REGOLITH AND SURFACE SEDIMENTS LEGEND

ROOT CODE

- **Z** — SOILS SURFACE SEDIMENTS
- **D** — DURICRUST
- **X** — OXIDISED

COLOUR

0	WHITE
1	GREY
2	GREEN
3	CREAM
4	KHAKI
5	YELLOW
6	ORANGE
7	RED
8	BROWN
9	BLACK
A	RED-WHITE OR PINK
B	RED-BROWN
C	RED-BLACK
D	RED-YELLOW
E	BROWN-WHITE
F	BROWN-YELLOW
G	DARK REDDISH BROWN
H	PALE RED PURPLE
J	LIGHT BROWN i.e. BUFF, FAWN, BEIGE
K	MODERATE YELLOW BROWN
L	MODERATE REDDISH BROWN

COMPOSITION / TYPE

K	CONGLOMERATE RUDITE
Y	CLAY (Argillaceous for Z code)
T	TRANSITION Y-Q (>15% matrix)
R	ARENITE Q-Y (<15% matrix)
A	ARKOSIC Q-Y-F
C	CALCAREOUS / CALCRETE
E	EVAPORITE (Halite / Gypsum)
B	CARBONACEOUS (Lignite)
S	SILICEOUS / SILCRETE
F	FERRUGINOUS >60% Fe_2O_3
H	HARDPAN
L	LATERITE <60% Fe_2O_3
G	FELSIC precursor
I	INTERMEDIATE precursor
M	MAFIC precursor
U	ULTRAMAFIC precursor
N	SEDIMENTARY precursor

Mica +/- Clay +/-Qtz — R

Carbonaceous +/- Clay+/-Qtz — K

SULPHATES +/- Q-Y — E

URANIUM MINERALS — U

Q-F-Y-M — G

PARTICLE SIZE

For Z Root Code ONLY

C	CLAY (<0.004mm)
L	LOAM (0.004 – 0.032mm)
S	SAND (0.032 – 2mm)
G	GRAVEL (>2mm)
M	MIXED

MINERALOGY

Y	CLAY +/- QUARTZ
M	CLAY-XH-XG
Q	QUARTZ- CLAY
S	QUARTZ-XH-XG
X	XH-XG-CLAY
F	XH-XG-QUARTZ
I	XH-XG (Calcareous)
C	CALCAREOUS -Y
D	CALCAREOUS -Q
B	CALCAREOUS (XH-XG)
P	SILICA (Calcareous)
J	SILICA (XH-XG)
H	SILICA -Y
N	MANGANESE RICH

TEXTURE

L	LAMINATED (<10mm)
B	BEDDED (10mm – 30cm)
T	THICKLY BEDDED (>30cm)
W	WELL SORTED
U	POORLY SORTED
M	MASSIVE
X	BRECCIATED
G	AGGREGATED CEMENTED
O	OOLITHS/ PISOLITHS
N	NODULES
E	EARTHY
C	PORCELLANEOUS
A	AMORPHOUS
V	VOIDED
Z	FOLIATED
F	FINE GRAINED (<1mm)
Q	EQUIGRANULAR (>2mm MEDIUM GRAINED)
P	PORPHYRITIC
S	SCHIST
$	GOSSAN/ SULPHIDE TEXTURES
%	PEBBLY
/	LAYERED
<	UNCONSOLIDATED
^	CRENULATED/FOLDED
J	JOINT OXIDISED

ORIGIN

NOT for use with D Root Code

A	ALLUVIUM
C	COLLUVIUM
W	AEOLIAN
L	LACUSTRINE
G	GLACIAL

Residual Profile

M	MOTTLED ZONE
K	LEACHED ZONE
Y	CLAY SAPROLITE
S	SAPROLITE (>20% RELICT TEXTURES & MINERALS)
R	SAPROCK (<25% OXIDISED)

Revised Mar 2010

ROCK LEGEND – SEDIMENTARY ROCKS

ROOT CODE

S SEDIMENTARY

COLOUR

0	White
1	Grey
2	Green
3	Cream
4	Khaki
5	Yellow
6	Orange
7	Red
8	Brown
9	Black
A	Red-White or Pink
B	Red-Brown
C	Red-Black
D	Red-Yellow
E	Brown -White
F	Brown-Yellow
G	Pale Red Purple
H	Dark Reddish Brown
J	Light Brown ie Buff, Fawn, Beige
K	Moderate Yellow Brown
L	Moderate Reddish Brown

SEDIMENTARY TEXTURES

L	LAMINAE
E	BEDS (1-10cm)
R	THICK BEDS (>10cm)
M	MASSIVE NO BEDDING
U	FINING UP
W	FINING DOWN
%	PEBBLY

OTHER TEXTURES

S	SCHIST
Y	MYLONITE
X	BRECCIA
Z	FOLIATED
O	OOLITIC
J	JOINT OXIDISED
&	FINE GRAINED
^	CRENULATED/ FOLDED

TYPE

S CHEMICAL SEDIMENTS

I INTERBEDDED
Put dominant rock name first (column 4) and composition of subordinate rock (column 5)

