

Lithologic Codes	Description
Regolith (R*)	
R	undifferentiated regolith
RCAC	calcrete
RSIC	silcrete
RFEC	ferricrete
RL	undifferentiated laterite
RLG	lateritic gravel (loose)
RLI	in situ laterite
RLT	transported laterite or cemented lateritic gravel
RCLY	in situ clay
RSAP	undifferentiated saprolite
RGOS	gossan ("iron cap") = iron oxide rock formed by weathering of sulphide rick rock. Textural or mineral prefix as appropriate (e.g. aciRGOS = acicular gossan, mcRGOS = malachite gossan)
Unconsolidated Sediments (S*)	
S	undifferentiated sediment
SLG	lateritic gravel
SGVL	unconsolidated gravel
SPCS	unconsolidated pebbly or cobbly sands
SAND	unconsolidated sand
SILT	unconsolidated silt
SMUD	unconsolidated mud
SCLY	unconsolidated clay (transported)
cyRB	regolith breccia with clay matrix
Sedimentary Rocks (S*)	
SS, qzSS, volcSS, lithSS, ccSS	>75% sandstone (undifferentiated) over minimum 5m logging interval, prefixes qzSS = quartz sandstone, lithSS = lithic sandstone, volcSS = volcanogenic sandstone, ccSS = calcareous sandstone
SM	>75% mudstone over minimum 5m logging interval
ST	>75% siltstone over minimum 5m logging interval
SSM	25-75% sandstone & mudstone over minimum 5m logging interval
SST	25-75% sandstone & siltstone over minimum 5m logging interval
SMH	shale
SML	slate
SMA	argillite (weakly metamorphosed mudstone)
SMP	phyllite
SGRT	grit
SSPC	pebbly or cobbly sandstone
SSIC	intraclastic sandstone and conglomerate
SCG	conglomerate
SCGR	mud chip conglomerate (rip-ups)
SCGM	monomict conglomerate
SCGP	polymict conglomerate
SBRM	monomict breccia
SBRP	polymict breccia
SCB, ooSCB, stSCB, bcSCB	undifferentiated carbonate, prefixes oo = oolitic, st = stromatolitic, bc = bioclastic
SLST	limestone
SDOL	dolomite
STIL	tillite
STUF	tuffite (redeposited)
SLAP	redeposited lapilli-stone
SCHT	chert
SBIF	banded iron formation
SLIG	lignite
Igneous Rocks (U* for Ultramafic, M* for Mafic, I* for Intermediate, F* for Felsic)	
UM	undifferentiated ultramafic
UDUN	dunite
UHAR	harzburgite
UPX	pyroxenite
UPD	peridotite
USERP	serpentinite
UKIM	kimberlite
ULAP	lamproite
ULAY	ultramafic lamprophyre
UK	komatiite (undifferentiated)
UKSTX	spinfex textured part of komatiite flow
UKoOC	olivine orthocumulate part of komatiite flow
UKoMC	olivine mesocumulate part of komatiite flow
MG	gabbro
MGL	leucogabbro
MD	dolerite
MB	basalt

Lithologic Codes	Description
MBHM	high-magnesium basalt
MBP	pillow-basalt
MBHY	basaltic hyaloclastite
MLAP	mafic lapilli-stone
MTUF	mafic tuff
IAND	andesite
IDIO, pxIDIO, amIDIO, btIDIO	diorite, with lower case mineral prefixes for key mafic phases, eg btIDIO, amIDIO, pxIDIO
F	undifferentiated felsic rock
FG, amFG, pxFG, btFG	undifferentiated granitoid, with lower case mineral prefixes for key mafic phases, eg btFG, amFG, pxFG
FGRA, amFGRA, btFGRA	granite, with lower case mineral prefixes for key mafic phases, eg btFGRA, amFGRA
FGRD, amFGRD, btFGRD	granodiorite, with lower case mineral prefixes for key mafic phases, eg btFGRD, amFGRD
FMON, amFMON, btFMON	monzonite, with lower case mineral prefixes for key mafic phases, eg btFMON, amFMON
FSYE, amFSYE	syenite, with lower case mineral prefixes for key mafic phases, eg btFSYE, amFSYE
FTUF	felsic tuff
FV	undifferentiated felsic volcanic rock
FRHY	rhyolite
FDAC	dacite
FPEG	pegmatite
FIGM	ignimbrite
Metamorphic & Metasomatic Rocks (Z*)	
ZSCH	undifferentiated schist
mZSCH	undifferentiated mafic schist, typically dominated by amphibole, chlorite and/or biotite with lesser feldspar, quartz, accessory leucoxene etc...
