

COMINCO LTD.

EXPLORATION
N.T.S. 921/9W

WESTERN DISTRICT
11 SEPTEMBER 1978

ASSESSMENT REPORT

PERCUSSION DRILLING

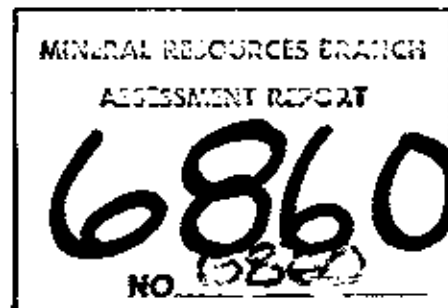
REG PROPERTY

GRANDVIEW SKI HILL AREA - KNUTSFORD
KAMLOOPS M.D., B.C.

120°19'30" 50°35'0"

DRILLING PERFORMED 16 AUG. - 20 AUG. 1978

ON CROWN GRANT NO. 1560



INTRODUCTION:

This report describes a percussion drilling program conducted on Crown Grant 1560 of the REG property in the Iron Mask batholith, south central British Columbia. This is an alkaline porphyry copper prospect owned by Great Plains Development Company of Canada Ltd. which Cominco Ltd. is operating under an option agreement dated 20 August 1977.

This drilling is the continuation of a program commenced in May this year but the completion was deferred until August in order to reduce the risk of surface damage resulting from heavy vehicle traffic over soft ground in the spring time.

The excellent cooperation of Mr. Reginald Payne who owns the surface rights in the area drilled is greatly appreciated.

BACKGROUND INFORMATION:

During the early 1970's, Great Plains conducted geological, geochemical and geophysical surveys on the I.M. and REG-BYR claims as well as Crown Grants 1560-1562. Considerable percussion and diamond drilling was done to test anomalies resulting from this work. This work has been documented in the private reports of Great Plains and these are available to Cominco. The basis for the drilling carried out by Cominco is a re-assessment of the Great Plains data.

PERCUSSION DRILLING AND SAMPLING:

Five vertical holes totalling 382 m (1260 feet) were drilled in the most recent program. Percussion cuttings were sampled at conventional ten

foot (3.3 m) intervals. Samples were collected in plastic refuse containers, a flocculating agent added to settle out the fines and the free water decanted. The remaining material was then poured through a large PVC plastic funnel into a filter bag which allowed most of the still remaining water to drain. The filter bags were then tied with string and left to dry in the sun, or alternately, placed in plastic bags which after tying were suspended upside down on a rack allowing the sample to lose further water by a combination of squeezing of the sample and drip drying. In due course the plastic bags containing the sample were packed in burlap bags for shipment to the Vancouver laboratory of Cominco where they were analysed by routine geochemical (A.A.) procedures for copper in the case of individual samples and for gold, silver and molybdenum in the case of composites. The assay results are included with the report.

Drill cuttings were examined briefly at the drill site with the aid of a ten-power hand lens. This type of examination identified general rock types, alteration and quality and approximate quantities of sulphides encountered.

ROCK CLASSIFICATION:

An attempt to group the intrusives encountered in the drilling is made and it is considered that these drill holes encountered the Cherry Creek and Sugarloaf units of Ken Northcote's classification for Iron Mask intrusives. The Northcote classification distinguishes the youngest units, the Sugarloaf and Cherry Creek, respectively on the basis of peculiarities in the shape of the mafic grain. These characteristics are sometimes gradational and not always easily determined even at the scale of out-crop samples; the problem of classifying percussion cuttings becomes quite another matter. Northcote (personal communication) indicates that the Cherry Creek unit may contain K-spar rich members while the Sugarloaf unit does not. This is the basis for assigning lithologies which contain abundant pink feldspar (assumed to be mainly Kspar) to the Cherry Creek unit and non-pink feldspar bearing lithologies to the Sugarloaf unit. Accordingly "monzonitic" and "dioritic" intrusives are distinguished in the rock descriptions of this report. One of the limitations of this classification is that some of the lithologies assigned to the Sugarloaf unit may actually be Cherry Creek members containing little or no K-spar. The Sugarloaf unit is readily distinguished from the coarser dioritic appearance of the Hybrid phase which contains abundant mafic inclusions. No intrusives resembling the Hybrid phase is recognized in this percussion drilling.