E EPICLASTIC

V VOLCANICLASTIC

M METAMORPHIC

C CARBONATE

ROCK NAME

$	SULPHIDE (<50%)
C	PALE CHERT
G	CARBONACEOUS CHERT
H	CHLORITE RICH
J	JASPER / BIF
K	RUDITES eg CONGLOMERATE (>2mm)
R	ARENITE <15% Matrix (0.06-2mm)
W	WACKE >15% Matrix (0.06-2mm)
A	ARGILLITE (<0.06mm)
S	BLACK SHALE (graphitic)

P	AGGLOMERATE (>64mm)
L	LAPILLI TUFF (2-64mm)
T	TUFF (ASH) (<2mm)
K	RUDITES eg CONGLOMERATE (>2mm)
R	ARENITE <15% Matrix (0.06-2mm)
W	WACKE >15% Matrix (0.06-2mm)
A	ARGILLITE (<0.06mm)

Q	QUARTZITE
M	MARBLE
D	DOLOMITE
B	LIMESTONE

DOMINANT MINERALOGY

1	Gossan (xh ± sp)
2	xm
3	xm-sp
4	sp-so
5	sp
6	so
7	sc
8	sph
9	sg

D	FELDSPAR dominant
Q	QUARTZ ± C± lithic
S	QUARTZ ± graphite
G	CARBONACEOUS/ graphitic ± Q
N	MANGANESE dominant
X	XH ± HG ± Q
H	CHLORITE ± A ± Q
R	SERICITE/ mu ± Q
T	BIOTITE ± Q ± C
L	LITHIC
P	POLYMICT

F	FELSIC Q-F-M
I	INTERMEDIATE F-C-M ±A ±Q
M	MAFIC A-C-F
U	ULTRAMAFIC A-C-M ±B

B	CARBONATE dominant (> 90%)
C	B±C±Q± lithic
Z	B ± graphitic ± Q

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QUALIFYING MINERAL ABBREVIAIONS

A	AMPHIBOLES	a
	ACTINOLITE	ac
	ANTHOPHYLLITE	an
	CUMMINGTONITE	auc
	HORNBLENDE	ah
	TREMOLITE	at
B	CARBONATES	b
	ANKERITE	ba
	CALCITE	bc
	CARNOTITE	bu
	DOLOMITE	bd
	MAGNESITE	bm
	MALACHITE	bl
C	CHLORITES	c
E	EPIDOTE	e
	CLINOZOISITE	ec
F	FELDSPAR	f
	ALBITE	fa
	MICROCLINE	fm
	ORTHOCLASE	fo
	PLAGIOCLASE	fp
G	GARNET	g
	ALMANDINE	ga
	ANDRADITE	gn
H	HYDROXIDES	h
	GIBBSITE	hal
	GOETHITE	hg
	LIMONITE	hl
I	OTHER SILICATES	i
	SPHENE	Is
	TOURMALINE	it
M	MICAS	m
	BIOTITE	mb
	PHENGITE	mf
	GLAUCONITE	mg
	LEPIDOLITE	ml
	PHLOGOPITE	mph
	SERICITE	mr
	MUSCOVITE	mu
O	OLIVINE	o
P	PYROXENE	p
	AUGITE	pca
	CLINOPYROXENE	pc
	DIOPSIDE	pcd
	ORTHOPYROXENE	po
Q	QUARTZ	q
	SILICEOUS	sil
R	SERPENTINE	r
	ANTIGORITE	ra
	CHRYSOTILE	rc
	LIZARDITE	rl
S	SULPHIDES	s
	ARSENOPYRITE	sa
	CHALCOPYRITE	sc
	GALENEA	sg
	MILLERITE	smi
	MOLYBDENITE	sm
	PENTLANDITE	se
	PYRITE	sp
	PYRRHOTITE	so
	SPHALERITE	sph
	VIOLARITE	sv
T	TALC	t
X	OXIDES	x
	CHROMITE	xc
	HEMATITE	xh
	ILMENITE	xi
	LEUCOXENE	xl
	MAGNETITE	xm
	MANGANESE OXIDES	xn
	RUTILE	xr
	URANITITE	xu
Y	CLAYS	y
	KAOLINITE	yk
	MONTMORILLONITE	ym
ZC	CARBON	zc
	GRAPHITE	zcg
ZS	SULPHATES	zs
	ALUNITE	zsa
	ANHYDRITE	zsh
	BARITE	zsb
	GYPSUM	zsg
	JAROSITE	zsj
ZP	PHOSPHATES	zp
	APATITE	zpa
	MONZONITE	zpm
ZH	HALITES	zh
	FLUORITE	zhf
	HALITE	zhh