BALL CREEK
800626 104G

SHEET No. 1

J. R. WOODCOCK CONSULTANTS LTD.

PROPERTY: Ball Creek
CLAIM No.: ME5
COORDINATES:
ELEVATION: 2725.5m (2380ft.)

HOLE No.: 80-1
BEARING: 113°
DIP: 68° SE
LENGTH: 401.4m (1317')
DIAMETER: NQ.

DRILLED BY: Lyons Diamond Drilling
STARTED: ~~July 30~~ Aug 1, 1980
TERMINATED: Aug 23, 1980
LOGGED BY: D. Gorc

abbreviations - quartz - qtz.; carbonate - carb. disseminated - diss.; pyrite - py.; molybdenite - moly; phenocryst - pheno.; grained - gr.; amount - amt.; adjacent - adj. chalcopyrite - chalco.; medium - med. Concentrations - Conc. ~~predominately~~ - ~~predom.~~

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
0	5.2m			Overburden and boulders							
5.2		95%		Andesitic Pyroclastic - dark grey in colour; over 50% plagioclase crystals greater than 1 mm; clasts of foriegn rock also present; these clasts are light coloured, seemingly altered, up to 2cm accross; finer grained phases are black; cut by numerous qtz and qtz.-carb. veinlets; small concentrations of epidote associated with pyrite especially where pyrite is adjacent to qtz. veinlets; chlorite?? present along some py. veinlets; some slight greyish bleaching alongside many veinlets (1cm wide) especially pyrite-chlorite veinlets; in addition to bleached zones there are thin zones (to 60cm) of greyish-green alteration which have a sericite-like appearance but ~~site~~ are quite hard ~~and incompetent~~; these alteration zones are associated with and often bounded by qtz. veins; the alteration within the zones is generally complete and such zones are almost always ~~bounded~~ sharply bounded by essentially unaltered rock.							
	Cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 4, 7, 1980 Sheet No. 2

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Contd.	9.8m			unit is quite magnetic with finely diss magnetite(?) which probably lends to dark colour of unit; in places there is flesh coloured alteration.							
			7.5m	Specimen shows sharp contact between unaltered and altered zones; some fine gr. moly.? in qtz. veins of more altered section;	B-1-1	6.7m	7.5m				
				Quartz veins whitish in colour, even in cross-section; no ~~prefer~~ persistant orientation but many veins @ 45°-60°; pyrite with or without epidote is a common constituent.	B-1-2	7.5m	9.7m				
9.8	~~[illegible]~~m	60%	12.6m	Feldspar Porphyry (barren); flesh coloured matrix; white feldspar and pinkish zoned feldspar phenocrysts; altered (chloritized) hornblende phenos.; characterized by noticeable amounts of diss. black magnetite crystals; qtz veinlets and py. veinlets are present but less abundant than above; small concentrations of epidote still common generally with pyrite; epidote both diss. and along veinlets; small amounts of a apple green alteration mineral present; small amounts of pinkish mineral along some veinlets; qtz veinlets still predominately white but many bluish qtz. veins appearing	B-1-3	11.3m	13.1m				
	Contd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 4 & 7, 1980 Sheet No. 3

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Contd.	13.1			core is badly broken up, much core lost; some moly? in qtz. vein at 12.8m.							
13.1		13.1-13.7m 60%	12m	Andesitic Pyroclastic - matrix brownish to whitish speckled; medium texture; core badly broken up, difficult to decipher; greenish epidote-like colouration on many fractures; pyrite content moderate (+) almost high; pyrite both diss and in fractures generally associated with small amounts of epidote;							
		13.7-16.0m 95%									
		16.0-20.7m 50%									
		20.7-23.1m 90%									
				13.7m-16.0m - largely light grey in colour with a few patchy zones dark brown; fine textured small concentrations of epidote still common both diss. and along fractures; qtz, qtz-carb. and py. veinlets present but qtz veins predominate; a few blackish crystals in some veins; some moly in vein @ 15.4m; pyrite content mod(+) to high diss. and along fractures; bleaching to near white (1 cm. zones) common along many veinlets; light grey colour due to carbonate-diopside alteration	B14	15.2	15.5m				
			16.2m	16.0-23.1 - core is badly broken up, much core is lost; much of core quite dark brown in colour and has appearance of perhaps being hornfelsed; thin zones of greyish to whitish bleaching (to 1 cm wide) adjacent to veinlets; abundant hairline py. veinlets							
			18.3m								

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Hole No. 80-1 Logged By D. Gorc Date Aug 9, 1980 Sheet No. 4

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Cont'd	23.1m		20°	epidote commonly seen with py; scattered, diss. plebs of epidote not abundant more abundant along fractures; qtz. veinlets predominately white coloured; some zones of bleaching thicker than usual to 10 cm across, ~~but not~~ zones of bleaching associated with qtz. veinlets.							
23.1		95%	23.9m	Altered Feldspar Porphyry 23.1 - 30.8m - Seemingly only slightly altered; matrix pale brown to light grey brown; abundant whitish feldspar phenos to 1.5cm, hornblende phenos also present but less numerous; feldspar phenos. seem slightly smaller than usual; small amounts of epidote noted again associated with py. but amt. far reduced from previous units; bleaching along veinlets noted; py content is low(+) to moderate (+) and is ~~both~~ diss. ~~and~~ along fractures; note that more blue qtz. veinlets appearing; core not broken up, excellent recovery; a few pyrite-chlorite veinlets but few in number; by 24.7m ~~zones~~ zones of bleaching and alteration alongside veinlets thickening up to 30cm thick but generally much thinner; in such zones the original texture is completely obliterated.	B-15	24	27m				
					B1-6	33	36m				
	cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 9, 1980 Sheet No. 5

