



Exploration Database Management System

Standard Logging Codes

For exclusive use by

Australasian Gold



Felsic, Intermediate, Mafic and Ultramafic Rocks

| Felsic | | | Intermediate | | | Mafic | | | Ultramafic | | |
|------------|------|-------------------|--------------|-------------------------|------|-----------------------|--------------------------|--------------------------|------------|--|--|
| VOLCANICS | F | Felsic | I | Intermediate | M | Mafic | U | Ultramafic | | | |
| | Fv | Volcanic Undiff. | Ipo | Porphyry | Mpo | Porphyry | Ua | Harzburgite | | | |
| | Fvd | Dacite | Iv | Volcanic Undiff. | Mv | Volcanic Undiff. | Ud | Dunite | | | |
| | Fvr | Rhyolite | Iva | Andesite | Mvb | Basalt | Uh | Hornblendite | | | |
| | Fvt | Rhyodacite | Ivl | Latite (Trachyandesite) | Mvm | High Magnesium Basalt | Uir | Chromite | | | |
| | FZa | Agglomerate | Ivn | Phonolite | Mvo | Tholeiitic Basalt | Uiu | Intrusive Undiff. | | | |
| | FZc | Volcaniclastic | Ivr | Tephrite | MZc | Volcaniclastic | Umc | Mesocumulate | | | |
| | FZe | Epiclastics | Ivt | Trachyte | MZe | Epiclastics | Umg | Mass.Magnetite/Ilmenite | | | |
| | FZi | Ignimbrite | IZc | Volcaniclastic | MZp | Pyroclastics | Uo | Orthopyroxenite | | | |
| | FZp | Pyroclastics | IZe | Epiclastics | MZt | Tuff | Uoc | Orthocumulate | | | |
| FZt | Tuff | IZp | Pyroclastics | | | Uok | Olivine-phyric Komatiite | | | | |
| | | IZt | Tuff | | | Upd | Peridotite | | | | |
| INTRUSIVES | Fiu | Intrusive Undiff. | Iiu | Intrusive Undiff. | Miu | Intrusive Undiff. | Upx | Pyroxenite | | | |
| | Fgl | Adamellite | Iia | Andesite (Intrusive) | Ma | Anorthosite | Ur | Lherzolite | | | |
| | Fa | Anorthosite | Id | Diorite | Md | Dolerite | Us | Serpentinised Undiff. | | | |
| | Fga | Aplite | Idq | Quartz Diorite | Mgq | Gabbro-Quartz | Usc | Adcumulate | | | |
| | Fgr | Granite Dyke | It | Trondhjemite | Mkb | Komatiitic Basalt | Usd | Serpentinised Dunite | | | |
| | Fg | Granitic Undiff. | Ipo | Intermediate Porphyry | Mn | Norite | Usp | Serpentinised Peridotite | | | |
| | Fgd | Granodiorite | | | Mdp | Porphyritic Dolerite | Usx | Serpentinised Pyroxinite | | | |
| | Fgy | Granophyre | | | Mt | Troctolite | Uv | Volcanic Undiff. | | | |
| | Fgm | Monzonite | | | | | Uvk | Komatiite | | | |
| | Fgp | Pegmatite | | | | | UZe | Epiclastics | | | |
| METAM. | Fpo | Porphyry | IXgn | Gneiss | MXam | Amphibolite | UZp | Pyroclastics | | | |
| | Fps | Syenite | IXhf | Hornfels | MXec | Eclogite | UZt | Tuffs | | | |
| | Fgt | Tonalite | IXmi | Migmatite | MXgn | Gneiss | UXgn | Gneiss | | | |
| | | | IXmy | Mylonite | MXhf | Hornfels | UXhf | Hornfels | | | |
| | | | IXsc | Schist | MXmi | Migmatite | UXmi | Migmatite | | | |
| ALT | FX | Altered Felsic | IX | Altered Intermediate | MXmy | Mylonite | UXmy | Mylonite | | | |
| | FXbx | Felsic Breccia | IXbx | Intermediate Breccia | MXsc | Schist | UXsc | Schist | | | |
| | | | | | MX | Altered Mafic | UX | Altered Ultramafic | | | |
| | | | | | MXbx | Mafic Breccia | UXbx | Ultramafic Breccia | | | |



Sedimentary and Tectonic Rocks

Transported

| | | |
|-------------|---|---------------------------|
| TRANSPORTED | Oal | Alluvium |
| | Occ | Calcrete |
| | Ocl | Colluvium |
| | Ocr | Scree |
| | Ocy | Clay |
| | Oel | Eluvium |
| | Ofc | Ferricrete |
| | Ogo | Gossan |
| | Ogv | Gravel |
| | Ohp | Hardpan |
| | Olc | Lacustrine Clays |
| | Olt | Laterite |
| | Osd | Sand |
| | Osi | Silcrete |
| | Osl | Soil |
| VEIN | Vm1m2m3 | Vein +mineral codes |
| | NB. V populated in Lith 2 if greater than 20% | |
| OTHER | nsb | Backfilled stope |
| | nsc | Contamination |
| | nsi | Interval not logged |
| | nsd | No data |
| | nsv | No Sample - NAVI drilling |
| | nsr | No sample return |
| | nss | Stope |
| | nsw | Waste dump material |