fZSCH	undifferentiated felsic schist, dominated by quartz & feldspar, muscovite, & accessory mafic minerals
btZSCH, btclZSCH, tcZSCH, etc...	biotite schist, biotite-chlorite schist, etc... using mineral code prefixes for only the distinguishing minerals
ZGNS	undifferentiated gneiss
btZGNS, kspZSCH, etc...	biotite gneiss, k-feldspar gneiss, etc... using mineral code prefixes for the key minerals
ZAMP	undifferentiated amphibolite
ZHF, pxZHF, btZHF, andZHF	hornfels = ZHF, microcrystalline, up to 2 lower case mineral prefixes as appropriate, eg. btZHF, andZHF, pxZHF etc...)
ZMRB, gtZMRB, olZMRB, veZMRB, etc...	marble, with up to 2 key alteration mineral prefixes, eg gtZMRB, gtpxZMRB, olZMRB, srZMRB, veZMRB
ZXS, gtZXS, gtpxZXS, woZXS	ZXS = exoskarn, with maximum 2 dominant mineral prefixes in alphabetical order, eg gtZXS, gtpxZXS, ccwoZXS, woZXS, gtmtZXS, cpygtZXS etc...
ZNS, gtpxZNS, epZNS,	ZNS = endoskarn (skarn formed within genetically related granitoid), with up to 2 dominant mineral prefixes in alphabetical order, eg epgtZNS, epZNS, pxZNS
ZGRS, tzZGRS, qztuZGRS	ZGRS = greisen comprising fine saccharoidal aggregate of quartz and muscovite, with up to 2 dominant mineral prefixes, eg. tzZGRS, qztuZGRS
Veins (V)	
*V	Veins, up to 2 key mineral prefixes as appropriate (eg qzV, qztuV), only use in Lith1 column
*VB	Vein breccias, up to 2 key mineral prefixes as appropriate according to mineralogy of cement (eg clccVB), only use in Lith1 column
Hydrothermal Breccias, Faults and Shear Rocks (X*)	
XHB	hydrothermal breccia
XMYL	mylonite
XFB	Fault breccia - incohesive >30% clastic
XFG	Fault gouge - incohesive <30% clastic
XFC	Fault cataclasite - cohesive more than >30% clastic
No Recovery & Cavities (N*)	
NCAV	cavity
NREC	no sample recovery (unknown problems)
NSAV	sample no longer available (applies to relogging)

Mineral Codes	
aca	acanthite
act	actinolite
aik	aikinite
ala	alabandite
alb	albite
alm	almandine
am	amphibole
ana	anatase
adl	andalusite
and	andradite
ank	ankerite
ano	anorthite
atq	antigorite
ars	arsenates
asp	arsenopyrite
aue	auerite
aug	augite
ax	axinite (Ca-Mg-Al borosilicate)
az	azurite
bar	baryte
bth	berthierite
byl	beryl
bt	biotite
bim	bismuthinite
bor	borate (undifferentiated)
brn	brannerite
bau	braunite
bru	brucite
bus	bustamite
cc	calcite
can	canfieldite
cb	carbonate (undifferentiated)
cs	cassiterite
cer	cerrusite
cha	chalcedony
cpy	chalcopyrite
cvx	chenevixite
cl	chlorite
cdp	chrome diopside
chr	chromite
cyb	chrysoberyl
crp	chrysoprase
crt	chrysotile
cin	cinnabar
cy	clay (undifferentiated)
cpx	clinopyroxene
cob	cobaltite
col	columbite
cd	cordierite
cos	cosalite
cub	cubanite
da	danalite
dd	diamond
di	diopside
dol	dolomite
dum	dumortite
elc	electrum
eng	enargite
ep	epidote
fay	fayalite
fsp	feldspar
fe	fe-oxide or hydroxide
feg	fergusonite
flu	flourite
flb	fluoborite
for	forsterite
gal	galena
gt	garnet
go	goethite
Au	gold
gra	graphite
grs	grossular
hau	hausmannite
hed	hedenbergite
he	hematite
hb	hornblende
hul	hulsite
ilt	illite
ilm	ilmenite