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd			26.2	adj. to some veinlets there are thin zones of pinkish alteration (carbonate?); moly in qtz. veinlets @ 25.5m, 26.2m; fault gouge? @ 29.6m; ~~some~~ chalco. in some veinlets.							
	30.8-34.7m 95%	34.1	36.3	30.8-59.7 unit gradually becomes increasingly altered until 34.7 m when unit becomes completely altered; By 34.7 much of unit is quite soft and often broken up; most of unit medium greyish in colour but more intensely altered sections have darkish green cast; pyrite primarily diss., lowt; appear to be thin zones (to 5cm) of silification adjacent to some qtz. veins. white qtz. veins predominate but a few blue qtz veinlets seen; moly. seen in many veinlets (ex. 31.0 to 31.4m, 33.6m to 34.4m, 37.2m); a few carbonate - qtz veinlets; only a few pyrite veinlets (to .5cm); small amounts of epidote but ~~noticeably~~ noticeably reduced from previous ~~sections~~ units; some sections of core badly broken up; some moly. along fracture @ 42.1m; By 41.3m unit becomes more intact, less broken up; small amount of chalco. @ 45.2m; small amounts of moly. from 45.8m to 46.2m, diss. and along veinlets.	B-1-7	45	48m				
	34.7-38.3m 65%										
	38.3-59.9m 75%										
	cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 9, 1980 Sheet No. 6

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	Specific ~~DELTA~~ ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	59.7		48.5	47.4m, 48.5m - small amounts of pinkish calcite along veins; ~~small~~ moly along qtz. veins 53.0 to 53.3m; 57.0 intensity of alteration diminishes slightly but still completely altered; 59.0-54.3m, small amounts of diss. moly.? galena?; 59.3-59.6 - small amounts of diss. galena, pyrite and chalco. associated with carb.-qtz filled fractures	B1-8	57.0	59.5m				
59.7	65.8	30%	64.1	Altered Pyroclastic - greyish in colour; alteration carbonate-diopside alteration; colour varies from grey green to med. grey; occasionally conc. of epidote but not common; py. content low(+) with a few sections with moderate py; py. diss. and along fractures; galena in qtz vein @ 64.1m; more galena @ 63.7m							
65.8	71.9	15%		Feldspar Porphyry (barren), unaltered, extremely poor recovery only small fragments remaining; abundant white and lesser pink feldspar phenocrysts; hornblende phenos. noted; small conc. of epidote noted usually with py.; quartz veinlets present predominately blue qtz; py. content low(+), mainly along fractures; hairline py. ~~fractu~~ veinlets can be abundant over short sections of 3-4 cm.							
71.9	84.1	0%		Tricone - no core recovery							

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Hole No. 80 - 1 Logged By D. Gorc Date Aug 9, 1980 Sheet No. 7

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
84.1	88.9	795% for remainder of hole	84.2	Lampro phyre; dark coloured with speckled and mottled appearance; matrix is dark green with small (.5cm to 1 cm) phenos coloured light olive green (feldspars?); there are also very dark green to black phenocrysts; in addition there are ~~diss~~ small (.5cm) concentrations of white calcite scattered throughout; light green concentrations of epidote also noted; py. content only trace; not magnetic; 88.2 to 88.9m texture becomes much finer grained and becomes med. grey with small black phenocrysts and smaller calcite concentrations; contact is sharp on either side; no alteration along veinlets; no qtz. veinlets; a few calcite veinlets; rock not broken up	B-1-9	85	88m				
88.9	cont'd		94.2	Andesite Porphyry - sharp upper contact; matrix med. grey fine textured with abundant white feldspar and very few pink feldspar (orthoclase) phenos; less numerous but still abundant hornblende phenos; epidote common but only in small amounts and widely scattered; py. diss and along fractures, at times with epidote; at times seems to replace rims of feldspar phenos.	B-1-10	92.0	95.0m				

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Hole No. BD-1 Logged By D. Gorc Date Aug 10, 1980 Sheet No. 8

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	95.3			only a few py. veinlets noted; essentially unaltered with only occasional white bleaching adjacent to some fractures or veinlets; few veinlets of any kind; py content is low(+); a few horizons have thin 1 cm zones of greyish green alteration but these are few in number; moly? @ 90.3m, 91.2; veins @ 25° to 30° to core; many hornblende phenos. altered to chlorite.							
95.3	96.9		95.8	~~Mod.~~ Grey Siltstone Very dark green grey to dark brownish green matrix, very fine grained; realitively soft; sharp upper and lower contacts; lower contact @ 10°; reaction to acid (carbonate); slightly magnetic, unaltered but some slight bleaching adj. to some veinlets	B-1-11	96.0	96.7m				
96.9			98.8	Feldspar Porphyry (Bauxen) matrix med. ~~grey~~ brown to med. brown grey with abundant white feldspar phenos. to 1 cm; quite numerous but less abundant hornblende phenos; occassionally hornblende phenos become more abundant over 60-70cm sections which gives rock darker colour; ~~Mod~~ small concentrations of epidote noted but not abundant; py. primarily diss. varying from low(+) to mod(+) average of low(+)	B-1-12	105.0	108.0m				
	Cont'd										

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Hole No. BO-1 Logged By D. Gorec Date Aug 10, 1980 Sheet No. 9

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Contd	114.5			only occassionally magnectic; veins @ 30° core angle unit for the most part unaltered but a few thin zones of altered rock do occur (ex 98.8m); 102.0m, 102.9 m qtz. veins with moly.; veins @ 20° to 30° core angle; 103.4 - 103.8 m - first major zone of alteration; adjacent to 1 cm thick qtz.-carb vein with minor galena and py; zone is dirty brownish grey and not completely altered since many feldspar phenos still intact; small amounts of pinkish, flesh coloured calcite noted							
				105.9 m - 1 cm. thick py. vein with 20 cm wide zone of slight alteration on either side of the vein							
				106.5 m large pinkish orthoclase phenos. begin appearing not many but quite noticeable since so large (up to 2 cm); also starting to get some very slight bleaching adjacent to some veinlets but such alteration is extremely minimal; unit is essentially unaltered.	B-1-B	109.0	110.3 m				
				Moly in qtz veins @ 108.0, 109.5, 110 m, 110.8 to 111.7 m (2 very flat veins @ 0°-5°), 113.2 m, 114.1							
	contd			113.0 m - chlorite and epidote diminished							

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Hole No. 80-1 Logged By D. Gorc Date Aug 10, 1980 Sheet No. ~~10~~ 9

