by surface oxidation. Colour - creamy yellow-white, grey, and oxide.			
7.6	10.5	Graphitic silicious biotite gneiss - typical grey and black, slightly coarser grained than usual. Minor segregation banding locally. Graphite disseminated at 2-3%. Contains a 15 cm band of very coarse biotite-crenulated. Gradational change through interbanding to the underlying silicious calc-silicate. Foliation at 65°.			
10.5	13.0	Silicious calc-silicate - Dark green and grey, with much pink garnet over the latter portion as disseminated mottles to blotches. First portion has the small cream spicules and, 15 cm is quite graphitic (2-3%). Moderate foliation at 55°.			
13.0	14.7	Pegmatite - interbanded with pegmatized biotite gneiss. Pegmatite is coarse grey and white, with a few blotches of coarse black biotite. Foliation at 65°.			
14.7	20.7	Pegmatized silicious biotite gneiss (looks much like orthogneiss). Overall is fine grained, light to medium grey, with minute biotite flakes scattered throughout, giving a weak to moderate foliation to the core. First metre is bleached to a ochre brown colour, and the core is quite broken, inferring a probable fault at 16.1 - 17.1. Local greenish alteration.			

Foliation - weak but constant at 65°.

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-13	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-13	Sheet 2
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length	Analysis						
20.7	23.6	Silicious calc-silicate, interbanded with dark green medium grained amphibolite (not silicious calc-silicate). Bands vary in width from a few cm to almost laminations. Contains 1 metre of pegmatite from 21.7 to 22.5. Looks much like sections in CK80-12. Foliation at 75°.									
23.6	26.0	Speckled pegmatite - Mainly a grey colour, but containing 30-40% white feldspar as minute to 2 mm grains scattered fairly evenly throughout. Minute biotite flakes can locally form a small percentage, contributing to the greyish colouration. Often they are partially bleached or chloritized. Fairly massive overall, but weak foliation is present at 70°.									
26.0	30.0	Mixed silicious biotite gneiss and silicious calc-silicate. Black, dark green, grey-white and minor light green. Most is a handblend rich silicious biotite gneiss, often partially pegmatite, but has a few short section and one wider section (0.5m) of banded silicious calc silicate. The wide section (28.1 - 28.6) has disseminated to banded pyrrhotite, overall averaging 3-4%. Foliation moderately developed, (but not the interbanding seen previous) at 85°.									
30.0	40.7	Pegmatite - Somewhat variable through this long length, but overall changes from a quite coarse grained, locally biotitic, type to a finer grained, massive cleaner type at 38.1. Overall is grey and light greenish colour. (Light green colour due to Pb rich feldspar). Fairly massive, but contains oxidized fractures. Massive hard grey bull quartz at 31.4 to 32.0. Few small areas of disseminated patchy pyrrhotite.									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-13	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at							CK 80-13	3
Completed		Core Size	Corr. Dip								
Co-ordinates			True Brg.								
Objective			% Recov.								
Route	Meterage	Description	Sample No.	Length	Analysis						
From	To										
40.7	42.6	Mixed silicious biotite gneiss and amphibolite. Light green fine grained and dark green medium grained, with white feldspar where amphibolite predominates. Quite well banded, from laminations to zones a few cm wide. Few rehealed fracture zones. Foliation at 85°.									
42.6	51.4	Pegmatite - Coarse grained to very coarse grained. Quite oxidized, but not broken up. Creamy yellow colour, with local grey where quartz is more abundant. Calcite and pyrite on a few fracture surfaces. Becomes non-oxidized after 48.0.									
51.4	56.9	Mainly silicious biotite gneiss with lesser silicious calc-silicate. Most is fine to medium grained grey to black silicious biotite gneiss with minor interbeds, increasing to wider zones of fine grained light green with white silicious calc-silicate. Disseminated graphite locally present in the gneiss. Garnets locally present in the calc-silicate. Pyrrhotite as disseminated grains to blebs at 10% from 54.5 to 54.6. No segregation banding, but foliation is moderately developed at 80 to 85°.									
56.9	59.1	Bleached silicious biotite gneiss. Overall light ochre-brown colour fine grained. No foliation in first half, but the latter half is graphitic, silicious, and foliated at 80°.									
59.1	61.5	Mixed silicious biotite gneiss and silicious calc-silicate.									
		59.1 - 59.7 Graphitic black silicious biotite gneiss (Graphite at 1-2%).									
		59.7 - 60.1 Pegmatized calc-silicate changing to coarse muscovite biotite gneiss.									
		60.1 - 61.0 More typical dark silicious bio gneiss, tr. graphite, foliation at 75°.									

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District		Hole No.	CK 80-13	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK 80-13	Sheet	4	
Commenced		Location		Tests at		Hor. Comp.		Vert. Comp.		Logged by		Date								
Completed		Core Size		True Brg.		% Recov.														
Co-ordinates		Objective																		
From	To	Description	Sample No.	Length m	Pb	Zn														
	61.0 - 61.5	Silicious calc-silicate, interbanded with dark green amphibolitic rock. Light and dark green. Foliation at 85°.																		
	61.5 - 62.7	Silicious calc-silicate, with two narrow bands of ZnS mineralization. The calc-silicate varies from slightly mottled green, white, and orange, through a 20 cm band of dark green black slightly graphitic biotite gneiss, through a semi-banded mottled dark green, orange and grey calc-silicate, to a graphitic, quartz rich, pyrrhotitic calc-silicate. The mineralization is confined to two bands over the latter portion (16 cm). 61.5 - 61.9 Slightly mottled. 61.9 - 62.55 Slightly graphitic, semi-banded quartz rich silicious calc-silicate, with garnet. Sample 61.9 - 62.55	60520	0.65	0.02	0.06														
	62.55 - 62.7	1.5 cm wide band of fine grained brown high grade ZnS mineralization, followed by 8 cm slightly pyrrhotitic quartz rich calc-silicate, then a 2 cm wide white quartz vein, followed by 4 cm of massive brown ZnS mineralization with small quartz eyes. Sample 62.55 - 62.7	60521	0.15	0.75	2.53														
	62.7 - 64.4	Mainly fine grained grey silicious muddy limestone, a short section of black silicious biotite gneiss, and pegmatite. 62.7 - 63.6 Medium grey muddy, quartz spotted limestone. Has a central 15 cm section of quartz-eye muscovite-biotite gneiss that has a few thin wisps at ZnS at the start. Flowage (?) seen in the limestone. Foliation 25° - 70°.																		

