

LITHOLOGY

Transported	Soils	NT*	Transported Materials (undifferentiated)		
		NR*			
		TA*	Alluvium & Fluvial Deposits		
		TW*			
		TC*			
		TE*			
		TP*			
		TJ*			
		TX*			
		TM*			
Regolith	Residual	TD*			
Mafic Rocks (M)	MPD	MPD	Post-Deformation Mafic Intrusive (eg Proterozoic Dolerite)		
		M	Undifferentiated mafic rock		
Mafic Intrusive Rocks	Undivided Gabbroic Rocks (G)	MG	Gabbro / Gabbroic rock - general (includes norite)		
		MGG	Magnetic gabbroic rock		
		MGM	Melanocratic gabbroic rock includes norite		
		MGF	Feldspathic gabbroic rock includes norite		
		MGN	Monzogabbro (alkali feldspar >10%)		
		MGQ	Quartz-bearing gabbroic rocks		
		MGQG	Quartz gabbro - Granophyric texture		
		MGA	Anorthosite		
		MGB	Mafic Layered Complex (undiff)		
		MD	Dolerite - general		
		MDG	Magnetic dolerite		
		MDM	Melanocratic dolerite		
		MDF	Feldspathic dolerite / microdolerite		
		MDQ	Quartz dolerite		
		MDGQ	Granophyric dolerite		
		Mafic Volcanic Rocks	Volcanic flow units	MB	Basalt to undiff mafic to intermediate volcanic
				MBT	Tholeiitic basalt
			Porphyritic units	MBK	Komatiitic or high magnesian basalt
MBMP	Porphyritic basalt - olivine/pyx phenocryst dominant				
MBFP	Porphyritic basalt - plagioclase phenocryst dominant				
MBP	Mafic porphyry				
MBC	Coarse doleritic-textured mafic				
MBQ	Quartz basalt				
MBW	Pillow basalt				
MBH	Basaltic hyaloclastite				
MBN	Mafic peperite				
Fragmentals	MT			Basaltic / Mafic tuff - undifferentiated	
	MTL		Basaltic / Mafic tuff - lithic		
	MTX		Basaltic / Mafic tuff - crystal		
	MTA		Basaltic / Mafic tuff - ash/lapilli		
	MTX		Basaltic breccia / Coarse pyroclastic		
	MTG		Basaltic agglomerate / fragmental		
Ultramafic Rocks (U)	Undivided Intrusive rocks		MTR	Basaltic autobreccia	
			U	Undifferentiated ultramafic rock	
			UB	Kimberlitic units	
		UC	Carbonatites		
		UL	Lamprophyres		
		UT	Lamproites		
		UN	Ultramafic layered intrusive (undiff)		
		Layered Intrusive rocks	UKO	Orthocumulate	
			UKA	Adcumulate	
			UKM	Mesocumulate	
	UD		Dunite		
	Peridotites	UP	Peridotite		
		Pyroxenites	UX	Pyroxenite (undiff)	
	UXV		Olivine pyroxenite		
	UXP		Orthopyroxenite		
	UXC		Clinopyroxenite		
	UXW		Websterite		
	UXH		Hornblende pyroxenite		
	UH		Hornblendite		
	Extrusive rocks		UK	Komatiite - undifferentiated	
UKS		Spinifex-textured komatiite			
UKY		Ultramafic hyaloclastite			
Metamorphosed Equivalents		UMR	Amphibole-chlorite ultramafic		
	UMC	Chlorite-dominated ultramafic			
	UMS	Serpentinite			
	UMT	Talc-chlorite ultramafic			
	UMB	Talc-carbonate ultramafic			
	I	Intermediate volcanic (undifferentiated)			
Intermediate Volcanic Rocks (I)	Undivided				
		Andesites	IA	Andesitic volcanic	
			IAB	Basaltic andesite	
IL	Latite				