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
114.5	121.0		117.8	Andesite Porphyry: matrix dark to med grey with abundant white feldspar phenos; more hornblende phenos than above; also slightly more magnectic than above; also ~~porphyry~~ does not have orthoclase phenos as does the ~~surrounding~~ above porphyry; unit is characteritized by 3-4cm rounded clasts of much darker non porphyritic material; unit is not cut by any veinlets very sharp upper and lower contacts	B-1-14	117m	120m				
121.0			123.5	Feldspar Porphyry (barren): identical to porphyry above Andesite Porphyry except perhaps a few more hornblende phenocrysts and no large orthoclase phenocrysts noted; matrix light grey to med. grey with abundant white feldspar phenos to 1cm; only occasionally magnectic; py. content is low(1) and diss., very fresh unaltered rock, with only a few thin zones of alteration adj. to veinlets; 125.6 m - 5cm wide zone of slight alteration adj. to veinlet; 129.2m, a few	B-1-15	129	130				
			129.9	thin zones (to 3cm) of light greenish alteration; at 129.0 m. more carb. veins begin appearing; occasionally rounded darkish non porphyritic clasts seen; such clasts sometimes contain a higher py content than the surrounding rock.							
		cont'd.									

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Hole No. 80-1 Logged By D. Gorc Date Aug 10, 1980 Sheet No. 11

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	Specimen ~~DELTA~~ ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Cont'd			137.5	135.6 to 136.6 m 1 cm wide carb vein @ 5° to 10° with a 4 cm zone of alteration adj. to veinlet. Small amounts of epidote still seen along veinlets generally with py; lower contact very sharp							
137.5			139.4	Altered Feldspar Porphyry - contains well developed qtz. stockwork; seemingly very intensely altered but alteration is somewhat variable with short sections to 20 cm showing little alteration; unit is pale greenish to light greyish; important to note that many foreign clasts of silicated volcanics are incorporated in the rock; such clasts are predominately light green (diopside?), 1cm - 2cm patches of bronzy brown garnet were noted in clasts; a few small patches of dark brown hornfel also noted in clasts; qtz. veinlets are predominately translucent bluish qtz with no preferred orientation; pyrite - epidote veinlets common but not as abundant as the qtz. veinlets; moly. in qtz. veinlets at 138.6 m and 139.4 m; scattered black magnetite crystals but few in number; only occasional reaction to magnet; py content low(+) to mod(+)	B-1-16	141.1 m	144 m				
Intrusive Breccia - Intermixed silicate volcanics & porphyry											
	Cont'd		140.2								

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Hole No. 80-1 Logged By D. Gore Date Aug 10, 1980 Sheet No. 12

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	149.8			with an average of moderate; py is diss. and along fractures.							
			144.9	140.2 m - thin gypsum veinlets noted; difficult to distinguish from thin qtz. veinlets by sight and not that ~~common~~ abundant.							
				145.9 m bluish qtz veinlets becoming less abundant; white carb. and qtz. and white qtz veinlets becoming more common							
				146.4 m - moly in qtz veinlet seen	B-1-17	147.7	149.3 m				
				147.7 - 149.3 m - moly seen in qtz veinlets in this section							
149.8			151.1	Feldspar Porphyry (Barren) very sharp upper contact @ 15° core angle; matrix very light grey almost dirty whitish along certain horizons; quite hard; abundant white feldspar phenocrysts a few of which have a pinkish cast; no hornblende phenos. seen but seemingly small amounts of altered mafics; a few scattered concentrations of epidote; a few py-epidote veinlets; blue qtz veinlets ~~still present~~ reduced in number from above but still numerous; a few carbonate and a few gypsum veinlets seen; no alteration seen along veinlets; some slight alteration for			cont'd				

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Hole No. 80-1 Logged By D. Gorc Date Aug 11, 1980 Sheet No. 13

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	152.3			3-4cm along uppercontact; some moly. @ 150.7m, 151.4m; unit is not magnectic							
152.3	156		153.0 153.8	Silicated Volcanic - unit as whole is quite ~~vist~~ intensely silicated; pale to dark diopside greens predomenate with patches of cream coloured to almost pinkish; small amounts of epidote noted generally with py.; patchy concentrations of bronzy brown garnet noted but not abundant; only a few py. -epidote veinlets; most veining @ 25° core angle; py. content low to moderate (+), average of 1(+); abundant porphyry and volcanic clasts; unit could be classed as breccia conglomerate; thin whitish reaction rims around many clasts; moly in qtz veins @ 153.7, 155.1m ~~155.5 [illegible]~~ unit is slightly magnetic. ~~156.0m 10cm wide [illegible] = [illegible] [illegible] @ 25°~~ ~~162.1m~~ - small blackish concentrations ~~of magnetite~~ ??	B-1-18	153	156m				
155.6	157.7			Feldspar Porphyry (barren) whitish fine grained matrix; abundant white feldspar phenos.							

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Hole No. 80-1 Logged By D. Gorc Date Aug 11, 1980 Sheet No. 19

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
157.7	174.1			Silicated ~~Pyroclastic~~ Volcanic - pyroclastic with abundant porphyry and volcanic clasts; could almost be classed as conglomerate; epidote content ~~the~~ increased slightly ~~from previously~~; again pale to dark greens predominate with small patchy bronzy brown concentrations of garnet; ~~very much similar if not~~ identical to ~~the~~ previous silicated unit (152.3-155.6m)	B1-19	165	168				
				moly in qtz. vein @ 156.5m; 156.0 10cm wide carb-anhydrite vein @ 25° core angle							
				162.1m - small blackish concentrations of magnetite							
				163.6m - 164.1m - seemingly more intense silication; increased small blackish concentrations of magnetite							
				164.1m - unit returns to previous characteristics; unit is hard; pyrite content is low(+); some greyish metallic mineral in some qtz. veinlets; a few gypsum veinlets; some gypsum veinlets have a very thin bleached (white) zone adjacent (1mm.)							
				173.4m - 5cm. wide qtz vein @ 20°; small amounts of py included.							
174.1	~~175.6~~		175.1	Andesitic Pyroclastics and Crystal Tuffs							
			179.9	Interbedded andesitic dark brown ~~[illegible]~~ pyroclastic and light greenish grey crystal tuff; tuff is characterized by very small ~~[illegible]~~ (1-3mm.) white crystals (feldspar?)							
	cont'd										

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Hole No. BV-1 Logged By D. Gore Date Aug 11, 1980 Sheet No. 15