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-13	Claim	T. Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						CK 80-13	5
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length m	Pb	Zn					
	62.7 - 63.6	Sample 62.7 - 63.6 (Cont'd.)	60522	0.9	0.01	0.05					
	63.6 - 63.94	10 cm limestone green massive silicified calc-silicate followed by 24 cm of coarse grey and white pegmatite.									
		Sample 63.6 - 63.94	60523	0.34	0.01	0.02					
	63.94 - 63.95	1 cm of ZnS between the overlying pegmatite, and underlying calc-silicate									
		Sample 63.94 - 63.95	60524	0.01	0.02	1.20					
	63.95 - 64.4	Limy calc-silicate. Not as limy as it looks. White to creamy white, speckled with rounded brown-grey quartz grains. Feint foliation at 70°.									
		Sample 63.95 - 64.4	60525	0.45	0.01	0.01					
	64.4 - 65.6	Coarse biotite gneiss mixed with pegmatite. Black and white, with same segregation banding, but developed as white lenses rather than distinct banding. Variable folding and minor crenulations. Trace graphite disseminated.									
		Sample 64.4 - 65.6	60526	1.2	0.01	0.03					
	65.6 - 66.4	Mixed rock types - Starts off as banded silicified-limy calc-silicate (light yellow, light green, translucent grey, trace garnet) changes to coarse muscovite-biotite gneiss, then to a splotchy green and white rock. No apparent sulphides									
		Sample 65.6 - 66.4	60527	0.8	0.01	0.01					

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-13	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	CK 80-13	Sheet	6
Commenced		Location	Tests at	Hor. Comp.									
Completed		Core Size	Corr. Dip	Vert. Comp.									
Co-ordinates			True Brg.	Logged by									
Objective			% Recov.	Date									
From	To	Description	Sample No.	Length m	Analysis								
					Pb	Zn							
66.4	70.0	Silicious biotite gneiss with minor silicious calc-silicate, and minor pegmatite. Contains a thin band of ZnS mineralization.											
66.4	67.57	Mixed black, eye-like gneiss and coarse blotchy pegmatite.											
		Sample 66.4 - 67.57	60528	1.17	0.01	0.02							
67.57	67.6	1 cm of flow-banded brown ZnS under a disseminated quartz and pyrrhotite band.											
		Sample 67.57 - 67.6	60529	0.03	0.45	5.60							
67.6	68.3	Eye-like coarse muscovite-biotite gneiss, some greenish alteration and minor pegmatite.											
		Sample 67.6 - 68.3	60530	0.7	0.01	0.02							
68.3	70.0	Black silicious biotite gneiss, somewhat intermixed with coarse biotite gneiss, thin band of green amphibolite, and the last 0.4 m is speckled pegmatized and slightly bleached silicious biotite gneiss. Foliation at 60°, but variable.											
70.0	75.6	Pegmatite and pegmatized silicious biotite gneiss. Pegmatite is chalky yellow-white and grey, often with oxidized tension gashes. The gneiss varies from fine grained to coarse and coarse speckled. Is very speckled over the last 0.6 m. Foliation is developed in the gneiss at a constant 75°. Few tension gashes at 30°.											
75.6	78.3	Silicious calc-silicate. Looks much like limy calc-silicate. Banded to granular aphanitic light green and yellow, with white. Locally slightly porous due to weathering of very small amounts of calcite (marble). Flow banding or wavy foliation quite common. In the less disturbed sections, the "foliation" is at 60 to 65°. Contains a central 40cm section of pegmatite.											

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-13	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK 80-13	Sheet 7
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
Rockage From	Meterage To	Description	Sample No.	Length	Analysis						
78.3	80.0	Pegmatite - white with minute black biotite speckles. May be pegmatized silicious bio gneiss. Locally the biotite has been chloritized. Foliation at 65 ⁰ , but somewhat variable, and possible overturning is in evidence.									
80.0	84.1	Silicious biotite gneiss partially pegmatized locally, and very pegmatized over the last 1.0 m. Otherwise medium to coarse grained, medium grey and black. Almost no foliation is developed, but in a few instances, a weak development at 70 ⁰ is present. No graphite or pyrrhotite apparent.									
		END OF HOLE 84.1m									
		Mineralization: Occurs as several thin bands near a muddy limestone layer. The same equivalent horizon as in CK 80-12. Dip of bed is 30 ⁰ . Not remobilized, and no structural thickening is in evidence.									

Scale

Colour Plot
& Tips

Drill Hole Record



Property	CK Property	District	Kamloops M.D.	Hole No.	CK 80-14
Commenced	Sept. 3, 1980	Location	Raft Synform Area	Tests at	78.0 (-50 ⁰)
Completed	Sept. 5, 1980	Core Size	B.Q.	Corr. Dip	-48 ⁰
Co-ordinates				True Brg.	270 ⁰
Objective	To test for Zn, Pb mineralization in the inferred closure area of the Raft Synform			% Recov.	
				Logged by	M.R. Murrell
				Date	Sept. 11, 12, 1980

Claim	Park 1
T Brg.	270 ⁰
Collar Dip	-45 ⁰
Elev.	1609.5 m
Length	90.5 m
Hole No.	CK80-14
Sheet	1

From	To	Description	Sample No.	Length M	Analysis		
					Pb	Zn	Cu
0	3.0	Casing					
3.0	17.0	Silicious calc-silicate interbanded with silicious biotite gneiss at the start, which gradually changes to amphibolite at the latter half. Overall the biotite gneiss in dark grey to black, fine grained and not well foliated. The calc-silicate is mainly light green fine grained diopside and fairly massive at the start, which gradually becomes interbanded to interbedded with the coarse green amphibolite. Foliation at the start and over much of this section in 45 ⁰ , but towards the end is 60 ⁰ . Trace disseminated pyrrhotite is present over a few short sections (i.e. 10.2 - 10.4).					
17.0	17.8	Pegmatite followed by silicious biotite gneiss. Pegmatite is typical, medium grained. Gneiss is fine grained to medium grained, medium to dark grey, with foliation moderately developed.					
17.8	21.2	Silicious calc-silicate with narrow zones of calcareous calc-silicate. Overall light green (diopside) fine grained, with minor banding of darker green amphiboles. The calcareous portions are randomly scattered through as zones about 10-20 cm wide, and are granular white in appearances. Becomes more soaked in quartz over the latter part, and has a 4 cm wide band of massive pyrrhotite at 20.05 to 20.09.					
		Sample 20.05 - 20.09	60531	0.04	001	001	013
		Last 30 cm is mixed with silicious biotite gneiss.					