LITHOLOGY

		IR	Trachyte
		IRA	Trachyandesite
		IH	Tephritic volcanic
		IP	Phonolitic volcanic
	Porphyritic Units	IAOP	Porphyritic andesite - phenocrysts undefined
		IAAP	Porphyritic andesite - biotite or amphibole phenocrysts
		IAPP	Porphyritic andesite - olivine or pyx phenocrysts
		IAFP	Porphyritic andesite - feldspar-dominant phenocrysts
		IAW	Pillowed andesite
		IAH	Andesitic hyaloclastite
	Fragmentals	IAN	Intermediate peperite
		IT	Intermediate tuff (undiff)
		ITL	Intermediate lithic crystal tuff
		ITY	Intermediate crystal tuff
		ITA	Intermediate tuff - ash/lapilli
		ITX	Intermediate breccia / Coarse pyroclastic
		ITG	Intermediate agglomerate / fragmental
		ITR	Intermediate autobreccia
Felsic Volcanic Rocks (F)	Undivided	F	Felsic volcanic (undifferentiated)
	Flows	FD	Dacite
		FR	Rhyolite
		FG	Obsidian or volcanic glass - uncertain classification
		FE	Feldspathoid-rich volcanic
	Felsic porphyrys, flows or subvolcanic sills/dykes (P)	FQP	Quartz porphyry - volcanic context
		FFP	Feldspar porphyry - volcanic context
		FEP	Quartz-feldspar porphyry - volcanic context
		FAP	Amphibole / biotite-feldspar +/- quartz porphyry
			Felsic hyaloclastic
			Felsic peperite
	Fragmentals (T)	FT	Felsic tuff (undifferentiated)
		FTL	Felsic lithic crystal tuff
		FTY	Felsic crystal tuff / Quartz-eye tuff
		FTA	Felsic ash / lapilli / Vitric tuff
		FTX	Felsic breccia
		FTT	Felsic pyroclastic - Ignimbrite
Felsic-Intermediate Intrusive Rocks (G)	Undivided	G	Granitoid (undifferentiated)
	Dioritic Rocks (I)	GI	Intermediate dyke (undifferentiated)
		GID	Diorite
		GIDQ	Quartz diorite / Trondhjemite
		GIM	Monzodiorite
		GIMQ	Quartz monzodiorite
	Granitic Rocks (R)	GRT	Tonalite
		GRD	Granodiorite
		GR	Granite
		GRA	Alkali Feldspar Granite
		GRQ	Quartz-rich granitic rock
	Syenitic Rocks (S)	GSM	Monzonite
		GSMQ	Quartz monzonite
		GS	Syenite
		GSQ	Quartz syenite
	Foid-rich cg intrusives (F)	GSA	Alkali feldspar +/- quartz syenite
		GF	Feldspathoid-rich Intrusive/Foidolite
		GFS	Foid-rich syenite / Foid monzosyenite
		GFM	Foid-rich diorite rocks
	General (A)	GA	Microgranite / Felsite or Aplite
		GAP	Pegmatite
		GAG	Greisen
Porp	Porphyritic Rocks (P)	P	Porphyry intrusive (undifferentiated)
		PF	Feldspar porphyry
		PQ	Quartz porphyry
		PQF	Quartz-feldspar porphyry
		PFQ	Feldspar quartz porphyry
		PB	Biotite aphyric porphyry
		PBF	Biotite feldspar porphyry
		PC	Chloritic aphyric porphyry
		PFB	Feldspar biotite porphyry
		PFBH	Feldspar biotite hornblende porphyry
		PFQB	Feldspar quartz biotite porphyry
		PFQH	Feldspar quartz hornblende porphyry
Sedimentary Rocks (S)	Undivided	S	Sediments (undifferentiated)
	Mud-silt size	SA	Argillites (undifferentiated), grain size <0.05 mm
		SAS	Siltstone
		SAF	Mudstone, shale & slate
		SAL	Lithic argillite
		SAD	Calcareous argillite / Marl
		SAP	Micaceous shale / mudstone
		SAY	Finely-laminated/graded argillites, minor sands