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY
175.6	180.9			Much of pyroclastic has dark brown colour suggesting a hornfel but some of dark colour may be due to chlorite; slightly more py. than usual in pyroclastic; a few 3-4cm clasts of crystal tuff within pyroclastic; epidote-pyrite veinlets present but not abundant; a few patches of bronzy brown garnet; py. and py.-magnetite veinlets common but not abundant; some moly. in qtz vein @ 176.6m.; 179.7m - bluish qtz. vein offset by py.-epidote veinlet.	B-1-20	177m	180m	
Cont'd								
180.9	191.4			Altered Pyroclastic - pyroclastic affected by quite intense dolomite-diopside alteration; short sections of silicated rock; mixture of light to dark green and light to medium grey; magnetite noted but noticeable decrease in content from previous unit; a few py-epidote concentrations, a few small patches of bronzy brown garnet still present; greenish tinges due probably to diopside; pyrite predominately along fractures and seems low on outer surface; upon splitting however short sections have moderate to moderate (+) py. chalco. in qtz vein @ 186.8m; moly. in qtz @ 188.1m, 189.0m				

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Hole No. BU-1 Logged By D. Gorc Date Aug 11, 1980 Sheet No. 16

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA ANGLE~~ Specimen	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
191.4			191.4 192.5	Transition Zone - Silicated Pyroclastic and Altered Pyroclasic Unit has been strongly affected by dolomite-diopside alteration and more intensive silication; unit consists predominately silicated rock with numerous (10-20cm) sections of greyish rock affected only by dolomite-diopside alteration; silicated rock is predominately dark green and seemingly contain abundant diopside; only small amounts of bronzy brown garnet; very small amounts of pyrrhotite; only minor chlorite; small amounts of py. -epidote still present; locally very small concentrations of galena and sphalerite; ~~chalco. in qtz vein @ 186.5m;~~ ~~Andy in~~ abundant light coloured porphyry clasts (blurred phenocrysts); clasts are volcanic? or intrusive? ; most are likely volcanic; lesser fine grained pyroclastic clasts and even fewer sedimentary clasts; clasts especially abundant from 192.8m - 194.0m; Number of clasts diminishes by 222.0 m; numerous dark brown banded clasts to 3cm across from 192.0m to 193.6m.	B-1-2	189	192m				
	Cont'd										

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Hole No. 80-1 Logged By D. Gove Date Aug 12, 1980 Sheet No. 17 (16)

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Spec. ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd			197.6	pyrite content still only low(1), predominately along fractures; py-epidote veinlets still present but not abundant; predominate orientation to veins is 25° core angle; 197.2-197.7m - major structure, 197.2-197.7m consists of coarse grained qtz. carb.; small amounts of py and dark orange brown mineral (sphalerite ?)							
				197.7m-201.2 - intense dolomite-diopside alteration; med. grey; few clasts.							
				Note: @ 199.9m and 202.m note that white carb. veinlets cut qtz. veinlets; carb. veins seen later; previously noted that gypsum veinlets cut all types of veinlets; gypsum veinlets generally not continuous.	B-1-22	201	204m				
				201.2m - 10cm. wide carb.-qtz vein @ 30° core angle.							
				201.4-201.9m - several veinlets with small amounts of chalco-sphalerite-py.							
	cont'd			Unit is only slightly magnetic							

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Hole No. BD-1 Logged By D. Gove Date Aug 12, 1980 Sheet No. 18

FOOTAGE FROM	TO	% RECOVERY	~~DELTA~~ Spear ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	FROM	TO	ASSAY
Cont'd			205.6	202.3m - some moly in qtz vein and adjacent to				
			208.6	203.5 ~~alteration~~ silicification still not intense and is in steel patches				
				203.5 - 209.0 - more than usual bluish qtz. veinlets; moly in qtz veins @ 206.0m, 207.0m, 209.0m.				
				204.4 - chalco + sphalerite in (8cm thick) whitish qtz. vein				
				Note: 209.0m. for last 25 m there seems to be more thick (5cm - 10cm) thick qtz veins than previously; epidote - py veinlets present but few in number				
				210.8m - some moly in qtz vein.	B-1-23	213	216m	
				212.2m - small amounts of chalco in carb. vein; adjacent is qtz vein with small amounts of moly.				
				212.7m - small concentrations of py - galena - sphalerite, some slight pinkish colouration adjacent; some moly?? at 222.6m.				
				220.0 - epidote-py veinlet cutting qtz. vein; nearby carb vein cutting qtz vein.				
	Cont'd							

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Hole No. 80-1 Logged By D. Gorc Date Aug 12, 1980 Sheet No. 19 (18)

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY
contd	228.4			216.5-216.8m - conc. of galena and py in carbonate veins and fracture infillings; one conc. 2cm. wide; ~~moly in qtz veinlet~~				
				215.8 - moly in qtz vein				
				220.3 - galena-py and lesser chalco. along fracture and in qtz vein; some moly? in qtz vein.				
				moly in qtz veins @ 221.7m, 222.1m, 224, m.	B-1-24	223	226	
				224.0m - 228.4 - qtz. veining increases, nearly stockwork; a few dark brown hornfel clasts				
				222.0 m - py-epidote veinlets still present sharp lower contact				
				Lamprophyre? ~~Dyke~~ altered diorite dyke				
228.4	232.9		229.9 to 232.9	~~Altered Diorite~~ could perhaps be ~~lamprophyre~~, original texture intact but rock is quite soft and cut by light green to dark green veinlets (sericite?); matrix is coarse textured. predominately dark green in colour but occasionally a few shades of brownish green mixed in; unit is also speckled with black; unit is quite magnetic; a few carb. veins but no qtz veins; no pyrite-epidote veinlets; only trace py. By 231.7m is texture considerably finer; By 232.9 texture is very fine.	B-1-25	229	230	

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Hole No. 80-1 Logged By D Gore Date Aug 12, 1980 Sheet No. 20