ROCK DESCRIPTION:

PH REG 78-8

Length : 91 m (300 feet)
Elevation: 3220 feet

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
0- 5' (0 - 1.5 m)	Overburden	
5-180' (1.5-54.5 m)	Sugarloaf unit	Oxidized dioritic looking intrusive containing minor pink feldspar. 3/4 to 1% pyrite. Minor chalcopyrite.
180-210' (54.5-63.6 m)	Cherry Creek unit	Monzonitic looking intrusive containing abundant pink feldspar and 3/4 to 1% pyrite.
210-300' (63.6-91 m)	Sugarloaf unit	Dioritic intrusive as 5-180'. 1/2 to 3/4% pyrite.
END		

PH REG 78-9

Length : 61 m (200 feet)
Elevation: 3240 feet

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
0-5' (0 - 1.5 m)	Overburden	
5-200' (1.5-61 m)	Sugarloaf unit	Dioritic looking intrusive containing minor pink feldspar. Pyrite generally 1/2%. Fairly heavy chalcopyrite 50-100' in a chloritized and epidotized section. Plagioclase altered.
END		

Note: Drill rods sticking in a caving section at 200'.
Hole abandoned, all equipment recovered.

PH REG 78-10

Length : 49 m (160 feet)
Elevation: 3215 feet

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
0- 5' (0 - 1.5 m)	Overburden	
5-160' (1.5- 49 m)	Sugarloaf unit	Dioritic looking intrusive with minor pink feldspar. Pyrite generally less than 1/2%. Faulting at 100'.

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
END		Epidote. Plagioclase generally fresh.

Note: Drill rods broke in faulted section at 100 feet.
Sixty feet of drill rods lost at depths below 100 feet.

PH REG 78-11

Length : 91 m (300 feet)
Elevation: 3290 feet

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
0- 5' (0 - 1.5 m)	Overburden	
5- 50' (1.5- 15 m)	Sugarloaf unit	Dioritic looking intrusive containing minor pink feldspar. $\frac{1}{4}$ to $\frac{1}{2}$ % pyrite. Chloritized mafics.
50- 70' (15 - 21 m)	Cherry Creek	Monzonitic - abundant pink feldspar. $\frac{1}{4}$ to $\frac{1}{2}$ % pyrite strongly chloritized. Fairly heavy chalcopyrite.
70- 80 (21 - 24 m)	Sugarloaf unit	Dioritic looking. $\frac{1}{4}$ % pyrite, epidote, chlorite abundant, traces of chalcopyrite. Monzonitic, plagioclase intensely altered. Drill sludge often runs milky white. Mafics chloritized $\frac{1}{2}$ % pyrite. 100-110' very heavy chalcopyrite.
120-300' (36 - 91 m)	Sugarloaf unit	Dioritic intrusive with minor pink feldspar $\frac{1}{2}$ to 1% pyrite. Chloritized mafic, plagioclase weakly altered. Traces of chalcopyrite.

PH REG 78-12

Length : 91 m (300 feet)
Elevation: 3195 feet

<u>Interval</u>	<u>Lithology</u>	<u>Note</u>
0- 18'(0 - 6 m)	Overburden	
18- 70'(6 -21 m)	Sugarloaf	Dioritic intrusive, chloritized mafics. $\frac{1}{2}$ - $\frac{3}{4}$ % pyrite.
70-100'(21-30 m)	Cherry Creek	Monzonitic intrusive. Chloritized mafics, plagioclase altered to clay minerals. Minor pyrite. Traces cpy.
100-190'(21-58 m)	Sugarloaf	Dioritic intrusive, mafics altered to chlorite, $\frac{1}{2}$ % pyrite.
190-300'(21-91 m)	Cherry Creek	Monzonitic intrusive containing heavy pink feldspar. Very heavy chalcopyrite at the top of the section decreasing with depth. Pyrite $\frac{1}{2}$ to 1%.

