

| Drill Type |   |
|------------|---|
| AC         | Air Core                                    |
| NQ         | NQ Diamond core                             |
| HQ         | HQ Diamond core                             |
| PQ         | PQ diamond core                             |
| RAB        | RAB (open hole air percussion drilling)     |
| RC         | Reverse Circulation air percussion drilling |
| MUD        | Rotary Mud                                  |

| Unit |  |
|------|--|
| AB   | Arunta Block   |
| APV  | Antrim Plateau Volcanics                                       |
| BSF  | Bitter Springs Formation - Amadeus Basin                       |
| CTS  | Cretaceous   |
| FSG  | Flynn Sub-Group  |
| HCG  | Hatches Creek Group  |
| HFM  | Hayfield Mudstone  |
| HQ   | Heavitree Quartzite - Amadeus Basin                            |
| JSS  | Jamison Sandstone (upper Roper Group, unconformable above KYM) |
| KYM  | Kyalla Member of Roper Group McMinn Formation                  |
| MSM  | Moroak Sandstone Member of Roper Group McMinn Formation        |
| PG   | Proterozoic Granites   |
| SIM  | Sherwin Ironstone Member - Roper Group                         |
| TLS  | Tindal Limestone (or equivalent Top Springs Limestone)         |
| TT   | Tertiary laterite (?)  |
| UND  | Undecided  |
| VEL  | Velkerri Formation   |
| WB   | Wiso Basin   |
| WF   | Warramunga Formation   |
| TC   | Tertiary Cover   |

| Lithology |   |
|-----------|---|
| ALG       | Algal silt/very fine grained rock with algal laminations                            |
| ALV       | alluvium  |
| AMP       | amphibolite (Meta-marl/dololutite (lime-rich-mud) to form para-amphibolite - may be |
| ANDTF     | andesitic tuff  |
| APL       | aplite (fine-grained light-colored granitic rock of orthoclase-quartz)              |
| ARG       | argillite (transitional shale to slate)   |
| ARK       | arkose (feldspar-rich sandstones )  |
| ARN       | arenite (0.06–2mm sand)   |
| BAS       | Basalt  |
| BIF       | banded iron formation   |
| BSH       | black shale   |
| BX        | breccia   |
| CAL       | Calcrete  |
| CAV       | cavity  |
| CBR       | carbonate rock  |
| CH        | chlorite  |
| CHT       | chert   |
| CLC       | chalcedony  |
| CNG       | conglomerate  |
| COL       | colluvium   |
| CSR       | calc-silicate rock  |

|       |  |
|-------|--|
| CY    | clay   |
| DLS   | dolomitic shale (dololutite)   |
| DLT   | dolerite   |
| DOL   | dolomite   |
| DRT   | diorite  |
| FES   | ironstone  |
| FEST  | Strongly ferruginous sandstone (i.e. Secondary mobilisation of iron oxide into pore space    |
| FPY   | feldspar porphyry  |
| FRCT  | ferricrete   |
| FRK   | felsic rock  |
| FVL   | felsic volcanic  |
| GAB   | gabbro   |
| GNS   | gneiss   |
| GOS   | gossan   |
| GPT   | graphitic  |
| GRD   | granodiorite   |
| GRT   | granite  |
| GVL   | gravel   |
| GWK   | greywacke (coarse-angular sandstone)   |
| HEMOO | Oolite; this code used in mapping but not in core logging (as of 28 Oct09); hematite oolite; |
| JAS   | Jasper   |
| KAO   | kaolinite (Weathered feldspars clay)   |
| LAM   | lamprophyre  |
| LAT   | laterite   |
| LMT   | limestone  |
| MAG   | magnesite  |
| MBL   | marble   |
| MBX   | matrix supported breccia   |
| MQZ   | massive quartz   |
| MRK   | mafic rock   |
| MSD   | metasediment   |
| MST   | mudstone   |
| MSU   | massive sulphide   |
| MVL   | mafic volcanic   |
| MYL   | mylonite (Fine-grained, formed by grinding during intense folding or faulting, cataclastic   |
| NC    | no code  |
| NR    | No recovery  |
| OO    | Oolite; typically hematite oolite but can be silicified or of mixed ooid composition; during |
| ORG   | organic  |
| OSH   | Oolitic shale  |
| OST   | Oolitic sandstone; a detrital quartz sandstone with generally <5 % ooids as ooid trains or a |
| PEG   | pegmatite  |
| PHL   | phyllite   |
| PHY   | porphyry   |
| PIS   | pisolite   |
| QBX   | quartz breccia   |
| QMON  | quartz monzonite   |
| QSY   | quartz syenite   |
| QVN   | quartz vein  |
| QZT   | quartzite  |
| RES   | residual   |
| RHDC  | rhyodacite   |