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specim ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
232.9	237.3		233.9	Andesitic Pyroclastic and Silicated Pyroclastic							
			~~235~~	similar in appearance to unit ~~before~~ above diorite dyke not as intensely altered; many ~~remnants~~ remnants of essiantally unaltered rock sandwiched between altered rock; rock predominately light to med. grey with altered sections having intermixed light to dark greens occasionally with small patches slightly pinkish; only a few py.-epidote veinlets; very minor amounts of chlorite; a few small concentrations of bronzy brown garnet; only occasionally magnetic; small amount of chalco. in qtz vein @ 235.7m; fault gouge? @ 233.4m.							
			235	234.8 - 235.2 altered light grey feldspar porphyry only in qtz. veins @ 233.1m, 233.3m,							
237.3				Altered Feldspar Porphyry - predominately pale shades of green mixed with lesser light to med. grey; original texture still decipherable but very blurred and indistinct; rock seems softer than usual; no bronzy garnet noted; epidote-pyrite veinlets almost non-existant; no chlorite seen; a few gypsum veinlets							
	cont'd										

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Hole No. EO-1 Logged By D. Gorc Date Aug 13, 1980 Sheet No. 21

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ SPEC ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Cont'd	249.			Py content low(+) to moderate (+) predominately along fractures; contains a few short horizons of breccia to 20cm; some hornfel clasts @ 248.7; core is occasionally magnetic only in qtz veins @ 237.1m, 237.6m, 238.5m, 241.6m, 241.9m; 243.4, 244.0 to 244.2m, 248m?	~~B-127~~	~~249~~	~~252~~				
				Note: no longer see chalco, galena, sphalerite, in calcite veins							
249	252.4		250.9	Altered Pyroclastic - predominately shades of pale green with lesser greys; whitish porphyritic clasts also common; clasts have ~~indistin~~ indisnct texture likely crystal tuff or volcanic porphyry; greenish colouration likely due to diopside; 250.9 - pinkish cast to some carb.-qtz veins 251.9 - small amounts of galena	B-127	249	252				
252.4			253.9	Altered Feldspar Porphyry (lesser Feldspar Porphyry (barren) predominately altered porphyry but alteration not that intense; original texture largely intact although generalled somewhat blurred and fuzzy; matrix is fine grained and predominately med to light grey occasionally with a slight brownish tinge; abundant white feldspar phenos. to 1cm.							
	Cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 13, 1980 Sheet No. ~~22~~ 23

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY
contd	265		258.	much less mafic minerals; hornblende generally chloritized; outstanding characteristic of unit are the many irregular carb. filled fractures cutting the unit; fracture infilling predominately calcite but some infillings are qtz.-carb.; small amounts of epidote noted with py.; pyrite content increased to moderate (-) predominately diss.; a few 2-3cm sections of high (-) pyrite; unit only occasionally magnetic; unit is generally quite hard but becomes noticeably softer by 254.7m; greenish sericite along some fractures? ex 259.6m galena @ 257.7m, 258.0m, 258.5m, 258.6m, 259.3m, 254.6m. minor chalco @ 258.0, 259.3m				
				carb. veins very jagged and irregular suggesting that rock has been broken up slightly; galena in some carb veins and along hairline fractures				
					B-128	257	258	
				259.6 m - alteration intensifies essentially completely altered with only a few relatively unaltered remnants; as a whole noticeably softer than previously; seeming also affected by patchy 3-4cm wide zones of silification; jagged carbonate veins found above continue; also bluish qtz. and white carbonate veins present; epidote-py veinlets again appearing but not abundant.	B-129	261	264	
	cont'd							

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Hole No. 80-1 Logged By D. Gore Date Aug 13/14/1980 Sheet No. 23

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
265.3				Altered Pyroclastic - med grey in colour with some horizons having brownish tinge; rock affected by dolomite-diopside alteration; first part of unit still ~~jag~~ cut by many jagged carb. veins; a few short horizons (10-20 cm) of crystal tuff or porphyritic volcanic noted (ex 270.4m-270.7m)							
				270.8-271.2m - small amounts of chalco and galena							
				Note: 270.0m - many veinlets especially bluish qtz. veinlets almost parallel to core angle; core angle for qtz veins 0° to 20°; core angle for carb. veins 20°-50°, mostly 30°-45°; white qtz and carb. veins cut bluish qtz veins	B1-30	273	276				
				271.9m - noticeable decrease in number of carb veins; unit no longer has broken up appearance but still quite fractured; qtz veining increasing slightly							
				272.1m - small amount of galena, py-sphalerite indy in qtz veins @ 273.0, 276.2m.							
	Cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 13, 14, 1980 Sheet No. 24

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	283.7		280.2	small amounts of light pinkish brown colouration adjacent to ~~a~~ ~~very~~ few veinlets; thin (1cm-2cm) zones of dark greenish alteration adjacent to some veinlets.							
				278.1 - several hornfels~~ed volcanics~~ fragments ex. 281.1m							
				279.6m transparent turquoise green mineral (fluorite?) in carbonate vein; epidote-py still present but not abundant; unit still slightly magnetic							
				Some moly in qtz veins 280.6, 280.8							
				282.1 - 283.7m - major structure; core very fractured; abundant calcite-filled fractures; gouge-like appearance							
283.7			280.0	~~Feldspar Porphyry~~ (Burven), light grey to light grey with brownish tinge matrix; fine grained matrix; abundant white feldspar phenos to 1 cm; fairly abundant black hornblende phenocrysts; diss. crystals of magnetite common; unaltered; py content low to moderate (+).	B-1-31	285	288				
	cont'd			Note quartz veining diminishing?							

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Hole No. 80-1 Logged By D. Gorc Date Aug 23, 1980 Sheet No. 25

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	289.2			285.5m - 5cm wide dark greyish hornfel clast??							
				288.6 - 289.2 - very fractured; abundant white calcite veins							
289.2			291.1m	Andesitic Pyroclastics medium to dark greens							
			291.7	predominate with significant amounts of							
			292.2m	grey and dark brown locally; dark green							
				may be due to chlorite?; thin horizons of							
				crystal tuff present but only ~~in small~~ a							
				~~amount~~ few of such; epidote-py concentrations							
				present; py content is moderate (-);							
				small amounts of chalco. along ~~some~~ a few	B1-32	297	300				
				fractures ex (292.6m); unit shows							
			300.6	evidence of being slightly silicated over							
			303.9	short horizons; moly in qtz veins @ 289.9m,							
				@ 295m, 303.9m?;							
				296.5 - 296.9. thick carb-qtz vein @ 20° core angle							
				contains minor py and some chlorite							
				299.1 - 299.9m moly? in qtz veins ~~dia~~ this section							
				299.6 - Carb vein cuts qtz. vein; carb vein							
				@ 35°; qtz vein @ 15°-20°							
	cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 23, 1980 Sheet No. 26

