

**WESTGOLD RESOURCES**  
**LOGGING CODES**

**LOCATION AND DRILLHOLE INFORMATION**

**HOLE TYPE**

<b>CODE</b>	<b>DEFINITION</b>
AC	Aircore
AUG	Auger
CH	Channel
DD	Diamond Drill Hole
RB	Rotary Air Bore
RC	Reverse Circulation
ROL	Roller Cone
SLRC	Slimline Reverse Circulation
VAC	Vacuum
Blade	Diamond Blade Bit
RR	Rock Roll

**When filling out DHMetaData use DD hole size ie HQ, NQ etc**

**LOGGED BY**

(Record Geologists initials, preferably use 3 initials if you have them)

**LOCATION SURVEY METHOD**

<b>CODE</b>	<b>DEFINITION</b>
DPGS	Differential GPS
GPS	Handheld GPS
PLAN	Planned
RTKGPS	Real Time Kinetic

**DOWNHOLE SURVEY METHOD**

<b>CODE</b>	<b>DEFINITION</b>
CAM	Single Shot Camera
COCL	Compass and Clino – same as COLL??
COLL	Collar - lined up drill mast with compass
FLEXIT	SensIT 7-parameter drillhole probe
REFLEX	EZ-TRAC 7-parameter drillhole probe
GYRO	Gyroscope
MAG	Magnetometer

## WESTGOLD RESOURCES LOGGING CODES

### SAMPLES AND SAMPLING

#### SAMPLED BY

(Record Field Assistants/Geologists initials, preferably use 3 initials if you have them)

#### SAMPLE RECOVERY

Code for RAB/AC/RC and % for diamond

CODE	DEFINITION
G	Good (>80%)
M	Medium ((50-80%)
P	Poor (<50%)
N	No sample presented
%	For core write in %

#### SAMPLE TYPE

CODE	DEFINITION
BULK	Bulk Sample
CALCNOD	Pedogenic nodular calcrete sample
CALCRETE	Calcrete Sample
CALCSOIL	Pedogenic carbonate soil
CHAN	Continuous channel sample
DSPLIT	Dry Split (Riffle)
GNS	Geologically Not Sampled
GRAB	Grab Sample
HALF	Half Diamond Core
LAG	Lag Sample
MET	Metallurgical Sample
NICHE	
NS	No Sample
PETROL	Petrology Samples
QUART	Quarter
ROCK	Rockchip
SCOOP	Scoop Sample
SOIL	Soil Sample
SPEAR	Spear Sample
SLIVER	Sliver Diamond Core (continuous sample)
STREAM	Stream Sediment Sample
STREAMOB	Stream Sediment Sample-Overbank
WHOLE	Whole Diamond Core
WSPLIT	Wet split (Riffle)

#### SAMPLE PURPOSE

CODE	DEFINITION
CU	Coarse residue reassay (at umpire lab)
FDUP	Field Duplicate taken at same time as original
FR	Fine residue reassay (at original lab)
FU	Fine residue reassay (at umpire lab)
OR	Original Field Sample
OTHER	Other reason for sample (use comments to describe more fully)
QTZWASH	Quartz wash result
REASSAY	Pulp Reassay (pulp packet from lab resubmitted to same lab)
RESAMP	Resampling of Old Holes – historical
RSPLIT	Resplit - of original field sample
STUDY	Sample used as part of sampling protocol study
UMPIRE	Pulp Umpire (pulp packet resubmitted to different lab)
UMPUKN	Pulp Umpire (unknown if pulp was send to same or different lab)

#### SAMPLE CONDITION

CODE	DEFINITION
D	Dry
M	Moist
A	Water inflow after rod change
W	Wet
I	Injected water
F	Injected water & additive (i.e. foam)
NR	Not recorded
T	Top of water table (check with driller if necessary)

#### SAMPLE QC CATEGORY

CODE	DEFINITION
FDUP	Field Duplicate
LABCHK	Lab Check
OR	Original Field Sample
RESAMP	Resampling of Old Holes
UMPIRE	Umpire Resample - ??
RSPLIT	Resplit – do we need size fractions for these

## WESTGOLD RESOURCES LOGGING CODES

### COLOUR, GRAINSIZE AND REGOLITH

#### COLOUR (Sample colour)

\*\*Note: Use only multiple codes where there is more than one colour in the rock eg. Don't use RB for reddy-brown rock, call it R or B