LITHOLOGY

		SAG	Graphitic or carbonaceous argillites
	Sand size	SS	Sandstone / arenite (undifferentiated), grain size >0.05 mm <2 mm
		SSP	Micaceous sandstone
		SSL	Lithic sandstone
		SSG	Graphitic or carbonaceous sandstone
		SSD	Calcareous sandstone
		SSQ	Quartzite
		SSA	Arkose & feldspathic sandstone
		SSW	Greywacke / Turbidite
	* second qualifier can include	SS*B	Pebbly sandstone
	Arkose (A), Greywacke (W)	SS*K	Cobbly sandstone
	Micaceous (P), Lithic (L)	SS*F	Fine-grained sandstone
	Graphitic (G), Calcareous (D)	SS*M	Medium-grained sandstone
	Quartz (Q)	SS*C	Coarse-grained sandstone
		SSY	Finely-bedded/graded sandstone
		SSH	Finely-interbedded / laminated sandstone & argillite
	Sedimentary Breccia (X)	SX	Sedimentary breccia (undifferentiated)
	& Conglomerate / Rudite (R)	SXM	Monomictic sedimentary breccia
	* 'clast-type' qualifier (inc dominant Felsic volcanic (F), Intermediate volcanic (I), Mafic volcanic (M), Ultramafic volcanic (U), Felsic-Intermediate porphyry (P), Granitoid (G), Sedimentary (S), Siliceous - vein, chert (Q), Metamorphic - schist, gneiss etc (C		
		SXP	Polymictic sedimentary breccia
		SXO	Oligomictic sedimentary breccia
		SR	Conglomerate (undifferentiated)
		SRS	Interbedded conglomerate & sandstone or argillite
		SRM	Monomictic conglomerate
		SRP	Polymictic conglomerate
		SRO	Oligomictic conglomerate
	Chemical sediments (C)	SCC	Carbonate Rocks (undifferentiated)
		SCD	Dolostone / Dolomitic Limestone
		SCL	Limestones (undifferentiated)
		SCCK	Chalk or chalky deposits
		SCE	Evaporites (undifferentiated)
		SCP	Phosphorites
		SCS	vfg siliceous sediment (- Radiolarite / diatomite etc)
		SCT	Chert
		SCJ	Jasper
		SCI	Iron Formation
		SCIO	Oxide facies iron formation - BIF / Jasperite
		SCIZ	Sulphide facies iron formation
		SCIS	Silicate facies iron formation
		SCIC	Carbonate facies iron formation
		SCN	Sinter
		SCZ	Exhalite (undifferentiated)
		SCZD	Exhalite - carbonate dominant
		SCZZ	Exhalite - pyrite / sulphide dominant
		SCZQ	Exhalite - silicate dominant
		SCZF	Exhalite - sulphate dominant
	Carbonaceous sediments (K)	SK	Carbonaceous sediment (undifferentiated)
		SKP	Peat
		SKC	Coal
		SKL	Lignite
		SKB	Bituminous Coal
		SKA	Anthracite
	Volcanic sediments (V)	SV	Volcaniclastic / Epiclastic sediment (undifferentiated)
		SVA	Volcanic / Tuffaceous argillite
		SVS	Volcaniclastic sandstone
		SVSF	Volcaniclastic sandstone - feldspar crystals
		SVSQ	Volcaniclastic sandstone - quartz crystals
		SVSX	Volcaniclastic sandstone - crystal
		SVSL	Volcaniclastic sandstone - lithic
		SVD	Volcanic debris flow
		SVX	Volcanic breccia (undifferentiated)
	Metamorphic & Foliated Rocks (P)	PGM	Mafic Granulite
	(use where primary textures are not apparent due to metamorphic recrystallisation at high metamorphic grades or where deformation has destroyed the primary fabric).		
	Granulites etc (G)	PGF	Felsic Granulite
		PGU	Ultramafic granulite (mafic minerals >90%)
	Gneisses & Amphibolites (N)	PNM	Mafic gneiss
		PNA	Mafic amphibolite (Amphibolites, +/- Pl, +/- Ov, +/- Gn)
		PNF	Felsic or granitic gneiss
		PNB	Banded gneiss
		PNE	Augen gneiss
		PNP	Pelitic gneiss / Amphibolite (garnet, cordierite or aluminosilicate)
		PNZ	Calc-silicate gneiss
		PNT	Migmatitic gneiss
	Schists (S)	PS	Schist (undifferentiated)
	(only applied to foliated rocks where precursor lithology is unclear or uncertain - use dominant mineral types as discriminator)		
		PSB	Biotite-dominated schist
		PSA	Pelitic schist (garnet, cordierite or aluminosilicate)

