ROCK TYPE

Metamorphic (M)

Mam	amphibolite	**Mvu**	metavolcanic general
Mcs	calc-silicate	**Mmi**	migmatite
Mes	endoskarn	**Moa**	orthoamphibolite
Mxs	exoskarn	**Mog**	orthogneiss
Mfs	felsic schist	**Mpa**	para-amphibolite
Mgn	gneiss	**Mpg**	paragneiss
Mgf	granofels	**Mph**	phyllite
Mgr	granulite	**Rph**	phyllonite
Mhf	hornfels	**Msk**	skarn
Mms	mafic schist	**Msc**	schist
Mmb	marble	**Mst**	slate
Mmu	metamorphic undifferentiated	**Mum**	ultramafic schist
Msu	metasediment general		

Veins (VN)

Rvc	carbonate vein
Rvq	quartz vein
Rvu	vein general

Breccias (BX)

Rbx	breccia
Rfb	fault breccia

Tectonic (T)

Rcc	cataclasite
Rfz	fault rock or zone undifferentiated
Rgx	gouge
Rmy	mylonite
Rsz	sheared zone or rock undifferentiated
Rtt	tectonite

ROCK TYPE

Igneous (P)

Gad	adamellite	**Glm**	lamprophyre
Gal	alaskite	**Glt**	latite
Gan	andesite	**Glg**	leucrogranite
Gao	anorthosite	**Gmu**	mafic rock undifferentiated
Gap	aplite	**Gmz**	monzonite
Gcb	carbonatite	**Gnr**	norite
Gcp	clinopyroxenite	**Gop**	orthopyroxenite
Gdc	dacite	**Gpg**	pegmatite
Gdr	diorite	**Gpr**	peridotite
Gdl	dolerite	**Gph**	phonolite
Gdn	dunite	**Gpp**	porphyry
Gfu	felsic rock undifferentiated	**Gpy**	pyroxenite
Gft	felsite	**Gqd**	quartz diorite
Ggb	gabbro	**Gqg**	quartz gabbro
Ggt	granite (sensu stricto)	**Gql**	quartz latite
Ggu	granitic rock undif. - granitoid	**Gqm**	quartz monzonite
Ggd	granodiorite	**Grd**	rhyodacite
Ggp	granophyre	**Gry**	rhyolite
Gmg	microgranite	**Gsp**	serpentinite
Ghz	harzburgite	**Gsy**	syenite
Ghb	hornblendite	**Gto**	tonalite
Guu	igneous rock undifferentiated	**Gta**	trachyandesite
Giu	intermediate rock unclassified	**Gtr**	trachyte
Gkb	kimberlite	**Gtj**	trondhjemite
		Gum	ultramafic general

Mineralisation ($*)

Rms	Massive sulphide rock

* Prefix any rock type code with "$" to indicate "economic" mineralisation is present

ROCK TYPE

Sedimentary (S)

Sco	coal	**Sdu**	sediment undifferentiated
Sdi	diatomite	**Sbx**	sedimentary breccia
Sph	phosphorite		

Sedimentary - Chemical (SM)

Rcp	caprock	**Sif**	iron formation general
Rcb	carbonate rock undifferentiated	**Sio**	iron formation oxide facies
Sct	chert	**Sil**	iron formation silicate facies
Rcy	clay	**Sis**	iron formation sulphide facies
Sdc	dolomite	**Sjs**	jaspilite, jasper
Sex	exhalite	**Slm**	limestone
Sic	iron formation carbonate facies	**Smg**	magnesite rock (sedimentary)

Sedimentary - Clastic (ST)

Sar	arenite	**Smd**	mudstone
Sag	argillite	**Sqo**	orthoquartzite
Sak	arkose	**Spa**	packstone (carbonate)
Sbo	boundstone (carbonate)	**Spe**	pelite
Sca	calcarenite	**Sps**	psammite
Scl	calcilutite	**Sqt**	quartzite
Scr	calcirudite	**Srd**	rudite
Scy	claystone	**Srs**	rudstone (carbonate)
Scg	conglomerate	**Ssn**	sandstone
Scs	carbonaceous shale	**Ssh**	shale
Sdm	diamictite	**Ssl**	siltstone
Sgs	grainstone (carbonate)	**Ssa**	subarkose
Sgw	greywacke	**Ssg**	subgreywacke
Sgr	grit	**Ssp**	shale - graphitic
Sml	marl	**Sti**	tillite
Smc	micrite	**Stb**	turbidite
		Swk	wacke