CONCLUSIONS:

Short intersections of copper grades normally considered significant in a porphyry environment were encountered in most of the drill holes. Further drill testing is required in the area between PH REG 78-1 to 4 in the west and PH REG 78-11 in the east. This is believed to be an area as yet untested by drilling. A few inclined percussion holes would be advisable. Holes drilled on a 400 foot centre should be adequate for a first pass provided they are staggered. The latter, together with some inclined holes would help reduce the risk of missing a good grade zone of mineralization in the order of 100 m in width, which, if a sufficient length and depth could be economic.

RUB:gk

Report by: *R. U. Bruaset*
R.U. Bruaset
Project Geologist

Attachments:

Index Map Plate 1
Drilling Plan Plate 2
Statement of Qualification
Statement of Expenditures
Assay Sheets

Endorsed by: *W.L. Wynne*
W.L. Wynne
Senior Geologist

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

STATEMENT OF QUALIFICATIONS

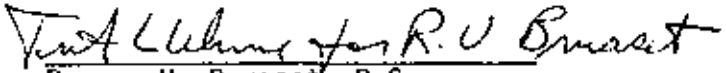
REG PROPERTY

I, Ragnar U. Bruaset, with business address at 409 Granville Street, Vancouver, British Columbia, V6C 1T8, do hereby certify that I have supervised the percussion drilling programme on the REG property.

I also certify that:

1. I am a graduate of the University of British Columbia with a degree of B.Sc. in Geology 1967.
2. That I have been involved in exploration work for Cominco Ltd. since 1967 and that I have been involved in all phases of porphyry copper exploration and development since 1968 to the present.
3. That I have been closely involved with the exploration work on the REG property during the period of August 1977 to the present.

Respectfully submitted:


Ragnar U. Bruaset, B.Sc.
Project Geologist

STATEMENT OF EXPENDITURES

REG DRILLING

Contract charges (Al Miller Percussion Drilling Ltd.)		\$ 4,573.
Salaries	R.U. Bruaset	1,064.
	Robert Ryziuk	360.
Domicile		300.
Assaying		499.
Transportation		240.
Miscellaneous		<u>350.</u>
		\$7,386.

Cost/foot = \$5.86

Cost/metre= \$19.34

Frank A. Alhane

REG PROPERTY

CU ppm

R78 05978	12132	I	5-20'	128
R78 05979	12133	I		3200
R78 05980	12134	I		1820
R78 05981	12135	I		466
R78 05982	12136	I		418
R78 05983	12137	I		604
R78 05984	12138	I		244
R78 05985	12139	I		326
R78 05986	12140	I		338
R78 05987	12141	I		310
R78 05988	12142	I		310
R78 05989	12143	I		320
R78 05990	12144	I		278
R78 05991	12145	I		226
R78 05992	12146	I		224
R78 05993	12147	I		222
R78 05994	12148	I		346
R78 05995	12149	I		200
R78 05996	12150	I		220
R78 05997	12151	I		188
R78 05998	12152	I		128
R78 05999	12153	I		240
R78 06000	12154	I		244
R78 06001	12155	I		156
R78 06002	12156	I		134
R78 06003	12157	I		122
R78 06004	12158	I		126
R78 06005	12159	I		192
R78 06006	12160	I	290-300'	160
R78 06007	12161	I	5-20'	118
R78 06008	12162	I		224
R78 06009	12163	I		158
R78 06010	12164	I		268
R78 06011	12165	I		1140
R78 06012	12166	I		400
R78 06013	12167	I		444
R78 06014	12168	I		5400
R78 06015	12169	I		1820
R78 06016	12170	I		1292
R78 06017	12171	I		312
R78 06018	12172	I		240
R78 06019	12173	I		140
R78 06020	12174	I		466
R78 06021	12175	I		1200
R78 06022	12176	I		262
R78 06023	12177	I		320
R78 06024	12178	I		520
R78 06025	12179	I	30-300'	260
R78 06236	12180	I	5-20'	110
R78 06237	12181	I		115
R78 06238	12182	I		427
R78 06239	12183	I		920
R78 06240	12184	I		326
R78 06241	12185	I		510
R78 06242	12186	I		500