Code	Definition
A	Grey
B	Brown
D	Black
G	Green
I	Pink
K	Khaki
L	Blue
O	Orange
P	Purple
R	Red
T	Tan
W	White
Y	Yellow
QUALIFIERS	(before colour, e.g. Light brown =1B)
1	Dark
2	Light

Code	Particle Diameter (mm)	Sedimentary	Igneous & Chemical	Description
1	<0.16	Clay	Glassy-Aphanitic	Clay
2	0.16-0.06	Silt	Aphanitic	Silt
3	0.06-0.25	Fine Sand	Fine	Very Fine - Fine Sand
4	0.25-1.0	Sand		Medium - Coarse Sand
5	1.0-4.0	Grit	Medium	Grit/Granule
6	4.0-16	Small Pebble	Coarse	Very Small - Small Pebble
7	16-64	Pebble	Very Coarse	Medium - Large Pebble
8	64-250	Cobble	Pegmatitic	Small - Large Cobble
9	>250	Boulder	Magepegmatitic	Small Boulder/Medium Boulder/Large Boulder/Very Large Boulder

#### REGOLITH (Stratigraphic position in weathering profile)

CODE	Definition	Description
TRANS	Transported or superficial deposits	e.g. Aeolian Sand
LAKE	Lake clays & associated deposits	Puggy, grey lake clays; sometimes mixed with ferruginous fragments and lateritic gravels
LAT	Lateritic residuum	Duricrust and lateritic gravels; complete replacement of primary and secondary fabric
SOIL	Residual soil	Derive from basement material
CALC	Calcrete development	Calcrete horizon developed in profile. Distinct horizon either nodular, platy, massive
SILC	Silcrete development	Silcrete horizon developed in profile. Distinct horizon.
SAP	Saprolite	Undifferentiated level of saprolite; clay dominated
USAP	Upper saprolite	Lack of primary rock fabric; clay dominated; leached or secondary cemented
LSAP	Lower saprolite	Clay mineral dominated; <70% secondary oxides; primary fabric preserved; sulphides absent or replaced; may preserve rock colour.
SAPRK	Saprock	<20% secondary oxides; fine detail in fabric preserved; sulphides weathered; preserved felsic minerals
FRESH	Fresh rock	Fresh sulphides and silicates.

**WESTGOLD RESOURCES**  
**LOGGING CODES**

**STRUCTURE AND VEINING**

**STRUCTURE**

CODE	DEFINITION
<b>VEIN</b>	
VN	Vein
VE	Extensional Vein
VG	Vuggy Vein
VL	Laminated Vein
VS	Shear Vein
VB	Untra vein Breccia (hydrothermal)
VNB	Net Vein Breccia (crackled)
<b>FOLIATION</b>	
FF	Foliation or foliated
FCL	Cleavage (fracture)
FFS	Weak foliation (fine grained and spaced)
FFC	Strong foliation (coarse grained and continous)
FSS	Weak schistosity (coarse grained and spaced)
FSC	Strong schistosity (coarse grained and continous)
FCC	Crenulated Cleavage
<b>FOLD</b>	
BFD	Fold
BF1	Gently Fold
BF2	Open Fold
BF3	Tightly Folded
BF4	Isoclinally Folded
BF5	Disharmonically Folded
BF6	Ptygmatically Folded
BF1	Intrafolial Folds
BFK	Kink fold
<b>SHEAR</b>	
SZ	Shear(ed)
SM	Mylonite
SB	Shear bands (ductile)
SC	Sheared Contact
<b>FAULT</b>	
TT	Fault
TC	Cataclasite (fault breccia)
TBD	Brittle ductile fault
TJ	Jointing/close spaced fracturing
TP	Fault pug/cataclasite
<b>PRIMARY</b>	
PB	Primary Bedding
PCN	Contact
PI	Primary Imbricated
PCI	Contact Intrusive
PYD	Primary Younging Down hole
PYU	Primary Younging Up hole
PW	Pillow structure/basalt flow boundary
LE	Linedated

<b>LINEATION</b>	
LS	Mineral Stretching lineation
LA	Shape alignment lineation
LSS	Slickenslide groove lineation
LI	Intersection lineation
LB	Boudinage
LMU	Fold mullion lineation
LF	Fold Axis
<b>KINEMATICS</b>	
KS	Sinistral
KD	Kinematics Dextral
KN	Kinematics Normal
KR	Kinematics Reverse

