#### AYLWIN CREEK

GEOLOGY AND DRILLING

Slocan M.D. N.T.S. 82-F-14 49°53'N 117°22'W

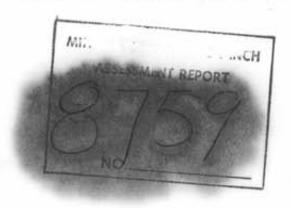
D. C. Durgin December 1980

# Riocanex

RIO TINTO CANADIAN EXPLORATION LIMITED



180-#884-# 8759



#### AYLWIN CREEK

## GEOLOGY AND DRILLING

Slocan M.D. N.T.S. 82-F-14 49°53'N 117°22'W

D. C. Durgin December 1980

Owner: Rio Tinto Canadian Exploration Ltd. Operators: Riocanex BP Minerals Ltd.
P. Leontowicz & W. Wingert

Work performed on:	Record #	Expiry	date
Ayl 1	1271	29 Jun	82
Ayl 2	1272	29 Jun	
Rush	1263	26 Jun	
Ent 1	1294	10 Jul	and the second
Ent 2	1313	11 Jul	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Ent: 3	1295	10 Jul	
Ent: 4	1296	10 Jul	83
Ayl 7	1312	ll Jul	
Leona 7	1321	28 Jun	
Leona 8	1322	28 Jun	
Leona 9	1323	28 Jun	83
Leona 10	1324		83
Willa	18212		83
Rockland	18213	3 Jan	83
Rustler	18214	3 Jan	83
Trenton	1260	26 Jun	83
Last Chance II	1261		83
Silver Band	1262		83
Little Daisy	1327	4 Jan	84
Golden	1222	18 May	84
Idler	1223	1. T. O. W. C. L. C.	84
Golden Fraction	1224	18 May	84

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#### INTRODUCTION

The Aylwin Creek property, N.T.S. 82-F-14, is located 8 kilometres north of Silverton, and 3 kilometres northwest of Mt. Aylwin (Location Map, Appendix IV). It consists of 89 units made up of optioned crown grants and single unit claims, recent claims staked by Riocanex and recent claims staked by BP Minerals. These are being explored under a joint venture agreement. An additional 28 units were staked late in May 1980 which are not represented by this report. The claims were staked and the joint venture formed as a result of 1979 reconnaissance work described below.

#### PREVIOUS WORK

The original crown grants were staked in the 1980's by prospectors in search of gold and copper. The Willa, Little Daisy, and Rockland tunnels were driven during the next few decades. Little ore was discovered and there was no production. In 1965 Cominco drilled four short holes in the Willa Zone. In 1969-1970 the Rockland Mining Company conducted a program of soil geochemistry, geologic mapping and diamond drilling. The twelve holes drilled encountered interesting copper-gold mineralization near the Willa tunnels, but grades were too low for the metal prices at that time. Minor molybdenum values were also noted.

J. R. Woodcock Consultants Ltd., on behalf of Riocanex, conducted in 1979 a reconnaissance mapping and lithogeo-chemical sampling program in search of a deep porphyry molybdenum target. Coincident Cu, Mo, W and F geochemical anomalies, and a favourable geological environment compelled Riocanex to option the old crown grants and begin staking.

. . . /2

Concurrently, reconnaissance work by BP Minerals caused them to stake in the same area, in persuit of a similar target.

1980 WORK through JUNE 23

Based on the results of the 1979 reconnaissance work, a program of 1:5000 scale geologic mapping, (map, Appendix V) rock geochemical (map, Appendix IV) sampling, and diamond drilling was planned for the 1980 season. Expenses incurred are detailed in the attached cost summary (Appendix III).

In late April and early May, some 1.5 kilometres of access road were rehabilitated, including the building of a bridge and preparation of a drill site.

Under contract with Canadian Mines Services a drill was moved onto the property on May 8th. A vertical hole was collared on the Rockland claim as indicated on the attached claim map on May 10th. Drilling proceed to a depth of 812.5 metres where the hole was stopped June 10th. Core for the entire hole is stored in a garage rented from Mr. Paul Malkin, just behind the Silverton Post Office.

Every 5th two-metre interval was split and shipped to Vancouver for analysis for Cu, Mo, WO<sub>3</sub>, and F. A detailed log is attached (Appendix II). The hole intersected modest molybdenum mineralization in a quartz stockwork developed in intrusive rocks and metavolcanics. There were also several log intersections of post mineral intrusive breccia. These results were of sufficient interest to justify further drilling, which will be covered in another report.

**GEOLOGY** 

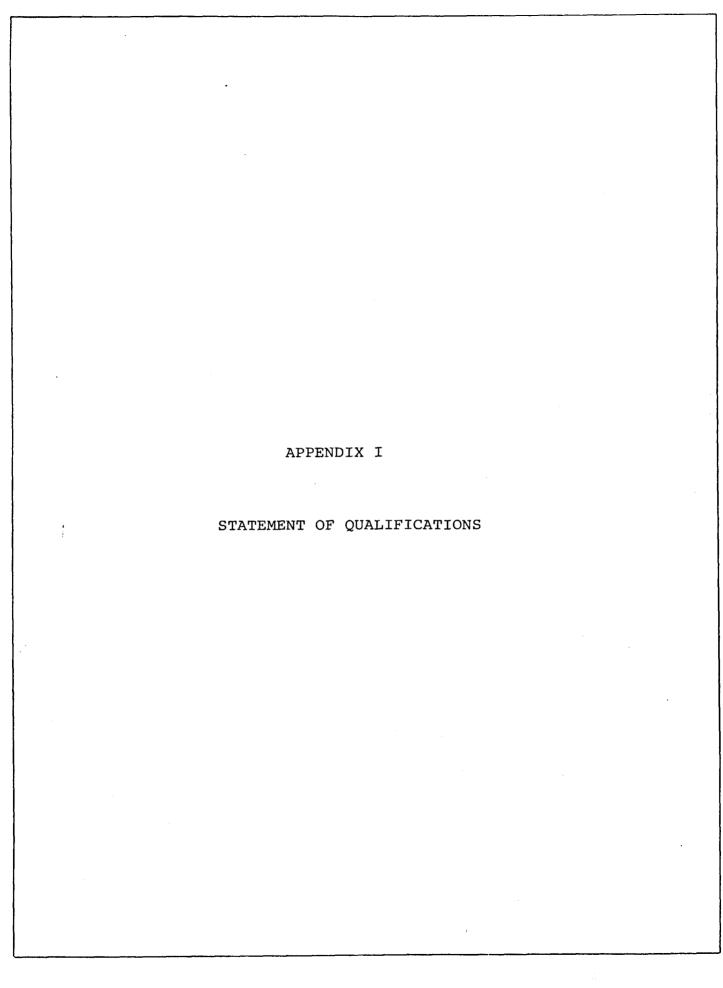
Geologic mapping and rockchip geochemical sampling was carried out concurrent with and subsequent to the drilling. A preliminary geologic map at 1:5000 scale is attached. A geochemical map is to follow, pending completion of analysis.

The Aylwin Creek project is centered on a large roof pendant of Kaslo volcanics in the Nelson Batholith. It is intruded by several porphyritic phases of latitic composition which are in part hydrothermally altered and pyritized. Some of these porphyry phases are disturbed in a crudely concentric and radical pattern upon which are centered roughly coincident Cu, Mo, W and F geochemical anomalies. This season's sampling further delineated known anomalous areas and extended the area examined.

Drilling demonstrated the presence of weak molybdenum mineralization near the centre of the target area. Part of the mineralized zone has been cut out by a later body of intrusive breccia. Further drilling, mapping and sampling for the remainder of the field season will be dealt with in a subsequent more detailed report.

#### REFERENCE

Aylwin Creek Assessment Report dated January 9, 1980.



#### STATEMENT OF QUALIFICATIONS

#### Dana C. Durgin

#### ACADEMIC

1970 B.A. Earth Sciences Dartmouth College

1972 M.Sc. Geology University of Washington

#### PRACTICAL

June 1979-present Rio Tinto Canadian Exploration Ltd. Vancouver BC Geologist involved in various aspects of mineral exploration in Yukon and B.C.

1973-May 1979 Rioamex Inc. Denver, Colorado

Geologist with experience in all phases of
base and precious metal exploration and
property examination in the western U.S.A.

1972 (Summer) Texasgulf Inc.
Geologist, uranium exploration
Denver, Colorado U.S.A.

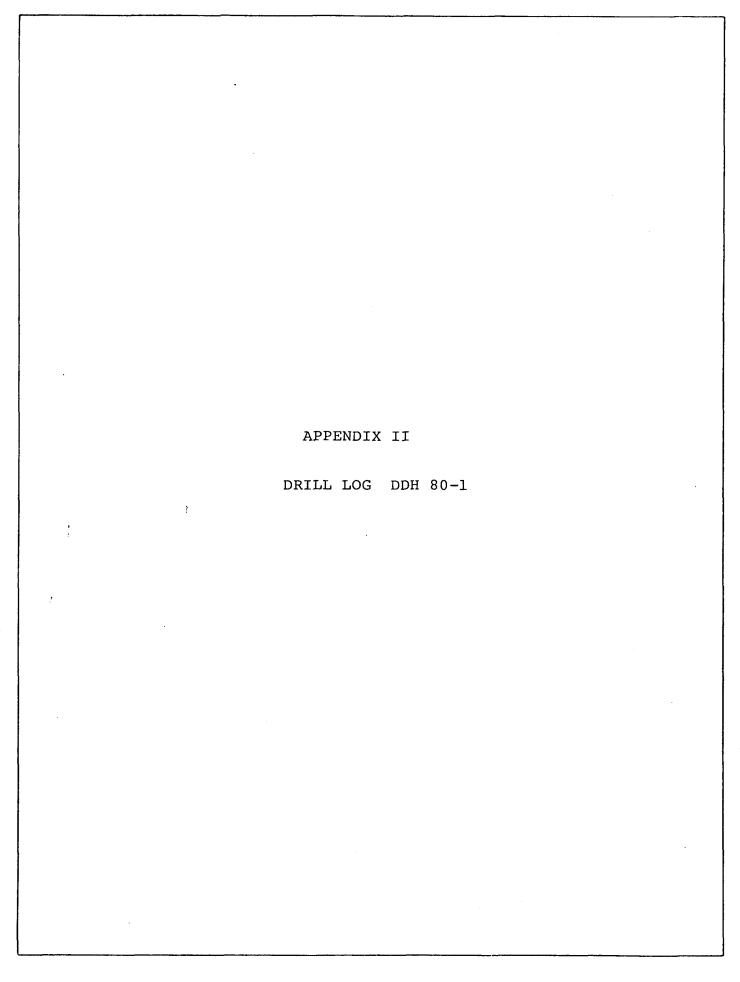
1971 (Summer) Humble Minerals
Geologist, massive sulphide exploration
Bangor, Maine

1970 (Summer) The Anaconda Co.