|        |  |
|--------|--|
| RHT    | rhyolite   |
| RHTF   | rhyolitic tuff   |
| SCH    | schist   |
| SER    | sericitic  |
| SH     | shale  |
| SIDOO  | Siderite oolite; this rock is essentially a siderite carbonate, yellow to red in colour, typically |
| SIDSOO | Strongly sideritic sandy oolite; pale green or yellow-grey rock with abundant/pervasive fine       |
| SL     | slate  |
| SLT    | siltstone  |
| SND    | sand   |
| SOL    | soil   |
| SOO    | Sandy oolite (oolite with 10->25% detrital quartz grains; black or red rock with abundant          |
| SST    | sandstone  |
| SYN    | syenite  |
| TRN    | transported  |
| TSC    | talc schist  |
| TUF    | tuff   |
| UND    | undifferentiated   |
| VBX    | volcanic breccia   |
| VCC    | volcaniclastic   |
| VOL    | volcanic   |

#### Oxidation

|    |                      |
|----|----------------------|
| VH | very highly oxidised |
| H  | highly oxidised      |
| M  | moderately oxidised  |
| W  | slightly oxidised    |
| FR | fresh                |

#### Colour Intensity

|    |        |
|----|--------|
| BT | bright |
| PL | pale   |
| LT | light  |
| MD | medium |
| DK | dark   |

#### Colour

|    |            |
|----|------------|
| BK | black      |
| BL | blue       |
| BR | brown      |
| BU | BUFF       |
| CR | cream      |
| GR | green      |
| GY | gray       |
| IR | iridescent |
| KH | khaki      |
| MA | Maroon     |
| OL | olive      |
| OR | orange     |
| PI | pink       |
| PU | purple     |
| RD | red        |

|    |        |
|----|--------|
| VI | violet |
| WH | white  |
| YE | yellow |

### Texture

|      |   |
|------|---|
| AM   | amorphous   |
| AMY  | amygdaloidal  |
| APH  | aphanitic (fine crystalline magmatic rock)              |
| APR  | aphyric   |
| BA   | banded  |
| BED  | bedded  |
| BLD  | bleached  |
| BOX  | boxwork   |
| BX   | brecciated  |
| CEM  | cemented  |
| CG   | coarse-grained  |
| CMT  | cemented  |
| CON  | conchoidal  |
| CX   | cryptocrystalline                                       |
| EQ   | equigranular  |
| FB   | flow banded   |
| FD   | folded  |
| FG   | fine-grained  |
| FMG  | Fine to medium grained                                  |
| FLT  | fault   |
| FO   | foliated  |
| FOB  | foliation parallel bedding                              |
| FRG  | fragmental  |
| GLY  | glassy  |
| GRP  | granophytic (intergrowth of quartz and alkali feldspar) |
| HBX  | hydrothermal brecciated                                 |
| IND  | indurated   |
| LAM  | laminated   |
| LEA  | leached   |
| MAG  | magnetic  |
| MAS  | massive   |
| MEG  | megacrystic   |
| MG   | medium grained  |
| MIG  | migmatitic  |
| MX   | microcrystalline  |
| NOD  | nodular   |
| PIS  | pisolitic   |
| POB  | porphyroblastic (large crystal of metamorphic origin)   |
| POR  | porphyritic   |
| PORS | porous  |
| PS   | pseudomorph   |
| RX   | recrystallised  |
| SAC  | saccharoidal  |
| SHR  | shear fabrics   |
| SHS  | schistose   |
| SIL  | siliceous   |
| SOF  | soft  |
| SPH  | spherulitic   |

