

ADDRESS Unit 5, Ground Floor 1 Centro Ave, Subiaco WA, 6005 Australia **PHONE** +61 (8) 9486 4036 **ABN** 96 095 684 389

EMAIL pmcneil@frontierresources.com.au WEBSITE www.frontierresources.com.au

ASX: FNT

Market Announcements Platform

30th May 2017

Bulago Porphyry Copper - Gold Hole GCZ002 Drilling Information

Frontier Resources Limited (Frontier) is pleased to release geological information and core photographs for hole GCZ002, Bulago Valley, EL 1595, Papua New Guinea.

Managing Director Peter McNeil stated:

"The recently received photographs and drill /sample logs demonstrate that multiple, megascopically interesting zones of brecciation, alteration and mineralisation were intersected by the 303.9m long hole and assay results will quantify them in a few weeks.

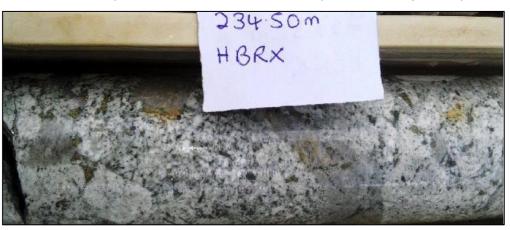
Hole GCZ002 targeted the 350m wide, NNE trending and NW dipping gold (+ copper) mineralised /structural zone that crosses the Bulago Valley. The hole intersected 6 major zones and >10 smaller zones of hydrothermal brecciation/ veining in diorites and mudstones and they appear to be wider /stronger in general with increasing depth.

The 69.7m intercept from 234.2m to end of hole (303.9m) appears to be very interesting, being comprised of hydrothermal breccia, siltstone, diorite, hydrothermal breccia, andesite, diorite, mudstone, siltstone /breccia and diorite and it is summarised below.

Drill core, rocks and stream sediment samples are en-route to the Laboratory in Townsville for analysis and

compiled results should be announced late June."

SUMMARY LOG 234.2-239.26m: 5.06m of hydrothermal breccia, intensely silicified siltstone clasts and strongly altered bleached (white) fine to



medium-grained diorite. Very strong pyrite + chalcopyrite occurring ubiquitously as discontinuous veinlets, fine massive clusters in fractures and cavities and disseminated.

239.26-251.4m: 12.14m of siltstone with intense quartz carbonate stockwork veinlets, pyrite-chalcopyrite in cavities with quartz carbonate veinlets.

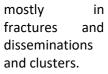
251.4-253.0m: 1.6m of porphyritic diorite, with fracture fill pyrite + chalcopyrite discontinuous veinlets and clusters. Weak epidote in fractures.



253.0-261.10m: 8.1m of hydrothermal breccia in siltstone and diorite respectively. Pyrite + chalcopyrite not common in siltstone but are common in diorite clasts. Weak-moderate pervasive brown alteration bleached by veinlets of quartz carbonate overprinting.

261.1-264.0m: 2.9m of andesite, pervasive chloriteepidote disseminated pyrite + chalcopyrite intergrown with epidote.

264.0-274.9m: 10.9m diorite, weak to moderately silicified with chlorite- epidote- pyrite + chalcopyrite in fractures and disseminated patches to pervasive in green zones. 264.9-266.9m is 2.0m of quartz carbonate flooding with strong cavities and vugs. From 269.3-270.5m is a bleached dioritic hydrothermal breccia with pyrite + chalcopyrite



274.9-281.8m: 6.9m of mudstone /siltstone with strong stockwork of quartz carbonate veinlets, local diorite breccia, from 277.1-278.9m silica flooding with crackle brecciation, strong pyrite +



JS8:30m Vuggy Qz-Cb Veins

chalcopyrite veinlets- clumpsdisseminations- fracture fill.

281.8-299.0m: 17.2m of siltstone, with strong bleaching and quartz carbonate veining, breccia zones are from 1cm to 1m wide.

299.00-303.9m: 4.9m of diorite, strong pyrite + chalcopyrite disseminated and pervasive, plus micro-veinlets of fine pyrite + chalcopyrite, intergrown with magnetite -biotite grains. Quartz veining is weak from 299.0-303.7m. Strong stockwork of quartz carbonate veinlets developing from 303.4-303.9m.



Geology

0.00-10.60m: Colluvium

Variable sediments on the old river bed of Bulago River. Boulders, cobbles, gravels and sands of mostly finemedium grained diorite and limestone. Medium grained diorite with strong weathering and weak clay overprinting with moderate pervasive oxidation at 8.4-9.9m.

