ANGLOGOLD ASHANTI AUSTRALIA

Australia Exploration Logging Codes

Lithology

Loose/recent sediment / residuum	
L	***Loose sediment / cover (undifferentiated)***
LA	**Alluvium (general recent fluvial)**
LU	**Colluvium / scree (loose sediment at base of hill-slope)**
LO	**Soil**
LR	**Crete (general)**
LRC	Calcrete
LRS	Silcrete
LRF	Ferricrete (not laterite)
LE	**Evaporite - general**
LEG	Gypsum
LEH	Halite (salt)
LC	**Clay (sedimentary; not residual regolith)**
LCB	Carbonaceous clay
LCG	Glauconitic clay (marine)
LT	**Silt**
LS	**Sand (general)**
LSG	Glauconitic sand (marine)
LSH	Heavy mineral sand (use Key Mineral field if significant)
LG	**Gravel /conglomerate (not lateritic)**
LL	**Laterite (undifferentiated)**
LLD	Laterite duricrust
LLG	Laterite gravel
LH	**Shelly deposit**
LI	**Iron rich deposit (undifferentiated)**
LID	Detrital iron-rich deposit
LIO	Ochre / limonite (not yellow clay)
LIP	Iron-rich pisolitic deposit (hematite, maghemite)
LIS	Iron segregation / hardpan
LP	**Peat**
LY	**Clay (residual clay formed by weathering or alteration; may use 'Minor Rock' to describe original rock is possible)**
LN	**Gossan (weathered sulphide)**

Sediments	
S	***Sediment (undifferentiated)***
SM	**Mudstone / shale**
ST	**Siltstone**
SS	**Sandstone (arenite, undifferentiated 0-15% clay matrix)**
SSQ	Quartz-arenite, sub-arkose, sublithic arenite (grains > 75% quartz)
SSA	Arkose / feldspathic arenite (grains >50% feldspar)
SSL	Lithic arenite (fragments >50% rock)
SSG	Glauconitic sandstone (marine)
SW	**Wackes (15-75% clay matrix)**
SWQ	Quartz-wacke (grains >95% quartz)
SWF	Feldspathic-wacke (grains >50% feldspar)
SWL	Lithic-wacke (fragments > 50% rock)
SC	**Conglomerate / rudite (undifferentiated, use qualifiers to describe textures, rounding etc)**
SCP	Polymictic conglomerate (>1 clast type)
SCM	Monomictic conglomerate (1 clast type)
SG	**Glacial sediments / tillites**
SB	**Carbonaceous sediment (undifferentiated)**
SBS	Carbonaceous shale
SBC	Coal
SBL	Lignite
SL	**Carbonate rocks (undifferentiated)**
SLL	Limestone
SLM	Marl
SLD	Dolomite
SLA	Calcarenite (sandy limestone)
SE	**Evaporites / chemical deposit (undifferentiated)**
SEA	Anhydrite
SEG	Gypsum
SEH	Halite (salt)
SF	**Ferruginous sediments (not BIF)**
SFG	Granular iron formation (Fe ooids)
SP	Spongalite / siliceous biosediment (radiolarite, diatomite)

Cherts	
C	***Cherts (undifferentiated)***
CM	**Massive**
CI	**Banded Iron Formation (undifferentiated)**
CIG	Goethite-enriched/replaced BIF (hard goethite)
CIH	Hematite-enriched/replaced BIF
CIM	Magnetite-enriched/replaced BIF
CJ	**Jaspilitic chert**
CL	**White / black / grey laminated/banded chert**
CB	**Barite-bearing cherts (VHMS)**