|      |                             |
|------|-----------------------------|
| SPT  | spotted                     |
| SPX  | spinifex                    |
| STM  | stromatilitic               |
| TBD  | thick bedded                |
| UND  | undifferentiated            |
| VCC  | volcaniclastic texture      |
| VCG  | Very coarse grained         |
| VE   | vesicular                   |
| VFF  | very fine to fine grained   |
| VFG  | Very fine grained           |
| VFCG | Very fine to coarse grained |
| VI   | vitric                      |
| VN   | veined                      |
| VU   | vuggy                       |
| XEN  | xenolithic                  |

#### Structure Type

|     |                     |
|-----|---------------------|
| BED | bedding             |
| BOU | boudinaged          |
| BR  | broken              |
| BX  | brecciated          |
| CAT | cataclastic         |
| CLV | cleaved             |
| CR  | crenulated          |
| CRS | crushed             |
| DEF | deformed            |
| FD  | folded              |
| FLT | faulted             |
| FOM | moderately foliated |
| FOS | strongly foliated   |
| FOW | weakly foliated     |
| FR  | fractured           |
| HVN | hairline veins      |
| JO  | jointed             |
| LAM | Laminated           |
| LI  | lineated            |
| MAS | massive             |
| MY  | mylonitic           |
| SH  | sheared             |
| SHS | schistose           |
| SL  | slickensided        |
| STK | Stockwork veined    |
| STY | stylolitised        |
| SZ  | shear zone          |
| TEN | tension gashes      |
| VN  | Vein                |

#### Vein Type

|      |                   |
|------|-------------------|
| AP   | aplite veins      |
| BI   | biotite           |
| CA   | calcite vein fill |
| CABX | calcite breccia   |

|     |                     |
|-----|---------------------|
| CB  | carbonate           |
| CH  | chlorite            |
| CP  | chalcopyrite        |
| CS  | calcsilicate        |
| EP  | epidote             |
| FLD | feldspar            |
| GA  | galena              |
| GOE | goethite            |
| PEG | pegmatite veins     |
| QBI | quartz-biotite      |
| QBX | quartz breccia      |
| QCA | quartz-calcite      |
| QCS | quartz-calcsilicate |
| QH  | Quartz-hematite     |
| QKF | quartz-kfeldspar    |
| QPY | quartz-pyrite       |
| QSE | quartz-sericite     |
| QTZ | quartz              |
| SER | sericite vein       |
| SID | siderite            |
| STW | stockwork           |
| SU  | sulphide            |

#### Vein Style

|    |                  |
|----|------------------|
| BF | brittle fracture |
| BX | breccia          |
| CX | crackle breccia  |
| EX | extensional      |
| FL | along foliations |
| LM | laminated        |
| MA | massive          |
| PG | ptygmatic        |
| SG | sugary           |
| ST | stringers        |
| SW | stockwork        |
| VL | veinlets         |

#### Alteration Type

|     |                    |
|-----|--------------------|
| AB  | albitic            |
| ALU | alunitic           |
| AR  | argillic           |
| CAL | calcite            |
| CHL | chloritic          |
| CRB | carbonate          |
| CY  | clay               |
| EP  | epidotised         |
| GN  | garnet             |
| HEM | hematitic          |
| KAO | kaolinitic         |
| KFS | Potassium feldspar |
| LIM | limonitic          |
| MGT | magnetite          |

|     |               |
|-----|---------------|
| MIC | mica          |
| POT | potassic      |
| PR  | propylitic    |
| PY  | pyritic       |
| RR  | red rock      |
| SER | sericitic     |
| SIL | silicified    |
| SID | siderite      |
| SK  | skarn         |
| SRP | serpentинised |
| TM  | tremolitic    |
| UA  | unaltered     |
| UD  | undefined     |
| ZEO | zeolitic      |