ROCK TYPE

Soils / weathering (SU)

Osa	A-horizon soil	**Oln**	lignite
Oal	alluvium	**Olo**	loam
Obt	bauxite	**Olt**	laterite
Osb	B-horizon soil	**Omg**	magnesite rock (weathering related)
Occ	calcrete	**Omd**	mud
Ocp	caprock	**Oou**	overburden general
Osc	C-horizon soil	**Opt**	plinthite
Ocy	clay	**Ops**	podsol
Ocl	colluvium	**Obx**	regolithic breccia
Odu	duricrust general	**Orb**	rubble
Oel	eluvium	**Osn**	sand, unconsolidated
Ofc	ferricrete	**Osr**	saprock
Ogo	gossan	**Osp**	saprolite
Ogv	gravel	**Osk**	scree
Ogy	gypcrete	**Ost**	silcrete
Ohp	hardpan	**Osl**	silt, unconsolidated
Ohm	humus	**Osu**	soil general
Ois	ironstone	**Otr**	travertine
Olg	lag (gravel)		

Other (Z)

Rnb	not rock - backfilled stope	**Rns**	not rock - no sample return
Rnc	not rock - contamination	**Rnp**	not rock - stope
Rnh	not rock - hole	**Rnw**	not rock - wood

ROCK TYPE

Volcanic (V)

Vag	agglomerate, volcanic	**Vob**	obsidian
Van	andesite volcanic	**Vpp**	peperite
Vbs	basalt	**Vpc**	pyroclastic
Vdc	dacitic volcanic	**Vrd**	rhyodacitic volcanic
Vvf	felsic volcanic	**Vry**	rhyolitic volcanic
Vft	felsitic volcanic	**Vsp**	spilite (volcanic)
Vhm	high magnesium basalt	**Vth**	tholeiitic volcanic
Vhc	hyalociastite	**Vta**	trachyandesitic volcanic
Vig	ignimbrite	**Vtb**	trachybasaltic volcanic
Vvi	intermediate volcanic	**Vtc**	trachytic volcanic
Vkt	keratophyre (volcanic)	**Vum**	ultramafic volcanic
Vkm	komatilite	**Vvu**	volcanic undifferentiated
Vlh	lahar	**Vvc**	volcaniclastic
Vvm	mafic volcanic	**Vmc**	mafic volclaniclastic

Volcanic - Tuffaceous (VT)

Tan	andesitic tuff	**Ttm**	mafic tuff
Txl	crystal lithic tuff	**Try**	rhyolitic tuff
Txx	crystal tuff	**Tta**	trachyandesitic tuff
Txv	crystal vitric tuff	**Ttc**	trachytic tuff
Tdc	dacitic tuff	**Ttu**	tuff general
Ttf	felsic tuff	**Tum**	ultramafic tuff
Tti	intermediate tuff	**Tvx**	vitric crystal tuff
Tlx	lithic crystal tuff	**Tvl**	vitric lithic tuff
Tll	lithic tuff	**Tvv**	vitric tuff
Tlv	lithic vitric tuff		