Mafic Intrusives	
D	***Mafic intrusives (undifferentiated)***
DB	**Basalt**
DD	**Dolerite**
DDQ	Quartz dolerite
DG	**Gabbro / gabbroid**
DGG	Gabbro (*ss.* <10% Opx)
DGR	Gabbro-norite (Cpx + Opx)
DGO	Olivine gabbro
DGL	Leucogabbro (leucocratic)
DGM	Melagabbro (melanocratic)
DGH	Hornblende-bearing gabbro
DGK	Monzogabbro (minor K-feldspar)
DGQ	Quartz gabbro
DGN	Norite (<10% Cpx - if uncertain use Gabbro)
DA	**Anorthosite**
DT	**Troctolite**

Coarse Felsic / Intermediate Intrusives	
G	***Felsic-intermediate intrusive (undifferentiated)***
GD	**Dioritic rock (<20% Qz, >90% Pl, <5% Kfs; Amp ± Bt)**
GDM	Monzodiorite (<5% Qz, Pl >Kfs)
GDR	Quartz monzodiorite (5-20% Qz, Pl > Kfs)
GDD	Diorite (<5% Qz, >90% Pl, <5% Kfs)
GDQ	Quartz diorite (5-10% Qz, >90% Pl, <5% Kfs)
GF	**Feldspathoid CG rock (feldpathoids; no Qz)**
GFS	Foid syenite
GFD	Foid diorite
GFF	Foidolitic rock
GG	**Granitoid (>20% Qz)**
GGG	Granite *ss.* (>20% Qz, >35% Kfs)
GGK	Alkali granite (> 90% Kfs >20% Qz, <5% Pl)
GGR	Granodiorite (>20% Qz, Pl > Kfs)
GGT	Tonalite (>20% Qz, >90% Pl, <5% Kfs)
GS	**Syenitic rock (<20% Qz, Kfs > 35%)**
GSS	Syenite (<5% Qz, Kfs > Pl)
GSQ	Quartz syenite (5-20% Qz, Kfs > Pl)
GSA	Alkali syenite (> 90% Kfs, <5% Qz, <5% Pl)
GSK	Alkali Qz-syenite (>90% Kfs, 5-20% Qz, <5% Pl)
GSM	Monzonite (<5% Qz, Kfs= Pl)
GSR	Quartz monzonite (5-20% Qz, Kfs = Pl)
GQ	**Quartz-rich granitoids (>60% Qz, consider RARE in nature)**

Minor Intrusives	
P	***Minor intrusive (undifferentiated)***
PF	**Felsic intrusive (undifferentiated)**
PFF	Felsic porphyry, feldspar dominant/phyric
PFQ	Felsic porphyry, quartz dominant/phyric
PL	**Lamprophyre / lamproite (undifferentiated)**
PLB	Biotite-dominant lamprophyre
PLA	Amphibole-dominant lamprophyre
PLX	Pyroxene-dominant lamprophyre
PI	**Andesite porphyry (not andesite lava)**
PD	**Dacitic porphyry (not andesite lava)**
PA	**Aplite**
PP	**Pegmatite**
PPF	Feldspar-dominant pegmatite
PPQ	Quartz-rich pegmatite
PPA	Amphibole-rich pegmatite

Schists (moderate-strong shear)	
Z	***Schist (undifferentiated)***
ZB	**Biotite-dominant schist**
ZC	**Chlorite-dominant schist**
ZM	**Muscovite-dominant schist**
ZS	**Sericite-dominant schist**
ZT	**Talc-dominant schist**
ZF	**Felsic schist (sheared precursor felsic rock)**
ZFQ	Quartz-feldspar schist
ZQ	**Quartz dom schist (sheared precursor Qz-rich rock)**
ZA	**Amphibole-dominant schist**
ZU	**Fuchsite-bearing schist**
ZG	**Graphite-bearing schist**

Mylonites	
Y	***Mylonite (undifferentiated)***
YU	**Ultramafic mylonite**
YM	**Mafic mylonite**
YI	**Intermediate mylonite**
YF	**Felsic mylonite**