Sedimentary

| | | |
|-------------|------|------------------|
| CLASTIC | S | Sediment Undiff. |
| | Sag | Argillite |
| | Sms | Mudstone |
| | Ssh | Shale |
| | Slr | Siltstone |
| | Sak | Arkose |
| | Sbx | Breccia |
| | Scg | Conglomerate |
| | Sgw | Greywacke |
| | Sgr | Grit |
| | Sps | Psammite |
| | Sst | Sandstone |
| | Stb | Turbidite |
| METAMORPHIC | Smc | Calc-silicates |
| | Spe | Pelite |
| | Ssp | Psammopelite |
| | Sqt | Quartzite |
| | SXma | Marble |
| | SXph | Phyllite, Slate |
| | SXbx | Altered Breccia |
| ALTERED | SXhf | Hornfels |
| | SXsc | Schist |
| | SXgn | Gneiss |
| | SXgr | Granulite |
| | SXmy | Mylonite |
| | SX | Altered Rock |

| | | |
|-----------|------|----------------------|
| CHEMICAL | Sct | Chert |
| | Sex | Exhalite |
| | Sja | Jaspilite |
| | Sif | Iron Formation (Sif) |
| | Sifc | Sif Carbonate |
| | Sifo | Sif Oxide Facies |
| | Sift | Sif Silicate Facies |
| | Sifp | Sif Sulphide Facies |
| CARBONATE | Scb | Carbonate Undiff. |
| | Sbo | Boundstone |
| | Sca | Calcarene |
| | Sdo | Dolomite |
| | Sgs | Grainstone |
| | Sls | Limestone |
| | Spk | Packstone |
| | Srd | Rudstone |
| OTHER | Sck | Chalk |
| | Sco | Coal |
| | Sdi | Diatomite |
| | Sva | Evaporite |
| | Slg | Lignite |
| | Spo | Phosphorite |
| | Sti | Tillite |
| | SZt | Tuffaceous Seds |
| | SZc | Volcaniclastic Seds |

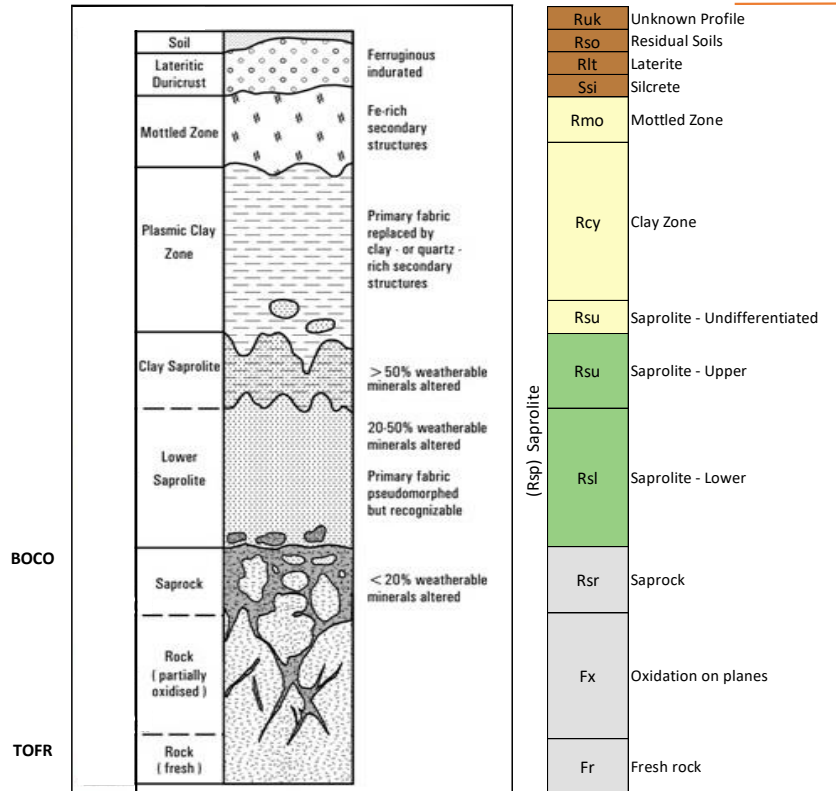
Tectonic/Altered Rocks

| | | |
|------------------|---------|-----------------------------|
| TECTONIC/ALTERED | X | Altered, Unknown |
| | Xbh | Hydrothermal Breccia |
| | Xcly | Altered, Clay |
| | Xkb | Karst Breccia |
| | Xmb | Brecciated Sulphides |
| | Xms | Massive Sulphide |
| | Xmss | Semi-Massive Sulphide |
| | Xbx | Breccia, Unknown |
| | Xgn | Gneiss, Unknown |
| | Xmy | Mylonite, Unknown |
| | Xpo | Porphyry, Unknown |
| | Xsc | Schist, Unknown |
| | XZt | Tuff, Unknown |
| | Xvc | Volcaniclastic, Unknown |
| | Xft | Fault Zone |
| | Xrz | Reaction/Contact Zone |
| | Xsk | Skarn Undiff. |
| | Xsz | Shear Zone |
| | Xslf | Undiff. Sulphides |
| | Xm1m2m3 | Altered + mineral codes |
| ALKALINE ROCKS | Ac | Carbonatite |
| | Ak | Kimberlite |
| | Akoe | Olivine Enriched-Kimberlite |
| | Akod | Olivine Depleted-Kimberlite |
| | Am | Lamproite |
| | Amoe | Olivine Enriched-Lamproite |
| | Amod | Olivine Depleted-Lamproite |



Regolith, Weathering, Colour and Grainsize

REGOLITH



OVERPRINT/QUALIFIERS

| OVERPRINT/QUALIFIERS | |
|----------------------|----------------|
| bl | bleached |
| cc | calcreted |
| cb | carbonate |
| fc | ferricreted |
| fe | ferruginous |
| gp | gypsiferous |
| le | leached |
| mg | magnesite rich |
| mn | manganiferous |
| mo | mottled |
| no | nontronitic |
| sc | silcreted |
| si | silicified |

COLOUR

| COLOUR | |
|--------|--------|
| bk | Black |
| bn | Brown |
| bu | Blue |
| cm | Cream |
| gn | Green |
| gy | Grey |
| or | Orange |
| pi | Pink |
| pu | Purple |
| rd | Red |
| wh | White |
| ye | Yellow |
| L | Light |
| D | Dark |

