MINERAL NAMES			
Ac actinolite	ep epidote	nf nepheline	ur uraninite
Ad adularia		nt nontronite	ux uranium minerals (general)
Aa agate	fx feldspar (general)		
Ab albite	fe ferric iron oxides,	ol olivine	vc vein carbonate
Aw allanite	(goethite, hematite, limonite)	op opaline silica	vq vein quartz
Af allophane	fm ferromagnesian mineral (general)	oc orthoclase	vs vesurvianite
Ai almandine	fl fluorite	ox orthopyroxene	vl violarite
Ai alunite	fu fuchsite		
Am amphibole (general)		pn pentlandite	wl willemite
Ax anatase	gh gahnite	pp phlogopite	wo wollastonite
An andalusite	ga galena	ph phosphate (general)	wf wolframite
Ae andradite	gn garnet	pi pitchblende	
ah anhydrite	gi garnierite	pl plagioclase	ze zeolite
ak ankerite	gl glauconite	pt platinum	zo zoisite
ap apatite	go goethite	pr prehnite	
ar aragonite	gp graphite	py pyrite	
as arsenophyrite	gs grossularite	pz pyrolusite	
ao asbestos	gt grunerite	pf pyrophyllite	
au auridium, gold	gy gypsum	px pyroxene	
az azurite		po pyrrhotite	
	hm heavy minerals (general)		
ba barite	he hematite	qz quartz (see also "silica" and	
bi biotite	hb hornblende	vein quartz)	
bs bismuthnite		qc quartz-carbonate mixture	
bn bornite	im ilmenite		
		rd rhodonite	
ca calcite	ja jarosite	rb riebeckite	
cn carbon (as in carbonaceous)		ru rutile	
cb carbonate (general,	ka kaolin		
see also "vein carbonate")	kf K-feldspar	sa sanidine	
ct cassiterite	ky kyanite	sc scapolite	
ce cerussite		sh scheeilte	
ck chalcedony	lx leucoxene	sr sericite	
cc chalcocite	le lepidolite	se serpentine	
cp chalcopyrite	li limonite	sd siderite	
cs cherty silica	lc limonite after carbonate	si silliminite	
cl chlorite	lp limonite after pyrite	si silica (general as in silificaiton:	
cd chloritoid	ls limonite after sulphide	see qz, cs, op)	
cm chromite	lz lizardite	sm smectite, montomorillonite	
chyrsocolla		ss smithsonite	
cq chrysoprase	mg magnesite	sp sphalerite	
cy clay (general)	mh maghemite	sf sphene	
cz zinozoisite	mt magnetite	st staurolite	
cx clinopyroxene (general)	mk malachite	sb stibnite	
cu copper, native	mn manganese oxides (general)	sx sulphates (general)	
co cordierite	mr marcasite	su sulphides (general)	
cv covellite	mi mica (general)		
cr cuprite	mc microline	tc talc	
	ml mineral (general)	tz topaz	
di diopside	mo molybdenite	tm tourmaline	
do dolomite	mz monazite	tr tremolite	
	mu muscovite		

QUALIFIERS

Composition
acd acid
alk alkaline general
amb amphibolitic
and andesitic
apl aplitic
arg argillaceous
ark arkosic
arn arenaceous
ash ash bearing
bas basic
bic bioclastic
bst basaltic
cgt conglomeratic
cln clean (washed)
cly clayey
cmt cemented, cement
cty cherty
dct dacitic
dir doleritic
dlm dolmitic
dun dunitic
fel felsic
fer ferruginous
fsp feldspathic
fst felsitic
gab gabbroic
gph graphitic
grd granodioritic
grn granitic
hmg high magnesium (basalt)
int intermediate
kom komatiitic
leu leucocratic
lim limey as in limestone
lth lithic
maf mafic
mag magnetic
mel melanocratic
mgw magnetic but weakly, lomag
ooll oolitic, oolites, ooliths
peg pegmatic
pel pelitic
pot potassic
rhy rhyolitic
shy shaley
sly silty
sty slatey
sny sandy
srp serptentinitic
syt syenitic
thl tholeiitic
ton tonalitic
ubc ultrabasic
umf ultramafic
vcl volcanolithic