Felsic Volcanics / Aphanitics	
F	***Felsic volcanic / aphanitic (undifferentiated)***
FR	**Rhyolite (coherent)**
FT	**Trachyte (coherent)**
FD	**Rhyodacite (coherent)**
FV	**Felsic volcaniclastic rock**
FVT	Felsic volcaniclastic siltstone
FVS	Felsic volcaniclastic sandstone

FVC	Felsic volcaniclastic conglomerate
FVB	Felsic volcaniclastic breccia
FVP	Felsic pyroclast-rich deposits
FVX	Felsic autoclastic breccia (autobreccia, hyaloclastite)
FS	**Felsic volcanic sedimentary rock**
FST	Felsic volcanic sedimentary siltstone
FSS	Felsic volcanic sedimentary sandstone
FSC	Felsic volcanic sedimentary conglomerate

Intermediate Volcanics / Aphanitics	
I	***Intermediate volcanic (undifferentiated)***
IA	**Andesite (coherent)**
IT	**Trachyandesite / Latite (coherent)**
IB	**Basaltic-andesite / andesitic-basalt (coherent)**
ID	**Dacite (coherent)**
IV	**Intermediate volcaniclastic rock**
IVT	Intermediate volcaniclastic siltstone
IVS	Intermediate volcaniclastic sandstone
IVC	Intermediate volcaniclastic conglomerate
IVB	Intermediate volcaniclastic breccia
IVP	Intermediate pyroclast-rich deposits
IVX	Intermediate autoclastic breccia (autobreccia, hyaloclastite)
IS	**Intermediate volcanic sedimentary rock**
IST	Intermediate volcanic sedimentary siltstone
ISS	Intermediate volcanic sedimenary sandstone
ISC	Intermediate volcanic sedimentary conglomerate

Mafic Volcanics	
B	***Mafic volcanic (undifferentiated)***
BB	**Basalt (coherent)**
BBO	Picrite (olivine-rich basalt)
BBM	High-Mg / komatiitic basalt (Archean)
BI	**Andesitic basalt**
BV	**Mafic volcaniclastic rock**
BVT	Mafic volcaniclastic siltstone
BVS	Mafic volcaniclastic sandstone
BVC	Mafic volcaniclastic conglomerate
BVB	Mafic volcaniclastic breccia
BVP	Mafic pyroclast-rich deposits
BVX	Mafic autoclastic breccia (autobreccia, hyaloclastite)
BS	**Mafic volcanic sedimentary rock**
BST	Mafic volcanic sedimentary siltstone
BSS	Mafic volcanic sedimentary sandstone
BSC	Mafic volcanic sedimentary conglomerate

Komatiites	
K	***Komatiite (undifferentiated)***
KA	**Aphanitic komatiite**
KS	Spinifex-textured komatiite
KB	Basaltic-komatiite (clinopyroxene-dominated, clinopyroxene spinifex)
KC	Cumulate textured komatiite
KV	**Komatiitic volcaniclastic**
KVX	Komatiitic autoclastic breccia

Ultramafic Intrusives	
U	***Ultramafic intrusive (undifferentiated)***
UP	Peridotite (>50% olivine)
UOD	Dunite (>90% olivine)
UPH	Harzburgite (olivine + Opx)
UPW	Wehrlite (olivine + Cpx)
UPL	Lherzolite (olivine + Cpx + Opx)
UX	**Pyroxenite (undifferentiated >50% pyroxene, <40% olivine)**
UXW	Websterite (Cpx + Opx), olivine websterite
UXO	Orthopyroxenite
UXC	Clinopyroxenite
UXP	Feldspathic (plag < 5%) pyroxenite
UH	**Hornblendite**
UC	**Carbonatite**
UK	**Kimberlite**