**VEINSTYLE**

Code	Definition
AN	Anastomosing
BN	Banded
BR	Brecciated
BU	Boudined
CI	Crustiform
CB	Comb Textured
CR	Crackle
CS	Crack Seal
EE	En Echelon
FB	Fibrous
MX	Massive
LM	Laminated
PT	Ptygmatic
SE	Stringers/Veinlets
ST	Sheeted
SW	Stockwork
SZ	Sheared
VD	Cavity Fillings
VG	Vuggy (open space)
WS	Wispy
ZN	Zoned

**VEIN MIN ASSEMBLAGE**

Up to 5 minerals in order of abundance.

**WESTGOLD RESOURCES**  
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**PRIMARY TEXTURE**

CODE	DEFINITION
AH	Aphanitic
AM	Amorphous
AT	Adcumulate
AY	Aphyric
BC	Cross bedded
BD	Bedded
BG	Bedded - Graded
BL	Bladed
BN	Banded
BR	Brecciated
BT	Botryoidal
CC	Concretionary
CD	Crowded
CM	Chilled Margin
CP	Clast Supported
CT	Clastic
CU	Cumulate
CX	Crystalline
EQ	Equigranular
FB	Flow Banded
FE	Flow Top Breccia (autoclastic)
FI	Fibrous
FS	Fissile
FZ	Feldspar Zoned
GB	Granoblastic
GF	Graphic
GH	Ghosted Phenocrystic
GL	Granulose
GN	Gneissic
GP	Glomero-porphyrific
GR	Granophyric
GY	Greasy Sectile
HX	Hyaloclastic
LD	Load Casted
LL	Lit-par-lit
LM	Laminated
MC	Mud Cracked
MM	Migmatitic
MP	Matrix Supported
MT	Mottled

MX	Massive
ND	Nodular
NT	No Texture
OC	Ocellular - variolitic
OM	Orthocumulate
OP	Ophitic
PB	Porphyroblastic
PC	Porphyroclastic
PD	Pillowed
PG	Pegmatitic
PH	Phyllitic
PI	Pisolitic
PP	Porphyritic
PU	Puggy
SC	Saccharoidal
SP	Spherulitic
SS	Soft Sediment Slumping
ST	Styolitic
SX	Spinifex
TF	Tuffaceous
VG	Vuggy
VS	Vesicular
VT	Variolitic
WL	Welded
XC	Cross Cutting
XM	Moderately Sorted
XP	Poorly Sorted
XW	Well Sorted

## WESTGOLD RESOURCES LOGGING CODES

### LITHOLOGY

MISCELLANEOUS	
GOSS	Gossan
NREC	No recovery/sample return
NLOG	No log
NFILL	Backfilled stopes/collapsed working
NROCK	Not rock
NVOID	Unfilled stope/open working
WC	Water course

TRANSPORTED/REGOLITH (prefix L)	
LAT	Laterite
LATG	Laterite pisoliths
LATM	Laterite loose nodules
LLG	Lateritic Gravel
LGP	Gypsum
LCF	Iron segregations
LSOIL	Soil
LSND	Aeolian sand
LGV	Gravel (non-lateritic)
LGR	Grits/Coarse sands
LD	Duricrust
LCAL	Calcrete
LCALN	Calcrete Nodules
LCALP	Calcrete platy
LCALM	Calcrete massive
LSIL	Silcrete
LAL	Alluvium
LSAP	Saprolite
LCOL	Colluvium
LFE	Ferricrete
LCY	Clay

IRONSTONES (prefix FE)	
FEST	Undifferentiated Ironstone
FEM	Magnetite dominant Ironstone

FEH	Haematite dominant Ironstone
FEMQ	Magnetite-Quartz Ironstone
FEHQ	Haematite-Quartz Ironstone

SEDIMENTS (prefix S)	
S	Undifferentiated sediments
SSST	Sandstone
SSLT	Siltstone
SMUD	Mudstone
SMFE	Iron Rich Mudstones
SGW	Greywacke
SDOL	Dolomite
SDST	Dolomitic siltstone
SBIF	Banded Iron Formation
SJIF	Jasperitic Iron Formation
SCG	Conglomerate
SLM	Limestone