ilv	ilvaite
ixi	ixiolite
jap	jalpaite
jam	jamesonite
ka	kaolin
kes	kesterite
ksp	k-feldspar (undifferentiated)
kob	kobellite
ky	kyanite
lau	laumontite
lep	lepidolite
lx	leucoxene
lm	limonite (undifferentiated iron oxyhydroxide)
loi	loellingite
lw	ludwigite
luz	luzonite
mg	magnesite
mt	magnetite
mic	malachite
mly	malayaite
mi	mica (undifferentiated)
mcr-pcl	microlite-pyrochlore
mn	mn-oxides
ms	moissanite
mol	molybdenite
mz	monazite
mon	montmorillonite
mu	muscovite

nac	nacrite
Bi	native bismuth
ol	olivine
ops	opaline silica
or	orthoclase
sxo	oxidised sulphide
pav	pavonite
pnt	pentlandite
pv	perovskite
pen	phenacite
phl	phlogopite
pl	plagioclase
pbs	polybasite
pcr	polycrase
pmg	polymignyte
prh	prehnite
pru	proustite
pyg	pyrargyrite
py	pyrite
pp	pyrope
px	pyroxene
po	pyrrhotite
qz	quartz
rhd	rhodenite
rdc	rhodochrosite
rf	rock fragments
rut	rutile
sam	samaraskite
sa	saponite
scp	scapolite
sh	scheelite
sco	scorodite
se	sercite
sr	serpentine
sd	siderite
si	siliceous
spc	specularite
sph	sphalerite
spn	spinel
spd	spodumene
slan	stannite
snd	stannoidite
stb	stibnite
sb	stibite
stp	stilpnomelane
stv	strueverite
sx	sulphide
tc	talc
tap	tapiolite
tt	tetrahedrite-tennantite
ti	titanite (sphene)
tz	topaz
tu	tourmaline
trm	tremolite
ve	vesuvianite (idocrase)
vo	vonsenite (Fe borate)
wlf	wolframite
wo	wollastonite
ze	zeolites
zin	zinnwaldite

Texture Codes	
aci	acicular, mineral specific types coded with mineral code followed by a (eg mta = acicular magnetite)
amg	amygdaloidal
anh	anhedral
bdn	boudins
blb	blobs; reasonably circular-ovoid, sharp-diffuse alteration shapes; ie. am-po-qz in hornfels.
blt	blotchy; harsher more irregular than mot, characteristic of recrystallised carbonate ie. in ccSS
bnd	banded
bot	botryoidal
bxw	boxwork
ctc	chaotic; disturbed bedding by structural or soft-sediment deformation; not an alteration product
chk	chunky
cqp	specifically quartz prisms in calcite matrix
col	cauliflower texture (of mineral growth)
den	dendritic
dis	disseminated
euh	euohedral
egg	equigranular
fol	foliated
gph	graphic & micrographic texture (as in granites)
grd	graded bedding
grn	granular texture (cf acicular or tabular textures), mineral specific types coded with mineral code followed by g (eg mtg = granular magnetite, gtg = granular garnet texture)
gtp	specifically garnet or ex-garnet porphyroblastic texture
hbr	healed breccia (texture) ie. pre-alteration breccia that has been overprinted
lam	laminated
mas	massive
mos	mosaic
mot	mottled; irregular/diffuse patchy alteration running across bed boundaries, particularly in hornfels
mta	acicular magnetite (after vonsonite)
mtg	granular magnetite
mzn	mineral zoning in fine laminae
oph	ophitic
orb	orbicules of any mineral, typically concentrically layered or zoned, mineral specific types coded with mineral code followed by o (eg veo = vesuvianite orbicules)
pbl	porphyroblastic, large metamorphic or metasomatic minerals in a finer matrix
pcl	porphyroclastic
plt	platy (as in coarse mica, but also seen in pyrrhotite + others?)