Ore-mineral / sulphide dominant rock	
$	***>50% ore-mineral / sulphide rock***
$AS	**Arsenopyrite dominant**
$CP	**Chalcopyrite dominant**
$GL	**Galena dominant**
$PO	**Pyrrhotitie dominant**
$PY	**Pyrite dominant**
$SP	**Spahlerite dominant**
$MT	**Magnetite dominant (e.g. layered intrusion, non-BIF sedimentary)**
$CR	**Chromite dominant (e.g. layered intrusion)**

Total alteration zone	
TA	**Total alteration zone (parent rock unknown)**
TAM	Total magnetite alteration (IOCG - parent rock unknown)
TAH	Total hematite alteration (IOCG - parent rock unknown)

Breccia	
X	***Breccia (undifferentiated)***
XX	**Parent rock known (use 'Minor Rock' to further describe)**
XA	**Alteration breccia (refer to alteration fields)**
XAM	Magnetite-dominant breccia (IOCG - parent rock unknown)
XAH	Hematite-dominant breccia (IOCG - parent rock unknown)
XH	**Hydrothermal breccia (vein phases can be defined)**
XI	**Intrusive breccia (use 'Minor Rock' to further describe)**
X$	**Sulphide breccia (use 'Minor Rock' to further describe)**
XF	**Fault breccia**

Vein	
V	**Vein undifferentiated (refer to vein fields)**
VQ	**Quartz vein / quartz-dominant vein**

Metamorphic, original rock textures are destroyed - facies may vary with composition	
M	***Metamorphic rock***
	(undifferentiated; can also be used as 'Minor Rock' as a modifier to Use)
MU	**Metamorphosed ultramafic rocks**
MUS	Serpentinised (± magnetite) ultramafic (Use if original rock unidentifiable, 'Minor Rock' as modifier)
MUT	Talc-(± magnesite)-dominated ultramafic (Use if original rock unidentifiable, 'Minor Rock' as modifier)
MUM	Tremolite-dominated ultramafic (Use if original rock unidentifiable, 'Minor Rock' as modifier)
MUA	Anthophyllite-dominated ultramafic (Use if original rock unidentifiable, 'Minor Rock' as modifier)
MUX	Pyroxene-olivine meta-ultramafic (very high metamorphic grade)
MUO	Olivine-dominated meta-ultramafic (very high metamorphic grade)
MM	**Metamorphosed mafic rocks (undifferentiated; < 10% Qz+feld)**
MMA	Actinolite-dominated rock (use if original rock unidentifiable, 'Minor Rock' as modifier)
MMH	Hornblende-dominated amphibolite-*ss*.
MMG	Garnet-bearing amphibolite
MMX	Pyroxene dominated rock (use Key Mineral to identify pyroxene; accessory garnet)
MMU	Mafic granulite *ss.* (orthopyroxene & clinopyroxene identified; accessory garnet)
MME	Eclogite (coarse grained green omphacite pyroxene, pink garnet; no plagioclase)
MMB	Blueshchist (glaucophane present - rare)