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-14
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

xxxxx From	Meterage To	Description	Sample No.	Length	Analysis					
					Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-14
21.2	24.5	Pegmatite - Coarse grained white and grey, but oxidized over the first, changing to a mixture of finer grained pegmatite with pegmatized silicious biotite gneiss over the last metre. Foliation in gneissic portions is 60°.								
24.5	28.4	Silicious calc-silicate, with minor sections of amphibolite. Mainly light green, fine grained, with wisps to shears of the darker green amphibolite over most of this section, but the amount of amphibolite increases so that over the last 1.5 metres there are two sections when amphiboles predominate, forming 60% of the area. Foliation is not well developed in the calc-silicate, but in the amphibolite it is 30°.								
28.4	29.9	Pegmatite - Coarse grained grey and white, with a very slight greenish-yellow tinge. Few scattered larger grains of pegmatite.								
29.9	32.5	Silicious calc-silicate - grades by increasing interbands to dark green amphibolites. Most is fine grained, light green unstructured, soaked in quartz, but the amphibolite is dark green, medium grained, and shows distinct banding at 30°.								
32.5	34.5	Pegmatite, with a thin (40 cm) central section of dark green amphibolite. Pegmatite is very coarse grained grey and white, but is oxidized yellow-orange. Few scattered biotite grains are slightly chloritized.								

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-14	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet	
Commenced		Location	Tests at	Hor. Comp.						CK80-14	3	
Completed		Core Size	Corr. Dip	Vert. Comp.								
Co-ordinates			True Brg.	Logged by								
Objective			% Recov.	Date								
From	To	Description	Sample No.	Length	Analysis							
34.5	39.5	Mixed amphibolite and silicious calc-silicate with a central 1 m band of pegmatite. Typical of this mixture as seen previous. No real structure in either rock type until the two are intermixed, then a foliation (banding) of 30° at the start, 65° at the end, is present. Few minor cross-cutting quartz veins. Pegmatite is typical coarse grained, with coarse biotite.										
39.5	44.5	Pegmatized silicious biotite gneiss. Looks almost like orthogneiss, except the biotite content is so high. Overall is medium grey with perhaps 30% medium grained black biotite in a moderate foliate pattern throughout. Otherwise quite massive and unbroken. The last 0.7 m is dark, almost black, and is more like typical silicious biotite gneiss. Foliation is at 70° throughout.										
44.5	47.8	Silicious calc-silicate, pegmatite, and silicious biotite gneiss as follows:										
		44.5 - 44.8 Silicious calc-silicate, light green and grey, soaked in quartz. Foliation at 65°.										
		44.8 - 49.4 Pegmatite - coarse white and grey, minor biotite.										
		49.4 - 45.8 Silicious biotite gneiss with subordinate silicious calc-silicate.										
		45.8 - 47.1 Very coarse pegmatite with lesser sections of pegmatized biotite gneiss.										
		47.1 - 47.8 Mixed silicious black biotite gneiss and dark green silicious calc-silicate with foliation at 70°.										

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-14	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.						CK80-14	4
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length	Analysis						
47.8	52.4	Pegmatized silicious biotite gneiss. Very similar to that described previously. Overall medium grained, medium grey, with up to 30% black biotite forming a weak to moderate foliation (but no banding) at 75°.									
52.4	54.1	Coarse black eye-like biotite gneiss, with muscovite sections and narrow bleached sections. Much is quite black and relatively fine grained, but shows small fine "eyes" of quartz elongated parallel to foliation. Other quartz grains further on are rounded. Contains a broken, narrow (20 cm) oxidized pegmatite section (possible fault). Foliation at 75°.									
54.1	57.3	Silicious biotite gneiss and minor silicious calc-silicate. Medium grained, dark grey to dark green. Quite intermixed, so no definite layering or colour banding is in evidence, but foliation is quite evident at 60 to 65°. Contains a few minor sections of pegmatite.									
57.3	60.6	Silicious calc-silicate, minor silicious biotite gneiss, trace pegmatite. Calc-silicate is a mixture of light green diopside, darker green coarse amphiboles, soaked in white quartz. Foliation is not well developed at all. Gneiss is weakly segregation banded - grey quartz and black fine grained biotite. The two main rock types in intermit layers about 20 - 30 cm wide. Pegmatite is quite minor - White, but oxidized to a yellow-orange colour. Foliation is at 70 to 75°.									
60.6	62.9	Silicious biotite gneiss, minor silicious calc-silicate, pegmatite. Gneiss is typical dark grey, but segregation banding has occurred, so grey-white bands to 1 cm wide are common									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-14	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length	Analysis						
60.6	62.9	throughout, at 75°. Calc-silicate only present as a few thin (10 cm) green bands.									
(Continued)		Pegmatite (60 cm) is coarse grey, white with black biotite which is partially chloritized.									
62.9	66.5	Partially pegmatized silicious biotite gneiss with minor pegmatite. Gneiss is medium grey with high percentage of fine biotite throughout, and in places is partially pegmatized. Pegmatite is quite minor, but is the very coarse grained biotitic variety. Some greenish alteration is present locally. No segregation banding. Foliation at 55° to 70° is only weakly developed.									
66.5	67.2	Mixed silicious and limy calc-silicate. Basically light grey and white. The limy portions have the "muddy" appearance as seen in the mineralized sections of holes CK 80-12 and 13, but not as well developed. Some is pitted and weathered. The silicious portions are dark green and white with only minor diopside. Limy sections are somewhat silicified and not as limy as they look. Foliation at 50°.									
67.2	69.2	Mixed zone of silicious calc-silicate, silicious biotite gneiss and pegmatite. Contains a 20 cm wide band of vesuvianite (?) as seen in the Main Boulder area, but no ZnS is present. Takes on a spotted, almost amphibolite look after the vesuvianite band. Foliation weak at 60°.									
69.2	75.5	Pegmatite - Much is medium grained creamy white and grey, but has a few 1 m sections of extremely coarse grey and white, angular grained materials. Scattered chloritized biotite. The first									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District		Hole No.	CK 80-14	Claim		T Brg.		Collar Dip		Elev.		Length		Hole No.	CK80-14	Sheet	6
Commenced		Location		Tests at		Hor. Comp.													
Completed		Core Size		Corr. Dip		Vert. Comp.													
Co-ordinates		True Brg.		Logged by															
Objective		% Recov.		Date															
From	To	Description	Sample No.	Length	Analysis														
69.2	75.5	80 cm is a spotted green probably pegmatized calc-silicate section. The last metre has minor disseminated black biotite, and a 20 cm section of biotite gneiss, with foliation at 65°.																	
		(Continued)																	
75.5	76.7	Coarse silicious biotite gneiss - partially pegmatized to impart a weak segregation banding, but becomes more typical finer grained over the last 20 cm. Foliation at 65°.																	
76.7	81.7	Pegmatite - Fine grained, light white, but oxidized over the first metre. Minor scattered biotite flecks. Contain silicious biotite gneiss at 78.7 - 79.0. Foliation suggested, but not intense at 50° and later at 65°.																	
81.7	83.4	Coarse silicious biotite gneiss, at previous, with a 15 cm section of light green and grey silicious calc-silicate. Foliation at 65°.																	
83.4	90.2	Pegmatite - Fine grained, white to light grey, local coarser sections. Fine disseminated biotite over the last ½ metre to give an orthogneiss appearance.																	
90.2	90.5	Bleached silicious biotite gneiss, some muscovite. Light ochre-grey, fine grained. Has minor diopside. Foliation at 75°.																	
		90.5 - END OF HOLE																	
		No Mineralized Intersection.																	