MINERALS

ac	actinolite
ad	adularia
aa	agate
ab	albite
aw	allanite
af	allophane
ai	almandine
al	alunite
am	amphibole
ax	anatase
an	andalusite
ae	andradite
ag	anglesite
ah	anhydrite
ak	ankerite
ay	anthophyllite
at	antigorite
ap	apatite
ar	aragonite
as	arsenophyrite
ao	asbestos
au	auridium
az	azurite
ba	barite
bi	biotite
bs	bismuthnite
bn	bornite
ca	calcite
cn	carbonaceous
cb	carbonate
ci	carnotite
ct	cassiterite
cg	cerargyrite
ce	cerussite
cj	chabazite
ck	chalcedony
cc	chalcocite
cp	chalcopyrite
cs	cherty silica
cl	chlorite
cd	chloritoid
cm	chromite
cq	chrysoprase
ch	chyrsocolla
cy	clay
cx	clinopyroxene
cz	clinozoisite
cf	coffnite
cu	copper (native)
co	cordierite
cv	covellite
cr	cuprite
di	diopside
do	dolomite
dr	dravite
en	enargite
ep	epidote
er	erythrite
fe	fe oxides (undiff)
fx	feldspar (undiff)
fm	ferromag. minerals (undiff)
fl	fluorite
fu	fuchsite
gh	gahnite
ga	galena
gn	garnet
gi	garnierite
gl	glauconite
go	goethite
gp	graphite
gs	grossularite
gt	grunerite
gy	gypsum
hm	heavy minerals (undiff)
hd	hedenbergite
he	hematite
hb	hornblende
im	ilmenite
ja	jarosite
ka	kaolin
kf	K-feldspar
ky	kyanite

MINERALS

le	lepidolite	**pn**	pentlandite	**ss**	smithsonite
lx	leucoxene	**pp**	phlogopite	**sp**	sphalerite
li	limonite	**ph**	phosphate (undiff)	**sf**	sphene
lc	limonite after carbonate	**pi**	pitchblende	**st**	staurolite
lp	limonite after pyrite	**pl**	plagioclase	**sb**	stibnite
ls	limonite after sulphide	**pt**	platinum	**sx**	sulphates (undiff)
lz	lizardite	**pr**	prehnite	**su**	sulphides (undiff)
		ps	psilomelane		
mh	maghemite	**py**	pyrite	**tc**	talc
mg	magnesite	**pz**	pyrolusite	**tn**	tennantite
mt	magnetite	**pm**	pyromorphite	**tt**	tetrahedrite
mk	malachite	**pf**	pyrophyllite	**tz**	topaz
mn	manganese oxides (undiff)	**px**	pyroxene	**tb**	torbanite
mr	marcasite	**po**	pyrrhotite	**tm**	tourmaline
mi	mica (undiff)			**tr**	tremolite
mc	microline	**qz**	quartz		
ml	mineral (undiff)	**qc**	quartz-carbonate mixture	**ur**	uraninite
mo	molybdenite			**ux**	uranium minerals (undiff)
mz	monazite	**rc**	rhodochrosite		
mu	muscovite	**rd**	rhodonite	**vc**	vein carbonate
		rb	riebeckite	**vq**	vein quartz
ne	neotocite	**ru**	rutile	**vs**	vesurvianite
nf	nepheline			**vl**	violarite
nt	nontronite	**sa**	sanidine		
		sc	scapolite	**wl**	willemite
ol	olivine	**sh**	scheeilte	**wf**	wolframite
op	opaline silica	**so**	scorodite	**wo**	wollastonite
oc	orthoclase	**sr**	sericite		
ox	orthopyroxene	**se**	serpentine	**ze**	zeolite
		sd	siderite	**zo**	zoisite
		si	silica		
		sl	silliminite		
		sm	smectite, montomorillonite		

QUALIFIERS

Mineralisation Styles

blb	blebby	**rep**	replacement
bou	boudin	**smv**	semi-massive
bxc	breccia - clast	**asi**	silicification
bxk	breccia - crackle	**skn**	skarn
bxm	breccia - matrix	**stf**	strataform
clt	clots	**sth**	structurally hosted
cll	colliform	**vsl**	vein - selvage
cst	crustiform	**vsk**	vein - stockwork
dis	disseminated	**vnw**	veining - network
fof	foliation/fabric fillings	**vlt**	veinlets
frf	fracture fillings	**vns**	veins
gos	gossan	**vuf**	vug fill
mas	massive	**vus**	vuggy silica
pse	pseudomorphic		