PH REG 78-8

Compacts R78 6026
 Au (ppb) Ag (ppm) Mo (ppm)
 <10 <4

PH REG 78-9

Comp
 R786027
 30 ppb Au
 4 ppm Ag
 200 ppm Mo
 Comp R786028
 <10 ppb Au
 <4 ppm Ag
 10 ppm Mo

Comp R
 78 6314

R78 06242	12186	I	565
R78 06243	12187	I	394
R78 06244	12188	I	242
R78 06245	12189	I	204
R78 06246	12190	I	196
R78 06247	12191	I	166
R78 06248	12192	I	143
R78 06249	12193	I	82
R78 06250	12194	I	117
R78 06251	12195	I	132
R78 06252	12196	I	106
R78 06253	12197	I	306
R78 06254	12198	I	2550
R78 06255	12199	I	1450
R78 06256	12200	I	485
R78 06257	12201	I	192
R78 06258	12202	I	460
R78 06259	12203	I	4000
R78 06260	12204	I	418
R78 06261	12205	I	280
R78 06262	12206	I	274
R78 06263	12207	I	326
R78 06264	12208	I	176
R78 06265	12209	I	285
R78 06266	12210	I	136
R78 06267	12211	I	130
R78 06268	12212	I	103
R78 06269	12213	I	92
R78 06270	12214	I	103
R78 06271	12215	I	111
R78 06272	12216	I	108
R78 06273	12217	I	710
R78 06274	12218	I	290
R78 06275	12219	I	183
R78 06276	12220	I	194
R78 06277	12221	I	310
R78 06278	12222	I	164
R78 06279	12223	I	1570
R78 06280	12224	I	500
R78 06281	12225	I	454
R78 06282	12226	I	560
R78 06283	12227	I	475
R78 06284	12228	I	330
R78 06285	12229	I	403
R78 06286	12230	I	407
R78 06287	12231	I	270
R78 06288	12232	I	137
R78 06289	12233	I	296
R78 06290	12234	I	672
R78 06291	12235	I	548
R78 06292	12236	I	252
R78 06293	12237	I	1520
R78 06294	12238	I	1160
R78 06295	12239	I	258
R78 06296	12240	I	10100
R78 06297	12241	I	4610
R78 06298	12242	I	4880
R78 06299	12243	I	3080
R78 06300	12244	I	1450
R78 06301	12245	I	4040
R78 06302	12246	I	1160
R78 06303	12247	I	2700
R78 06304	12248	I	1430
R78 06305	12249	I	706
R78 06306	12250	I	940

PH REG 78-10

<10 ppb Au
<4 ppm Ag
4 ppm Mo

150-160'
4-20'

Comp
R786315

PH REG 78-11

<10 ppb Au
<4 ppm Ag
6 ppm Mo

290-300'
18-30'