MI	**Meta-intermediate rock (undifferentiated - Amp+Bt+mafics = Qz+Fsp)**
MIA	Amphibole-rich intermediate gneiss
MIB	Biotite-rich intermediate gneiss
MIG	Garnet-bearing intermediate gneiss
MIX	Intermediate granulite (granular texture pyroxene + plagioclase, minor quartz. Little biotite)
MIM	Intermediate migmatite (equal proportion leucosome-melts to melanasomes)
MF	**Meta-felsic rock** (Fsp ± Qz dominant, leucocratic)
MFQ	Quartzofeldspathic gneiss
MFG	Garnet-bearing quartzofeldspathic gneiss
MFF	Feldspar dominant gneiss
MFX	Felsic granulite (granular texture, accessory pyroxene, garnet. Little biotite, no muscovite)
MFM	Felsic migmatite (felsic leucosome/melts > melanosomes)
MG	**Granitic gneiss (clearly identifiable as a felsic meta-granitoid - use 'Minor Rock' to describe further)**
MS	**Metasediment - pelitic / semipeltic (obvious metasediment)**
MSP	Phyllite / slate (use Key Mineral field to define zones e.g. Barrovian / Buchan)
MSZ	Metasedimentary schist (use Key Mineral field to define zones e.g. Barrovian / Buchan)
MSN	Metasedimetary gneiss / paragneiss (use Key Mineral field to define zones e.g. Barrovian / Buchan)
MSM	Metasedimentary migmatite
MSG	Metasedimentary garnet-bearing gneiss
MSH	Metasedimentary hornfels / granofels (use Key Mineral fields to describe facies)
MSR	Graphitic metasediment (possible EM response)
MQ	**Quartz-rich metasediment - (metamorphosed quartz-rich sediments)**
MQQ	Quartzite – pure (metamorphosed Qz-arenite/chert etc)
MQD	Impure/dirty quartzite / psammite (use Key Mineral / 'Minor Rock' to describe further)
MQN	Quartz-rich gneiss
MQG	Garnet-bearing quartz-dominant gneiss
MQI	Recrystallised magnetite-quartz gneiss (e.g. after BIF or iron rich sediment - possible mag response)
MQR	Graphite-bearing quartz-dominant rock (possible EM response)
MQM	Quartz-rich migmatite (feldspathic leucosomes)
MC	**Carbonate-rich metamorphic**
	(rock-forming carbonate, equal or accessory silicates)
MCL	Marble (calcite / dolomite dominated,

	accessory silicates)
MCS	Calc-silicate rocks (carbonate and silicate minerals, use Key Mineral fields)
MR	**Graphite-dominant metamorphic (possible EM response)**

Other	
STOPE	**Stope / void / cavity**

H	**Anthropogenic deposit**
HW	Mine waste (man-made)
HT	Tailings (man-made)
HR	Rubble (man-made)
HL	Landfill
-	**Not logged**

LITHOLOGY QUALIFIER

'Minor Rock' Only	
1M	'Minor Rock' further describes MAJ_ROCK
1C	'Minor Rock' describes MAJ_ROCK dominant clast (breccia/conglomerate/xenolith)
1P	'Minor Rock' indicates MAJ_ROCK protolith

Regolith and Sediments	
A	Alluvial
BD	Bedded/interbedded
BI	Bimodal
BW	Boxworked (gossan)
C	Colluvial
CS	Clast supported
D	Laterite duricrust fragments
E	Saprolite fragments
F	Ferruginous lithic fragments
FM	Flame structures
FS	Fossiliferous
G	Gravelly (modifier, not for interbedded rock types)
GO	Goethite stained
GR	Graded bedding
HE	Hematite stained
LM	Laminated
LC	Load cast/s
MS	Matrix supported
N	Nodular
OO	Oolitic
P	Pisolitic / pisoliths
PL	Pebbly
PC	Pisoliths with cutans (minor transport)
PS	Poorly sorted
PU	Puggy
Q	Quartz fragments
R	Rock fragments
RP	Ripple marks
S	Sandy (modifier, not for interbedded rock types)
U	Running sand
W	Aolian
WS	Well sorted
XB	Cross bedded
Y	Clayey (modifier, not for interbedded rock types)

Grain size / habit	
VFG	Very fine grained < 0.1mm
FG	Fine grained < 1mm
MG	Medium grained (igneous: 1-5mm / sediment 1-2mm)
CG	Coarse grained (igneous 5-30mm / sediment 2-4mm)
VCG	Very coarse grained (igneous: >30mm / sediment: 4-8mm)
RD	Rounded
SRD	Subrounded
WRD	Well rounded
AN	Angular
SAN	Sub angular
VAN	Very angular

Igneous (also use sedimentary)	
CU	Cumulate (undiff)
CUA	Adcumulate
CUM	Mesocumulate
CUO	Orthocumulate
EQ	Equigranular
FL	Flow banded
GA	Graphic (igneous texture – not graphite)
HY	Hyaloclastitic
IG	Intergranular minerals (use Key Mineral field)
IN	Intrusive (to identify dyke / sill e.g.)
IQ	Inequigranular
LA	Layered