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Kamloops M.D.	Hole No.	CK 80-15
Commenced	Sept. 7, 1980	Location	Raft Synform Area	Tests at	102.4m (-82.5°)
Completed	Sept. 10, 1980	Core Size	B.Q.	Corr. Dip	-84.5°
Co-ordinates				True Brg.	240°
Objective	To test for Zn/Pb mineralization at the inferred closure of the Raft Synform			% Recov.	
				Logged by	M.R. Murrell
				Date	Sept. 14, 1980

Claim	Park 1
T Brg.	240°
Collar Dip	-86°
Elev.	1600m
Length	102.4 m
Hole No.	CK80-15
Sheet	1

Rock From	Meterage To	Description	Sample No.	Length	Analysis				
0	3.0	Casing							
3.0	9.7	Silicious biotite gneiss - Graphitic, at 2 to 3% disseminated as small grains fairly evenly throughout. Contains a few minor sections of garnetiferous dark silicious calc-silicate. One short section of gneiss has segregation banding. Foliation at 65°							
9.7	15.8	Mottled silicious calc-silicate. Light green fine grained diopside and white quartz, with the occasional pink orange smear of garnet. No foliation developed throughout this section, except for a suggestion at 60° over the last meter.							
15.8	17.2	Pegmatite - First half is a coarse grained, somewhat oxidized type, changing to a pegmatized biotite gneiss with no well developed foliation. Biotite content 10% as interstitial grains.							
17.2	18.8	Graphitic silicious biotite gneiss. Dark grey to almost black, fine grained. Graphite at 2-3% disseminated evenly throughout the first half. Second half has a fair amount of pegmatite, and minor green silicious calc-silicate. Foliation (where present) is at 75°							
18.8	20.1	Silicious calc-silicate. Dark green fine grained diopside soaked in a grey quartz, with quartz content increasing with depth. Few limonitic oxidized fractures. Becomes more granular - looking towards the end.							

Scale

Colour Plot
& Dip

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-15	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length	Analysis						
20.1	27.2	Mixed silicious biotite gneiss, silicious calc-silicate, and minor pegmatite.									
		20.1 - 25.0 Mainly fine to medium grained silicious biotite gneiss, dark grey. Foliation at 50°.									
		25.0 - 25.8 Pegmatite - very coarse grained, with coarse black biotite.									
		25.8 - 27.2 Mixed gneiss and calc-silicate. Some large dark green amphibole grains. Trace pyrrhotite.									
27.2	30.8	Pegmatized silicious biotite gneiss. Some core loss at 27.7 (30 cm?). Rest is fairly massive medium to coarse grained. Feldspar and quartz semi-rounded, with 30% interstitial black biotite, locally altered to a greenish colour. Foliation almost non-existent. Suggested at 80°.									
30.8	35.2	Pegmatite - Medium grained, creamy white. Scattered biotite, and centrally there is enough wispy beds to give a foliation at 50°.									
35.2	39.1	Pegmatized silicious biotite gneiss. Black and white speckled to almost spotted appearance. Quite coarse grained. Quartz and feldspar as rounded grains, with biotite occurring interstitially around them. Foliation only weakly developed to almost absent, at 70°.									
39.1	46.2	Mixed limy and silicious calc-silicate. Overall light green and white mottled to slightly banded. Locally small amounts of darker green amphiboles. The limy sections are usually whiter and granular looking, but are not extremely limy in composition - have much fine									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-15	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at	Hor. Comp.							
Completed		Core Size	Corr. Dip	Vert. Comp.							
Co-ordinates			True Brg.	Logged by							
Objective			% Recov.	Date							
From	To	Description	Sample No.	Length m	Analysis			Pb	Zn	Cu	
39.1	46.2	grained rounded quartz grains enclosed. The silicious sections are more massive looking, (Continued) are soaked in quartz, and are green and creamy-yellow in colour. Foliation only well developed in amphibolite sections at 75°.									
46.2	50.3	Semi-pegmatized silicious biotite gneiss. Grey and black, medium grained. Fairly massive and unfoliated, but has several thin quartz (pegmatite) bands at 80° and has one very coarse biotite pegmatite band at 48.7 to 49.2.									
50.3	51.9	Pegmatite - Fine grained, few coarse grained patches. Scattered fine biotite grains throughout (trace amounts) giving a slight foliation at 65°. Oxidation apparent to impart an overall orange-yellow colouration.									
51.9	55.8	Limy calc-silicate, with numerous thin (10 cm) sections of silicious calc-silicate. The calcareous portions are usually fine grained grey, with darker rounded quartz grains, and some sections are dark grey, aphanitic, and show possible flow banding texture. Possibly one, or a few, of these very fine grained muddy sections are correlateable with the muddy zones adjacent to ZnS in holes CK 80-12 and 13. The silicious calc-silicate is more typical white and green, soaked in quartz, and locally has minor amounts of disseminated pyrrhotite. i.e.: Sample: Sample 52.8 - 53.3	60532	0.5				-Q01	-Q01	-Q01	
55.8	59.8	Pegmatite, with a few thin extraneous sections. Pegmatite is very coarse grained, with									

Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-15
Commenced		Location	Tests at	Hor. Comp.
Completed		Core Size	Corr. Dip	Vert. Comp.
Co-ordinates			True Brg.	Logged by
Objective			% Recov.	Date

From	To	Description	Sample No.	Length	Analysis					Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. CK80-15	Sheet 4
55.8	59.8	numerous patches of coarse grained biotite. Encloses a dark grey silicious marble band at 56.9 - 57.0 and a pegmatized, spotted biotite gneiss (?) unit at 58.0 to 58.6. A thin silicious calc-silicate unit (yellow) is present at 59.1. Contact with underlying unit is gradational and interlayered. Foliation at 70° where present.														
		(Continued)														
59.8	62.9	Limy calc-silicate, and silicious calc-silicate. Silicious portion mainly over the first half as light green sections mixed with coarser green amphibole, and minor pegmatite. All ill-defined, irregular bands. The latter part of this section is mainly granular grey silicious, calcareous calc-silicate (as previous), with weak foliation at 65°.														
62.9	67.6	Pegmatite, with a few extraneous bands. Pegmatite starts off as fine grained, biotitic and foliated, but changes abruptly to very coarse grained at 65.4, with large biotite patches. Has limy calc-silicate at 65.2 to 65.4, 66.7 to 66.9 and 67.3 to 67.5. Foliation at 55° in the "orthogneiss".														
67.6	70.7	Mixed limy and silicious calc-silicate with minor pegmatite towards the end. Most is grey-green granular looking quartz-grain with limy calc-silicate, with open folding or flow-banding. The silicious sections are somewhat mottled green and white with minor orange garnet. Very minor amphiboles present. No pronounced foliation.														
70.7	72.6	Pegmatite and pegmatized silicious biotite gneiss. Pegmatite is fine grained, white, with sprinkled biotite, gradually increasing in biotite content until at the end it looks like														