WEATHERING

| WEATHERING | | |
|------------|----------------------|--|
| wu | Weathering Unknown | Historical record where weathering noted |
| ew | Extremely weathered | Completely weathered. Exhibits soil like properties |
| hw | Highly weathered | Limonite staining or bleaching affects the whole of the rock & other signs of chemical or physical decomposition are evident. Colour & strength of original rock no longer |
| mw | Moderately weathered | Staining extends throughout whole of rock substance & the original colour of the fresh rock is no longer recognisable |
| ww | Weakly weathered | Partial staining of discolouration of the rock substance & usually by limonite. The colour & texture of the fresh rock is recognisable |
| fx | Fracture oxidation | Fracture oxidation in joints etc |
| fr | Fresh | Unaffected by weathering |

GRAINSIZE

| GRAINSIZE | (Qualifier)(gsize)(gsize) |
|-----------|-----------------------------|
| bd | Boulder (>256mm) |
| co | Cobbly (16-256mm) |
| pb | Pebbly (2-16mm) |
| vc | Very coarse grained (1-2mm) |
| cg | Coarse grained (0.5-1.0mm) |
| mg | Medium grained (0.25-0.5mm) |
| fg | Fine grained (0.06-0.25mm) |
| vf | Very fine grained (0.004mm) |



Minerals

| | | | | | | | | | |
|-----|---------------|-----|-----------------------|-----|-----------------------|-----|-------------------------|-----|-----------------------|
| act | actinolite | chy | chrysotile | hbd | hornblende | par | paragonite | ten | tennantite |
| adu | adularia | cly | clay | hem | hematite | pb2 | secondary lead minerals | tlc | talc |
| alb | albite | cov | covellite | ilm | ilmenite | pen | pentlandite | tml | tourmaline |
| all | allanite | cpx | clinopyroxene | jar | jarosite | phl | phlogopite | top | topaz |
| alm | almandine | cpy | chalcopyrite | jsp | jaspolite | plg | plagioclase | trm | tremolite |
| alp | allophane | crb | carbonate | kfp | k-feldspar | plt | platinum | tth | tetrahedrite |
| alu | alunite | crd | cordierite | kln | kaolin | pre | prehnite | vio | violarite |
| amp | amphibole | cry | cuprite | kyn | kyanite | pyl | pyrolusite | wlf | wolframite |
| and | andalusite | csl | cherty silica | lcx | leucoxene | pyo | pyrrhotite | wol | wollastonite |
| ang | antigorite | cu2 | secondary Cu minerals | lep | lepidolite | pyr | pyrite | zeo | zeolite |
| ank | ankerite | cum | cumingtonite | lim | limonite | pyx | pyroxene | zir | zircon |
| ant | anthophyllite | dol | dolomite | liz | lizardite | qtz | quartz | zn2 | secondary Zn minerals |
| any | anhydrite | dps | diopside | mal | malachite | rdc | rhodochrosite | | |
| apt | apatite | ens | enstatite | mar | marcasite | rut | rutile | | |
| apy | arsenopyrite | epd | epidote | mcl | microcline | sau | saussurite | | |
| ara | aragonite | fer | ferric iron oxides | mgh | maghemite | sch | scheelite | | |
| asb | asbestos | flt | fluorite | mgs | magnesite | ser | sericite | | |
| azu | azurite | for | forsterite | mic | mica | sid | siderite | | |
| bar | barite | fpr | feldspar | mng | manganese | sil | silica | | |
| bio | biotite | fuc | fuchsite | mnt | magnetite | slf | sulphides | | |
| bis | bismuthinite | gar | garnierite | mnz | monazite | slm | siliminite | | |
| bor | bornite | gib | gibbsite | mol | molybdenite | sme | smectite | | |
| cal | calcite | gld | gold | mus | muscovite | smt | smithsonite | | |
| cas | cassiterite | gln | galena | ni2 | secondary Ni minerals | spd | spodumene | | |
| cbn | carbon | gnt | garnet | nic | niccolite | sph | sphene | | |
| cct | chalcocite | goe | geothite | non | nontronite | spl | sphalerite | | |
| cer | cerussite | grp | graphite | olv | olivine | srp | serpentine | | |
| cha | chalcedony | gru | grunerite | ops | opaline silica | sta | staurolite | | |
| chl | chlorite | gyp | gypsum | opx | orthopyroxene | stb | stibnite | | |
| chr | chromite | hal | halite | otc | orthoclase | tel | telurides | | |