MC	Miarolitic
OB	Orbicular
OC	Ocelli
OP	Ophitic
PK	Poikolitic
PM	Pumiceous / scoraceous
PO	Porphritic (use Key Mineral field to identify porph)
PW	Pillowed
RV	Rapakivi
SP	Spheriolitic
SX	Spinifex textured (use Key Mineral field)
VE	Vesicular, amygdaloidal
XC	Xenocrystic (hosts xenocrysts)
XL	Xenolithic (hosts xenoliths)

Metamorphic	
AG	Augen textured (use Key Mineral field)
CB	Coarse gneissic banding
MB	Medium gneissic banding
FB	Fine gneissic banding
GB	Granoblastic
GF	Granofelsed
HF	Hornfelsed
MI	Migmatitic / partial melt texture
PH	Phyllitic
PB	Porphyroblastic (use Key Mineral to identify porph)
RE	Retrograded
SC	Schistose

Structural	
BU	Boudinaged
BX	Brecciated
CR	Crenulated
CV	Cleavage
FD	Facing downhole
FO	Folded
FR	Fractured
FT	Foliated
FU	Facing uphole
KI	Kinematic indicators (general)
LI	Lineated
MA	Massive
MY	Mylonitic
SH	Sheared
ST	Styolitic
VU	Vuggy

Other	
#AS	Asbestiform / acicular minerals
#RD	Radioactive
MT	Magnetic

MINERALS

AB	Albite
ACT	Actinolite
ADL	Adularia
ADR	Andradite
AEG	Aegirine
AG	Silver (native)
AGT	Argentite
ALM	Almandine
ALN	Allanite
ALU	Alunite
AMP	Amphibole (undifferentiated)
AMZ	Amazonite
AN	Anorthite
AND	Andalusite
ANH	Anhydrite
ANK	Ankerite
AP	Apatite
APY	Arsenopyrite
ARG	Aragonite
ASB	Asbestos (undifferentiated)
ATG	Antigorite
ATH	Anthophyllite
AU	Gold (native)
AUG	Augite
AX	Axinite
AZR	Azurite
BIS	Bismuthanite / Bismuth
BN	Bornite
BRC	Brucite
BRL	Beryl
BRT	Barite
BRX	Bronzite (Opx)

BST	Bustamite
BT	Biotite
CAL	Calcite
CB	Carbonate (undifferentiated)
CBN	Cubanite
CBT	Cobaltite
CCL	Chrysocolla
CCP	Chalcopyrite
CCT	Chalcocite
CER	Cerussite
CHL	Chlorite
CHR	Chromite
CIN	Cinnabar
CLY	Clay (undifferentiated)
CPR	Cuprite
CPX	Clinopyroxene
CRD	Cordierite
CRN	Corundum
CST	Cassiterite
CTL	Chrysotile
CU	Copper (native)
CUM	Cummingtonite
CV	Covellite
CZO	Clinozoisite
DCK	Dickite
DI	Diopside (cpx)
DIA	Diamond
DOL	Dolomite
DSP	Diaspore
ELT	Electrum
EN	Enstatite (opx)
ENG	Enargite
EP	Epidote
FA	Fayalite
FL	Fluorite
FO	Forsterite
FSP	Feldspar (undifferentiated)
FUC	Fuchsite
GAR	Garnierite
GBS	Gibbsite
GDF	Gersdorffite
GHN	Gahnite
GLN	Glaucophane
GLT	Glauconite
GN	Galena
GO	Goethite
GP	Gypsum