LITHOLOGY

		PSH	Amphibole +/- chlorite-dominant schist
		PSC	Chlorite-dominant schist
		PSU	Ultramafic (talc / serpentine etc) -dominated schist
		PSM	Mafic schist (chlorite-amphibole-plag (+/- Qz) schist)
		PSD	Chlorite-sericite (+/- quartz) schist
		PSS	Sericite / muscovite (-quartz, +/- biotite) schist
		PSF	Felsic schist (Qz, Fd, +/- mica, +/- amph)
		PSG	Graphitic schist
		PSZ	Calc-silicate schist
(only applies where precursor lithology is unclear or uncertain)	Phyllites (P)	PPS	Micaceous phyllite
		PPC	Chlorite phyllite
		PPG	Graphitic phyllite
	Hornfels (H)	PHM	Mafic hornfels
		PHP	Pelitic hornfels (garnet, cordierite or aluminosilicate)
		PHZ	Calc-silicate hornfels (undifferentiated)
		PHF	Biotite-quartz-feldspar hornfels
(skarns or skarn-like metamorphic assemblages)	Calc-silicate rocks and skarns	PCC	Calcic-garnet, cpx, wollastonite, amphibole-dominated
		PCM	Magnesian-olivine, pyroxene, serpentine, talc, tremolite
		PCB	Marble
	Quartzites (Q)	PQU	Orthoquartzite
		PQM	Quartz-magnetite rock
		PQA	Quartz-magnetite-amphibole rock
	Deformation Zones (D) (limited to zones of most intense deformation, otherwise employ schist or primary lithocodes)	PDC	Cataclastic
		PDY	Mylonite (undifferentiated)
		PDYP	Protomylonite
		PDYU	Ultramylonite
		PDB	Fault gouge / Fault breccia
		PDS	Intense brittle-ductile shear zone
	Fault Breccia (B)	PB	Breccia zone (unsubdivided, unmineralised)
	(textural qualifier)	PBC	Breccia zone (collapse, unmineralised)
		PB*A	Breccia - angular clasts
		PB*R	Breccia - rounded clasts
Mineralization / Hydrothermal Alteration (Z) (limited to structures with intense alteration or vein overprint and/or are well-mineralised such that primary lithology/metamorphic textures are totally obscured)	Shear Zone (Z)	ZZV	Mineralised / veined or altered shear zone
		ZB	Breccia zone - unsubdivided, mineralised / altered
		ZBH	Breccia zone - hydrothermal, mineralised / altered
		ZBC	Breccia zone - collapse, mineralised / altered
	Breccia (B)	ZRM*	Monomictic milled breccia
		ZRO*	Oligomictic milled breccia
		ZRP*	Polymictic milled breccia
		ZAM*	Monomictic angular breccia
		ZAO*	Oligomictic angular breccia
		ZAP*	Polymictic angular breccia
	Sulphide (S)	ZSM	Massive sulphide
		ZSS	Semi-massive sulphide
		ZSD	Stringer or disseminated sulphide
		ZSB	Sulphide breccia
	Quartz (Q)	ZQV	Massive quartz vein
		ZQS	Quartz stockwork - host rock obscure
		ZQB	Quartz - cemented breccia
restricted to VMS environments	Silicate (L)	ZLC	Chlorite stringer breccia
	Carbonate (C)	ZCV	Massive carbonate veining
		ZCS	Carbonate stockwork - host rock obscure
		ZCB	Carbonate - cemented breccia
	Gossan (G)	ZGM	Massive gossan zone
		ZGS	Semi-massive gossan
	Magnetite (M)	ZMM	Massive magnetite
		ZMS	Semi-massive magnetite
	Barite (Y)	ZYV	Intense barite veining
		ZYM	Massive barite
		CAV	Cavity
		COLO	Core loss
		CAS	Core loss due to casing
		FILL	Back fill
		NSR	No sample recovered
		NL	Not logged
		NS	Not sampled
		WOK	Workings/Stope
		WD	Waste dump
		ICE	Ice