Textures

| | | | | | | | | | | | |
|-----|--------------------|-----|-------------------------|-----|-------------------|-----|-----------------|-----|---------------------|-----|-------------------|
| a1 | grained randox | cyc | cyclic | ign | ignimbritic | oph | ophitic | san | sandy | vtp | vitrophyric |
| a2 | randox spinifex | dec | decussate | imb | imbricate | opl | opaline | sch | schistose | vug | vuggy |
| a3 | (olivine) | dif | differentiated | ind | indurated | org | organic | sco | scoriacious | wld | welded |
| acc | accretionary | dir | doleritic | inq | inequigranular | p1 | beef) spinifex | sel | selvage | wsa | well sorted |
| aci | acicular | dis | disseminated | jnt | on joints | pbd | parallel bedded | sha | shard | xbd | crosbedded |
| adc | adcumulate | dol | doleritic | jsw | jig saw | pct | polymictic | shd | subhedral | xen | xenoblastic |
| aft | ash fall tuff | dsr | disrupted | kno | knotty | peb | pebbly | skw | Stock-worked | xlm | cross laminations |
| agg | agglomeratic | ear | earthy | kst | karst | peg | pegmatitic | sla | slaty | zon | zoned |
| alg | algal | equ | equigranular | lam | laminated | pep | peperitic | slt | silty | | |
| amo | amorphous | fdf | fining downward bedding | lap | lapilli | per | Pervasive | sor | sorted | | |
| amy | amygdaloidal | fib | fibrous | lat | lateritic | pha | phaneritic | spt | spotty | | |
| ana | anastomosing | fis | fissile | lay | layered | pil | pillowed | spu | spherulitic | | |
| ang | angular | flb | flow banded | len | lenticular | pis | pisolitic | spx | spinifex | | |
| anh | anhedral | flg | flaggy | lit | lithic | pit | pitted | srd | subrounded | | |
| apc | aphyric | fln | flinty | lms | lensoidal | pla | plastic | str | stratiform | | |
| aph | aphanitic | flu | fluidised | lpd | lepidoblastic | pob | porphyroblastic | stt | striated | | |
| asb | asbestiform | for | foraminiferal | mam | mamillary | poi | poikiloblastic | sty | stylitic | | |
| aug | augen | fos | fossiliferous | mas | massive | pol | poorly sorted | sug | sugary | | |
| bed | bedded | frc | fracture | mbd | medium bedded | por | porphyritic | tbd | thinly bedded | | |
| blb | blebby | frg | fragmental | mct | mesocumulate | prc | porcelaneous | thd | thickly bedded | | |
| bld | bladed | fri | friable | mgc | megacrystic | prs | porous | tra | trachytic | | |
| blk | blocky | fto | flow top breccia | mia | miarolitic | ptc | perthitic | tuf | tuffaceous | | |
| bnd | banded | fub | fining upward bedding | mig | migmatic | pty | ptygmatic | tur | turbiditic | | |
| bou | boudinaged | gdb | graded-bedded | mon | monomictic | pug | puggy | txb | bedding | | |
| btb | bioturbated | glc | glassy | mos | mosaic | pum | pumiceous | txl | laminations | | |
| buc | bucky | gns | gneissic | mot | mottled | pyr | pyritic | uns | unsorted | | |
| bxx | brecciated | gos | gossanous | mph | multiphase | qch | quenched | uxb | bedding | | |
| cem | cemented/concreted | grb | granoblastic | mso | moderately sorted | rad | radiate | uxl | laminations | | |
| cgl | conglomeritic | grn | granitic | mtx | matrix | rcm | recemented | ves | vesicular | | |
| cla | clastic | grp | granophyric | mud | muddy | rcx | recrystallised | vfl | laminated | | |
| clm | columnar | grs | greasy | mxl | microcrystalline | ref | reefal | vit | vitric | | |
| cly | clay | grv | gravelly | mxs | matrix supported | rel | relict | vkb | very thickly bedded | | |
| cma | chill margin | hpm | hypidiomorphic | myr | myrmekitic | ren | reniform | vlc | contact | | |
| col | colloformed | hxt | holocrystalline | nod | nodular | rib | ribbon | vlt | veinlets | | |
| crs | cross-cutting | hyl | hyaloclastic | oce | ocellar | rip | rippled | vnd | veined | | |
| crt | crustiform | hyx | hypocrystalline | oct | orthocumulate | rnd | rounded | voi | voided | | |
| cry | crystalline | ibd | interbedded | oli | oligomictic | sac | sacharoidal | vol | volcanic | | |
| cum | cumulate | idi | idiomorphic | ool | oolitic | sag | subangular | vth | very thinly bedded | | |

Alteration

Veining

| | | |
|------|---|--------------|
| ZONE | D | Distal |
| | I | Intermediate |
| | P | Proximal |

| | |
|-----|-----------------------|
| apy | arsenopyrite |
| azu | azurite |
| bis | bismuthinite |
| bor | bornite |
| cct | chalcocite |
| cpy | chalcopyrite |
| cov | covellite |
| xlf | ex-sulphides |
| fer | ferric iron oxides |
| gln | galena |
| gld | gold |
| mnt | magnetite |
| mar | marcasite |
| mil | millerite |
| mol | molybdenite |
| nic | niccolite |
| pen | pentlandite |
| pyr | pyrite |
| pyo | pyrrhotite |
| cu2 | secondary Cu minerals |
| pb2 | secondary Pb minerals |
| ni2 | secondary Ni minerals |
| zn2 | secondary Zn minerals |
| spl | sphalerite |
| stb | stibnite |
| slf | sulphides |
| tel | telurides |
| ten | tennantite |
| tth | tetrahedrite |
| vio | violarite |

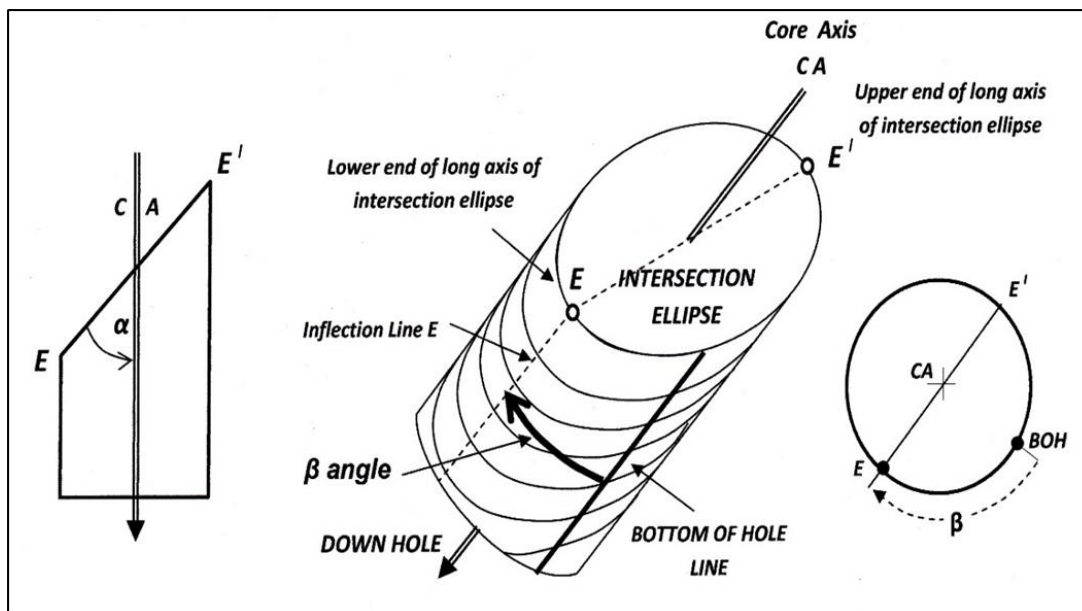
| | | |
|---------------------------|--------------------------|------------------------|
| ALTERATION/SULPHIDE STYLE | aci | Acicular |
| | bnd | Banded |
| | bed | Bedded |
| | blb | Blebbly |
| | box | Boxworked |
| | bxx | Breccia matrix |
| | cry | Crystalline |
| | dis | Disseminated |
| | frc | Fracture |
| | gos | Gossan |
| | grd | Gradational |
| | jnt | Joints |
| | mas | Massive |
| | mot | Mottled |
| | onf | Folding associated |
| | pat | Patchy |
| | per | Pervasive |
| | pef | Pervasive on fractures |
| | pit | Pitted |
| | rcx | Recrystallised |
| sel | Selvage | |
| sma | Semi-Massive(15-70% vol) | |
| stk | Stockwork | |
| str | Stringers | |
| sty | Styolitic | |
| vnd | Veined | |
| vlt | Veinlets | |
| vug | Vuggy | |