GR	Graphite
GRS	Grossular
GRT	Garnet (undifferentiated)
GRU	Grunerite
HBL	Hornblende
HCBN	Hydrocarbon, liquid
HD	Hendenbergite (Cpx)
HEM	Hematite
HL	Halite / Salt
HLM	Holmquistite
HYP	Hypersthene (Opx)
HZC	Hydrozincite
ILM	Ilmenite
ILT	Illite
JD	Jadeite
JRS	Jarosite
KFS	Potassium-feldspar (undifferentiated)
KLN	Kaolinite
KY	Kyanite
LAB	Labradorite
LCT	Leucite (feldpathoid)
LMT	Laumontite (zeolite)
LO	Loellingite
LPD	Lepidolite
LZR	Lazurite (feldpathoid)
MAG	Magnetite
MC	Microcline
MCL	Malachite
MGH	Maghemite
MGS	Magnesite
MLR	Millerite
MNO	Manganese Oxide
MNT	Montmorillonite
MNZ	Monazite
MOL	Molybdenite
MRC	Marcasite
MS	Muscovite
NIC	Niccolite / Nickeline
NPH	Nepheline
NTR	Natrolite (zeolite)
OL	Olivine (undifferentiated)
OLG	Oligoclase
OMP	Omphacite (Opx)
OPL	Opal
OPQ	Opaque mineral
OPX	Orthopyroxene (undiff)
OR	Orthoclase

ORGC	Organic carbon, solid
ORP	Orpiment
OX	Oxides (undifferentiated)
PBL	Pitchblende
PD	Palladium (native)
PG	Paragonite
PHL	Phlogopite
PHR	Zeolite - Prehnite
PL	Plagioclase
PMP	Pumpellyite (zeolite)
PMT	Piedmontite / Piemontite
PN	Pentlandite
PO	Pyrrhotite
PRL	Pyrophyllite
PRP	Pyrope
PRT	Pyrolusite
PRV	Perovskite
PT	Platinum (native)
PX	Pyroxene (undifferentiated)
PY	Pyrite
QZ	Quartz
QZB	Quartz - blue quartz
QZC	Quartz - (sub)chalcedonic silica
QZS	Smokey quartz
QZO	Opaque quartz
RDN	Rhodonite
RDS	Rhodocrosite
RT	Rutile / Leucoxene
S	Sulphur (native)
SA	Sanidine
SB	Antinomy (native)
SCH	Scheelite
SCP	Scapolite
SD	Siderite
SER	Sericite
SER	Sericite
SI	Silica / Silicified
SIL	Sillimanite
SL	Sulphate (undifferentiated)

SME	Smectite
SMT	Smithsonite
SOD	Sodalite
SP	Sphalerite
SPD	Spodumene (Cpx)
SPL	Spinel
SPN	Sphene / Titanite
SPR	Sapphirine
SPS	Spessertine / Spessarite
SRP	Serpentine
ST	Staurolite
STI	Stibnite
STB	Stilbite
STC	Stichtite
STP	Stilpnomelane
SU	Sulphide (general)
TAN	Tantalite
TBN	Torbenite
TEL	Telluride (undifferentiated)
TLC	Talc
TNT	Tennantite
TPZ	Topaz
TR	Tremolite
TTR	Tetrahedrite
TUR	Tourmaline (undifferentiated)
URN	Uranite
VRM	Vermiculite
VIO	Violarite
WLF	Wolframite
WLM	Willemnite
WO	Wollastonite
WUR	Wurtzite
XTM	Xenotime
ZEO	Zeolite (undifferentiated)
ZIN	Zincite
ZO	Zoisite
ZRN	Zircon