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Cont'd	311.4			core is occasional magnetic; not ceable numbers of clasts but edges to clasts very indistinct; not many porphyritic clasts but some	Tel. Bt-33	309	312				
			310.0	309.9m - silication becomes more noticeable; lighter greens begin to predominate, localized small concentrations of garnet; short sections (10-20cm) of well developed qtz. stockwork; qtz. of bluish translucent type. moly in qtz veins 307.9, 309.2m.							
311.4	318.2		317.	Silicated Clastics - darker green than usual for silicated rocks but less dark than above unit; ~~lesser~~ small amounts of inter mixed light to dark brown; ~~fairly in tensely~~ strongly silicated but not intensely so; little garnet or pyrrhotite noted; fairly abundant clasts of porphyry with very small white phenos. (volcanic porphyry?). 313.0. carbonate veining diminishing and qtz. veining especially bluish qtz. veining is ~~getting~~ more abundant. moly in qtz. veins 317.4, 318.4, 318.6.							
318.2	~~322.4~~		320.2	Feldspar Porphyry (barren) - fine grained med. grey matrix with abundant white feldspar phenocrysts; also a few large (to 2cm) orthoclase phenocrysts; ~~also~~ hornblende phenocrysts also present.	B-1-4	319.2	322.2				
	Cont'd										

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Hole No. 80-1 Logged By D. Grace Date Aug 24, 1980 Sheet No. 27

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
Cont'd	322.4			rock is very fresh and even hornblende phenos are unaltered; occasional slight alignment of feldspar phenocrysts; along fractures and veinlets some whitish bleaching alongside but very minor; a few qtz. veins present; pyrite content is low to ~~locally~~ low (+) locally; very minor amounts of epidote; small amounts of chlorite noted; only in qtz vein @ 321.7m	bluish						
322.4			322.9	Altered Pyroclastic - affected by dolomite-diopside alteration; med to dark greens predominate with significant sections containing noticeable ~~abun~~ amounts of red. brown; unit cut by numerous small fractures and has appearance of being somewhat ~~fractured~~ shattered; radiating crytals on many fracture surfaces; more abundant clasts including porphyry clasts at least to 324.0 m.; py content is moderate (-) to moderate (+); py.-epidote perhaps getting more abundant; bluish qtz veining definitly diminishing, most qtz veinlets of white qtz. variety; sections of core have definite brecciated appearance. (ex. 325.2-325.3m)	B-1-35	333	336				
					B-1-36	345	348				
	Cont'd										

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Hole No. 80-1 Logged By D. Gore Date Aug 25, 1980 Sheet No. 28

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	334.6		325.5	some moly? along some fracture planes ex 325.5m							
			334.3	moly in qtz. veins 323.4m?, 325.3m							
334.6	343.8m		338.8	Andesitic Pyroclastics - dark greenish to dark brownish matrix; a few very short zones slightly silicated containing small amounts of garnet (ex. 338.8m); small amounts of epidote + chlorite; breccia appearance; contains a few porphyry clasts; a few gypsum veins noted; often has spotty textured matrix;							
343.8	345.9			Feldspar Porphyry (barren), med grey fine grained matrix with abundant white felelspar phenos and lesser hornblende phenos.; a few foreign clasts (volcanics?); unit has slightly shattered appearance; numerous thin carb. filled fractures; core easy to break apart; sharp upper and lower contacts; pyrite content is low(-); core only occasionally magnetic; small amounts of epidote-pyrite; small amounts of cholrite.							

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Hole No. 80-1 Logged By D. Gore Date Aug 25, 1980 Sheet No. 29

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	~~DELTA~~ Specimen ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
345.9	348.6		347.8	Andesitic Pyroclastic dark greens predominate with lesser light browns; med. to light green also noted locally; a few sections (5cm to 10cm) have a mottled appearance, pyrite-epidote still present but in very small amounts; a few bluish qtz veinlets; moly in qtz vein @ 346.4m	B-136	345	348				
348.6	357.5		351.6	Feldspar Porphyry (barren) light to med. grey fine grained matrix with abundant white feldspar and lesser hornblende phenos; a few pinkish (orthoclase) phenos; a few foreign clasts of porphyritic volcanic?; few veinlets of any kind; small amounts of pyrite and epidote; unaltered quite fresh ~~rock~~ appearing rock. slight alignment to feldspar phenocrysts	B-137	353	357				
357.5	~~375.6~~		358.8 361.7 363.2 364.7 366.7	Transition Zone - Andesitic Pyroclastics and Silicated Clastics; predominately light green with lesser dark green; patches of dark brown common; fairly abundant number of clasts some >5cm; clasts ~~fine~~ of fine grained pyroclastic and porphyritic volcanic (lighter colour) present; quartz ~~veining~~ veining quite strong with many hairline veinlets; epidote-pyrite-magnetite	B-137	353	357				
					B-138	369	372				
	cont'd										

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Hole No. 80-1 Logged By D. Gorc Date Aug 25, 1980 Sheet No. 30

FOOTAGE FROM	FOOTAGE TO	% RECOVERY	DELTA ANGLE	DESCRIPTION AND REMARKS	SAMPLE NO.	SAMPLE FROM	SAMPLE TO	ASSAY			
cont'd	3956		378.7	concentrations common often to 2cm across; sometimes short sections (to 5cm) have mottled appearance; pyrite content is low(+) to moderate(-) with average of low(+); in altered sections some bronzy brown garnet present; altered sections also contain much more sulphide.							
				367.7 - 367.8 - high (+) pyrite							
				368.4 - 368.7 - high (+) pyrite							
				a few short sections of crystal tuff or volcanic porphyry (ex, 360.2 - 360.8m); small amounts of chlorite;	B-139	381	384				
				a few short sections (10-30 cm) appear to be hornfelized dark brown. (ex (371.3-371.7, 378.3-379.9);	B-140	393	396				
				moly in qtz veins @ 378.2 m?, 379.4m, 380.0m							
3956			396	Silicated Clastics - quite intensely silicated							
			400.7	with light pale green predominating; occasionally slightly pinkish cast along certain horizons; diopside seems to be predominate constituent ~~mineral~~ with small amounts of brown garnet also noted; no pyrrhotite noted. moly in qtz veins @ 392.5, 393.4, 400.7	B-141	400	401				
				END of Hole 401.4m							