10.6-14.4m: Quartz Diorite

Strongly weathered pale gravy porphyritic diorite. Disintegration/leaching of matrix leaving medium-grained spike like Quartz. Quartz vein (0.5cm) in the centre of the core parallel to the core axis. Pervasive green chlorite sparsely dispersed, black mineral (biotite/magnetite?), Pyrite + chalcopyrite as disseminations, clusters or fracture fill (3%).

14.4-17.4m: Diorite

Fine-grained felsic with strong silicification and strong pervasive brown alteration overprinting. Minor (1%) pyrite + chalcopyrite, quartz crystals and minor veinlets. A 0.3m strongly weathered zone with clay overprinting at 17.1-17.4m. Quartz crystals and veinlets with weak sulphides (pyrite-cpy) development. Very strong brown alteration overprinting.

17.4-19.3m: Quartz Diorite

Intermediate medium to coarse grained diorite with pervasive quartz crystals in a weak-moderately leached black-gravy matrix. Minor quartz veinlets. Black interstitial mineral decomposing.

19.3-21.1m: Porphyritic Feldspar Diorite

Strongly silicified fine to medium grained crowded feldspar porphyry diorite with breccia.

19.3 to 20- 20.4m: Very fine-grained with pervasive strong brown alteration and strong silicification with quartz veinlets, pyrite is mostly disseminated and hairline veinlets.

20.4-21.2m is a breccia zone with sub-angular to angular sub-rounded and strong brown altered diorite clasts. Extremely silicified strong brown alteration with strong pyrite + chalcopyrite. At 21.2 to 21.9m is a zone of crowded medium-grained feldspar diorite, pervasively disseminated, fracture fill hairline and veinlets. Extremely silicified with quartz breccia vein with sulphides.

21.9-33.5m: Diorite Fined-grained felsic to intermediate Diorite with



quartz-green elongated hornblende + magnetite + feldspar in gravy-green zones while bleached zones have moderate to strong pervasive brown alteration development, pyrite + chalcopyrite is disseminated to fracture fill veinlets with clusters, bleached zones with brown alteration are moderately silicified. 3% sulphides (pyrite + chalcopyrite).

33.5-47.0m: Diorite

Very fine-grained silicified and bleached with pervasive moderate to strong brown alteration overprinting. Strong pyrite + chalcopyrite disseminated to hairline veinlets to fracture fill, biotite+ magnetite+ minor epidote -chlorite. Some weak leaching at places. Fault with clay+ pyrite at 42.4-42.5m; breccia zone with strong pervasive brown alteration and strong silicification at 42.5-44.1m. Breccia zone contains silicified

diorite and fine-grained gravy diorite and silicified porphyritic quartz diorite clasts/xenoliths that have strong brown alteration. Pyrite-cpy disseminated, fracture fill and hairline veinlets.

44.1-44.8m: Extremely silicified breccia with Quartz veinlets encompassing angular clasts of very fine grained pale gravy diorite. Sulphides are disseminated, fracture fill and veinlets. Quartz veinlets are comb to saccharoidal.

44.8-45m: Fault with clay infill. Strong to extremely weathered with clay+ pyrite at 44.95m. From 44.80 to 44.95m is a silicified zone that has suffered high fracture density and shearing with weak fracture weathering and pyrite development.

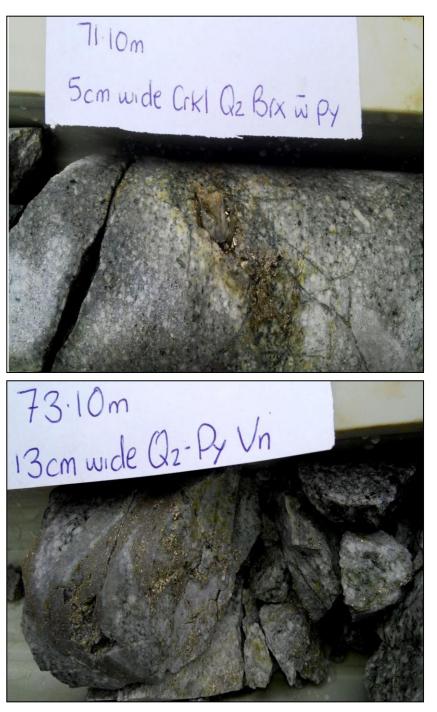
45-47m: Fine to medium grained pale grey to bleached diorite with moderate to strong silicification developing. Pyrite + chalcopyrite (cpy) is disseminated-fracture fill-veinlets (3%). Minor faulting with shearing and moderate fracture controlled weathering and clay-pyrite developing at 45.3-45.4m. From 45.6-46m is a zone of breccia with a thin bed of a very fine grained volcanic rock which cross cuts it. Moderate weathering with weak clay developing, vitreous quartz breccia veinlets cut and displaces fine grained gravy-brown laminated sandstone/volcs? Fine grained thin bed trending N-S and quartz breccia trending NE-SW.