CHERTS (prefix C)	
CHT	Undifferentiated Chert
CHTM	Thick bedded chert
CHTJ	Massive Jaspilritic chert
CHTB	Banded chert (non-jaspilritic)

METAMORPHICS (prefix A & Z)	
ZSL	Slate
ZHL	Shale
ZPH	Phyllite
ZSH	Schist
ZGN	Gneiss
ZHF	Hornfels
ZSK	Skarn
ZMB	Marble
ZCS	Calcsilicate
ZAM	Amphibolite

TECTONICS (prefix T)	
TFT	Fault Zone

TBX	Breccia
TMY	Mylonite
TSZ	Shear Zone

GRANITOIDS (prefix G)	
G	Undifferentiated granitoids
GDI	granodiorite
GT	tonalite
GS	syenite
GM	monzonite
GP	pegmatite
GD	diorite / quartz diorite
GR	Granite
GDI	granodiorite

FELSIC VOLCANICS (prefix F)	
F	Undifferentiated felsic volcanics
FD	Dacite
FP	Felsic porphyry
FR	Rhyolite
FRD	Rhyodacite
FT	Felsic Tuff
FTI	Ibnimbrite
FS	Volcaniclastic

INTERMEDIATE VOLCANICS (prefix I)	
I	undifferentiated intermediate volcanics
IA	andesite
IL	latite
IT	trachyte
IV	intermediate tuff

MAFICS (prefix M)	
M	Undifferentiated mafics
MB	Basalt
MD	Dolerite
MG	Gabbro

## WESTGOLD RESOURCES LOGGING CODES

MN	Norite
MA	Anorthosite

ULTRAMAFICS (prefix U)	
U	undifferentiated ultramafics
UPD	Peridotite
UPX	Peroxenite
UD	Dunite
US	Serpentinite
UK	Komatiite

OTHER	
A	Intensely altered rock
ADOL	Altered Dolomite
AGW	Altered Greywacke
AS	Altered Metasediment
AX	Massive sulphide
AJAS	Jasperoid
V	Massive Vein
ZS	Unaltered Metasediment

### Structural Recordings

\_ Codes used for the description of structures in drill core

Structural Code	
ALT	Alteration Contact
AX	Mineralised Vein; sulphides vein
ZAX	Shear hosted mineralisation
CN	Contact
CTI	Contact – Intrusive
PCN	Contact – Primary
F1	Foliation – Primary
S1	Schistosity – Primary
LLS	Lineation – Slickenside

LL	Lineations
ME	Mineral Elongation
TT	Fault
VN	Vein - General
VE	Vein - Extensional
VG	Vein - Vughy
VS1	Vein – Narrow shear vein

### **Lith Unit Codes**

Lith Unit Codes	
WISO	Wisio Cover Sequence
WALT	Weak CL Alt
MALT	Moderate CL Alt
SALT	Strong CL Alt
ZA	Zone A Ironstone
ZB	Zone B Ironstone
ZC	Zone C Ironstone
SHEAR	Shear Zone
FAULT	Fault Zone
VEIN	Vein
SILL	Sill (Felsic Intrusion)
LAM	Laminated Shale
OXS	Oxidised Shale

ZA: Massive MG dominant ironstone >80%

ZB: MG dominant Ironstone with strong Sulphides

ZC: MG / HE ironstone with strong quartz and / or carbonates including jaspers and BIF's

**WESTGOLD RESOURCES**  
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**MINERALS AND MINERALISATION**

**LITHOLOGICAL MIN QUALIFIERS**

AB	Albite
AC	Actinolite
AK	Ankerite
AX	Amphiboles General
BI	Biotite
CA	Calcite
CB	Carbonates General
CL	Chlorite
DO	Dolomite
EP	Epidote
FD	Feldspar
FL	Fluorite
FU	Fuchsite
HB	Hornblende
HE	Haematite
IM	Ilmenite
JS	Jasper
LITH	Unclassified Lithic Fragments
LIMF	Mafic Lithic Fragments
LIFL	Felsic Lithic Fragments
LIIM	Intermediate Lithic Fragments
LISD	Sedimentary Lithic Fragments
LIUM	Ultramafic Lithic Fragments
KF	Kfeldspar
MA	Magnesite
MG	Magnetite
MU	Muscovite
PG	Plagioclase
QZ	Quartz
SD	Siderite
SK	Silica
SR	Sericite
TA	Talc
TO	Tourmaline