Texture
acc acicular
adc adcumulate textured
agg agglomeratic
alt alternating
amd amygdaloidal or as amygdules
ams amorphous
ang angular
anh anhedral
bdg bedded, graded
bdi interbedded
bdu bedded/bedding general
blb blebs
blk blocky
brn branchings, anastomosing
cch conchoidal
cls clastic or as clasts
con concretionary, concretions
csp clast supported
ctg coatings
dis disseminated/disseminations
dir doleritic
eqg equigranular
euh euhedral
fgm fragmental or as fragments
fb fibrous
fis fissile
flb flow banded
flt flattened
fri friable, loose
fst felsitic
gls glassy
gns gneissic
grb granoblastic
het heterogeneous
hom homogeneous
imb imbricated
ing intergranular
irr irregular (but not bedding, see "bdr")
ist interstitial
knt knotted
lap lapilli textured, lapilli
len lenticular or as lenticles
mas massive ("but not bedding, see "bds")
mct mesocumlate textured
mig migmatitic
mlk milky
mtx matrix (in or of)
mxs matrix supported
nod nodular or as nodules
oct orthocumalate textured
pil pillowed
por porphyritic or as phenocrysts
ppb porphyroblastic or as porphyroblasts
prs porous
ptc perthitic
rad radiating
rdd rounded
rel relict
rex recrystallised
rip rippled, ripples
rod rodded, columnar
sba subangular
sbh subhedral
sbr subrounded
sfx spinifex textured
stg sorting good
stm sorting moderate
stp sorting poor
sug sugary
trn transitional
ufx uniform textured
ves vesicular or in vesicles
vug vuggy
xen xenolith or xenolithic
xtl crystalline

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

Sample Quality
dr dry sample
dp damp sample
wt wet sample

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

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

Veining
vcb carbonate veined
vlc vein on lithologic contact
vlt veinlet
vmr massive vein, reef
vqc quartz carbonate veined
vqz quartz veined
vsk stockworked or as stockwork
vst stringers
vsv vein subvertical

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

Genetic
aeo aeolian
agg agglomeratic
alv alluvial
clp collapse (as in collapse brecci
col colluvial
dep depositional
dig diagenetic
dyk occurring as a dyke
elv eluvial
epc epiclastic
epg epigenetic
ept epithermal
ext extrusive
flt float
flv fluviatile
flw occurring as a flow
glc glacigenic
igb ignimbritic
inf intraformational
ins in situ

QUALIFIERS - continued

itv intrusive	mml low grade metamorphism	rew reworked	trn transported
mmc metamorphic,	mmm medium grade metamorphism	sec secondary	tuf tuffaceous
metamorphosed	mmh high grade metamorphism	sed sedimentary	tur turbiditic
mmg greenschist facies	ocp outcrop	sil occuring as a sill	vlc volcaniclastic
mma amphibolite facies	pmy primary	stm stromatolitic	vol volcanic
mmn granulite facies	pyc pyrociastic	syg syngenetic	