| | | |
|---------|---------|---------------|
| PERCENT | 0.1 | Trace |
| | 0.5 | Minor |
| | 1-10% | 1% Increments |
| | 10-100% | 5% Increments |



Geotech / Structural Logging

| Structure | | | Orientation | | | Geotech | | | | | |
|-----------|------------------------|-----------------------------|--------------------|------------|-------------------------|------------|--------------------|----------------------------|-------------|------------|--------------------------------|
| FOLIATION | C | Contact | LINEATION | L | Lineation Unspecified | CONFIDENCE | Bed | Low - using bedding to ori | ORIGIN | Ind | Drilling induced |
| | S | Foliation Unspecified | | Lb | Boudin | | Failed | No ori line possible | | Nat | Pre-drilling fracture |
| | S0 | Bedding | | Lc | Crenulation lineation | | High | High Confidence | | Par | Fracture partially across core |
| | S1 | Foliation 1st deformation | | Lf | Fold Axis - unspecified | | Mod | Moderate Confidence | | Trc | Trace of feature |
| | S2 | Foliation 2st deformation | | Lfa | Fold Axis - Antiform | | Low | Low Confidence | | Unk | Uncertain if drilling induced |
| | S3 | Foliation 3st deformation | | Lfs | Fold Axis - Synform | Projected | Projected Ori Line | | | | |
| | S4 | Foliation 4st deformation | | Li | Intersection | Unknown | Unknown | | | | |
| | Sa | Axial plane unspecified | | Lm | Mineral Lineation | | | | | | |
| | Sa1 | Axial plane 1st deformation | | Lr | Rod | | | | | | |
| | Sa2 | Axial plane 2st deformation | | Ls | Slickenside | | | | | | |
| | Sa3 | Axial plane 3st deformation | Lt | Stretching | | | | | | | |
| | Sa4 | Axial plane 4st deformation | Lu | Mullion | | | | | | | |
| | Sb | Banding | FAULT/ FRACTURE | F | Fracture Unspecified | ORITYPE | ACT | ACT Digital Tool | DEFECT FORM | C | Curved |
| | Sc | Crenulation | | Fj | Joint | | Ballmark | Ballmark Tool | | I | Irregular |
| | Sd | Deformation | | Fr | Fracture | | CoreStub | Core Stub Template Tool | | P | Planar |
| | Sf | Flow | | Ft | Fault | | Reflex | Reflex Tool | | S | Stepped |
| Sp | Pillow | | | | Spear | | Spear Tool | U | | Undulating | |
| Sv | Cleavage - Unspecified | | | | TruCore | TruCore | | | | | |
| Svp | Cleavage - Spaced | | | Unknown | Unknown | | | | | | |
| Svs | Slaty Cleavage | | | | | TEXTURE | Ro | Rough | | | |
| Sz | Shear | | | | | | Sl | Slickensided | | | |
| | | | | | | | Sm | Smooth | | | |
| VEINING | V | Vein | | | LINE | TOH | Top of Hole | | | | |
| | Vbu | Bucky Vein | | | | BOH | Bottom of Hole | | | | |
| | Vbx | Breccia Vein | | | CONV. | TOP | Top of feature | | | | |
| | Vca | Cockade Vein | | | | MID | Middle of feature | | | | |
| | Vcf | Colloform Vein | | | | BASE | Bottom of feature | | | | |
| | Vcs | Crackseal Vein | | | | | | | | | |
| | Vfb | Fibrous Vein | | | | | | | | | |
| | Vlm | Laminated Vein | | | | | | | | | |
| | Vsw | Stockwork Vein | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |





Logging

| | | |
|----------|----|-----------------------|
| HARDNESS | R0 | Extremely weak rock |
| | R1 | Very weak rock |
| | R2 | Weak rock |
| | R3 | Medium strong rock |
| | R4 | Strong rock |
| | R5 | Very strong rock |
| | R6 | Extremely strong rock |
| | S1 | Very soft clay |
| | S2 | Soft clay |
| | S3 | Firm clay |
| | S4 | Stiff clay |
| | S5 | Very stiff clay |
| | S6 | Hard clay |

Indented by thumbnail

Crumbles under firm blows with point of geological hammer, can be peeled by a pocket knife

Can be peeled by a pocket knife with difficulty, shallow indentations made by firm blow with point of geological hammer

Cannot be scraped or peeled with a pocket knife, specimen can be fractured with a single firm blow of geological hammer