Geologist, uranium exploration
Grants, New Mexico

1970 (Jan-March) Institute Geographico Nacional de Guatemala Geologist, mapping for the Guatemalan government Guatemala City

1969 (Summer) Callahan Mining Co.
Geologist, massive sulphide exploration
Coastal Maine



DIAMOND DRILL RECORD

HOLE NO :80-1

AZIMUTH : \_

PROPERTY:

AYLWIN CREEK

DIP : -90

**LENGTH** : 812.5m

: 1250m

Claim No.:

ELEVATION

|STARTED : 10 May 1980

LOCATION: 10,000N, 10,000E

NQ 0-593.6m CORE SIZE : BQ 593.6-812.5mDATE LOGGED :

SECTION:

Relogged D.C. Durgin

COMPLETED : 10 June 1980

DIP TESTS : Sperry-Sun Survey

LOGGED BY : Sept.20/80, Oct.1/80

PURPOSE: To test rockgeochemical anomaly (Cu, Mo, W, F)

CONTRACTOR:

MET	RES		SAMPLE	Metre	S						
from	to	DESCRIPTION	Νō	from	to	LENGTH		ppm Cu	ppm F	ppm Mo	ppm W
0	3.9m	Overburden	0	0	4m	4m					
3.9m	15.8m	Feldspar Porphyry									
		Fine to medium grained, scattered white		4	6	2m					
		feldspar phenocrysts average 2mm, grey green									
		to pinkish brown due to patchy secondary									
		biotite, esp. near bottom, locally fragment-		6	88	2m	 ļ				
		al texture. Moderate to intense silicif-					 				<u> </u>
		ication. Strongly fractured with qtz-chlor-									<u> </u>
		py and amphibole-py veinlets, also qtz	D 1501	8	10	2m		130	580	2	10
		veinlets only. Feldspar bleached	<u> </u>								
		adjacent to qtz-chlor veinlets, irregular									
		patchy replacement of breccia matrix by		10	1.2	2m					
		py-amphibole locally.					 				
		8.2-8.4- Breccia w/angular siliceous					 MIN	ERAL RES	LIBORS P	DANCH	
		porphyry fragments in very chloritic matrix,		12	14	2m				1 1	
		a parallel coarse qtz vein-lower contact						A.SSESSMI	NI REPO	RT	
		arbitrary, @ 40° obscured by alteration.									
		Secondary biotite, fracture controlled-		14	16	2m					
		see 15.7m.						. <b>L</b>			
15.8m	30.4	Heterogeneous breccia									
		Generally dacitic composition, feldspar		16	18	2m		NO.		4	
		porphyry fragments most common, also				. •					
		cream to white felsites, dark brown/sch									
		volcanics. Several textural varieties of	I								

DIAMOND DRILL RECORD

HOLE NO: 80-1 PAGE NO:

IGE NO:

M	ETRES	DECCRIPTION	SAMPLE	MET	TRES	I ENGTH				
from	to	DESCRIPTION	Νō	from	to	LENGTH	ppm Cu	ppm F	ppm Mô	ppm W
		feldspar porphyry, composition similar.								
		28.2-Coarse crowded feldspar porphyry fragment	D 1502	18	20	2m	9950	960	8	1
		w/feldspars to 4mm and fresh hbld phenocrysts,								
		some possibly dykes. Matrix of breccia strongly								
		chloritized, composed of small fragments and rock		20	22	2m				
		flour, some epidote.								
		Rock is silicified, cut by qtz-chlor-py veinlets								
		epidote-chlor-py veinlets and associated patchy		22	24	2m				
		replacement of matrix and fragments. Latest is								
		black amphibole-pyrite in hairline fracture net-							-	
		work. A few very late fractures w/calcite &		24	26	2m				
		bleaching of adjacent feldspar. Cpy+py in seams,								
		replacements and blebs, generally w/chlorite								
		28.2m-20cm Fragment much like early porphyry		26	28	2m				
		18.2-18.4 Strong coasrse cpy-py-po	D 1503	28	30	2m	168	830	4	3
									1	
30:4	38.4	Feldspar Porphyry								
		Generally fine grained, grey to pinkish, locally		32	34	2m				
		pink-brown to grey-green due to alteration. 30%			1				<u> </u>	
		feldspar lmm or less, 2-3% feldspar phenocrysts								
		to 2.5mm, 1-2% altered hornblende phenocrysts to		34	36	2m				
		3mm. Often strongly altered with up to 15%				-				
		disseminated pyrite with epidote in clots and		1						
		streaks. Secondary biotite common along fractures	,	36	38	2m				
		esp near base. Qtz-chlor-py veinlets common,								
		later black amphibole-py veinlets locally intense						•	<u></u>	
38.4	44.6m	Heterogeneous breccia	D 1504	38	40	2m	1120	640	6	1
		Few large fragments, matrix predomonates.		1 -3				0,10	1-3	
		A few larger feldspar porphyry fragments. Similar								
		to 15.8-30.4; v. strong black amphibole-py on		40	42	2m				
		fractures, up to 10% py in clots & disseminations				•			· †	
		silicified		1	1				<del>                                     </del>	
44.6	50.2m	Feldspar Porphyry		42	44	2m				
		v. Similar to 30.4 - 38.4, a bit more coarse			<u> </u>					
		grained. 5-7% diss. py, w/chlorite and minor							1	

## DIAMOND DRILL RECORD

HOLE Ng: 80-1

PAGE Nº:

MET	RES		SAMPLE	METRI	ES					
from	to	DESCRIPTION	Nō	from	to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
		epidote. Patchy pinkish secondary biotite over-		44	46	2m				
		printed w/green chlor-py and amphibole-py alterati	pn							
		mineralization as above.		46	48	2m				
50.2	55.3	Heterogeneous Breccia	D_1505	48	50	2m	570	300	4	10
		Breccia nature obvious only locally. Several larg	e							
		dark brown-green volcanic fragments, a few feld-		50	52	2m				
·		spar porphyry fragments. Py-cpy in blebs and veinlets very abundant locally (52.7), decreas-		52	54	2m				
		ing dwonward. Amphible-py veinlets v. abundant		32	<u> </u>	ZIII				
		@ low angles to core, lower contact sharp @ 55°			<del> </del>					
		to core axis.			<u> </u>					
55.3	60.8	Feldspar porphyry		54	56	2m				
		A bit more coarse than 44.6-50.2, crowded feld-		J.T.	- 50				<b> </b>	
		spar phenocrysts to 4mm, ave 2mm, 5% hornblende			<del></del>				<del> </del>	
		pseudomorphas, a few qtz_crystals, aphanitic mat-		56	58	2m				
		rix. Pink-brown due to abundant secondary biot-								
		ite, 1-2% diss py, Py-black amphible-chlorite								
		veinlets common, qtz-ep veinlets								
		58-60.8- gougy zone, many slips, strong argillic	D 1506	58	60	2m	800	770	8	2
		alteration, a few quartz veins. Upper contact								
		appears chilled against breccia								
60.8	65.0	Heterogeneous breccia.		60	62	2m				
		Most fragments are feldspar porphyry similar to								
- "		55.3-60.8, a few andesitic fragments, a few tan		62	64	2m				
		cherty fragments, silicified. Weak to moderate								
-		typical chlor-py mineralization, minor cpy-		64	66	2m				
		perhaps 0.1% Cu. Matrix grey, f.gr., silicified.								
65.0	115.0	Feldspar porphyry								
		Same as 55.3-60.8. A crowded feldspar porphry		66	68	2m				
		w/feldspar phenocrysts to 4mm, average 2mm.								
		Biotite after hornblende, trace quartz eyes,				•				
		aphanitic matrix, general pink-brown colour	D 1507	68	70	2m	6500	640	2	1
		due to secondary biotite which is often replaced								
		by disseminated pyrite and epidote. Biotite								
		destroyed in silicified envelopes of py-ep-black	1	70	77	2m				

DIAMOND DRILL RECORD

HOLE No: 80-1 PAGE No:

METRES SAMPLE METRES LENGTH DESCRIPTION ppm F ppm Mô ppm W from NΩ ppm Cu from amphibole (or dark chlorite?) veinlets. -Weak 72 74 2m vague fragmental textures perhaps a function of alteration. Same py-ep-amphibole mineralization, weak. 74 76 2m 68.5-72.3 - cpy-py-po in clots and streaks as replacements along fractures w/chlorite. Less abundant cpy-py present throughout. Also locally 78 76 2m associated w/patchy silicification. D 1508 80 2m 78 2630 470 10 2m84 2m 82 86 2m 86 88 2m D 1509 90 2m 93-101.3m- Gradually becomes brecciated, developing patchy silicification, matrix very fine grained, siliceous. No foreign fragments-92 porphyry is crackles & silicified-not a primary 2m texture, but result of alteration. Strongly

92

94

96

2m

2m

fractured w/chlorite and py, minor cpy+ po on,

as replacement from fractures. Becoming more biotitic. Last 2m, fewer obvious fragments.

Occassional gypsum veinlet.