Composition

acd	acid	**kom**	komatiitic
alk	alkaline general	**ool**	oolitic, oolites, ooliths
amb	amphibolitic	**lab**	labile
and	andesitic	**leu**	leucocratic
apl	aplitic	**lim**	limey as in limestone
arn	arenaceous	**lth**	lithic
arg	argillaceous	**maf**	mafic
ark	arkosic	**mag**	magnetic
ash	ash bearing	**mgw**	magnetic - weakly
bst	basaltic	**mel**	melanocratic
bas	basic	**mon**	monomictic
bic	bioclastic	**mnz**	monzonitic
cmt	cemented, cement	**mud**	muddy
cty	cherty	**olg**	oligomictic
cly	clayey	**peg**	pegmatic
cln	clean (washed)	**pel**	pelitic
cgt	conglomeratic	**plm**	polymictic
dct	dacitic	**pot**	potassic
drt	diontic	**rhy**	rhyolitic
dty	dirty	**ryd**	ryhodacitic
dir	doleritic	**sny**	sandy

QUALIFIERS

Composition (cont.)

dlm	dolmitic	**srp**	serptentinitic
dun	dunitic	**shy**	shaley
fsp	feldspathic	**sly**	silty
fel	felsic	**sty**	slatey
fst	felsitic	**spl**	spilitic
fer	ferruginous	**syt**	syenitic
gab	gabbroic	**thl**	tholeiitic
grn	granitic	**ton**	tonalitic
grd	granodioritic	**ubc**	ultrabasic
grp	granophyric	**umf**	ultramafic
gph	graphitic	**vit**	vitnc
hmg	high magnesium (basalt)	**vcl**	volcanolithic
int	intermediate		

Texture

acc	acicular	**brn**	branchings, anastomosing
adc	adcumulate textured	**cch**	conchoidal
agg	agglomeratic	**cls**	clastic or as clasts
alt	alternating	**cnv**	convoluted (not bedding - use "bdc")
amd	amygdaloidal or as amygdules	**con**	concretionary, concretions
ams	amorphous	**cry**	cryptocrystalline
ang	angular	**csp**	clast supported
anh	anhedral	**ctg**	coatings
aph	aphanitic	**dis**	disseminated/disseminations
apy	aphyric	**dir**	doleritic
bdb	bedded, banded	**ear**	earthy
bdc	bedded, convoluted	**eqg**	equigranular
bdg	bedded, graded	**euh**	euhedral
bdi	interbedded	**fgm**	fragmental or as fragments
bdk	bedded, thick	**fb**	fibrous
bdl	bedded, laminar	**fis**	fissile
bdm	bedded, medium	**flb**	flow banded
bdn	bedded, thin	**flg**	flaggy
bdr	bedded, irregular	**flt**	flattened
bds	bedded, massive	**fri**	friable, loose
bdt	bedded, turbiditic	**fst**	felsitic
bdu	bedded/bedding general	**glp**	glomero-porphyritic

QUALIFIERS

Texture (cont)

bdv	bedded, varved	**gls**	glassy
bdw	bedded, wavy	**gns**	gneissic
bdx	bedded, cross	**grb**	granoblastic
blb	blebs	**het**	heterogeneous
blk	blocky	**hfl**	hornfelsic
bot	botryoidal or as botryoids	**hom**	homogeneous
xtl	crystalline	**rel**	relict
hrd	hard, hardened	**rip**	rippled, ripples
imb	imbricated	**rod**	rodded, columnar
inq	inequigranular	**rdd**	rounded
ing	intergranular	**skl**	skeletal
ist	interstitial	**stg**	sorting good
irr	irregular (not bedding,see "bdr")	**stm**	sorting moderate
knt	knotted	**stp**	sorting poor
lap	lapilli textured, lapilli	**sph**	spherulitic, spherules
len	lenticular or as lenticles	**sfx**	spinifex textured
mas	massive (not bedding, see "bds")	**stl**	stylotitic
mtx	matrix (in or of)	**sba**	subangular
mxs	matrix supported	**sbh**	subhedral
mct	mesocumlate textured	**sbo**	subordinate
mig	migmatitic	**sbr**	subrounded
mlk	milky	**sug**	sugary
nod	nodular or as nodules	**thk**	thick, large
ocl	ocellar, ocelli	**thn**	thin, small
oct	orthocumalate textured	**trc**	trachytic
plt	peletoidal	**trn**	transitional
ptc	perthitic	**ufx**	uniform textured
pil	pillowed	**vgd**	variegated
prs	porous	**var**	variolitic
poi	poikiloblastic	**vrm**	vermiform
por	porphyritic	**ves**	vesicular or in vesicles
ppb	porphyroblastic	**vug**	vuggy
prd	predominant or main	**wld**	welded
rad	radiating	**xen**	xenolith or xenolithic
rex	recrystallised		