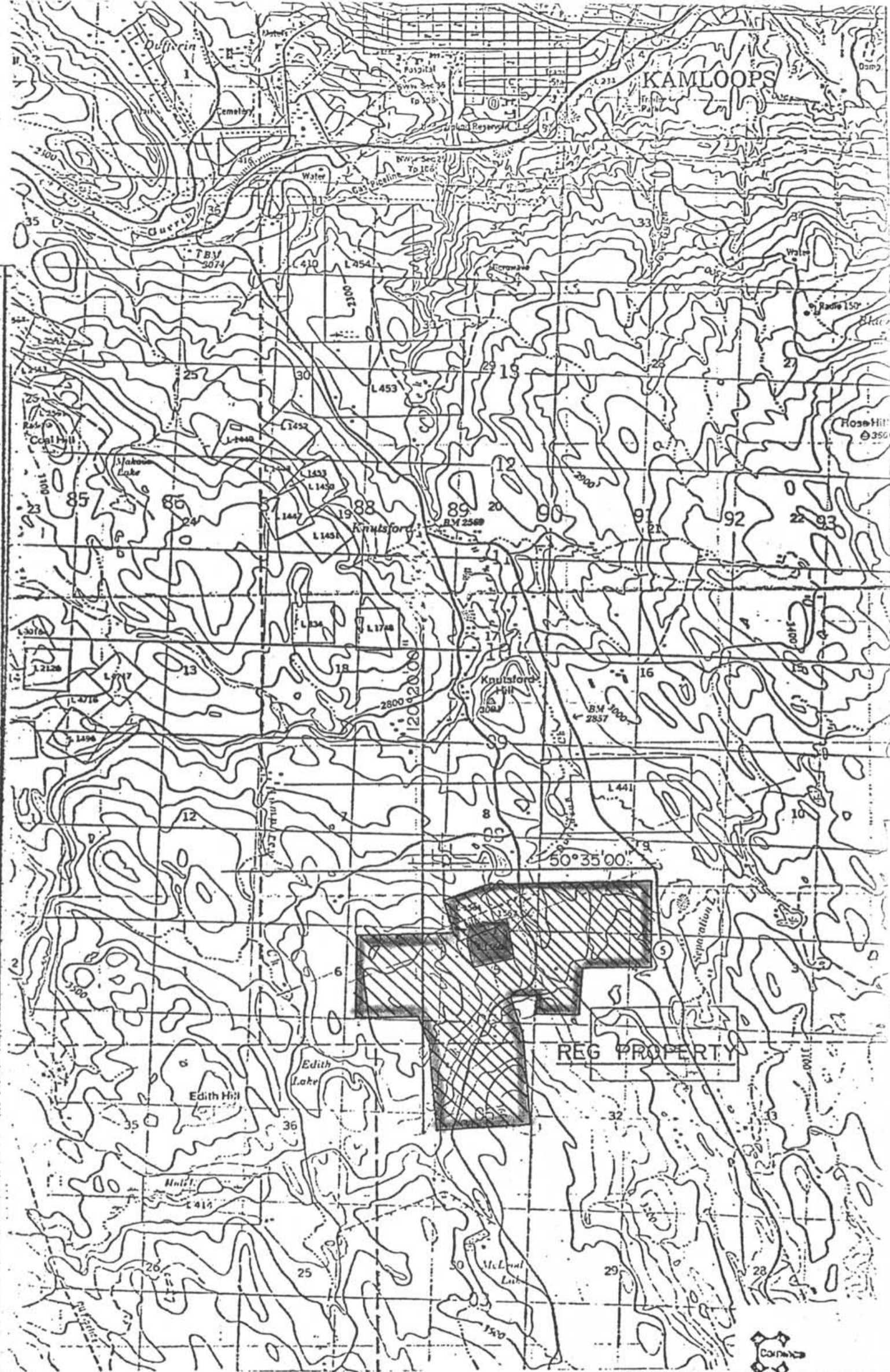
Composite
R786316

PH REG 78-12

24 ppb Au
<4 ppm Ag
6 ppm Mo

Comp
R786317

30 ppb Au
<4 ppm Ag
25 ppm Mo



Drawn by:		Traced by:	