Key Mineral QUALIFIER

M	Major constituent – if not implied by rock-type
A	Accessory

P	Porph phase
D	Diagnostic

REGOLITH TYPE

TPD	Surficial transported	*Relatively recent clastic and chemical sediments and soil, unconsolidated/unlithified, but includes cretes formed by near-surface processes, and most laterites.*
COVL	Leached Cover	*Strongly leached/kaolinitised older sedimentary sequences unconformably overlying the targeted basement. The definition may depend on the project area.*
COV	Cover	*Older sedimentary sequences unconformably overlying the targeted basement. The definition may depend on the project area.*
USAP	Upper saprolite derived from basement	*Kaolin dominated. Pallid, most weatherable minerals kaolinitised. Powdery, hard to mould. White, pinks. May be hematite stained for mafic rocks.*
LSAP	Lower saprolite derived from basement	*Smectite / illite dominated, can be moulded. Hints of green, deep red in mafic rocks. Beginning to assume some rock characteristics and textures.*
SPRK20	Saprock 20% weathered	*Rock characteristics, with significant clay.*
SPRK10	Saprock 10% weathered	*Rock characteristics, with moderate clay.*
SPRK5	Saprock 5% weathered	*Rock, with weathering restricted to fracture surfaces*
FRESH	Fresh rock	*Fresh, unweathered rock.*

REGOLITH QUALIFIER

CA	Calcified
SI	Silicified
FE	Ferruginised
PZ	Pallid zone

WM	Weakly mottled, <10% mottle or staining
MM	Moderately mottled, 10-30% mottle
SM	Strongly mottled, >30% mottle
-	Not logged

ALTERATION QUALIFIER

P	**Pervasive**
M	**Mineral selective alteration**
MM	Mafic minerals altered
MF	Felsic minerals altered
MP	Porph minerals altered
MG	Groundmass / matrix minerals altered
F	**Fabric selective alteration**

FB	Alteration along bedding planes
FN	Alteration along gneissic foliation
FC	Alteration along cleavage / schistosity
S	**Selvedge to veins / stockwork**
T	**Patchy**
C	**Cavity / void infill**
-	Not logged

VEIN QUALIFIER

AN	Anastomosing
BX	Brecciated
CT	Comb textured
DF	Diffuse
MA	Massive
LA	Laminated
MS	Multistage
SE	Sheeted

SW	Stockwork
VU	Vuggy
WY	Wispy
PA	Porphyry A-style vein
PB	Porphyry B-style vein
PD	Porphyry D-style vein
PM	Porphyry M-style vein
-	Not logged

ORE MINERAL QUALIFIER

GENERALLY CHOOSE TEXTURE, FOLLOWED BY GRAIN HABIT

BL	Blebby
CL	Cluster / aggregate
CF	Cavity fill
DE	Detrital / placer
DI	Disseminated
LA	Laminated / layered
MA	Massive
NO	Nodules
NT	Net-textured

SM	Semi-massive
SR	Stringers
SV	Selvedge to veins
VN	Within veins
ACG	Anhedral CG
AFG	Anhedral FG
ECG	Euhedral CG
EFG	Euhedral FG
-	Not logged

COLOUR

B1	Light Brown
B	Brown
B2	Dark Brown
R1	Light Red
R	Red
R2	Dark Red
O1	Light Orange
O	Orange
O2	Dark Orange
Y1	Pale Yellow
Y	Yellow
Y2	Dark Yellow
W	White
C	Cream
E	Beige

K	Khaki
G1	Light Green
G	Green
G2	Dark Green
L1	Light Blue
L	Blue
L2	Dark Blue
P	Purple
M	Maroon
A1	Light Grey
A	Grey
A2	Dark Grey
D	Black
-	Not Logged

NUMERICAL FIELDS

Shear Intensity	
0	Unsheared
20	Weakly sheared
40	Moderately sheared
60	Strongly sheared
80	Intensely sheared

Alteration Intensity	
0	Unaltered
20	Weakly altered
40	Moderately altered
60	Strongly altered
80	Intensely altered

Ore mineral / Vein Per-Cent	
0	percent
0.1	percent - trace
0.5	percent
1	percent
2	percent
3	percent
5	percent
7	percent
10	percent
15	percent
20	percent
25	percent
30	percent
40	percent
50	percent
70	percent
90	percent
100	percent