## DIAMOND DRILL RECORD

HOLE NQ: 80-1 PAGE Nº:

METRES from to	DESCRIPTION	SAMPLE Nº	ME'	TRES to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
	101.8-103.7 Very strong red-bron biotite. 5%								
	Sulfides, py-cpy		96	98	2m				
		D 1510	98	100	2m	190	1200	ND	15
			100	102	2m				
	103.7-111.2 Biotite content decreases, silicif-		102	104	2m				
	ication, chlor-ep-py increases. Still some								
	feldspar porphyry, occasional diss cpy, abundant								
	ру.			-					
	105.8-20cm v. leucocratic aplitic textured dyke		104	106	2m				
	@ 45°								
	111.2 - 115.0 Silicification and fracturing		106	108	2m				
	increasingly intense, no obvious fragments. 3%								
	disseminated pyrite with epidote. No secondary								
	biotite. Rock grey green in colour. Minor black	D1511	108	110	2m	56	1650	2	8
	amphibole-pyrite veining increasing toward end.								
			110	112	2m				
			112	114	2m				
									_
115 147.3	Heterogeneous Breccia		114	116	- 2m				
	Most common fragments are feldspar porphyry in								
	several textural varieties. Many look much like		116	118_	2m				
	feldspar porphyry. A few similar to early porphyr	y							
	10-15% are brown to black shcistose metavolcanics.				-				
	Fragments commonly 5-10cm, occassionally larger,	D1512	118	120	2m	530	590	ND_	25
	w/smaller interstitial fragments & light apple								
	green matrix (rock flour?) little or no brown		120	122	2m				
	biotite. Fragments generally rounded with reaction	ր							

## DIAMOND DRILL RECORD

HOLE	NΩ:		
	80-1		 
PAGE	Nō :	6	

METR	RES		SAMPLE	MET	TRES	. 54071					
from	to	DESCRIPTION	Νō	from	to	LENGTH	ppr	ı Cu	ppm F	ppm Mo	ppm W
		rims, esp. black fragments. 2-5% disseminated py,		122	124	2m					
		trace cpy. py-ep-chlor in stringers & clost abund-									
		ant but erratic. Black amphibole (or chlorite)									
		plus py. Fractures- weak to intense. Occasional		124	126	2m					
		late gypsum veinlets.									
		114.5-116.5 Intense py-black amphibole veining.		126	128	2m					
			D 1513	128	130	2m	134	40	710	4	17
				130	132	2m					
		1133.6- 3cm pink-brown garnet-epidote vein @ 60°		132	134	3m					
				134	136	2m					
			1	136	138	2m					
				130	130	Ziii					
			D 1514	138	140	2m	2	00	2400	ND	7
				140	142	2m					
			<u> </u>	140	142	2111				· · · ·	-
				142	144	2m					
				144	146	2m					
				277	140	2.11					
147.3	156.8	Heterogeneous Breccia?		146	148	2m					
		Few obvious rock fragments, many broken feldspars									
		Probably still a fragmental rock. Strong chlorite-	D 1515	148	150	2m	202	0	300	88	200
		epidote-pyrite alteration, silicified. Black			ļ						
		amphibite-py veinlets common; a few 1-2cm seams		150	152	2m				1	
		of ep-py-qtz-chlor w/sharp contacts. Scattered									
		patches, blebs and stringers of py +/- cpy w/epi-									
		dote.			<u> </u>			-			
			<u> </u>	<u> </u>							

DIAMOND DRILL RECORD

HOLE	NΩ:	
	80-1	 
PAGE	No :	

METRES SAMPLE METRES LENGTH DESCRIPTION from to Νō from ppm Cu ppm F ppm Mo ppm W 156.8 301.5 Heterogeneous Breccia 152 2m 154 as 115 - 147.3 coarsely fragmental. Fragments include feldspar porphyry, dark schistose volcanics 154 156 2m fine grained white siliceous volcanics. Fragments 1-20cm. Colour more of a pale lime green here. 156 158 2m 1-4 cm. bands, sharply defined, of epidote-qtz.py common. Rock is more strongly altered, fragment D 1516 158 160 2m 890 250 8 margins less sharp. Py-po-epidote +/- cpy moderate but erratic. Black emphibole-py veinlets 160 162 still present. 164 162 170.6 - fragments of coarse porphyry - early 166 164 porphyry? 173 - 177 Odd parallel banding, dark lines 166 168 spaced 3-5mm apart @ 30° to core- incipient D 1517 foliation? Cuts across fragments and epidote-py 2m 168 170 680 380 ND -qtz bands 170 172 172 174 175.8 1.8m 174 176.5 1.5m 178 180 ` 2m D 1518 178 1000 10... 710 182 180 184 182 184 186

## DIAMOND DRILL RECORD

HOLE NQ:

80-1

PAGE NQ:

METRES		SAMPLE					Τ		
from to	DESCRIPTION	Nº	MET:	RES to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
	small fragments in matrix high-lighted by alter-	<del>                                     </del>	186	188					
	ation along calcite veinlet		100	100					
		D 1519	188	190	2m	770	640	6	18
	187.191 Several very large fragments to 30cm								
	190 - Below here veining descreased to only		190	192					
	occasional chlor-ep-py veinlet and late gypsum veinlets.		192	194					
		<u> </u>	194	196					
			196	198					
		D 1520	198	200	2m				
			200	202					
	202.3- 202.6- Feldspar porphyry fragment w/hnblnd		202	204					
	- early porphyry?	-							
	204.5 - ep-chlor-amphibole- py band nearly paralle	1	204	206					
	to core. 5cm dark chlorite along margins- these						ļ		
	bands might be tuffisite dykes?	<u> </u>	206	208					
		D 1521	208	210	2m	1310	890	6	3
	209.7 - Fragment of feldspar porphyry looks just	ļ							
	like feldspar porphry from higher in this hole.		210	212					
		-	212	214					
	215.6 - Very large fragments ? of dark schistose metavolcanic		214	216					
	216.6 - Early porphyry (?) fragment		216	218					
		D 1523	218	220	2m	530	750	6	13

## DIAMOND DRILL RECORD

HOLE NQ: 80-1 PAGE Nº:

MET	RES	DESCRIPTION	SAMPLE	METRI	ES	LENGTH				
from	to		Nō	from	to	LENGTH	ppm Cu	pom F	DDM Mo	DDm W
		221.8 - 20cm breccia fragment of early porphyry		220	222					
	<u> </u>	with barren milky qtz. veins.								
				222	224					
		220 - 233 - Breccia contains many early porphyry		224	226					
		fragments. Moderate chlor-ep-py veining and diss		224	220					
		py - 3-4% total sulfides.		226	228					
					<b></b>					
			D 1523	228	230	2m	400	700	22	14
				230	232					
				230	232					
		233- 234 - Breccia composed of early prophyry		232	234					
<u> </u>		fragments in a black matrix		232	234					<u> </u>
		235.7 - 236 - 40cm black schistose metavolcanic		234	236					
		fragment.								
<u> </u>	· · · · · · · · · · · · · · · · · · ·			236	238					
								ļ		
			D 1524	238	240	2m	160	660	8	7
				240	242				ļ	-
				240	242				<u> </u>	<del> </del>
				242	244					
					244					<b> </b>
				244	246		·			
		247.7 - 248 - Breccaited early porphyry w/black		246	248					
		matrix								
			D 1525	248	250	2m	370	790	10	17
		248 - 260 Secondary biotite common in several		0.50	0.50				ļ	
		fragments. 3-5% diss py.	l	250	252 ~				-	-
		251.1		0.5.4	07.5				<del> </del>	-
		251.1 - Two 1-2mm qtz-MoS <sub>2</sub> veinlets perpendic- ular to core axis - appear later than breccia.	<u> </u>	254	256				<del> </del>	<b>——</b>
		In a zone of secondary biotite 15cm long.		256	258					<u> </u>

## DIAMOND DRILL RECORD

HOLE NQ: 80-1 PAGE Nº: 10

16	ETRES		r	·		<del></del>	<del>,</del>	10	<del></del>	
from M.	to	DESCRIPTION	SAMPLE Nº	METRES from	to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
		253.2 - 2cm lamprophyre dyke	D 1526	258	260	2m.,	290	1150	16	20
		258.1 - feldspar porphry fragment with one large		260	262					
		qtz eye and 5% diss py.								
				262	264					
		262.7 - 263.3 Lamprophyre dyke, upper contact								
		@ 40°, lower 60°		264	266					
		262.2								
		263.3 - breccia predominantly fragment supported,		266	268			-		
		little matrix, which is largely small fragments	ļ		· · · · · ·					
		very well mixed - early porphyry, Feldspar porphyr	y D 1527	268	270	2m	470	1100	30	35
		augite porphyry, dark schistose metavolcanics,								
		fine grained siliceous volcanics. Poorly fract-		270	272					
		ured, very few veins. 1-2% disseminated pyrite wi	th		<del></del>					
ļ		epidote replacing mafic minerals. Occasional		272	274					
		sulfide blebs, largely py, minor po								
		274m - obvious early porphyry fragments 277.9m - 5cm lamprophyre dyke @ 55°		274	276					
		277.9m - 5cm lamprophyre dyke @ 55°								-
				276	278					
		early porphyry fragments and related ones with	D 1528	278	280	2m	220	750	. 24	13
		qtz eys, quite common throughout								
				280	282					
				282	284					
				284	286					
				286	288			-		
		292.5 - patchy, weak to moderate silicification and	D 1529	_288	290	2m	200	820	20	12
		pale green alteration, largely fracture - related.		290	292					
						<del>                                     </del>				
L			İ	l		<u> </u>			<u> </u>	L

#### DIAMOND DRILL RECORD

HOLE Nº: 80-1 PAGE Nº:

MET	RES		L 0445: 5	3.00000	EC		L	<del></del>	[	
from	to	DESCRIPTION	SAMPLE Nº	METR from	ES to	LENGTH				[
170111	10		145	+		<del> </del>	ppm Cu	ppm F	ppm Mo	ppm W
				292	294			<del> </del>		
					200				<del> </del>	
				294	296					
				296	298					
		296.2m - 2cm fragmental dyke (?) - feldspar						ļ	ļ	
		fragments and silicified shards in chlor-ep matrix	D 1530	298	300	2m	66	860	26	2
		297.8m - 20 cm interval, feldspar porphyry frag-								
		ments in brown biotite matrix biotite breccia.								
		299 - Increasing pale brown alteration & fracturing		300	302					
				302	304					
301.5	302.0	Lamprophyre dyke		304	306					
		Lamprophyre dyke Upper contact @ 10°, lower 45° (broken core)								
				306	308					
302.9	302 - 2m	Lamprophyre dyke			350					
		Lamprophyre dyke Upper contact @ 45°, lower @ 45°	D 1531	308	310	2m	650	800	26	5
								1		
304.3	361.8	Heterogeneous Breccia:		312	314					
		same fragment types as above.		1-212	314			<del> </del>		
				314	316					
		304.3 - 307.0 - weak silicification, bleaching,			310					
		pale brown colour, fading to normal brown-green-		316	318				†	
		white colours		310	310				·	
		309-311, 314-316.5 - Fragments generally less	D 1532	318	320	2m	350	680	32	5
· · · · · · · · · · · · · · · · · · ·		coarse than normal, most less than 3cm.	בננג ע	710	320	ZIII	300	1 000	1 32	
		coarse chan normar, most less than Joh.		200	322				<u> </u>	
		220 220	<del> </del>	320	322			<b>-</b>	<del></del>	
		320- 330m - moderate silicification, crackling, early fine grained veinlets, 2% diss py.		200	201			-	·	
		earry time grained verifiets, 2% drss py.	ļ	322	324		-	<b>+</b>	<del> </del>	
		222 0 222 0 2 anhaduite voimlete w/i	·	+	<del> </del>			-	<del> </del>	ļ
	L	332.8, 332.9 - 3 anhydrite veinlets \( \pi / \text{minor} \)	1	J	<u> </u>		<u> </u>		<u> </u>	L

