LITHOLOGICAL CODES

Overburden	
OP	Pindan
OPG	Pindan with gravel – clast-supported
OS	Sand
OSC	Sandy clay
OCS	Clayey sand
OSCGR	Sandy clay with grit – matrix supported
OGR	Grit – clast-supported
OSG	Sand with gravel – matrix-supported
OSCG	Sandy clay with gravel – matrix-supported
OCSG	Clayey sand with gravel – matrix-supported
OCG	Clay with gravel – matrix-supported
OG	Gravel – clast-supported
OLGR	Transported lateritic grit
OLG	Transported lateritic gravel
OGL	Lag gravel on bedrock surface
OSCL	Sandy clay with insitu laterite
OPWL	Pindan with weakly developed laterite
OPML	Pindan with moderately developed laterite
OPHL	Pindan with highly developed laterite
OSWL	Sand with weakly developed laterite
OSML	Sand with moderately developed laterite
OSHL	Sand with highly developed laterite
OCWL	Clay with weakly developed laterite
OCML	Clay with moderately developed laterite
OCHL	Clay with highly developed laterite
OB	Black soil

Sediments	
S	Sediment
SL	Limestone
SST	Sandstone
SSS	Silicified sandstone
SSF	Fine-grain sandstone
SSM	Medium-grain sandstone
SSC	Coarse-grain sandstone
SSFM	Fine to medium-grain sandstone
SSMC	Medium to coarse-grain sandstone
SSFC	Fine to coarse-grain, poorly-sorted sandstone
SGW	Greywacke - > 15% clay matrix, poorly sorted
SSL	Siltstone
SMD	Mudstone
SCG	Conglomerate
SBX	Breccia
SSH	Shale
SSHC	Carbonaceous shale
SCT	Chert

Upper Saprolite	
C	Clay after basement lithology of indeterminate type
CSS	Sandy clay probably after sandstone
CLST	Clay probably after limestone
CG	Basement sandy clay with gravel
CULM	Clay probably after magmatic lamproite
CULT	Clay probably after tuffaceous lamproite
CULTS	Clay probably after sandy tuffaceous lamproite
CUK	Clay probably after kimberlitic rock

Ultramafic Rocks	
UK	Kimberlitic rock of indeterminate type
UKB	Kimberlitic breccia
UL	Lamproitic rock of indeterminate type
ULT	Lamproite tuff
ULTS	Sandy tuff (>20% quartz grains)
ULTR	Reworked tuff (clasts of tuff)
ULTL	Lapilli tuff
ULTX	Crystal-rich tuff (>20% crystals)
ULTW	Welded tuff
TS	Tuffaceous sandstone (>40% quartz grains)
ULBX	Lamproitic magmatic breccia, usually auto breccia.

Chemical Deposits	
LNW	Weakly developed nodular laterite (overprinting pre-existing rock)
LNM	Moderately developed nodular laterite
LNH	Highly developed nodular laterite
LM	Massive laterite overprinting pre-existing rock
LL	Laminated laterite overprinting pre-existing rock
CCO ---	Chemical calcrete overprinting pre-existing rock
CCOW ---	Weakly developed calcrete overprint
CCOH ---	Highly developed calcrete overprint
CCOM ---	Moderately developed calcrete overprint
CSO ---	Chemical silcrete overprinting pre-existing rock

Merlin-specific Rock Types	
Qsl	Quaternary soil
Qfk	Ferricrete
Tlat	Tertiary laterite - insitu
Kslst	Cretaceous Siltstone
Ksst	Cretaceous Sandstone
Kb	Kimberlite
Ebsst	Cambrian Bukalara Sandstone
Pmd	Proterozoic (McArthur Group)

WET COLOUR DESCRIPTION	
Code	***Intensity***
5	VERY DARK
4	DARK
3	MEDIUM
2	LIGHT
1	PALE

Code	***Colour***	***Code***	***Composite Colours***
Gy	grey	GyWh	grey-white
Bu	blue	YeOr	yellow-orange
Pk	pink	OrYe	orange-yellow
Gn	green	YeGn	yellow-green
Kh	khaki	RdBn	red-brown
Ol	olive	OlGn	olive-green
Bl	black	BuGn	blue-green
Or	orange	CrWh	cream-white
Pu	purple	OrCr	orange-cream
Rd	red	RdBn	red-brown
Tn	tan	YeWh	yellow-white
Bn	brown		
Wh	white		
Ye	yellow		
Cr	cream		

WEATHERING/OXIDATION		
CODE	DESCRIPTION	DETAILED DESCRIPTION
F	FRESH	ROCK SUBSTANCE UNAFFECTED BY WEATHERING, SULPHIDES OBSERVED.
S	SLIGHTLY WEATHERED	ROCK SHOWS SLIGHT CHANGE OF COLOUR AND LUSTRE BUT GENERALLY SHOWS LITTLE OR NO CHANGE OF STRENGTH FROM FRESH ROCK.
M	MODERATELY WEATHERED	SIGNIFICANT CHANGE OF COLOUR AND LUSTRE THROUGH THE ROCK FABRIC, AND ROCK STRENGTH IS NOTICEABLY REDUCED BY WEATHERING, BUT ROCK PIECES CANNOT BE BROKEN BY HAND ACROSS THE ROCK FABRIC AND THE ROCK MATERIAL IS NOT FRIABLE.
H	HIGHLY WEATHERED	ROCK STRENGTH AND HARDNESS CLEARLY REDUCED BY WEATHERING, ROCK PIECES CAN GENERALLY BE BROKEN BY HAND ACROSS THE ROCK FABRIC AD THE ROCK MATERIAL IS PARTLY FRIABLE; THE ROCK MAY BE HIGHLY DISCOLOURED, USUALLY BY IRONSTAINING.
E	EXTREMELY WEATHERED	ROCK IS WEATHERED TO AN EXTENT THAT IT HAS SOIL PROPERTIES, IE. IN WATER IT EITHER DISINTEGRATES OR CAN BE REMOULDED, BUT ORIGINAL FABRIC IS MAINLY PRESERVED.
R	RESIDUAL SOIL	ROCK IS COMPLETELY CHANGED TO SOIL IN WHICH ORIGINAL ROCK FABRIC IS COMPLETELY DESTROYED.