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PROPERTY Ball Creek

HOLE No. 801 LOGGED BY D. Gurc DATE Aug 7, 1980 SHEET No. 1

INTERSECTION (~~m~~ metres) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
0	5.2	overburden	/	/	/	/	/	/	
5.2	9.8.	Andesitic Pyroclastic	/	21.3	/	41.3	3	Mod(+)	zones of greyish (dolomite - diopside?) alteration to 60cm. Separated by seeming unaltered rock; also thinner zones of greyish bleaching (to 2cm) adjacent to some veinlets; pyrite predominately along thin hairline fractures
9.8	B1	Feldspar Porphyry (harven)	/	4.8	/	6.0	.1	Low-	minimal alteration; only a few thin zones of intense greyish alteration; most of core very broken up; py. primarily diss.
13.1-	23.7	Andesitic Pyroclastic	0.6	10.4	/	33.0	2	Mod(+) to Hi	very patchy greyish alteration; 13.1 - 13.7m - only a very small amount of light greenish bleaching adjacent to some veinlets 13.7 - 16.0. most of core affected by light grey alteration but patchy and seemingly not that intense. 16.0. - 23.1m - alteration limited to zones adjacent to veinlets; most zones thin; thickest is 20cm.

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PROPERTY Bell Creek

HOLE No. 80-1 LOGGED BY D. Gore DATE Aug 9, 1980 SHEET No. 2

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
23.1	30.8	Altered Feldspar Porphyry	✓	2.3	3.4	10.4	1	L to M(+)	~~grayish~~ Seemingly ~~not intensely~~ only slightly altered except for thin zones of intense alteration to 30cm in which original texture is completely obliterated; altered units are whitish and quite hard;
30.8	59.7	Altered Feldspar Porphyry	1.1	5.6	0.3	100	8 to 10	L(+) to ~~M~~ Mod (+)	30.8-31.7 - intensity of alteration 8 31.7-41.3 - intensity of alteration 9 41.3-57.0 - intensity of alteration 10 30.8-34.7m - rock is medium grayish and quite hard; seeming thin zones (5cm.) of ~~silifi~~ silification adjacent to some quartz veins. 34.7-41.3 - unit predominately dark green and somewhat soft; alteration variable with some sections ~~having a~~ slightly less altered in which original texture still ~~is~~ decipherable. 41.3m - unit ~~comp~~ becomes completely altered; dark green in colour; somewhat soft. 57.0m - alteration intensity ~~diminishes~~ diminishes and is patchy but overall still quite strongly altered.

J. R. WOODCOCK CONSULTANTS LTD. PROPERTY Bell Creek

HOLE No. 80-1 LOGGED BY D. Gorc DATE Aug 9, 10, 1980 SHEET No. 3

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
59.7	65.8	Altered Pyroclastic	2.5	2.5	.7	100	10	~~Lo to~~ Low(+) to mod(-) pred. Low (+)	completely altered; greyish (dolomite-diopside?) alteration; pyrite content seemingly quite low except for a few short sections of more abundant hairline py. veinlets
65.8	71.9	Feldspar Porphyry barren	2.4? ~~1.0~~	1.6?	.5?	?	/	Low(+) to Mod. pred. Mod(-)	essentially unaltered; so much core is lost that veinlet count almost meaningless
71.9-	84.1	Tricone	/	/	/	/	/	/	
84.1	88.9	Lamprophyre	5.4	/	/	/	/	tr	unaltered; some epidote; a few carbonate veinlets have some pyrite,
88.9	95.3	Andesite Porphyry	1.3	~~0.5~~ .9	.5	/	/	Low(+) to Mod(-) pred. Low(+)	unaltered except for a ~~few~~ few very thin (1cm) zones of bleaching adj. and to some veinlets; ~~often~~ very few thicker zones of alteration
95.3	96.9	Siltstone	7.0	/	/	/	/	tr	unaltered; only a few carb. veins
96.9	114.5	Feldspar Porphyry (barren).	.5	1.3	1.0	~~4~~.0	/	~~Low to~~ Low(+) to mod(-) pred. Low(+)	~~unaltered~~ essentially unaltered except for a ~~few~~ few short zones of alteration (ex 103.4-103.8m); some very thin zone of greyish bleaching adj. to ~~many~~ some veinlets

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PROPERTY Ball Creek

HOLE No. 80-1 LOGGED BY D. Gove DATE Aug. 10, 1980 SHEET No. 4

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
114.5	121.0	Andesite Porphyry	/	/	/	/	/	mod(+) to High(-)	unaltered - noticeably more diss. py. than above.
121.0	129.0	Feldspar Porphyry (barren)	1.0	0.5	/	/	/	L(+)	essentially unaltered
129.0	137.5	Feldspar Porphyry (barren)	3.6	/	/	3.5	/	Low(+)	a few thin zones (3-4cm) of greenish alteration (sericite ??) adjacent to some veinlets; not many altered zones; widely scattered.
137.5	140.2	Altered Feldspar Porphyry	1.1	.7	43.0	100	8	M(+)	zone of well developed qtz. stockwork; veinlets mainly of bluish translucent quartz; contains noticeable number of clasts of silicated pyroclastic; such clasts contain garnet; garnet in 1-2cm concentrations with bronzy brown colouration; alteration quite extensive but many short sections to 20cm only slightly altered;
140.2	149.6	Altered Feldspar Porphyry	2.0	1.5	12.0	100	10	L(+) to M(+)	Quartz veining diminishes; alteration still quite intense with fewer short sections of slight alteration; unit is quite hard; ~~some~~ few gypsum veinlets

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HOLE No. 80-1 LOGGED BY D. Gore DATE Aug 11, 1980 SHEET No. 5