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	250		SAMPLE	·			· · · · · · · · · · · · · · · · · · ·		.2	Γ
METI from	RES   to	DESCRIPTION	Nº	from ME'	TRES	LENGTH	nn C.	ppm F	nnm Mã	nnm M
		chlor and py @ 40° to core.		324	326		ppin Cu	ppiii r	PDIII MO	DDIII W
		enter and py ( 40 to toze.		32-1	<del>- 32</del> 0					
				326	328				<del> </del>	
				720	320					
			D 1533	328	330	2m	330	550	26	12
				330	332					
				332	334					
					<u> </u>					
		334 m Begin blebs of py and minor po with ep		334	336					
		and chlor, 3-4% py.								
· · · · · · · · · · · · · · · · · · ·				336	338					
		341 - Begin bleaching, increasing chlor-ep-py-po			ļ					
		-mag. 5-6% sulfides by 346	D 1534	338	340	2m	380	970	26	15
<del></del>	<del> </del>								_	
				342	344				ļ	ļ
		2/6/			0.46	_			-	
		346.4m - 10cm white pegmatite dyke @ 40° 348.1m - 15cm white pegmatite dyke @ 60°		344	346	<del></del>			<del>-</del>	-
		340.1m 13cm white pegmatite dyke 6 00		2/6	2/0					ļ
		349.5 - 350 - Coarse py streaks with cpy.		346	348					-
		31313 330 Course py Streams with oppy	D 1535	348	350	2m	1140	770	114	15
	<u></u>	252.0 261.0	D 1333	1 340	330	2111	1140		+ + + + + + + + + + + + + + + + + + + +	+ +
		352.9 - 361.8 - very strong chlor ep alteration with abundant blebs and streaks of py-po-mag,	<del> </del>	350	352			-		<b>†</b>
		trace cpy, replacing matrix and some mafic frag-		1 330	352				<del> </del>	
		ments. 10-12% sulfides		352	354				<del>                                     </del>	1
				752	354				†	
		360.8 - 2 Qtz veins as below-irregular, glassy,		354	356				1	
		cut by py-po mineralization Fragment in								
		breccia. Transition abrupt, contact not sharp.		356	358					
61.8	394.1	Meta Volcanic	D 1536	358	360	2m	990	880	18	85
		Textures destroyed. Moderate tan argillic alter-								
		ation and patchy green colour. Very abundant		360	362					

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MET	TRES	± DESCRIPTION	SAMPLE	М	ETRES	LENGTH	<u> </u>			
from	to	DESCRIPTION	Νō	from	to	LENGIH	ppm Cu	ppm F	ppm Mo	ppm W
		qtz stringers and veinlets, several ages, varying		362	364					
		dips. Barren to trace MoS <sub>2</sub> Parent rock unrecog-								
		izeable. Abundant feldspars to 5mm, variable.		364	366					
		Variable silicification, occasional qtz eyes late								
		gypsum veinlets common.		366	368					
		369, 372.6 - crushed zone S several qtz veins						ļ		
		with minor MoS <sub>2</sub> , scattered	D 1537	368	370	2m	280	760	20	170
		377.8, 378.8 1cm pegmatite veinlets @ 45°		370	372					
				372	374					
				374	376					
				376	378					
		381.5 - 382.5 Patchy hematite alteration of		370	370				<del>                                     </del>	
		feldspars associated with late calcite veinlets	D 1538	378	380	2m	33^	390	58	15
		383.8m - 0.7cm quartz vein with MoS, on margins		380	382					
		383.8m - 0.7cm quartz vein with MoS <sub>2</sub> on margins 384.0 - 40cm quartz vein @ 30°								
		386.8m - 10Cm gouge zone @ 45°		382	384					
		387.0m - 0.6cm quartz vein with inclusions of			ļ					ļ
		volcanics		384	386			ļ		ļ
1.50		390 m- massive pyrite patch 30cm long with minor		386	388					
		pyrrhotite, hematite								
			D 1539	388	390	2m	330	460	136	5
		394, 394.5 m - 3 coarse aplite dykes @ 70°								
				390	392				1	
394.1	423m	Meta Volcanics								
		A volcanic breccia, fragments visible, but indist-		392	394	. •				
		inct, chlor, pale brown tinge- weak argillic alter							<b></b>	ļ
		-ation? Silicified to 401.6 with other crenulated		394	396			<b></b>	<b></b>	
		qtz veins, cut by later more glassy ones. A few		206	398			<del>                                     </del>	<del>                                     </del>	<u> </u>
		late py-chlor veins.	l	396	778		<u> </u>	1	1	L

# DIAMOND DRILL RECORD

HOLE No: PAGE Nº:

MET: from	RES   to	DESCRIPTION	SAMPLE Nº	METR1	ES to	LENGTH	ppm Cu	nnm F	ppm Mo	nnm W
		/O1 ( /1" T / )	D 1540	398	400	2m	130	+	20	<del>                                     </del>
	<del> </del>	401.6 - 415m Intense argillic alteration with crenulated qtz veins, fragmental texture not	D 1340	390	400	2m	130	960	20	1.5
		evident, tuffaceous? Other qtz veins crackled	<b></b>	400	402			1	<del></del>	ļ
		(see 406.2) very little sulfide other than 1%		100	702					<del> </del>
<del></del>		disseminated pyrite.	<u> </u>	100	404		<del>                                     </del>			
		disseminated pyrite.	<u> </u>	402	404					<del>                                     </del>
	<del> </del>	403 - 423m - Massive quartz veins up to 1.5metres		404	406					
		wide make up 50% of rock. Many other stringers		404	400					
		and veinlets all barren Older veins contorted		406	408				<del> </del>	-
				400	400			<del> </del>		
		Lower contact abrupt but not sharp	D 1541	408	410	2m	57	500	16	15
<del></del>					110			ļ		<u> </u>
				410	412					<del> </del>
				412	414					
				414	416					
				717	410					
				416	418					
~ 1			D 1542	418	420	2 m	85	640	20	4
423	472.0	Quartz Vein		420	422				<u> </u>	
	1/210	Upper contact @ 20° to core. Quartz vein, milky,								
		cut by translucent quartz stringers as @ 434.6.		422	424					
		Scattered silicified and resorbed volcanic frag-								1
		ments. Hairline qtz-py veinlets about 6/metres.		424	426					
		Hairline fractures with gypsum more than 2-/metre.		727	720			<b></b>	<b>-</b>	1
<del></del>		A few small qtz-py-mag veinlets.		426	428			<del>                                     </del>	<u> </u>	
		425.6m- trace MoS <sub>2</sub> on fracture, 426.8 same with py		720	1-0		<b>†</b>			
		trace MoS <sub>2</sub> common below 425m, 0.00XM0	D 1543	428	430	2m	53	50	28	5
		$432.2.434.6$ quartz-MoS py- veinlets @ $25^{\circ}$								
		to core 60° 2		430	432					
		436.5, 437.2m - white pegmatite dyke @ 45°,								
		cut by qtz-py veinlet, minor diss py.		432	434					

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GE Nº: 15

METR from	RES to	DESCRIPTION	SAMPLE Nº	METR1	ES   to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
		444 - 448m- granular textured qtz-silicified		434	436			**********		
		volcanic?								
		44.8. 448.2m - 1-2cm coarse granitic dykelets		436	438					
	_	44.8, 448.2m - 1-2cm coarse granitic dykelets with strong argillic alteration @ 45°								
		451.2 - 452.0m - aplite dyke with pegmatite	D 1544	438	440	2m	220	200	74	4
		patch, argillic alteration, cut by qtz-py								
		veinlet 0 60° to core.		440	442					
		454.2, 454.8m- same, 10m, @ 60°								
		452 - 473.2m - abundant colcanic fragments,		442	.444					
		py-chlor-specularite-po patches; 2-5% py, diss								
		and in fractures		444	446					
		457.5 - 458.6m -aplite dyke @ 45°, green, intense								
		sericite-qtz alteration.		<sup>7</sup> 446	448					ļ
		berrette que arcoration.	D 1545	448	450	2m	47	100	58	7 -
		464 - 469.5 MoS <sub>2</sub> in hairline fractures & qtz-py	D 1343	440	430	2111	47	100	- 50	<b></b>
		vienlets, grade 0.02% Mo? many gypsum veinlets		450	452					
		469.3, 469.5 pegmatite dykes @ 70		450	432				<del> </del>	-
		405.5, 405.5 pegmatize ayato ( )		452	454					
472.0	478 7	Early Porphyry	<u></u>	<del>                                     </del>	<del> </del>				1	
472.0	4/0./	Fragments in quartz vein as above	<b></b>	454	456				· · · · · · · · · · · · · · · · · · ·	
		473.2 473.6 diorite dyke, silicified,	<u> </u>	1 13 ,	133				1	
		weak argillic alteration. Bleached along gypsum		456	458					
		veinlets	·	1_730	750					
		477.4 - 20cm pink granitic dyke @ 65° to core	D 1546	458	460	2m	76	170	20	5
478.7	481.8	Diorite		460	462				-	
		Medium grained, relatively fresh biotite;	<del>                                     </del>	700	1 702				+	<del>                                     </del>
		chloritic alteration along quartz-chlorite	<u> </u>	462	464					
		vein; fresh, w/pegmatite at both contacts		402	404					
				464	466				1	
481.8	488.3	Quartz Vein		ļ						
		Nearly all quartz with silicifed early porphyry	D 1547	468	470	2m	66	110	38_	8
		fragments. Several 1-2cm pink pegmatite dykelets								
				470	472					