#### Alteration Intensity

|        |           |
|--------|-----------|
| UA     | unaltered |
| W or 1 | weak      |
| M or 2 | moderate  |
| S or 3 | strong    |
| P or 4 | pervasive |

#### Mineralisation

|     |                            |
|-----|----------------------------|
| ANT | antimony                   |
| ASO | oxidised arsenopyrite      |
| ASP | arsenopyrite               |
| AU  | gold                       |
| AZ  | azurite                    |
| BN  | bornite                    |
| BRT | barite                     |
| CAS | cassiterite                |
| CC  | chalcocite                 |
| CHR | chromite                   |
| CIN | cinnabar                   |
| COP | copper (native)            |
| CPY | chalcopyrite               |
| CST | cerussite (Lead Carbonate) |
| CUO | oxidised Cu minerals       |
| CUP | cuprite                    |
| CV  | covellite (Copper Sulfide) |
| DG  | digenite (Copper Sulfide)  |
| FEO | iron oxide                 |
| GAL | galena                     |
| HEM | hematite                   |
| MAG | magnetite                  |
| MAL | malachite                  |
| MCS | marcasite                  |
| MGH | maghemite                  |
| MGS | magnesite                  |
| MLL | millerite (Nickel Sulfide) |
| MNO | manganese oxides           |

|     |   |
|-----|---|
| MOL | molybdenite                                       |
| OPQ | opaque mineral                                    |
| PBO | oxidised lead minerals                            |
| PIT | pitchblende                                       |
| PN  | pentlandite                                       |
| PO  | pyrrhotite  |
| PY  | pyrite  |
| PYO | oxidised pyrite                                   |
| RT  | rutile  |
| SCH | scheelite (Calcium Tungsten Oxide)                |
| SPC | specularite (hematite)                            |
| SPH | sphalerite  |
| STB | stibnite (Antimony Sulfide)                       |
| SUL | sulphide  |
| TEL | tellurides  |
| TNR | tenorite  |
| TNT | tenantite (Copper Arsenic Sulfide)                |
| TOR | tourmaline  |
| TRE | tremolite   |
| TTH | tetrahedrite (Copper Antimony Sulfide)            |
| TTL | tantalite (Iron Manganese Tantalum Niobium Oxide) |
| USC | uranium secondaries                               |
| VIO | violarite   |
| WFM | wolframite (Iron Manganese Tungsten Oxide)        |
| ZNO | oxidised Zn minerals                              |
| ZRN | zircon  |

#### Mineralisation Style

|     |  |
|-----|--|
| BB  | blebs, phenocrysts                             |
| BED | along bedding planes                           |
| BX  | breccia  |
| DIS | disseminated                                   |
| FL  | on foliations                                  |
| FR  | fracture                                       |
| MAS | massive  |
| MTX | mineralisation as matrix replacement or infill |
| PER | Pervasive                                      |
| SEC | secondary                                      |
| SH  | in shears                                      |
| ST  | stringers                                      |
| SW  | stockwork                                      |
| VN  | associated with veins                          |

#### Mineralisation Intensity

|          |             |
|----------|-------------|
| VW or TR | very weak   |
| W or 1   | weak        |
| M or 2   | moderate    |
| S or 3   | strong      |
| VS or 4  | very strong |

#### Sample Wetness

|   |     |
|---|-----|
| D | dry |
|---|-----|

|   |        |
|---|--------|
| M | moist  |
| S | sticky |
| W | wet    |
| L | liquid |

**Sample Hardness**

- |   |                                  |
|---|----------------------------------|
| 1 | soft                             |
| 2 | moderately soft to slightly hard |
| 3 | moderately hard                  |
| 4 | hard                             |