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
149.8	152.3	Feldspar Porphyry (barren)	2.0	/	26.0	/	/	L(+)	essentially unaltered, some altered matics; some slight alteration for 3-4 cm at top and base of unit; a few gypsum veinlets
152.3	163.6 ~~163.6~~	Silicated ~~Volcanic~~ Volcanic (155.6-157.7m) Feldspar porphyry (barren)	2.7	0.4	7.9	100	8	L(+)	pyroclastics are seemingly quite intensely silicated; only slightly altered porphyry clasts quite common; pale to dark olivgreen, greens ~~are mean colour~~ dominate colouration, small amounts of bronzy brown, garnet present; feldspar ~~porph~~ porphyry dyke is unaltered
						/	/	L(+)	
163.6	169.1	Silicated Volcanic	2.7	/	3.5	100	9	L(+)	~~were~~ ~~seen~~ increased intensity to silication;
169.1	180.9	Silicated Volcanic (174.1-180.9) Andesitic pyroclastics and Crystal Tuffs	4.3	2.3	3.7	(~~169.1-174.1m~~) 100	9	L(+)	169.1-174.1 Intensely silicated
						(~~174.1-180.9m~~) 10	1	L(+)	174.1-180.9 - only short zones of silicated rock separate by seemingly unaltered rock; some garnet in silicated zones

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PROPERTY: BALL CREEK

HOLE No. 80-1 LOGGED BY D Gore DATE Aug. 11, 12, 1980 SHEET No. 6

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	QUARTZ VEINLETS BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
180.9	~~194.4~~ 228.4	Altered Pyroclastic (191.4 - 228.4)	3.7	1.7	4.2	100	9	L(+) to M.	strongly altered with very few unaltered ~~remnants~~ remnants; multicolored with intermixed
		Altered pyroclastic and Silicated pyroclastic				100	9	L(+) to M.	dark to light greens and light to med grey; widely scattered small concentrations of bronzy brown garnet; greens suggest diopside; a few gypsum veinlets; rock is hard.
~~228.4~~	~~232.9~~	~~Lamprophyre~~	~~2.0~~	~~/~~	~~/~~	~~100~~	~~8~~	~~tr~~	
228.4	232.9	Lamprophyre	2.0	/	/	100	8	tr	Seemingly entire unit somewhat altered?; dark green; ~~fine~~ soft; noticeably magnetic.
232.9	252.4	Andesitic Pyroclastic and Silicated Pyroclastic (237.3 - 249.0m)	4.8	2.7	8.4	100	9	L(+) to M. prod. L(+)	232.9 - 237.3m - ~~Fen~~ largely altered rock with numerous thin zones of ~~two~~ essentially unaltered rock sandwiched between ~~the~~ the altered zones.
		Altered Feldspar Porp. (249.0 - 252.4m)				100	5	L(+) to M.	237.3 - 249.0 - ~~Fen~~ Seemingly not intensely altered, original texture still decipherable although very blurred and indistinct.
		Altered pyroclastic				100	9	L(+) to M.	249.0 - 252.4 - quite strongly altered; occasional brownish garnet.

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PROPERTY: BALL CREEK

HOLE No.: 80-1 LOGGED BY: D. Gore DATE: Aug 13, 1980 SHEET No.: 7

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
252.4	259.6	Altered Feldspar Porphyry	12.5	1.1	/	13.9	.5	m(-) to m(+)	most of unit altered but only very slightly altered; texture still visible but quite blurred; ~~zones~~; unit is predominately greyish; ~~zones~~ short zones are more intensely altered; ~~each zone~~ unit is quite fractured; abundant calcite filled fractures; few qtz. veins; noticeably softer than most alteration zones; also some veinlets of what appears to greenish sericite? alteration may contain more sericite than usual.
259.6	283.7	(259.6-265.3) Altered Feldspar Porphyry (265.3-283.7 m) Altered pyroclastic	10.1	2.2	5.0				259.6-265.3m - alteration intensifies with patchy 3-4cm zones of silicification adjacent to many veinlets. 265.3-283.7m - quite intensely altered; greyish colouration; 271.9m - carbonate veining decreases

J. R. WOODCOCK CONSULTANTS LTD. PROPERTY BALL CREEK

HOLE No. 80-1 LOGGED BY D. Gore DATE Aug 13, 23, 25, 1980 SHEET No. 8

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
283.7	289.2	Feldspar Porphyry (Charlen)	7.3	.7	1.1	/	/	M(-)	unaltered.
289.2	318.2	Andesitic Pyroclastics	6.7	1.1	4.5	/	/	M(-)	essentially unaltered; short zones of silicated rock beginning @ 309.9m.
318.2	322.4	Feldspar Porphyry (Charlen)	0.6	1.7	7.5	/	/	L+0L(+)	essentially unaltered; some very minor bleaching along some veinlets (322.4 to 334.6m)
322.4	343.8	Altered Pyroclastic (334.6 - 343.8m)	0.7	3.1	1.9	100	9.5	M(-) to M(+)	strongly altered; some sections quite fractured 334.6.
		Andesitic Pyroclastic				3	.1	M(-) to M.	essentially unaltered a few thin altered zones; some minor brown garnet.
343.8	345.9	Feldspar Porphyry (Charlen)	5.7	.5	/	/	/	L(-)	unaltered; some chloritized hornblende phenocrysts.
345.9	348.6	Andesitic Pyroclastic	3.7	3.0	4.0	/	/	L(+)	perhaps very slightly silication in small irregular patches
348.6	357.5	Feldspar Porphyry (Charlen)	0.7	/	.2	/	/	L(-)	unaltered

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PROPERTY BALL CREEK

HOLE No. BD-1 LOGGED BY D. Gore DATE Aug 23, 25, 1980 SHEET No. 9

INTERSECTION, ft. (m.) FROM	TO	ROCK TYPE	CARB. VEINLETS No./m	QUARTZ VEINLETS WHITE No./m	BLUISH No./m	ALTERATION BANDS cm/m	INTENSITY OF ALTERATION (1 to 10)	PYRITE (Low to High)	COMMENTS
357.5	401.4	Andesitic Pyroclastic and Silicated clastics	1.1	1.4	4.0	20	3	L(+) to M(+)	intermittent zones of essentially unaltered and altered rock; locally small concentrations of grown garnet
		(395.6-401.4 m) Silicated Clastic				100	8	L(+) to M(-)	more intensely silicated; no garnet noted.