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XMX.	ETRES	DECCRIPTION	SAMPLE	ME	TRES	LENGTH				
from	to	DESCRIPTION	Νō	from	to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
		with weak argillic alteration. Several 1-3 cm		472	474					
_		coarse diorite dykes with argillic alteration.	,		1-11					
		Minor MoS <sub>2</sub>		474	476					
		£		- '' <del>'</del>	1 770					
488.3	492.8	Biotite Schist		476	478					
		Weak to moderately chloritized, strong chlorite								
		along fractures and quartz veinlets. Late quartz- calcite veinlets. Schistosity @ 45°	D 1548	478	480	2m	14	390	18	3
	<u> </u>			480	482					
492.6	495.6	Biotite Quartz Monzonite (Nelson-related?)			1					<del></del>
<del> </del>		Medium grained, locally pegmatitic.		482	484					
		Foliated near lower contact. Older than quartz		1 702	707					
		veining, moderate argillic alteration		486	488					
				1,00	1				1	
595.6	511.2	Quart Vein	D 1549	490	492	2m	9	420	8	1
		Glassy translucent qtz with occasional silicified								<del></del>
				492	494					
		early porphyry inclusion with Kaolinized feldspars. Thin quartz-py-speculerite veinlets @ 30° + 70° to							1	· · · · · · · · · · · · · · · · · · ·
		core. Qtz-py MoS, veinlets, some MoS, on fractures		494	496					
		grades less than 0.01% Mos		<del>                                     </del>	7.70					
		grades less than 0.01% MoS <sub>2</sub> .  499.0 - 15cm pegmatite dyke @ 60°	-	496	498					
<del></del>		500.1 - hornfels inclusion		1,70	1				<del> </del>	ļ · · · · · · · · · · · · · · · · · · ·
			D 1550	498	500	2m	23	100	30	4
		503.0 - qtz-py-MoS <sub>2</sub> - hematite veinlets 503.7, 504.1 - pegmatite dyke, weak kaolinization	<u> </u>	770				100	1 30	4
		@ 50° to core		500	502					
		504.5 - 511.2 abundant argillically altered		1 300	1 302					
<del></del>		fragments.		502	504					
<del></del>					304					
511.2	517.7	Biotite Schist		504	506					
	1	Moderate to strong chlorite, esp along veinlets.		707	700					
		Hairline calcite-py veinlets. A few small slips.		506	508	• -				
		Foliation @ 70°		1 200	700					
		515.1 - 2cm pegmatite dyke, w/6cm chlor-ep alter-	⊉∴1551	508	510	2m	54	190	26	10
<del></del>		ation envelope.					1	1,717	1	
	<del></del>	4					<u>*                                      </u>	<del></del>		<del></del>

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METRES from	to	DESCRIPTION	SAMPLE Nº	METI from	RES to	LENGTH			34	
110111			Mā	<del>-</del>	<del>                                     </del>		ppm Cu	ppm F	ppm Mo	ppm W
				512	514					
				F1/	F16	<del> </del>			<u> </u>	<del></del>
	<del></del>			514	516					
	<del></del>			516	518			<u> </u>		
517.7	567 3	Farly Porphyry						<del> </del>	-	
		Early Porphyry Contact @ 70° in quartz veining	D 1552	518	520	2m	46	560	30	5
		35% rounded indistinct feldspars, average 2mm,								
		a few to 5mm. 10% black biotite. Fine grained		520	522			<del> </del>		
-		matrix, 3% diss pyrite with epidote. Strongly	····-					<u> </u>	1	
		silicified, bleached. Quartz stock-work intense;		522	524			<del> </del>		
		at least 5 vein stets: 1) barren quartz 2) barren		322	724				†	<b>†</b>
		quartz 3) quartz-py-chlor +/- py 4) quartz-MoS2		524	526					-
	1.0	+/- py 5) chlor-py-calcite		724	320		<del> </del>		<u> </u>	
		520.4 - 521.3 - granitic dyke, medium grained		526	528					<u> </u>
		equigranular, locally pegmatitic, white, 5%		1					<u> </u>	
		biotite. Fresh cut quartz veins, a MoS - quartz	D 1553	528	530	^2m	38	400	38	8
		biotite. Fresh cut quartz veins, a MoS <sub>2</sub> - quartz vein; cut by quartz-py-chlor, chlor-py-calcite,			+			1		
		MoS <sub>2</sub> - py veins.		530	532			-		<u> </u>
		522.6 - 532.2 - strongly fractured			-					
		524.5 - 2 pegmatite dykes, 5 + 10cm. Bleached		532	534					
		feldspars near late fractures, silicified adjacent			1					
		to chlorite-py veinlet.		534	536					1
		528.0 - 530.8 biotitic metavolcanics 532 locally		<del> </del>	1					
		abundant po, occasional qtz-MoS2, qtz-py-MoS2		536	538			<u> </u>		
		veinlets						\		
	· · · · · · · · · · · · · · · · · · ·	536 - 537.3 - chloritic metavolcanic inclusion	D 155	538	540	2m	30	660	95	7
		537.5 - late 4mm quartz-MoS2 vein parallel to core	· · · · · · · · · · · · · · · · · · ·							
		546.2 - siliceous white pegmatite dyke		540	542					
		547.4 - 548.3 - white pegmatite dyke, cut by								
		translucent tz ei s ard by gtz-py-chlor veins:		542	544					
, , , , , , , , , , , , , , , , , , , ,		translucent tz eis ard by qtz-py-chlor veins; has clots of py. Contact @ 50°.								
		550 - 552.5 - late intense silicification and		544	546					1
		pink-brown mottled alteration with up to 15%		744	1 7 7 7					
		po and minor cpy in irregular patches - hornfels	,	546	548				1	

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PAGE	–	Δ	

SAMPLE **METRES METRES** DESCRIPTION LENGTH from to Νō from ppm W ppm Cu ppm F ppm Mo inclusions D 1555 548 550 2m 670 30 554 - 567.3 Feldspar phenocrysts distinct white, unaltered (?), biotite only weakly altered, 550 552 intense qtz stockwork 556-557.8 Lamprophyrye dyke @ 45° 552 554 562 - 567.3 Intensity of stockwork increasing. late translucent quartz veining 554 556 563.4 - 50% vein quartz, relatively fresh qtz. porphyry, veins nearly parallel to core 563.1, 565, 565,4 - 10cm pegmatite dykes @ 45° 556 558 D 1556 42 560 558 2m 330 67 4 Nelson Quart Monzonite 567 3 568 4 5-10% feldspar phenocyrsts4-6mm in seriate ground mass, 15% biotite, some hornblende-weakly chlorit-560 562 ized. A few K-spar phenocrysts 2-4 cm. Ouite 562 564 fresh. Early Porphyry 572.7 568.4 as 517.7 - 567.3 same intense stockwork as above 564 566 with veining, and alteration minor MoS2. 572.7 587.5 Nelson Quart Monzonite 566 568 as 567.3 - 568.4, 572.7-575.4 more leucocratic, no veining, few large K-spars, gradational lower D 1557 568 570 2m 26 640 72 contact 575.4 Tectonic breccia- 5cm Below 567, 572 570 late chlor-py-calcite veinlets common, weak chlorite envelopes, quite fresh otherwise. 572 574 584.8- 10cm pegmatite dyke @ 45° 585.8 - 40cm aplite-pegmatite dyke @ 45° 576 578 587.5 590.5 Early Porphyry as 517.7 - 567.3 incipient stockwork, fractured, D 1558 578 580 2m 12 610 3 kaolinized, silicified 590.1 - 4 quartz-MoS,-pyrite veins @ 60° 582 580 Nelson Quartz Monzonite 590.5 602.1 as 567.3 - 568.4 quite fresh 582 584 584 586

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METI from	RES to	DESCRIPTION	SAMPLE Nº	ME'	TRES	LENGTH	nnm Cu	nom E.	DDM MO	nom W
		Reduce to BQ at 593.6 metres		586	588					
		595.2 - Several chlor-calcite-py veinlets, bleach- ed & silicified for 40cm	D 1559	588	590	2m	24	740	160	3
		597.0 - 20cm pegmatite dyke @ 25° 596.5 - 597.6 - hornfelsed heterogeneous breccia		590	592					
		as 604.8 -644.1, contact @ 30° 600.7 - 602.1 - strongly silicified, pinkish-brown		592	594					
		mottling, several quartz-MoS <sub>2</sub> veins @ 30-45°		594	596					
602.1	602.9	Heterogeneous Breccia as at 604.8 - 644.1, silicified, upper contact 50°, lower 40°		596	598					
602.9	604.8	White Feldspar Porphyry (?) 5% partially alterd biotite, 30-40% white feldspars to 2mm in aphan-	D 1560	598	600	2m	14	870	6	1
		itic matrix, trace disseminated pryite.		600	602				_	
604.8	644.1	Heterogensous Breccia Very similar to upper 400 metres except more strongly metamorphosed. Heterogeneous volcanic		602	604					
		and porphyritic fragments in green fine grained matrix, scattered interstitial clost of py- +/-		604	606					
		cpy Occasional irregular veins of py-po-hornfels related? Late calcite veinlets \( \sigma 20/m \) several		606	608					
		large andesite blocks.  605 - 606.1 - biotite schist with 10% py-po-cpy	D 1561	608	610	2m	310	690	10	11
		in clots, lower contact @ 30° mottled red-brown and pale green		610	612					
		611.3 - 613 Biotite schist, lower contact @ 40° 614.3 - 614.8 Aplite-pegmatite dyke @ 50°		612	614					
		617.2 - quartz-MoS <sub>2</sub> veinlet, 1mm @ 60° 618, 622.5, 626 late calcite veinlets show		614	616					
		narrow bleached envelopes where they cut granitic		616	618					
		fragment 626.2 - 626.7 - Alaskite dyke, pegmatitic in part, 2% disspy, contacts 3 65°	D 1562	618	620	2m	196	820	9	4
		2% disspy, contacts 'd 65°		620	622					