ppy	porphyritic
psm	general prismatic texture code which could apply to a number of minerals
rcz	recrystallised
ruc	rip-up clasts; distinguish in comments between Carter's-like (small, platy), and large & irregular
sch	schistose
scl	cleaved
shz	shear or shear zone
spk	dark minerals such as biotite or magnetite scattered though paler matrix
s-p	specifically salt and pepper skarn with atoll textured magnetite with microscopic qz prisms and feldspar, in siderite matrix
spt	spotted, such as spotting in a hornfels
sqp	specifically quartz prisms in siderite matrix
stk	streaky; characteristic of vw RCLY
stwk	stockwork
sub	subhedral
tab	tabular, mineral specific types coded with mineral code followed by t (eg vet = vesuvianite tablets)
tad	am+po spots with tales in px matrix
tuf	tuffaceous
ves	vesicular
vet	tabular vesuvianite texture
wrg	wrigglite
Structure Codes	
bkn	weak core broken by drilling (typically near beginning of hole)
brc	brecciated
flt	fault
frz	fracture zone
ftz	fault or fault zone
mcf	microfaults- displacement <1cm scale
slk	slickensides
sfl	small-scale folding (<4m period)
ssf	small-scale faulting (>1cm, <core diameter)
ssd	soft sediment deformation; disturbed protolith (precursor to ctc texture?)
BCA	acute angle between core axis and bedding (=alpha)
SCA	acute angle between core axis and cleavage or schistosity (=alpha)
FCA	acute angle between core axis and fault (=alpha)
Sedimentary Bedding Codes	
lam	laminated (<10mm)
tnb	thin bedded (10-100mm)
mdb	medium bedded (100-300mm)
tkb	thick bedded (>300mm)
vtkb	very thick bedded (>1m)
Sedimentary Grain size	
svfg	very fine grained <64 um (mud, silt & clay)
sfg	fine grained 64 um to 0.25 mm (fine sand)
smg	medium grained 0.25 to 0.5mm (medium sand)
scg	coarse grained 0.5 to 2 mm (coarse sand)
svcg	very coarse grain >2mm (2 - 4mm granules, 4 - 16mm pebbles, 16-256 mm cobbles, >256 mm boulders)
Igneous & Metamorphic Grain Size	
ifg	fine grained <1 mm
img	medium grained 1-5 mm
icg	coarse grained 5-30 mm
ipg	pegmatitic >30 mm
Weathering Codes	
vw	very weathered, BOTH PRIMARY TEXTURE & MINERALOGY DESTROYED by weathering, no sulphide, generally dominated by Fe and Al oxides and/or silica (= laterite, duricrust, lateritic gravel & massive textureless clays)

mw	moderately weathered, PRIMARY TEXTURE REMAINS but MINERALOGY SECONDARY clays (= saprolite)
ww	weakly weathered, MAINLY PRIMARY TEXTURE & MINERALOGY, low clay content, partially oxidised sulphide (= saprock & fresh rock with iron staining and clay development restricted to fractures)
fr	fresh (compeletely primary texture & mineralogy without significant iron staining on fractures)
Moisture Codes	
S	Sloppy
M	Moist
D	Dry
Colour Codes	
l	light (e.g. lgn = light green, lgy = light grey)
d	dark (e.g. dgn = dark green, dgy = dark grey)
bk	black
bl	blue
bn	brown
bz	bronze (e.g. sulphides such as pyrrhotite & pyrite)
cm	cream
gn	green
gy	grey
kk	khaki
og	orange
ov	olive
pk	pink
pl	purple
rd	red
wt	white
yw	yellow
Sample Recovery Codes	
ideally measured as weight in kg, below codes for estimates	
e	excessive
g	good
m	moderate
p	poor
n	none