ALTERATION

AAB	Albitic / albitite
AAC	Albite - carbonate
AAR	Argillic
AAS	Albite - sericite
ABA	Silica - biotite - albite
ABL	Bleached
ABS	Biotite - sericite
ABT	Biotitic
ACA	Carbonate
ACAF	Calc silicate - alkali feldspar
ACAM	Calc silicate - alkali feldspar - magnetite
ACC	Chlorite - carbonate +/- Biotite +/- pyrrhotite
ACG	Chlorite - garnet
ACH	Chloritic
APC	Chlorite - biotite - pyrrhotite
ACS	Chlorite - sericite
ACSC	Chlorite - sericite - carbonate
ACT	Actinolite
ADA	Advanced argillic - generic
ADD	Advanced argillic - quartz-dickite dominant
ADP	Advanced argillic - pyrophyllite bearing
ADQ	Advanced argillic - quartz-alunite dominant
AEP	Epidote
AFB	Albite - biotite
AFE	Ferruginous
AFU	Fuchsitic
AHM	Haematitic (undifferentiated)
AHS	Haematite - steely
AHE	Haematite - earthy
AHM	Haematite - mixed steely and earthy
AHS	Haematite - sericite
AHSCC	Haematite - sericite - chlorite - carbonate
AHSC	Haematite - sericite - chlorite
AHC	Haematite - chlorite
AKS	K-spar
AIK	Illite - kaolinite
AMB	Magnetite - biotite
AMG	Magnetite
AMN	Manganiferous
APH	Phyllic (clay)
APT	Potassic (K-spar - biotite)
APR	Propylitic (chlorite - carbonate - epidote - haematite)
AQP	Quartz - pyrite
ARR	Red rock (alkali feldspar (albite) - haematite
ASA	Saussuritic
ASB	Silica - biotite +/- Arsenopyrite +/- Pyrrhotite
ASC	Sericite - carbonate
ASE	Sericitic
ASF	Silica - feldspar
ASI	Silicic
ASK	Skarn
ASM	Smectite - illite
ASS	Silica - sericite
AST	Serpentine
ASU	Sulphidic
ASZ	Siliceous banded
AVS	Vuggy silica

INTENSITY

M	MEDIUM
S	STRONG
V	VARIABLE
W	WEAK

MINERALOGY

AC ACTINOLITE
 AB ALBITE
 AFS ALKALI FELDSPAR
 AM AMPHIBOLE
 AD ANDALUSITE
 AK ANKERITE
 AN ANTHOPHYLITE
 SB ANTIMONY
 AS ARSENIC
 APY ARSENOPIRYTE
 AU AUTINITE
 BI BIOTITE
 CAL CALCAREOUS
 CA CALCITE
 CAR CARBONATE RHOMBS
 CN CARNOTITE
 CPY CHALCOPYRITE
 CL CHLORITE
 CY CLAY
 CPX CLINOPYROXENE
 DA DAVIDITE
 DI DIOPSIDE
 EP EPIDOTE
 FS FELDSPAR
 FE FERRUGINOUS/IRON
 FU FUCHSITE
 GL GALENA
 GA GARNET
 GE GOETHITE
 VG GOLD
 GO GOSSANOUS
 GR GRAPHITE
 GYP GYPSUM
 HE HAEMATITE
 HB HORNBLLENDE
 IL ILMENITE
 KA KAOLIN
 LX LEUCOXENE
 LM LIMONITE
 MG MAGNETITE
 MN MANGANESE OXIDES
 MA META-AUTINITE
 MT META-TORBERNITE
 MI MICA
 MU MUSCOVITE
 NON NONTRONITE
 OL OLIVINE
 OPX ORTHOPYROXENE
 PHL PHLOGOPITE
 PT PITCHBLLENDE
 PL PLAGIOCLASE
 PY PYRITE
 PYX PYROXENE
 PO PYRRHOTITE
 Q QUARTZ
 RU RUTILE

MINERALOGY

SH SCHROECKINGERITE
 SE SERICITE
 SP SERPENTINE
 SI SIDERITE
 SL SILICA (FINE GRAINED)
 SPH SPHALERITE
 STA STAUROLITE
 SLP SULPHIDES (UNSPECIFIED)
 TA TALC
 TO TORBERNITE
 TU TOURMALINE
 TR TREMOLITE
 TY TYUYAMUNITE
 UR URANINITE
 UP URANOPHANE