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	~~~									· .L.	
MET from	RES to	DESCRIPTION	SAMPLE Nº	METRE from	S to	LENGTH	D	om Cu	ppm F	ppm Mo	ppm W
		629.7 - 630 - WHite feldspar porphyry dyke? @ 70		622	624						
		635.6 - 636 - leucocratic quartz mononite dyke									
		with pegmatitic margins @ 55°		624	626						
		636.8, 638.4, 640.5 - white pegmatite dykes									
		with minor diss po- 10cm each		626	628						
		630-649- py-po-cpy abundant in clots and stringers	3								
		to 0.3% Cu. Locally very magnetic	0 1563	628	630	2m		225	820	10	1
644.8	644.9	Aplite Dyke							† <u>-</u> -		
		Largely aplitic, locally pegmatitic, 2-4% dissem-		630	632						<u> </u>
		inated sulfides, largely po @ 45°						<u> </u>			
644.9	657.9	Heterogeneous Breccia	1	632	634						-
		Fragments generally less than 5cm, porphyry frag-	<b></b>	032	034	<del>  </del>					-
		ments common; pale green-brownish pink-dark green	<b></b>	634	636				1	<del>                                     </del>	
		mottling due to skarn alteration -moderate	<b></b>	034	0.30				<del> </del>		
		to strong. Very little quartz veining	<b>-</b>	636	638	<del>  </del>					
	<del></del>	Late chlorite-calcite +/- gypsum veining. Minor		0.30	0.38	<del> </del>					
		py-po +/- cpy as blebs, 0.1% Cu.	D 1564	638	640	2m		196	1050	11	3
		646.8 - 647.4 Lamprophyre dyke @ 55°	1304	030	040	2111		190	1030	TT	3
		648.7 - 653.8 - Fault zone cemented by chlorite		640	642			<del></del> :	<del> </del>		<u> </u>
		and calcite, minor gypsum. Many slicks @ 40-50°,	<b>-</b>	040	042	<del> </del>		<del></del>			<u> </u>
		fractures with chlorite + calcite persist to 656m				-		······································		<del> </del>	<u> </u>
657.9	660.1	Biotite quartz Monzonite (Nelson?)		642	644	<del>  </del>				-	-
	000.1	feldspar phenocrysts 2-4mm, brown biotite in		644	646	+			-		
		1-5cm bands @ 60°. Strong fracture set @ 20°	<del> </del>	044	040				<del> </del>	<del> </del>	<b>.</b>
		to core with argillic alteration. Contact @ 60°.	<del> </del>			<del></del>			ļ		
660.1	661 /			646	648					ļ	
000.1	661.4	Lamprophyre Dyke.		<del> </del>					<del> </del>	<del> </del>	
((1))		Contact @ 30°, a few late calcite-quart veinlets	D 1565	648	650	2m		174	1050	11	2
661.4	694.9	Heterogeneous Breccia	ļ	(50	650						<u> </u>
		Coarse. 15% porphyry fragments, 25% biotitic	ļ	650	652	4					
		volcanics, 25% pink cherty siltstone, 10% others,								ļ	
		25% matrix. Strong skarn-like alteration, diop-		652	654	1			ļ		
·		side-actionolite, secondary biotite, hornblende.							ļ		ļ
		Cut by many (15-20/metre) actinolite-po-py +/-	<b> </b>	654	656						
	*	cpy quartz veinlets or alteration along fractures.	ļ	<u> </u>							
		Occasional black amphibole- py-po vėinlets.	L	656	658				l	L	L

DIAMOND DRILL RECORD

HOLE No:	
80-1	

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METR from	to	DESCRIPTION	SAMPLE Nº D 1566	from	RES to	LENGTH	ppm Cu	nnm F	nnm Ma	<b>!</b>
					from to		1 1373111 (.711			
			ו אמרו וו	750		1		340		
			р 1300	658	660	2m	10	340	2	2
				- //0	- //0					ļ
	i			660	662					
		669.3 - 670.0 - Porphyry dyke w/epidote-pegmatite		·····						
		dykes as follows:		662	664					
		662.4- 15Cm @ 60°, 665.4 - 10cm @ 50° 666.0 -40cm								
		662.4- 15Cm @ 60°, 665.4 - 10cm @ 50° 666.0 -40cm @ 50°, 673.7-8cm @ 70°, 679.6 - 5cm @ 20°, 679.9		664	666					
		10cm @ 70°, 684.0,								
				666	668			****		
		684.5 Nearly parallel core								
		total sulfides less than 2% below 660m	D 1567	668	670	2m	84	630	6	1
									<del> </del>	<del>                                     </del>
		673- 678 m - many late calcite +/- chlorite		670	672					
		veinlets at low angles, only weakly magnetic			072				<del>                                     </del>	
		vermees at less angles, only weakly magnetic		672	674					
		alteration intensity increasing decreased		0/2	0/4					<del> </del>
		alteration intensity increasing downward fragments becoming indistinct - see 685.5		674	676		 <u> </u>		ļ	<del>                                     </del>
		Tragments becoming indistinct - see 003.3			070					
604.0	700.0	D1		(7)	(70					<del>                                     </del>
694.9	702.2	Biotite Schist		676_	678					<del>                                     </del>
		Brown hornfelsed andesite? A few visible frag-			<b> </b>	_			ļ	<del></del>
		ments. 2-3% diss. py-po. Weakly magnetic. Cut by a few quartz-actionolite veins as at 696.6	D 1568	678	680	2m	136	830	4	1
		by a rew quartz-actionoffice verifis as at 670.0								-
				680	682		 		<del> </del>	<u> </u>
702.2	707.8	Heterogeneous Breccia	· · · · · · · · · · · · · · · · · · ·				 			
		Fragments very indistinct, deformed, intense		682	684				ļ	<del> </del>
		skarn alteration. Schistose in part.								
				684	686					<u> </u>
				686	688					
			D 1569	688	690	2m	200	920	7	1
				690	692					
				030	092				<b>†</b>	<del>                                      </del>
				692	694				<del>                                     </del>	<del> </del>

DIAMOND DRILL RECORD

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METRES	· ·			Y		·	<del>, , , , , , , , , , , , , , , , , , , </del>	۷.	_	
from	to	DESCRIPTION	SAMPLE Nº	METR from	ES to	LENGTH	ppm Cu	ppm F	ppm Mo	ppm W
				694	696			-		
				696	698					
				090	090					
			D 1570	698	700	2m	157	1250	1	1
		703 5 703 9 - white perphyritic dyke with peg-		700	702					
		703.5 703.9 - white porphyritic dyke with peg- matitic margins, contact @ 65°		702	704					
707.8	721.3			704	706					
		1% quartz phenocrysts, abundant white feldspar phenocrysts in grey to pink-brown aphanitic		706	708					
		matrix. Strong biotitic alteration (hornfels).  A few fragments locally, very indistinct. Streaks	D 1571	708	710	2m	86	590	4	3
		and diss po to 1%, trace cpy. Many hairline calcite veinlets with 1-2mm white envelopes, generally @ 25° schistose locally		710	712					
		generally @ 25° schistose locally  711.6 - 2 cm white pegmatite dyke @ 70°		712	714					
721.3	740.5	Heterogeneous Breccia		714	716					
		as 702.2 - 707.8 Strong skarn alteration.  Porphyry fragments to 15cm with pink-brown biotite		716	718					
		pale green actinolite and chlorite in others and								
		in matrix. Minor disseminated po. A few calcite- py veinlets; calcite on late fractures.	D 1572	718	720	2m	32	650	3	2
		py verniets; carcite on rate fractures.		720	722					
		731.9 - 8cm pegmatite dyke, quartz rich with po		700	70/					
		clots.		722	724					
		732.7 - 733.2 - rock strongly fractured, grey-		724	726					
		green clour-quartz sericite?		726	728			+		
		734.3 - 734.7 Lamprophyre dyke @ 60°								
				728	730					

DIAMOND DRILL RECORD

HOLE	NQ:	
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24 METRES METRES SAMPLE LENGTH DESCRIPTION from to Nο from DDM Cu DDM F DDM MO DDM W 748.7 730 732 740.5 Feldspar Porphyry indistinct plagioclase phenocrysts to 2mm in fine grained matrix. 1% quartz phenocrysts to 2mm. 732 734 Strong biotite veinlets with 1-3mm bleached and silicified envelopes. 734 736 736 738 740 710 D 1574 738 2m134 742 740 748.3 - white coarse aplite to pegmatite dyke with 5% brown biotite, 10cm, @ 70° 742 744 748.7 749.9 Heterogeneous Breccia 746 as 721.3 - 740.5 744 749.9 757.3 Feldspar Porphyry as 740.5 - 748.7, except strong pale green 748 746 alteration (quartz-actinolite-epidote?) at 755m. Very granular texture to 756.7 - 757.3 silicified D 1575 748 750 2m 800 2 162 12 fracture zone @ 30° 752 750 757.3 763.7 Heterogeneous Breccia as 721.3 - 740.5 752 754 py & cpy locally abundant between fragments and as irregular veinlets, see 759.1 756 754 759.8 - white pegmatite kyke, 10% disseminated po, @ 20% 756 758 763.7 775.2 Feldspar Porphyry D 1576 758 760 2m 170 810 as 740.5 - 763.7 Strong brown biotite (hornfels) 760 762 Feldspar phenocrysts indistinct. May be locally fragmental rock. Many hairline fractures with chlorite-calcite-pyrite with bleached margins. 762 764 A few actinolite-pyrrhotite-biotite-quartz veinlets to 4mm with 1cm silicified envelopes. A few low 764 766