Specimen requires more than one blow of geological hammer to fracture it

Specimen requires many blows of geological hammer to fracture it

Specimen can only be chipped with geological hammer

Easily penetrated several inches by fist

Easily penetrated several inches by thumb

Can be penetrated several inches by thumb with moderate effort

Readily indented by thumb but penetrated only with great effort

Readily indented by thumbnail

Indented with difficulty by thumbnail

| | | |
|----------|------|---------------------|
| COHESION | HL5 | Hard Infill <5mm |
| | HG5 | Hard Infill > 5mm |
| | SL5 | Soft Infilling <5mm |
| | SH5 | Soft Infill >5mm |
| | None | None |

| | | |
|-------------------------|-----|--------------------------|
| JOINT ROUGHNESS (Jr) | 0.5 | Slickensides, planar |
| | 1 | Smooth, planar |
| | 1.5 | Slickensides, undulating |
| | 2 | Smooth, undulating |
| | 3 | Rough, undulating |
| | 4 | Discontinuous |

| | | |
|------------------|----------|---------------------------------|
| JOINT WATER (Jw) | 1 | Dry or minor inflow |
| | 0.66 | Medium inflow |
| | 0.5 | Jet inflow, unfilled joints |
| | 0.33 | Large inflow, outwash of joints |
| | 0.2-0.1 | High inflow |
| | 0.1-0.05 | High inflow, no decay |

| | | |
|-----------------------|-----|--------------------------------|
| JOINT SET NUMBER (Jn) | 0.5 | Massive |
| | 1 | A few joints |
| | 2 | 1 joint set |
| | 3 | 1 joint set plus random joints |
| | 4 | 2 joint sets |
| | 6 | 2 joint set plus random joints |
| | 9 | 3 joint sets |
| | 12 | 3 joint set plus random joints |
| | 15 | 4 or more joint sets |
| | 20 | Crushed rock, earth like |

| | | |
|--------------------------|------|--|
| JOINT ALTERATION (Ja) | 0.75 | Healed |
| | 1 | Unaltered |
| | 2 | Slightly Altered |
| | 3 | Silty or Sandy coatings, small clay fraction |
| | 4 | Clay coatings |
| | 6 | Consolidated |
| | 8-12 | Clay filling |

| | | |
|-----|-----|---|
| SRF | 10 | Many weak zones contain clay, very loose surrounding rock |
| | 7.5 | Shear in competent clay-free rock loose surrounding rock |
| | 5 | Loose, open joints, heavily jointed |
| | 2.5 | Single weak zones |
| | 1 | Medium stress |



Drilling and Sampling

Prospect Code

| | |
|----------|--|
| PROJECT | |
| | |
| | |
| PROSPECT | |
| | |
| | |

Site Catagories

| | | |
|------|----|----------------|
| TYPE | PT | Surface Sample |
| | DH | Drill Hole |
| | TR | Trench |
| | | |

Surface Sampling

| | | |
|---------------|-----|------------------------------|
| SITE SUB-TYPE | BL | Bleg Sample |
| | DP | Dump Sample |
| | DS | Drill Spoil - Depth Unknown |
| | FL | Float Sample |
| | GP | Geological Point of Interest |
| | LAG | Lag Sample |
| | PS | Pisolite |
| | RIP | Grade control - dozer Rip |
| | RK | Rockchip |
| | SD | Sludge |
| | SH | Shaft |
| | SL | Soil |
| | SS | Stream Sediment |
| | TR | Trench Sample |
| | UF | Ultra Fine Sample |
| | UNK | Unknown |
| | VG | Vegetation Sample |

Drilling

| | | |
|--|-----|--------------------------|
| | AC | Air Core Hole |
| | AG | Auger Hole |
| | BH | Blast Hole |
| | DD | Diamond Hole |
| | GC | RC Grade Control |
| | RAB | Rotary Air Blast Hole |
| | RC | Reverse Circulation Hole |
| | UDD | Under ground diamond |

Drill Specifications

| | | |
|-----------|---|-----------------|
| SHIFT | D | Day |
| | N | Night |
| WORK TYPE | B | Breakdown |
| | C | Clean out |
| | M | Mobilisation |
| | N | Normal drilling |
| | R | Reaming |

Diamond (DD)

| | | |
|------------|---------|--------------|
| DRILL TYPE | DD_Unkn | DD - Unknown |
| | HQ | DD - 63.5mm |
| | HQ3 | DD - 61.1mm |
| | NQ | DD - NQ |
| | NQ2 | DD - 47.6mm |
| | NQ3 | DD - 45.0mm |
| | PQ2 | DD - 85mm |
| | PQ3 | DD - 83.1mm |

Reverse Circulation (RC)

| | | |
|------------|---------|--------------|
| DRILL TYPE | RC_Unkn | RC - Unknown |
| | RC4_25 | RC 4.25" |
| | RC4_5 | RC 4.5" |
| | RC5 | RC 5" |
| | RC5_25 | RC 5.25" |
| | RC5_5 | RC 5.5" |
| | RC6 | RC 6" |
| | RC6_25 | RC 6.25" |
| | RC6_5 | RC 6.5" |

Other

| | | |
|------------|---------|----------------------|
| DRILL TYPE | AC100 | AC - 100mm |
| | AC85 | AC - 85mm |
| | AC_Unkn | AC - Unknown |
| | AG | Auger |
| | MR | Mud Rotary |
| | OH | Open Hole Percussion |
| | RAB | RAB |
| | Unknown | Unknown |

Collar Survey

| | | |
|-----------------|----|---------------------------|
| LOCATION METHOD | CL | Clino |
| | CT | Compass and Tape |
| | DG | Differential GPS |
| | GP | GPS Located |
| | LG | Local Grid |
| | MP | Scaled off map, estimated |
| | RP | Relative position |
| | SU | Surveyed but unknown type |
| | TH | Theodilite |
| | TO | Total Station |
| | UK | Unknown |