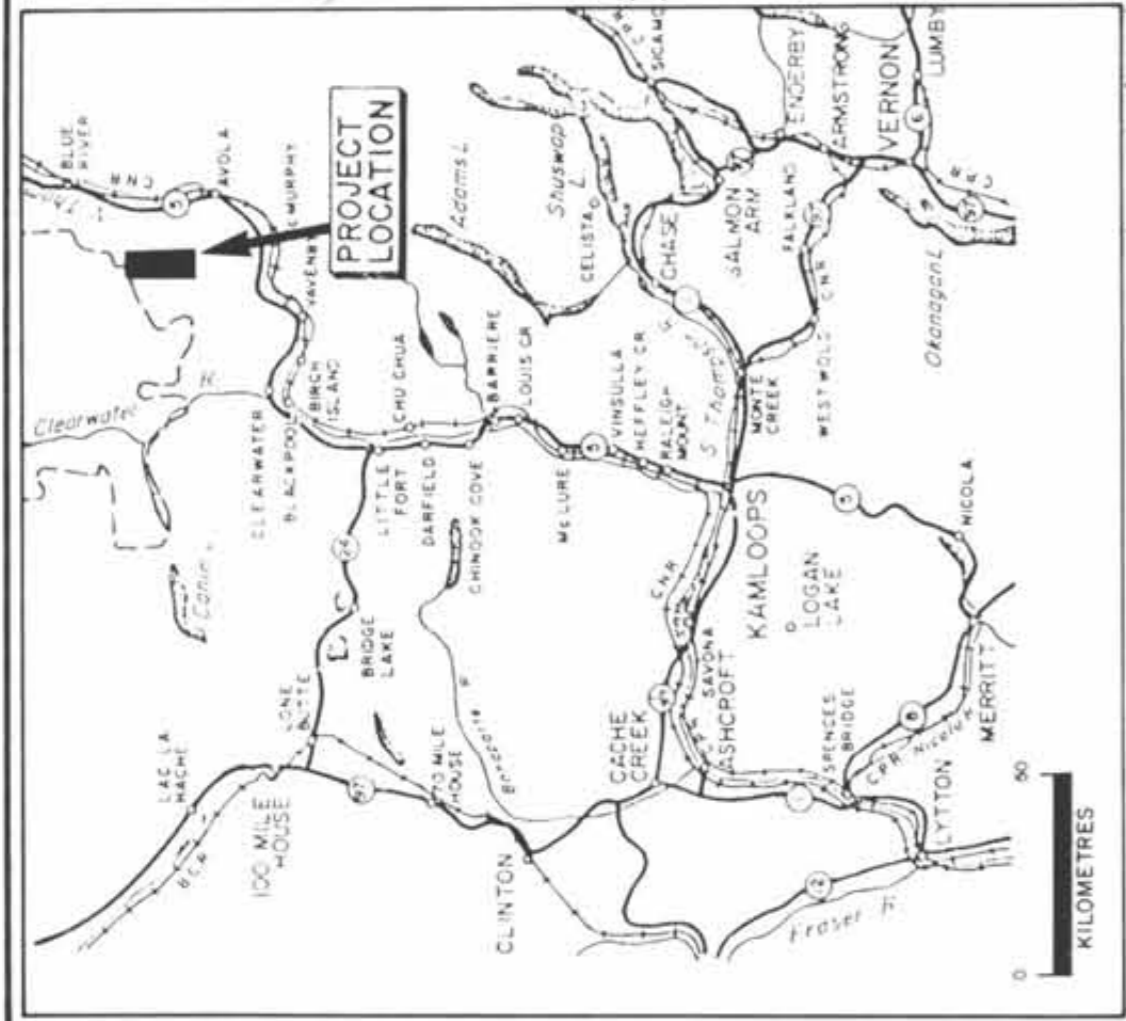
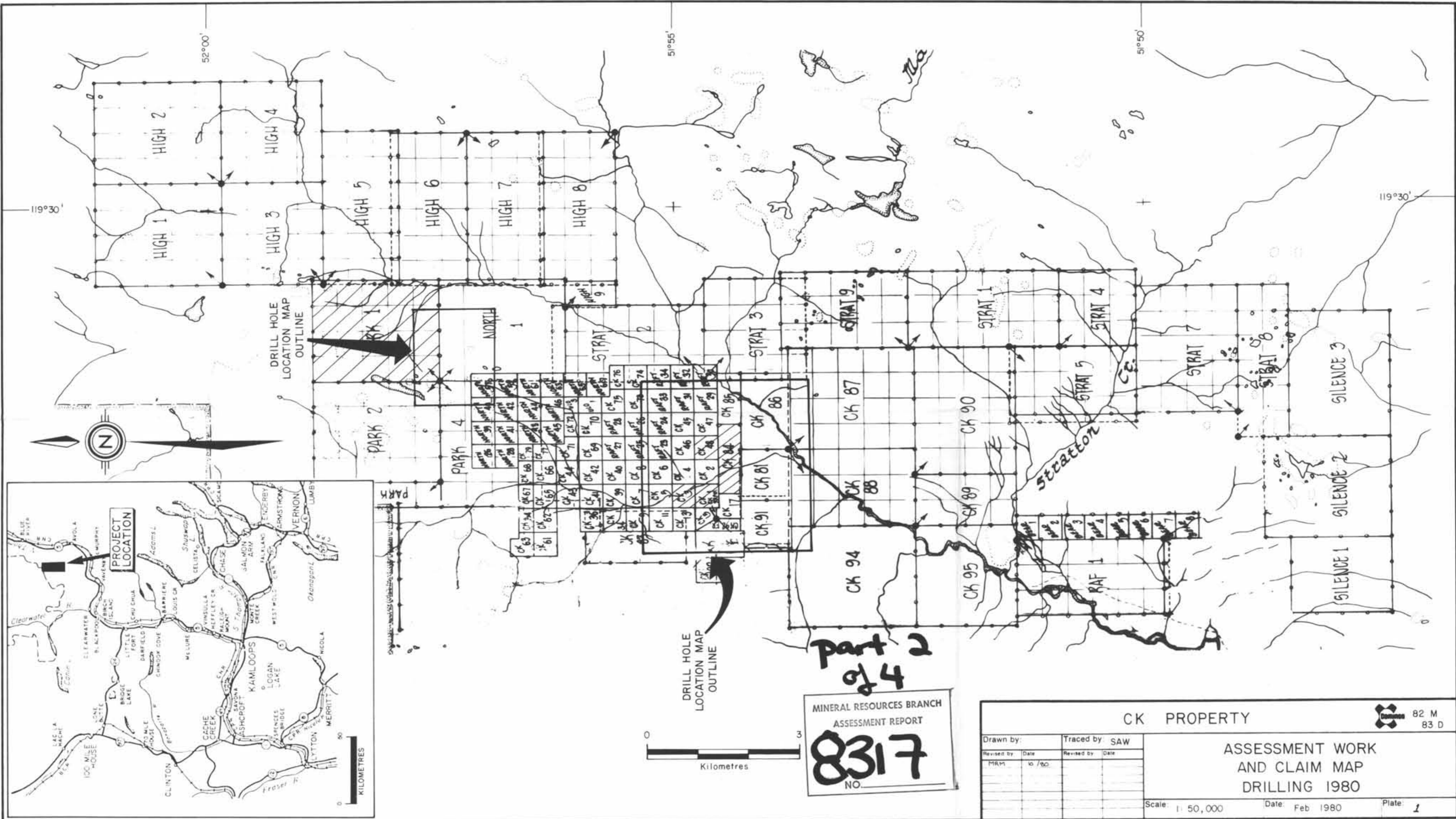
Scale

Colour Plot
& Dips

Drill Hole Record



Property	CK Property	District	Hole No.	CK 80-15	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Commenced		Location	Tests at							CK80-15	6
Completed		Core Size	Corr. Dip								
Co-ordinates			True Brg.								
Objective			% Recov.								
Range	Meterage	Description	Sample No.	Length	Analysis						
From	To										
91.3	92.2	grained. Has a few minor garnets at the start. Foliation at 65°.									
		(Continued)									
92.2	97.6	Pegmatite - Chloritized biotitic, coarse until 94.9. 94.9-95.6 - Fault zone - Very broken and oxidized. 95.6-97.6 - Mixed coarse clean and fine grained biotitic (chloritized).									
97.6	99.4	Mainly typical dark grey to black silicious biotite gneiss, fine to medium grained, with weak foliation at 85°. Last 30 cm is a white marble, with scattered green diopside grains, which grades rapidly to a calc-silicate.									
99.4	100.8	Pegmatite - grey and white - medium to coarse grained. Minor scattered chloritized biotite. No structure or foliation apparent.									
100.8	101.4	Silicious calc-silicate. Light green and white mottled changing to semi-banded at 65°. Last 15 cm is dark black-grey silicious biotite gneiss.									
101.4	102.4	Pegmatite - Medium to coarse grained. Rounded feldspar grains (white) in a mass of grey-rounded quartz and chloritized biotite. Almost a breccia-looking effect.									
		102.4 - END OF HOLE									
		No Mineralized Intersection.									