DIAMOND DRILL RECORD

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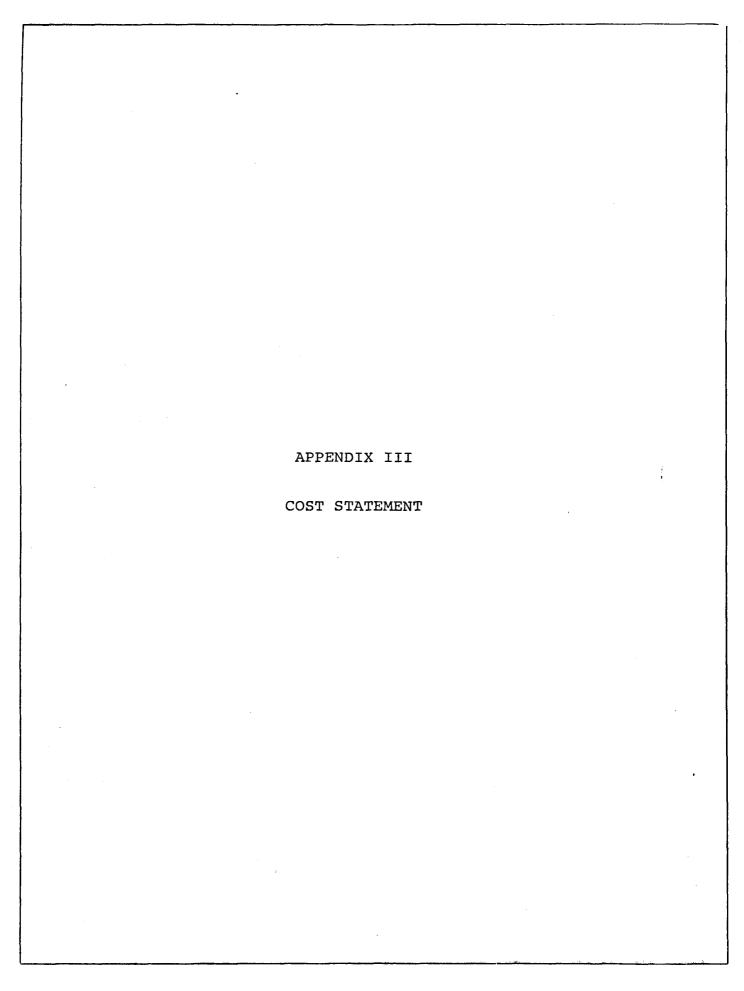
METRES from to		DESCRIPTION		METRES from to		LENGTH	nnm Cu	nnm F	nnm Mo	W maa
		angle calcite veinlets						DDM.		
		767 - 77713 intensely fractured with		<del></del>	<del>                                     </del>					
		silicification and dark green silicate veinlets		766	768					
		772.3 - 773 Intense silicification		700	700					
		773.5 - 774.4, 775.2 - white pegmatite dykes	D 1577	768	770	2m	42	580	1	3
		with pyrrhotite	f		1					
		water pyramotice		770	772					
775. 2	782.3	Heterogeneous Breccia								
,		Intense hornfels, fragments distorted, indistinct		772	774					
				112	1/7					
		776.5- calcite veinlets with tan bleached envel-		774	776					
		opes								
		777.2- 10 cm Nelson porphyry dyke. @ 25°		776	778				1	
		778.4 - 1.5cm irregular po-quartz-cpy veins		170	170					
		781.0-20cm dyke - Nelson quart monzonite	D 1578	778	780	2m	18	490	2	3
		@ 45°	1370	770	700			-430	<del> </del>	<u> </u>
			<b> </b>	780	782					
782.3	812.5	Plagioclase-Quartz-Biolite-Hornfels	1	1					<u> </u>	
102.	OLZAJ	Feldspar porphyry? Phenocrysts only locally	1	782	784					
		obvious. 2% locally 5% disseminated po. Many		1	1					
		small po-cpy veinlets. Bleamhed adjacent to cal-	<del> </del>	784	786					
		cite and to quartz-calcite-chlorite veinlets.	1	704	1,00			<del> </del> -		
		Low angle ones more strongly altered.	ļ	786	788				<u> </u>	
					<del> </del>			<u> </u>		
		786.6 - 786.9 - white pegmatite dyke @ 70°	D 1579	788	790	2m	34	450	2	
		789.1 - 10cm gouge zone @ 30°	עובר מ	700	170	2111	J4	430	1	
		794.0 -2cm po-cpy vein parallel to core	<u> </u>	790 ı	792					
		794.8 - Stronger bleaching adjacent to veinlets.		7901	192					
		796.1 - 796.6 - white pegmatite - a0lite dyke with minor disseminated po & cpy @ 70°		792	794				-	
		799.3 - 3cm white granular quartz @ 65°	1	192	134			-	-	
		801.2 - 801.5 White porphyry dyke with		794	796					
		10% biotite, pegmatitic quartz margins	<b></b>	134	790		<del> </del>			<del>                                     </del>
		@ 70°	<del> </del>	706	700					
		U	ļ	796	798			<del> </del>	<del> </del>	
			D 1580	798	800	2m	44	670	1	4

DIAMOND DRILL RECORD

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	TRES	DESCRIPTION	SAMPLE		TRES	LENGTH						
from	to	DESCRIPTION	Νō	from	to	CENOTI			ppm Cu	ppm F	ppm Mo	ppm W
				800	802							
				802	804							
				804	806							
				806	808							
		Polovy 900m fractiveing hosping group gilia	D 1581	808	810	2m			126	410	1	1
•	<del> </del>	Below 802m fracturing becomes very strong, silic- ification nearly pervasive locally. Pyrrhotite	D TOOT	000	010	2111		7	120	710	+ -	
- · · · · · · · · · · · · · · · · · · ·		content erratic, about 2% disseminated. Occasion-		810	812.5					<del>                                     </del>		
	<del>                                     </del>	al po-py-cpy vein.	<u> </u>	010	012.5	†					<del>                                     </del>	<u> </u>
			<del> </del>		-			<del></del>		<del>                                     </del>	<del> </del>	
					ļ					<del> </del>	<del> </del>	<del> </del>
		010 5			-					<del>                                     </del>	<del> </del>	<del> </del>
		812.5 metres. End of Hole.								<del> </del>	<u> </u>	-
										<del> </del>		<del> </del>
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					-	T				<u> </u>	<u> </u>	1
			<b>†</b>			<del> </del>	<del></del>	<del>  </del>	<del></del>	<del> </del>	1	
					<del> </del>	-				<del> </del>	<del> </del>	
	<b>†</b>			<del>                                     </del>						<del>                                     </del>	†	
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			<b></b>	<del> </del>	<del> </del>	<b> </b>	<del> </del>			-	+	-
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#### COSTS STATEMENT

#### B.C. AYLWIN CREEK OPTION

# GEOLOGY, DIAMOND DRILLING, AND PHYSICAL WORK

## 5 MAY THROUGH 25 JUNE 1980

# GENERAL COSTS

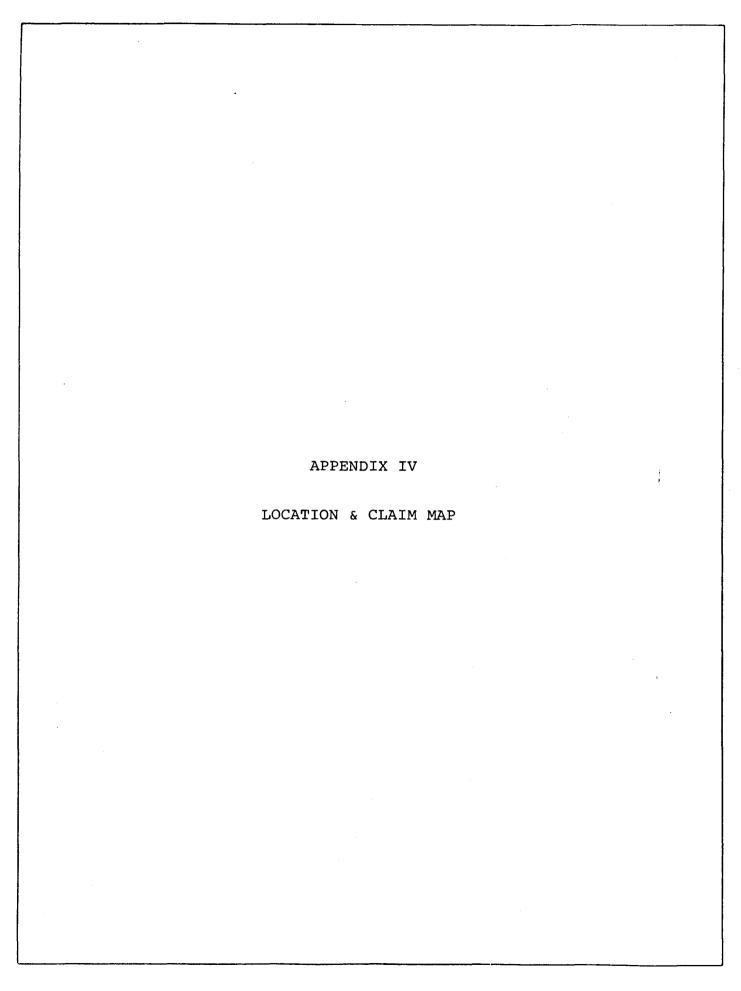
Food & Accommodation	
3 Men, 5 May-25 Jun, 101 Man Days @\$21.01	\$2,123.00
Supplies	1,547.33
<u>Fuel</u>	102.00
Fixed Wing (P.W.A.)	
Universal Travel, 5 May-30 May, 4 Rtns, 1-oneway, 9 trips @\$62.28	560.55
Riocanex Equipment 101 Man Days @\$3	303.00
Contract Rentals	
Bowmac '70 Toyota FJ40, 2 May-22Jun, 52 Days @\$24.28	1,262.56
TOTAL GENERAL COSTS	\$5,898.44
GEOLOGY COSTS	
Salary & Wages	
3 Men, 5 May-22Jun, 28 Man Days @\$65.00	\$1,831.20
Benefits @ 20%	366.24
<u>Helicopter</u>	
Highland 206B, 20-25 Jun 1.8hrs @\$382.67	688.80
Base Map Production	
McElhanney Surveying & Engineering	2,030.00
Rock Analysis	
Chemex Labs 73 for Cu, F, Mn, Mo, S, Sn, W @\$22.80	1,664.40
General Costs	
28/101 X \$5,898.14	1,635.21
TOTAL GEOLOGY COSTS	\$8,215.85