Downhole Survey

| | | |
|------------------------|----|-------------------------|
| DOWNHOLE SURVEY METHOD | CO | Measured from Rig Setup |
| | FX | Flexit Tool |
| | GY | Down Hole Gyro |
| | MS | Multi Shot |
| | MX | Maxi-bore Tool |
| | SS | Single Shot |
| | UK | Unknown |

Sampling

| | | |
|----------------|-------|--------------------|
| STANDARD | Blank | Blank Sample |
| | TBA | To Be Advised |
| | | |
| SAMPLE QUALITY | lc | Low Contamination |
| | hc | High Contamination |
| | nc | No Contamination |
| | nr | No Recovery |
| WATER CONTENT | d | Dry |
| | m | Moist |
| | w | Wet |
| CASING TYPE | i | Injected |
| | HWT | HWT Steel Casing |
| | PVC | PVC |
| | Steel | Steel |

Sample Type

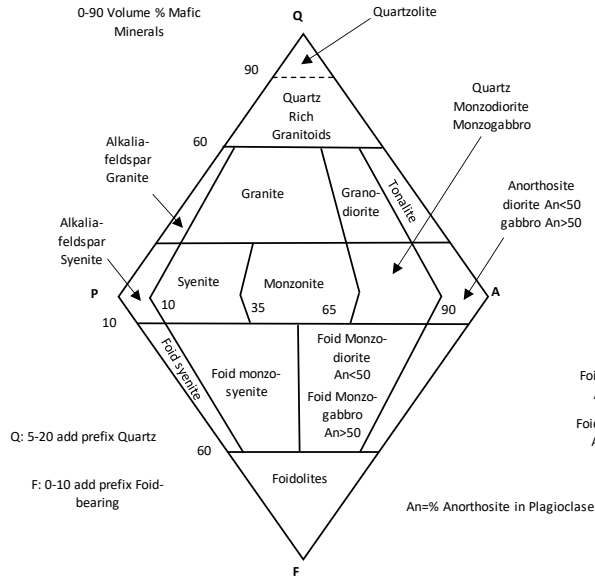
| | | |
|-------------|------|--------------------------------------|
| SAMPLE TYPE | Orig | Original sample, from that interval |
| | Chck | Check Sample |
| | Dupl | Duplicate Sample |
| | LDup | Lab Duplicate |
| | NS | Not Sampled |
| | NA | Sampled - not submitted for analysis |
| | Met | Metallurgy Sample |

Field Prep

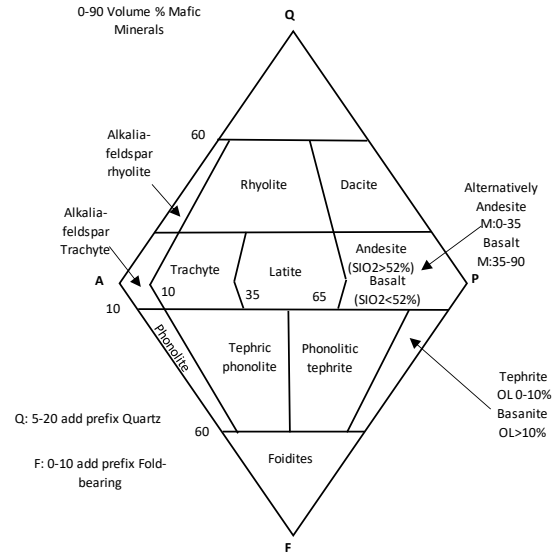
| | | |
|------------|------------|--|
| FIELD PREP | Bleg | Bleg Soil |
| | Float | Float Rockchip Sample |
| | Grab | Grab Sample |
| | LAG | Pisolite sample |
| | MagLag | magnetic lag sample |
| | MMI | Mobile Metal Ions Soil Sample |
| | Rockchip | Outcrop Sample |
| | Soil | Soil - Fraction Unknown |
| | Soil-2mm | Soil -2mm fraction |
| | SS | Stream Sediment |
| | Standard | Standard or Blank |
| | Unknown | Unknown |
| | DD_Full | Diamond Drilling - Full core sample |
| | DD_Half | DD - Half core sample |
| | DD_Quarter | DD - Quarter core sample |
| | DD_Sliver | DD - Sliver sample |
| | DD_Labhalf | DD - Lab Half sample |
| | DD_Unkn | Diamond Drilling - Unknown |
| | 2Tier | 2 Tier Riffle Sample |
| | 3Tier | 3 Tier Riffle Sample |
| | 4Tier | 4 Tier Riffle Sample |
| | XTier | Riffle Split - Unknown |
| | Cone | Cone Sample |
| | Spear | Spear Sample |
| | Pulp | Pulp Sample |
| | AC_Unkn | Aircore Drilling - Unknown |
| | AG_Unkn | Auger Drilling - Unknown |
| | RAB_Unkn | Rotary Air Blast Drilling - Unknown |
| | RC_Unkn | Reverse Circulation Drilling - Unknown |
| | Scoop | Scoop sample |
| | RC_Unkn | Reverse Circulation Drilling - Unknown |
| | RC_Unkn | Reverse Circulation Drilling - Unknown |