ROCK TYPE

Overburden and Non-basement	Rns not rock - no sample return	Gtr trachyte	Sqo orthoquartzite
Regolith	Rnw not rock - wood	Gum ultramafic general	Sqt quartzite
Oal alluvium	Rph phyllonite	Gus ultramafic schist	Srd rudite
Obt bauxite	Rrz redox zone	Guu igneous rock undifferentiated	Srs rudstone (carbonate)
Obx regolithic breccia	Rsp saprolite	Gwb websterite	Ssa subarkose
Occ calcrete	Rsr saprock	Gwh wehrlite	Ssg subgreywacke
Ocl colluvium	Rsz sheared zone or rock undiff		Ssh shale
Ocp caprock	Rtt tectonite	**Metamorphic**	Ssl siltstone
Ocy clay	Rus upper saprolite	Mam amphibolite	Ssn sandstone
Odu duricrust general	Ruu unidentified rock	Mcs calc-silicate	Stb turbidite
Oel eluvium	Rvc carbonate vein	Mes endoskarn	Sti tillite
Ofc ferricrete	Rvq quartz vein	Mfs felsic schist	Swk wacke
Ogo gossan	Rvu vein general	Mgf granofels	
Ogv gravel		Mgn gneiss	**Sediments Chemical**
Ogy gypcrete	**Igneous (non-extrusive)**	Mgr granulite	Sct chert
Ohm humus	Gad adamellite	Mhf hornfels	Sdc dolomite
Ohp hardpan	Gan andesite	Mmb marble	Sex exhalite
Ois ironstone	Gao anorthosite	Mmi migmatite	Sic iron formation carbonate facie
Olg lag (gravel)	Gap aplite	Mms mafic schist	Sif iron formation general
Oln lignite	Gcb carbonatite	Mmu metamorphic undifferentiated	Sil iron formation silicate facies
Olo loam	Gcp clinopyroxenite	Moa orthoamphibolite	Sio iron formation oxide facies
Olt laterite	Gch chromitite	Mog orthogneiss	Sis iron formation sulphide facies
Omd mud	Gdc dacite	Mpa para-amphibolite	Sjs jaspilite, jasper
Omg magnesite rock (weathering)	Gdl dolerite	Mpg paragneiss	Slm limestone
Oou overburden general	Gdn dunite	Mph phyllite	Smg magnesite rock (sedimentar
Ops podsol	Gdr diorite	Msc schist	
Orb rubble	Gft felsite	Msk skarn	**Tuff**
Osa A-horizon soil	Gfu felsic rock undifferentiated	Mst slate	Tan andesitic tuff
Osb B-horizon soil	Ggb gabbro	Msu metasediment general	Tdc dacitic tuff
Osc C-horizon soil	Ggd granodiorite	Mum ultramafic schist	Tll lithic tuff
Osk scree	Ggn gabbronorite	Mvu metavolcanic general	Tlv lithic vitric tuff
Osl silt, unconsolidated	Ggp granophyre	Mxs exoskarn	Tlx lithic crystal tuff
Osn sand, unconsolidated	Ggt granite (sensu stricto)		Try rhyolitic tuff
Osp saprolite	Ggu granitic rock undiff granitoid	**Sediments General**	Tta trachyandesitic tuff
Osr saprock	Ghb hornblendite	Sbx sedimentary breccia	Ttc trachytic tuff
Ost silcrete	Ghz harzburgite	Sco coal	Ttf felsic tuff
Osu soil general	Giu intermediate rock unclassified	Sdi diatomite	Tti intermediate tuff
	Gkb kimberlite	Sdu sediment general, undiff	Ttm mafic tuff
Uncategorised & in situ Basement	Glg leucrogranite	Sph phosphorite	Ttu tuff general
Rbk bedrock	Glm lamprophyre		Tum ultramafic tuff
Rbx breccia	Glz lherzolite	**Sediments Clastic**	Tvl vitric lithic tuff
Rcb carbonate rock undifferentiated	Gmu mafic rock undifferentiated	Sag argillite	Tvv vitric tuff
Rcc cataclasite	Gmz monzonite	Sak arkose	Tvx vitric crystal tuff
Rcp caprock	Gnr norite	Sar arenite	Txl crystal lithic tuff
Rcy clay	Gop orthopyroxenite	Sbo boundstone (carbonate0	Txv crystal vitric tuff
Rfb fault breccia	Gpg pegmatite	Sca calcarenite	Txx crystal tuff
Rfz fault rock or zone undifferentiated	Gpp porphyry	Scg conglomerate	
Rgs greisen	Gpr peridotite	Scl calcilutite	
Rgx gouge	Gpy pyroxenite	Scr calcirudite	
Rku rock general or uncategorised	Gqd quartz diorite	Scy claystone	
Rln rock - not logged	Gqg quartz gabbro	Sdm diamictite	
Rls lower saprolite	Gql quartz latite	Sgr grit	
Rms massive any mineral	Gqm quartz monzonite	Sgs grainstone (carbonate)	
Rmy mylonite	Grd rhyodacite	Sgw greywacke	
Rnb not rock - backfilled stope	Gry rhyolite	Smc micrite	
Rnc not rock - contamination	Gsp serpentinite	Smd mudstone	
Rnh not rock - hole	Gsy syenite	Sml marl	
Rnp not rock - stope	Gta trachyandesite	Spa packstone (carbonate)	
	Gtj trondhjemite	Spe pelite	
	Gto tonalite	Sps psammite	

ROCK TYPE - Continued

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

ROCK TYPE

Rock type abbreviations always start with a capital. The capitals are chosen to show general categories:

B for base of oxidation categories.

G for general igneous (including unclassified varieties of igneous rock as well as intrusives) but known extrusives.

G was chosen rather than I because of the problems of confusion of I with 1 and l.

M for metamorphic

O for overburden related rock types which includes regolith which is transported but NOT that which is derived in situ.

R for rock names outside other categories, and for situ regolith to basement rocks.

S for sedimentary.

T for tuff (separated from other volcanics to allow a simple tuff terminology).

V for volcanic/volcaniclastic (but note special tuff terminology above).

Estimates of Abundance and Intensity

Quantitative estimates of abundance as percentages must directly follow the mineral or rock that they refer to , and consist of a two digit number ranging from 01 to 99. Qualitative estimates of intensity must consist of a number from 0 to 5, referring to a scale from absent to intense as listed below, and must directly follow the term referred to. Qualitative estimates should generally be for charaterisitics such as weathering for which a percentage is meaningless.

0 absent	1 trace, rare	2 weak, minor	
3 moderate, common	4 strong, abundant	5 intense, very abundant	

Colour

Colour codes have been organised to give the same descriptions as those used in the Rock-Colour Chart prepared by the Geological Society of America. The colour chart should be used for any detailed logging, but the codes can also be used for rough descriptions (eg OcyB meaning brown clay). The strongest hue is listed first, the weaker hue (if present) is listed second, and the strenght/shade listed last, eg (BY5 equals moderate yellowish-brown).

Hues:	**Strenght/Shade**	**Oxidation**
A grey	1 very pale	Bow base of partial oxidation
B brown	2 pale	Box base of total oxidation
G green	3 light	Wox weakly oxidised
I pink	4 medium light	Mox moderately oxidised
L olive	5 moderate	Sox strongly oxidised
N black (noir)	6 dusky	
O orange	7 very dusky	
P purple	8 dark	
R red	9 very dark	
u blue		
W white		
Y yellow		