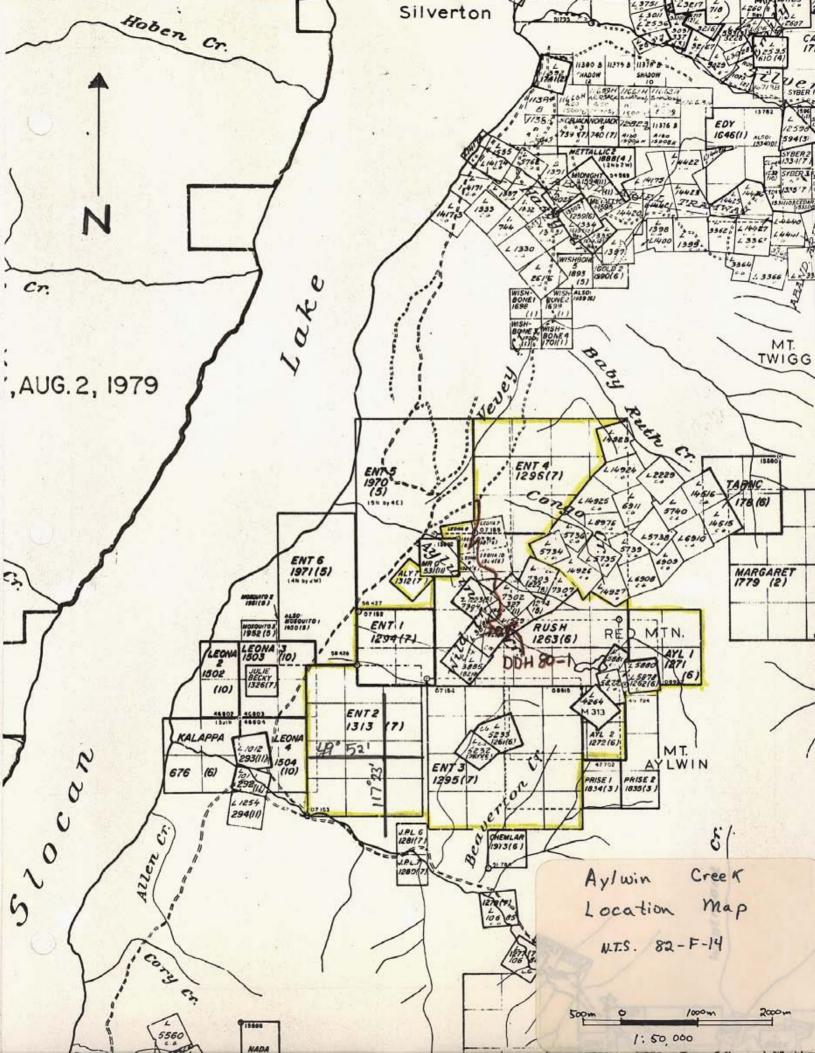
	DIAMOND DRILLING COSTS		
	Salary & Wages		
	3 Men, 5 May-25Jun, 65 Man Days @\$65.40	\$4	,251.00
	Benefits @ 20%		850.20
	Diamond Drilling (Contract)		
	Cameron McCutcheon, 1 May-25Jun, 812.29m @\$93.36	75	,838.86
	Hole Direction Survey		
	Sperry-Sun, 8 Jun, 730m @\$2.68	1	,958.77
	Core Assays		
	Chemex Labs, 122 WO <sub>3</sub> , F @\$21.00	2	,562.00
	Core Analysis		
	Riocanex Lab, 81 Cu, Mo @\$6.00 \$486.00 Chemex Labs, 41 Cu, Mo @\$11.50 471,50		957.50
	<u>Drill Move</u>		
	R & S Holdings, D6 Cat, 13 Jun, 8 hrs @\$50 \$400.00 Lowbed for Cat Mob/Demob		680.00
	General Costs		
	65/101 X \$5,898.14	3	796.03
	TOTAL DIAMOND DRILLING COSTS	\$90	,894.36
	PHYSICAL WORK		
	Riocanex Supervision Salary & Wages	ć	
	3 Men, 19-21 25 Apr, 5-11 May; 12 Man Days @\$65.40	\$	789.80
	Benefits @ 20%		156.96
	Contractors  V & H Contracots, 2-8May, DK8 Cat, 52 Hrs @\$89.75  Power Saw & Faller, 39 Hrs @\$14.50  DK8 Mob/Demob Lowbed/Pilot 5Hrs @\$93.88  W.C. Wingert, 21-25Apr, TD8 Cat, 45 Hrs @\$35  Labour 48 hours @ \$16.00  TD8 Mob/Demob	\$4,667.00 565.50 469.40 1,575.00 768.00 248.00	
	Vehicle Rental, 6 Days @\$25.00	125.00	8,417.00
1	Fixed Wing Universal Travel, 18Mar, 23 Apr Van-Cas Rtn 2 @\$123 General Costs	.10	246.20
:. £	8/101 X \$5,898.44		467.20
	TOTAL PHYSICAL WORK COSTS	· - -	\$10,072.48

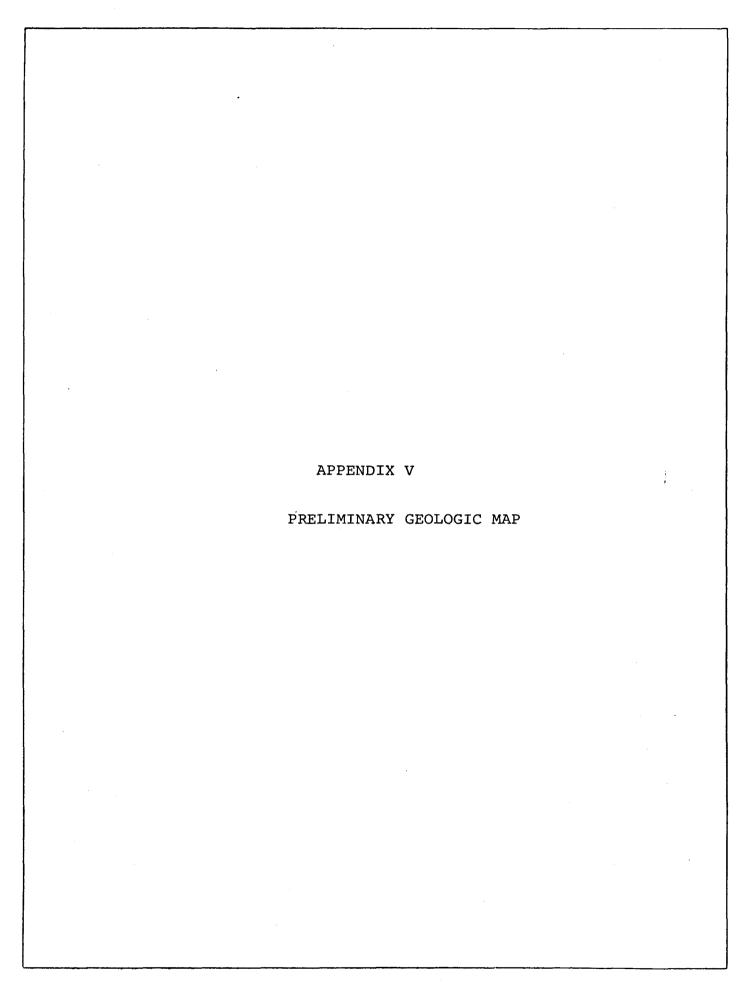
#### COSTS APPORTIONED

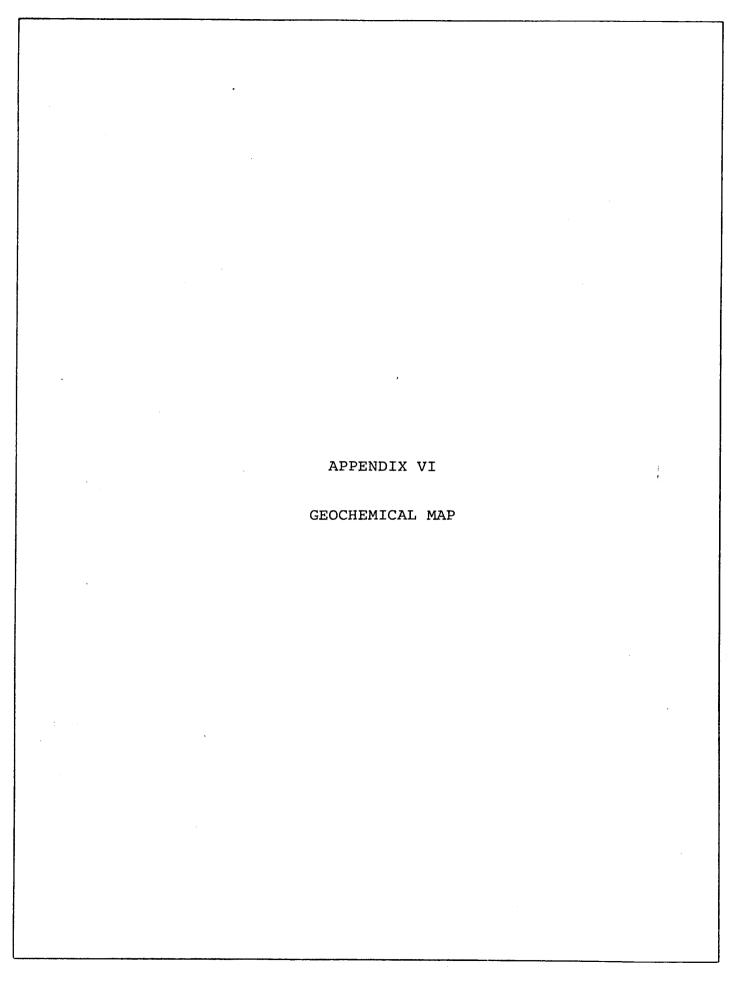
#### TO CLAIMS

CLAIM	UNITS	GEOLOGY	DRILLING	PHYSICAL	TOTAL
AYL 1	4	\$ 369.24	\$ -	\$ 452.68	\$ 821.92
AYL 2	6	553.86	-	679.02	1,232.88
RUSH	20	1,846.20	_	2,263.40	4,109.60
		•		,	,
ENT 1	4	369.24	_	452.68	821.92
ENT 2	12	1,107.72	_	1,358.04	2,465.76
ENT 3	16	1,476.96	_	1,810.72	3,287.68
ENT 4	12	1,107.72		1,358.04	2,465.76
ENT 5	20	-	-	_	· <del>-</del>
ENT 6	8	-		_	_
AYL 7	1	92.33	-	113.20	205.53
					*
LEONA 7	1	92.32	-	113.20	205.52
LEONA 8	1	92.32	-	113.20	205.52
LEONA 9	1	92.32	-	113.20	205.52
LEONA 10	1	92.32	_	113.20	205.52
WILLA	1	92.32		112 10	205 51
ROCKLAND	1	92.32	00 00/ 26	113.19	205.51
RUSTLER	1		90,894.36	113.19	91,099.87
		92.32	-	113.19	205.51
TRENTON	1	92.32		113.19	205.51
LAST CHANCE II	1	92.32	-	113.19	205.51
SILVER BAND	1	92.32	-	113.19	205.51
LITTLE DAISY	1	92.32	-	113.19	205.51
GOLDEN	1	92.32	-	113.19	205.51
IDLER	1	92.32	-	113.19	205.51
GOLDEN FR		92.32		113.19_	205.51
	117	\$8,215.75	\$90,894.36	\$10,072.48	\$109,182.59









Map to Follow