**MINERALISATION ASSEMBLAGE**

AR	Argenite
AS	Arsenopyrite
AU	Gold
AZ	Azurite
BO	Bornite
BS	Bismuth
CE	Chalcocite
CI	Cuprite
CK	Chysocolla
CN	Cinnabar
CP	Chalcopyrite
CR	Chromite
CT	Cassiterite
CU	Native Copper
CV	Covellite
EN	Enargite
GN	Galena
HE	Haematite
HS	Haematite (Specularite)
IM	Ilmenite
MC	Malachite
MG	Magnetite
MM	Manganese
MO	Molybdenite
MR	Marcasite
PN	Pentlandite
PO	Pyrrhotite
PY	Pyrite
RU	Rutile
SB	Stibnite
SH	Scheelite
SP	Sphalerite
SU	Unclassified sulphides
TL	Tellurides
WO	Wolframite

**MINERALISATION OCCURRENCE**

AH	Anhedral crystals
AHC	Anhedral crystals Coarse grained
AHF	Anhedral crystals Fine grained
AN	Anastomosing
BB	Blebs
BD	Bedded
BI	Breccia infillings
BN	Banded
BT	Botryoidal
BW	Boxwork
CC	Concretionary
CD	Crowded
DS	Disseminated
EN	Encrustations/Coatings
EU	Euhedral Crystals
EUC	Euhedral Crystals Coarse grained
EUH	Euhedral Crystals Fine grained
FM	Films along foliations and shears
IG	Intergranular
IN	Interstitial
IS	Pressure shadow infills
LB	Lensoidal banded
LM	Laminations/laminated
LN	Lenticular
ND	Nodules/Nodular
RR	Selective replacement
SO	Spots
TM	Streaks/Smears
VH	Vein Halo
VI	In vein selvages and scattered throughout the matrix
ZS	Within Shears

**MINERALISATION INTENSITY (%)**

Use 0.1 to denote trace amount, 1-100 for any other amount.



## WESTGOLD RESOURCES LOGGING CODES

### ALTERATION

#### ALTERATION MIN ASSEMBLAGE

Choose up to 5 minerals in order of abundance

AB	Albite
AC	Actinolite
AK	Ankerite
AR	Argenite
AS	Arsenopyrite
AU	Gold
AX	Amphiboles General
AZ	Azurite
BI	Biotite
BO	Bornite
BS	Bismuth
CA	Calcite
CB	Carbonate
CI	Cuprite
CK	Chrysocolla
CL	Chlorite
CN	Cinnabar
CO	Chalcocite
CP	Chalcopyrite
CR	Chromite
CT	Cassiterite
CU	Native Copper
CV	Covellite
DO	Dolomite
EN	Enargite
EP	Epidote
FD	Feldspar General
FL	Fluorite
FU	Fuchsite
GN	Galena
GA	Garnet
HB	Hornblende

HE	Haematite
HS	Haematite Specularite
IM	Ilmenite
KF	K-feldspar
LE	Leucoxene
MA	Magnesite
MC	Malachite
MG	Magnetite
MM	Manganese
MO	Molybdenite
MR	Marcasite
MU	Muscovite
PG	Plagioclase
PN	Pentlandite
PO	Pyrrhotite
PY	Pyrite
QZ	Quartz
RU	Rutile
SB	Stibnite
SD	Siderite
SH	Scheelite
SK	Silica
SP	Sphalerite
SR	Sericite
SU	Suphides General
TA	Talc
TO	Tourmaline
TL	Tellurides
WO	Wolframite

### ALTERATION OCCURRENCE

BB	Blebs
DS	Disseminated
FM	Films along foliations and shears
HA	Halos
IG	Intergranular
IN	Interstitial
MT	Mottling
PV	Pervasive
PY	Patchy
RE	Replacement
RR	Selective replacement
SO	Spots
VH	Vein Halo
VI	In vein selvages and scattered through the matrix
VV	Vein selvage
ZS	Within Shears

### ALTERATION INTENSITY

CODE	DEFINITION
W	Weak alteration – original texture well preserved
M	Moderate alteration – partial destruction of fabric/texture
S	Strong alteration – destruction of fabric/texture. Original rock type still identifiable.
I	Intense alteration complete destruction of fabric/texture. Original rock type unidentifiable.