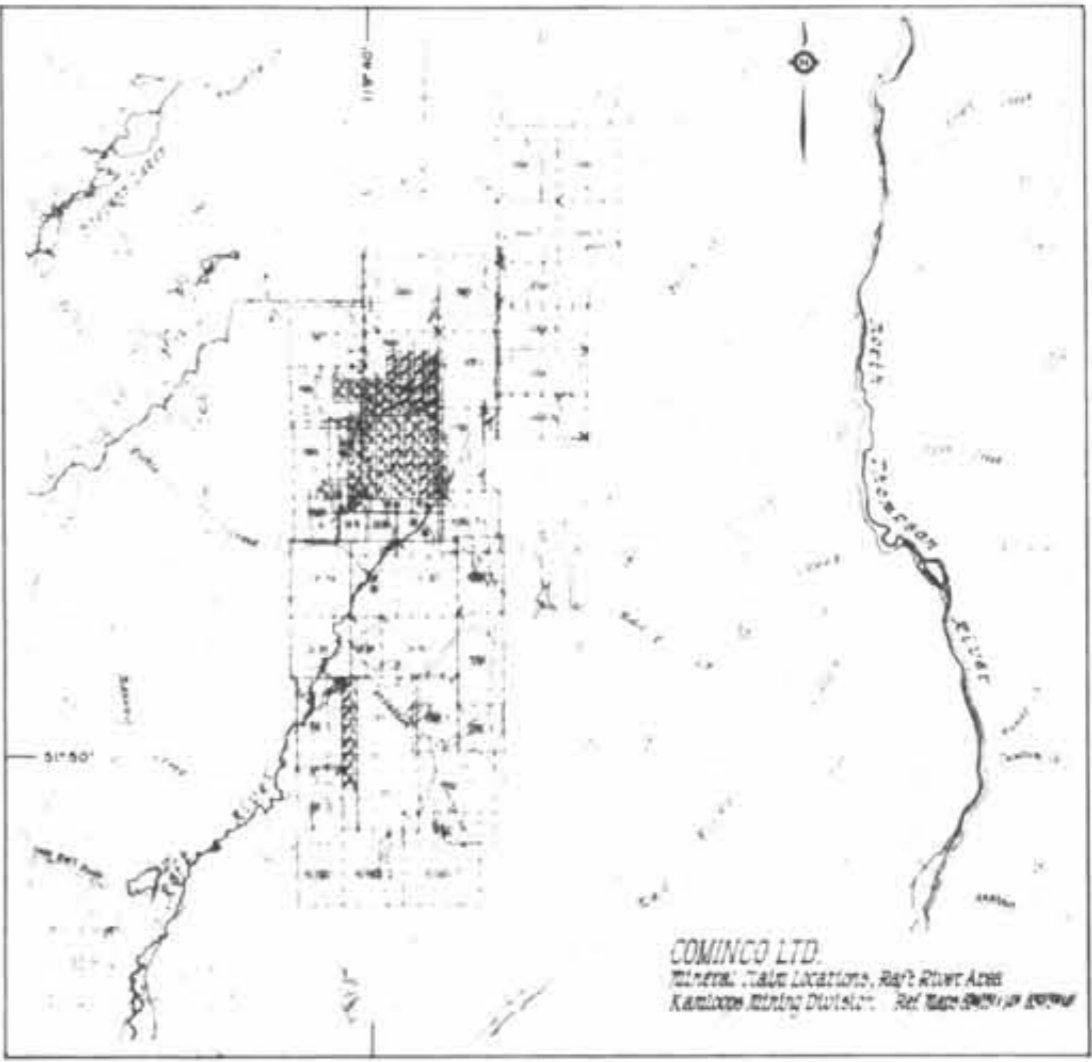
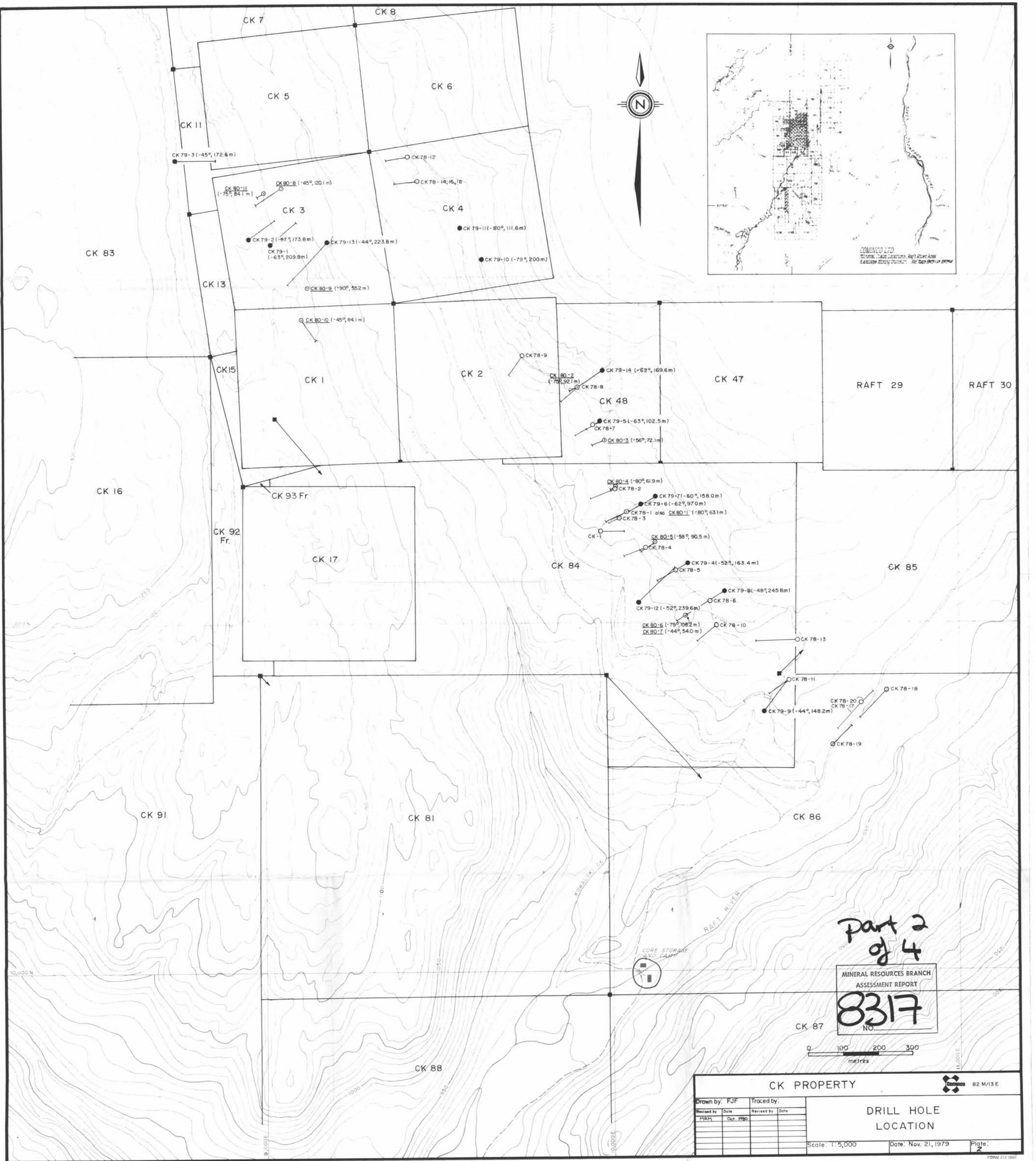
DRILL HOLE LOCATION MAP OUTLINE