QUALIFIERS

Regolith

ars	arenose (weathering profile term)	**mot**	mottled or as mottles
blc	bleached	**oxd**	oxidised
bxw	boxworked (as in feox-after-sulphide)	**pal**	pallid
ccr	calcreted	**ped**	pedogenic
cap	cap or capping	**pis**	pisolitic, pisolites, pisoliths
fcr	ferricreted	**pmc**	plasmic
frs	fresh	**res**	residual
gly	gley	**sap**	saprolitic
gos	gossanous	**sit**	silcreted
hpn	hardpanized, hardpanned	**spg**	supergene
ind	indurated	**sfl**	surficial
lat	lateritic	**whl**	weathered, highly
lch	leached	**wmd**	weathered, moderately
lsg	liesegang	**wsl**	weathered, slightly
lir	lithorelics	**wtd**	weathered, weathering
lom	loamy		

Oxidation

blc	bleached	**oxd**	oxidised
frs	fresh	**wox**	oxidised - weakly
mot	mottled	**mox**	oxidised - moderately
tox	transitional	**sox**	oxidised - strongly
rox	reduzate		

Structure

aug	augen textured or as augen	**iso**	isoclinal
bou	boudinaged	**jnt**	jointed, jointing
bxx	brecciated	**lin**	lineated or forming lineation
cta	cataclastic	**mas**	massive
clv	cleaved, cleavage	**myl**	mylonitic
ctt	contorted	**phy**	phyllitic
cbx	crackle brecciated	**ptg**	ptygmatic
crn	crenulated	**sch**	schistose, schistosity
fau	faulted, fault	**scl**	schlieren textured, schlieren
fld	folded, folds	**shd**	sheared
fol	foliated, foliation	**sls**	slickensided
frc	fracture, in fractures	**tec**	tectonic

QUALIFIERS

Veining

cnt	geological contact	**unf**	unfoliated
vcb	carbonate veined	**vst**	stringers
vhe	hematile vein	**vnu**	vein - undifferentiated
vpy	pyrite vein	**vlc**	vein on lithologic contact
vmr	massive vein, reef	**vsv**	vein subvertical
vqc	quartz carbonate veined	**vlt**	veinlet
vqz	quartz veined		
vsk	stockworked or as stockworks		

Structures and Structural Texttures

mnl	mineral layering	**shz**	shear zone
gst	glacial striations	**lcr**	crenulation lineation
pcd	paleocurrent direction	**lfp**	fold plunge lineation
gnb	gnesic banding	**lil**	intersection lineation
slc	slaty cleavage	**lme**	mineral elongation lineation
spc	spaced cleavage	**lmf**	mineral fibre lineation
fbx	fault breccia	**lpl**	parting lineation
shn	shear - narrow (<2cm)	**lsf**	shape fabric lineation
shb	shear bands	**lsl**	slickenside lineation
		frc	fracture

Grain Size

gzv	very fine grained (<0.1mm)	**gzg**	granule, gritty (2.0-4.0mm)
gzf	fine grained (0.1-.25mm)	**gzp**	pebbly (4-16mm)
gzm	medium grained (.25-0.5mm)	**gzo**	cobbly (16-256mm)
gzc	coarse grained (0.5-1.0mm)	**gzb**	bouldery (>256mm)
gzy	very coarse grained (1.0-2.0mm)		