COLOUR

DK DARK
 LT LIGHT

COLOUR

B BLUE
 BG BEIGE
 BL BLACK
 BR BROWN
 C CREAM
 CL CLEAR
 G GREEN
 GB GREEN BLUE/BLUE GREEN
 GG GREY GREEN
 GY GREY
 KH KHAKI
 MO MOTTLED
 MV MAUVE
 OC OCHRE
 OR ORANGE
 P PURPLE
 PI PINK
 R RED
 RB RED BROWN
 TN TAN
 TR TRANSLUCENT
 W WHITE
 Y YELLOW

TEXTURE CODE

AM	AMYGDALOIDAL
AN	ANGULAR
APH	APHANITIC
BA	BANDED
BD	BEDDED
BLD	BLADED
BL	BLEACHED
BB	BLEBBY
CVN	CARBONATE VEINING
CTC	CHILLED MARGIN
EQU	EQUI-GRANULAR
GL	GLASSY
GNS	GNEISSIC
GR	GRANULAR
GH	GRAPHITIC
LA	LAMINATED
MOT	MOTTLED
GMY	MYLONITIC
PO	PORPHYRITIC
QEY	QUARTZ EYES
QFD	QUARTZ FLOODING
QVN	QUARTZ VEINING
QCV	QUARTZ-CARBONATE VEINING
QCAV	QUARTZ-CARBONATE-ALBITE VEINING
CTP	SHARP CONTACT
CTS	SHEARED CONTACT
SL	SILICIFIED
STV	STOCKWORK VEINING
VS	VESICULAR
VUG	VUGGY

GRAIN SIZE

APH	APHANITIC
IFG	FINE GRAINED <1MM IGNEOUS
IMG	MEDIUM GRAINED 1-5MM IGNEOUS
ICG	COARSE GRAINED 5-30MM IGNEOUS
IPG	PEGMATIC >30MM IGNEOUS
A+P	DISTINCTLY PORPHYRITIC W/ APHANITIC GMASS
SBD	BOULDERY (>256MM) SEDIMENTARY
SCO	COBBLY (16-256MM) SEDIMENTARY
SPB	PEBBLY (2-16MM) SEDIMENTARY
SVC	VERY COARSE (1-2MM) SEDIMENTARY
SCG	COARSE (0.5-1.0MM) SEDIMENTARY
SMG	MEDIUM (0.25-0.5MM) SEDIMENTARY
SFG	FINE (0.06-0.25MM) SEDIMENTARY
SCF	VERY FINE (0.03-0.06MM) SEDIMENTARY
SMF	0.004-0.03MM (FINE - MED Ss) SEDIMENTARY
SEF	<.004MM (MUDSTONE) SEDIMENTARY

STRUCTURE CODE

BCK	BLOCKY
BX	BRECCIATED
CR	CRENULATED
FT	FAULT
FBX	FAULT BRECCIA
FD	FOLDED
FL	FOLIATED
FR	FRACTURED
JT	JOINTED
LN	LINEATED
MAS	MASSIVE
PL	PILLOWED
SC	SCHISTOSE
SH	SHEARED
SS	SLICKENSIDED
FLB	FLOW BANDING
DFL	DEBRIS FLOW

ALTERATION STYLE

B	BANDS, BEDDING CONTROLLED
D	DISSEMINATED
F	FOLIATION CONTROLLED
R	FRACTURE CONTROLLED
G	GOSSANOUS
H	HALO / REACTION RIMS
L	LODES
M	MASSIVE
P	PATCHES, PODS
E	PERVASSIVE
S	STOCKWORKS
V	VEINS

STRUCTURE TYPE

BN	BAND
BD	BED
CL	CLEAVAGE
CT	CONTACT
CR	CRENULATION
FT	FAULT
FD	FOLD
FO	FOLIATED
FR	FRACTURE
JT	JOINT
LN	LINEATION
XX	OTHER SEE COMMENTS
SC	SCHISTOSITY
SH	SHEAR
SS	SLICKENSIDE
VN	VEIN

WEATHERING

EW	EXTREMELY
F	FRESH
HW	HIGHLY
MW	MODERATELY
SW	SLIGHTLY

HARDNESS

F	FRIABLE
H	HARD
M	MEDIUM
P	POWDERY
S	SOFT

WET/DRY

W	WET
D	DRY
M	MOIST

DEVICE

KN	Kenometer
OC	Orientation Cradle