DRILL HOLE LOCATION MAP OUTLINE

Part 2 of 4
 MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
8317
 NO.



CK PROPERTY				82 M 83 D	
ASSESSMENT WORK AND CLAIM MAP DRILLING 1980					
Drawn by:	Traced by: SAW		Scale: 1:50,000	Date: Feb 1980	Plate: 1
Revised by:	Date:	Revised by:	Date:		
MRM	10/80				

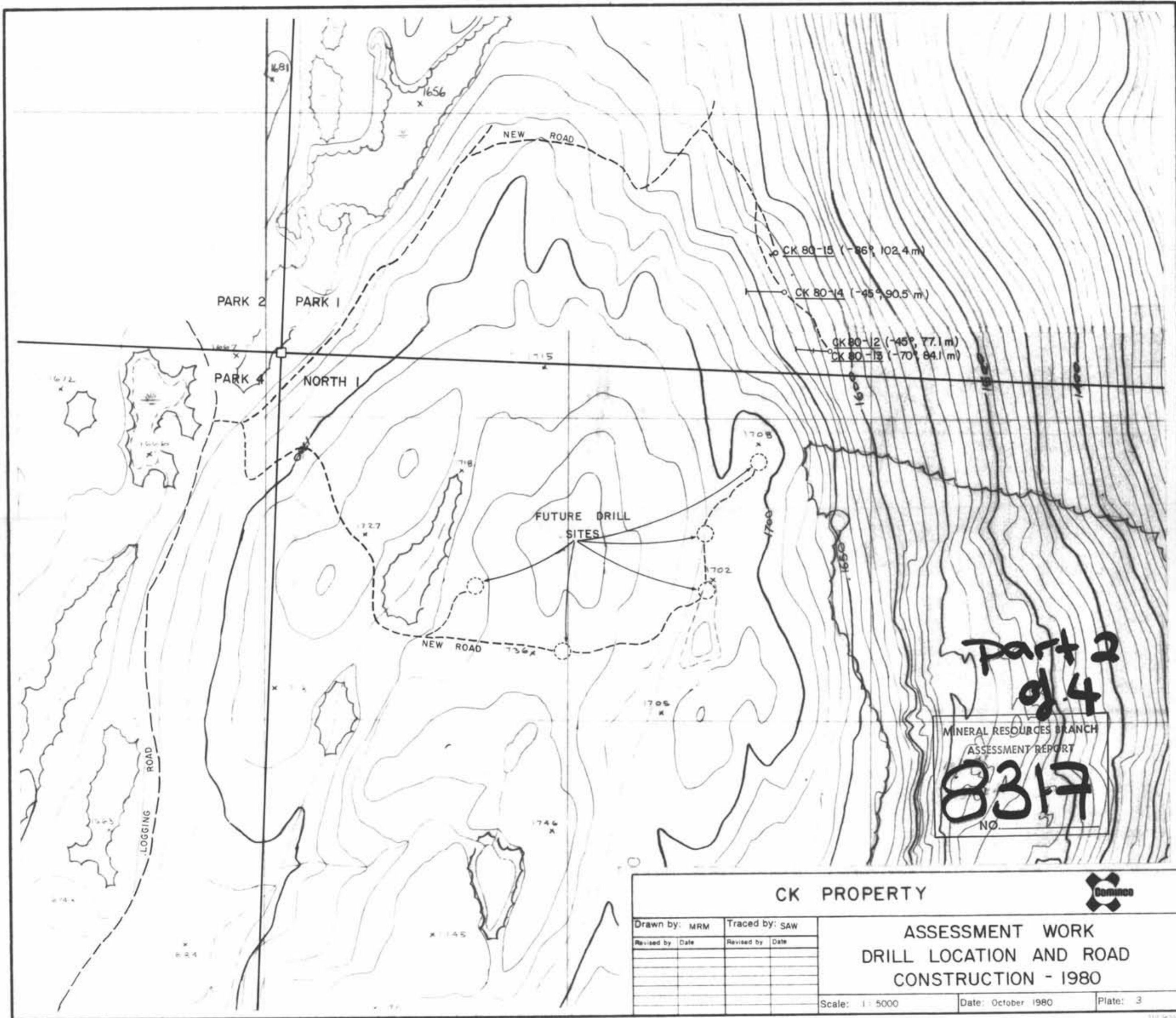


Part 2
of 4

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8317
NO.

0 100 200 300
metres


CK PROPERTY				82 M/13 E	
Drawn by: FJF	Traced by:		DRILL HOLE LOCATION		
Revised by: MRM	Date: Oct 1990	Revised by:			
Scale: 1:5,000			Date: Nov. 21, 1979		Plate: 2



Part 2
of 4

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8317
NO.

CK PROPERTY						
Drawn by: MRM	Traced by: SAW		ASSESSMENT WORK DRILL LOCATION AND ROAD CONSTRUCTION - 1980			
Revised by: _____	Date: _____	Revised by: _____				Date: _____
Scale: 1 : 5000		Date: October 1980		Plate: 3		