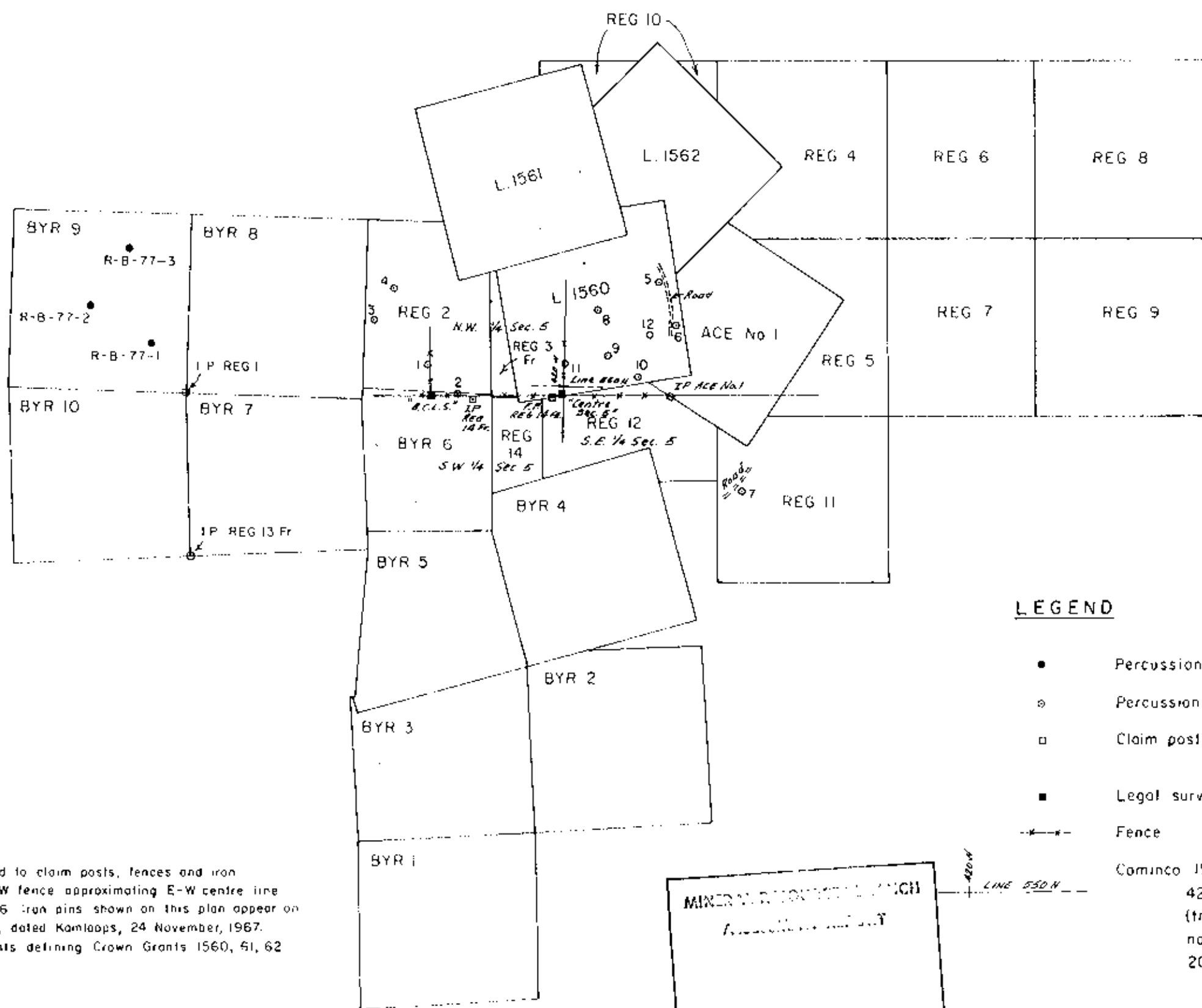
MINERAL RESOURCES BRANCH

REG PROPERTY ASSESSMENT REPORT
GRANDVIEW SKI HILL AREA - KAMLOOPS M.D., B.C.
INDEX MAP

NO. **6860**



0 Baseline



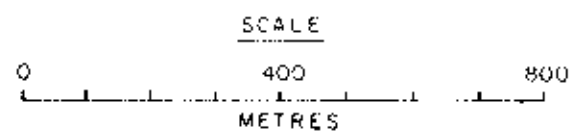
50 S

NOTE:

Percussion hole collars tied to claim posts, fences and iron pins on, or near, the E-W fence approximating E-W centre line of Section 5 Tp 19 R17 W6. Iron pins shown on this plan appear on Land Registry Plan 17805, dated Kamloops, 24 November, 1967. The positions of monuments defining Crown Grants 1560, 61, 62 are unknown.

LEGEND

- Percussion hole 1977 R-B-77-1 to 3
- Percussion hole 1978 Reg 78-1 to 12
- Claim post (I.P. - initial post)
(F.P. - final post)
- Legal survey iron pin
- - - Fence
- - - Cominco 1978 I.P. Grid (co-ord. point
420 m west, 550 m north shown)
(the line crosses the fence 87 ft
north of iron pin; 420 m west is
20 feet west of fence)



L. 40 W

0 0 0

MINERAL RIGHTS LEASE
 6860

REG - BYR OPTION



Drawn by	Traced by <i>pmf</i>
Revised by Date	Revised by Date
<i>RUB</i> <i>Nov 11/77</i>	
<i>RUB</i> <i>Aug 23/78</i>	

DRILL PLAN

Scale: 1" = 1000'

Date: AUGUST, 1977

Plate 2