FELSIC/INTERMEDIATE PLUTONIC

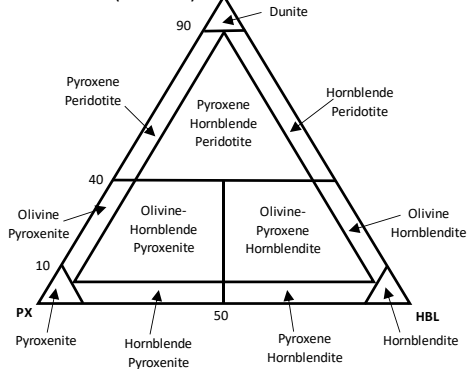


FELSIC/INTERMEDIATE VOLCANIC



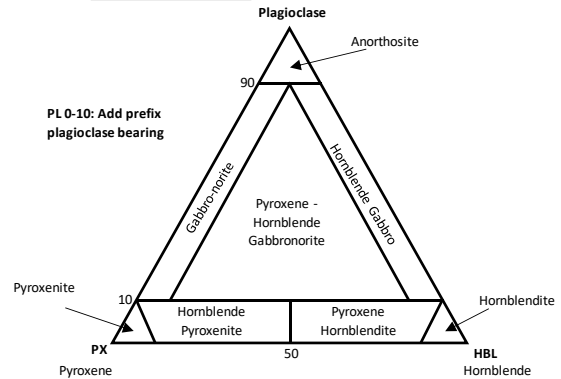
ULTRAMAFIC INTRUSIVE

Ultramafic Rocks (M=90-100%)

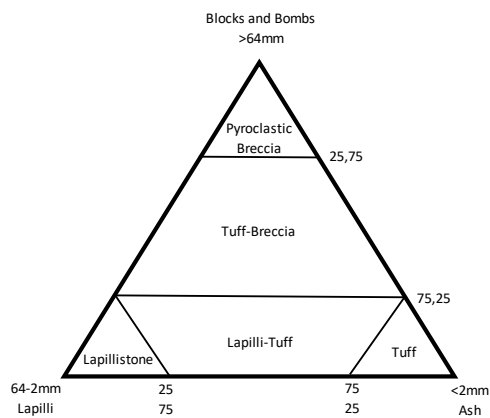


MAFIC INTRUSIVE

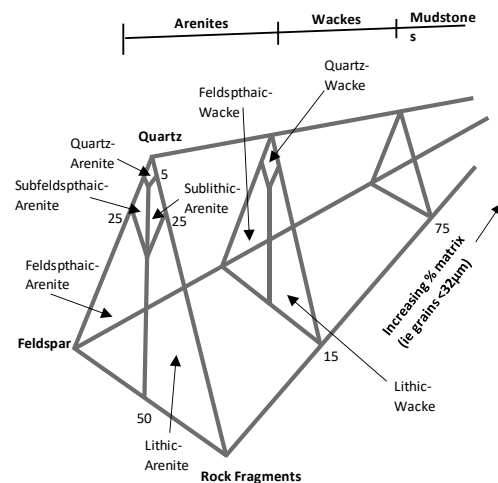
PL 0-10: Add prefix plagioclase bearing



PYROCLASTIC

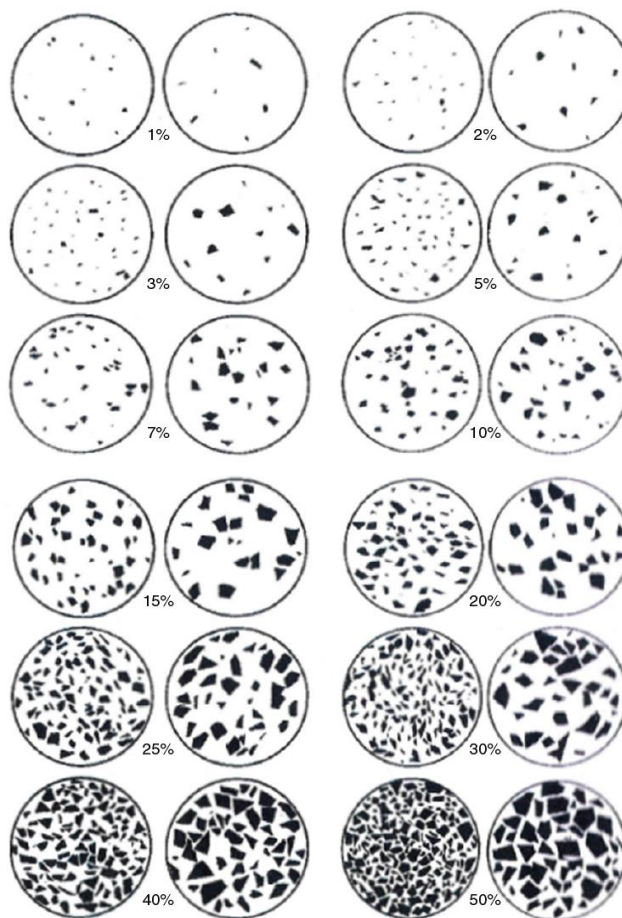


CLASTIC SEDIMENTARY





Various Percentages of Grains



Scheme for Sedimentary Rock Identification

| INORGANIC LAND-DERIVED SEDIMENTARY ROCKS | | | | | |
|--|---|---|---|--------------|------------|
| TEXTURE | GRAIN SIZE | COMPOSITION | COMMENTS | ROCK NAME | MAP SYMBOL |
| Clastic (fragmental) | Pebbles, cobbles, and/or boulders embedded in sand, silt, and/or clay | Mostly quartz, feldspar, and clay minerals; may contain fragments of other rocks and minerals | Rounded fragments | Conglomerate | |
| | | | Angular fragments | Breccia | |
| | Sand (0.2 to 0.006 cm) | | Fine to coarse | Sandstone | |
| | Silt (0.006 to 0.0004 cm) | | Very fine grain | Siltstone | |
| | Clay (less than 0.0004 cm) | | Compact; may split easily | Shale | |
| CHEMICALLY AND/OR ORGANICALLY FORMED SEDIMENTARY ROCKS | | | | | |
| TEXTURE | GRAIN SIZE | COMPOSITION | COMMENTS | ROCK NAME | MAP SYMBOL |
| Crystalline | Varied | Halite | Crystals from chemical precipitates and evaporites | Halite | |
| | Varied | Gypsum | | Rock Gypsum | |
| | Varied | Dolomite | | Dolomite | |
| Bioclastic | Microscopic to coarse | Calcite | Cemented shell fragments or precipitates of biologic origin | Limestone | |
| | Varied | Carbon | From plant remains | Coal | |