QUALIFIERS

Genetic

aeo	aeolian	**igb**	ignimbritic
agg	agglomeratic	**ins**	in situ
agc	authigenic	**inf**	intraformational
all	allochthonous	**itv**	intrusive
alv	alluvial	**mml**	low grade metamorphism
mma	amphibolite facies	**mmm**	medium grade metamorphism
aqu	aqueous	**mmc**	metamorphic, metamorphosed
aug	authigenic	**sil**	occuring as a sill
aut	autochthonous	**dyk**	occurring as a dyke
clp	collapse (as in collapse breccia)	**flw**	occurring as a flow
col	colluvial	**ocp**	outcrop
dep	depositional	**pmy**	primary
dig	diagenetic	**pyc**	pyroclastic
elv	eluvial	**rew**	reworked
epc	epiclastic	**sec**	secondary
epg	epigenetic	**sed**	sedimentary
ept	epithermal	**smc**	stromatolitic
ext	extrusive	**syg**	syngenetic
flo	float	**tpd**	transported
flv	fluviatile	**tuf**	tuffaceous
glc	glacigenic	**tur**	turbiditic
mmn	granulite facies	**vol**	volcanic
mmg	greenschist facies	**vcc**	volcaniclastic
mmh	high grade metamorphism		

QUALIFIERS

Alteration

aaa	advanced argillic	**alm**	limonite alteration
aau	alteration unspecific	**ahp**	hypogene
aag	argillic alteration	**amc**	metasomatic
abi	biotite alteration	**apv**	pervasive
abl	bleached, bleaching	**apc**	phyllic
acb	carbonate alteration	**apt**	potassic
aci	chlorite alteration	**app**	propylitic
acy	clay alteration	**asr**	sericite alteration
agz	greisenized	**ase**	serpentinised
agp	alteration graphitic	**asi**	silica alteration
ahd	hydrothermal	**asp**	spilitic
ahe	hematite alteration	**atm**	tourmaline alteration

Colour - Hue

N	black (noir)	**O**	orange
U	blue	**I**	pink
B	brown	**P**	purple
G	green	**R**	red
A	gray	**W**	white
L	olive	**Y**	yellow
		C	cream

Colour - Shade

cs1	very pale	**cs6**	dusky
cs2	pale	**cs7**	very dusky
cs3	light	**cs8**	dark
cs4	medium light	**cs9**	very dark
cs5	moderate		

Abundance / Quality

0	absent	**low**	low quality
1	trace, rare	**mod**	moderate quality
2	weak, minor	**high**	high quality
3	moderate, common		
4	strong, abundant		
5	intense, very abundant		

QUALIFIERS

Geotech - Structure Type

A1	Natural cleavage foliation parting or fracture, not broken by drilling	**F1**	Geological fault with slickensides, gouge or other evidence of shear movement
A2	Cleavage foliation parting or fracture, uncertain whether A1 or A3	**F2**	Zone of multiple core breaks induced
A3	Cleavage foliation parting or fracture, broken by drilling	**F3**	Zone of multiple natural core breaks (zone of broken core)
A4	Cleavage foliation, intact	**J1**	Natural geological joint, not broken by drilling
B1	Natural bedding plane fracture, not broken by drilling	**J2**	Geological joint, uncertain whether J1 or J3
B2	Bedding plane fracture, uncertain whether B1 or B3	**J3**	Geological joint, broken by drilling
B3	Bedding plane fracture, broken by drilling	**J4**	Geological fracture (J1 to J3) but not continuous across core
B4	Bedding plane fracture, intact	**NN**	Rock surface not observable
C1	Natural geological contact between two different rock types, not broken by drilling	**S1**	Shear zone (zone of closely spaced shear fractures not classed as F1)
C2	Geological contact, uncertain whether C1 or C3	**U1**	Unoriented section of core
C3	Geological contact, initially intact but broken by drilling	**V1**	Vein cemented with infill, continuous across core
C4	Geological contact (C1 to C3), but not broken by drilling	**V2**	Vein, not continuous across core
		X1	Single, drilling induced, core break

QUALIFIERS

Geotech - Strength

EH	Extremely high
VH	Very high
H	High
M	Medium
L	Low
VL	Very low
EL	Extremely low

Geotech - Termination

B	Termination on bedding
C	Termination at rock type contact
D	Termination at intrusive dyke contact
F	Termination on fault
J	Termination on joint
N	No termination (outside field of view)
R	Termination in rock
U	Termination at unconformity
V	Termination on vein

Sand Factor

10	shale
20	mud
30	clay
40	silt
50	fine sand
60	medium sand
70	coarse sand
80	gravel
90	pebble conglomerate
100	cobble/boulder conglomerate