47-65.8m: Feldspar Porphyry Porphyritic diorite with crowded coarse feldspar phenocrysts, biotite+ magnetite+ sparse epidote +pyrite disseminated in white feldspar matrix. Sparse pyrite + chalcopyrite veinlets with clumps, very weak brown alteration developing at places especially in bleached zones. Clasts supported feldspar with interstial biotite +magnetite +black minerals. From 49-49.3m is a sheared and shattered zone with strong leaching and strong pervasive brown alteration. Quartz flooding. Green chlorite replaced by epidote and pyrite replacing epidote. Black mineral(s) decaying and replaced by epidotepyrite at places. Porphyritic quartz diorite. Sparse hornblende phenocrysts/xenoliths of very fine grained black volcanics at places. Generally, a strongly silicified rock.

Quartz Diorite with quartz+ pyrite veins. Very strong pervasive silicification with weak-mod pervasive brown biotite alteration associated with quartz-pyrite veining at 60-65.9m.

65.8-77m: Diorite

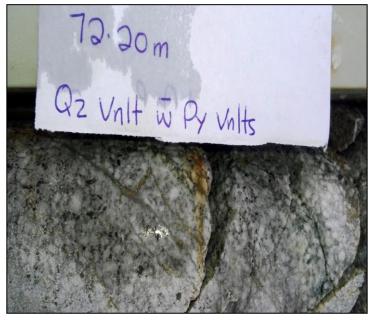
Grey to green porphyritic diorite. Coarse feldspar phenocrysts set in white siliceous matrix, abundant hornblende phenocrysts + biotite + epidote + chlorite. Pyrite+ Cpy



veinlets-fracture fill-diss-clusters. Quartz veinlets at places with massive pyrite clusters in fractures.

77-88.4m: Quartz diorite (mostly felsic with grey-green zones)

Silicified porphyritic diorite with abundant Quartz crystals. Strongly pervasive silicification with Quartz veins with pyrites. Xenoliths of very fine grained volcanic rock sparsely emplaced in this rock unit and breccia zones at places. Strongly silicifiedguartz zones and brecciated zones are overprinted with moderate to strong brown alteration. Pyrite veins observed at places, zones of grey-green siliceous porphyritic diorite with abundant hornblende phenocrysts, epidote replacing chlorite in grey-green zones.



88.4-90.4m: Andesite (Dyke)

Very fine-grained mid green rock with elongated green hornblende (hbl) phenocrysts and chlorite-epidote phenocrysts set in a siliceous matrix. Pyrite replacing epidote+ chlorite. Strong pyrite + chalcopyrite as disseminated (diss)-fracture fill-veinlets-clumps (5-10%).

90.4-90.8m: Crackle Breccia

Extremely silicified and altered diorite with crackle brecciation by quartz-pyrite veinlets. Pyrite clumps, fracture fill and disseminated. Pervasive moderate chlorite+ epidote with pyrite replacing epidote.

90.8-104.2m: Quartz Diorite (alternating zones of felsic and intermediate)

Coarse euhedral quartz + feldspar phenocrysts set in felsic-intermediate siliceous matrix with decomposing hornblende + biotite. Intermediate zones are grey to green with siliceous matrix that has chlorite-epidote-pyrite alteration. Abundant black hornblende + biotite. Pyrite-cpy diss, fracture fill, clumps and veinlets. Felsic zones are strongly silicified with quartz veins with pyrite. Weak brown alteration overprinting. Hornblende +

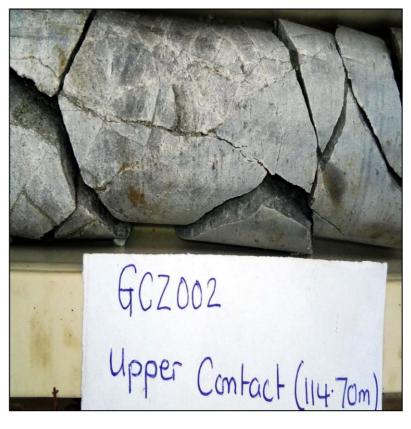
biotite, epidote-pyrite in fractures and disseminated pervasively. Strong pyrite veins-frac fill-diss in quartz veinsextremely silicified zones.

104.2-111.6m: Extremely Silicified Crackle Breccia

Extremely silicified weak porphyritic grey diorite to crowded mediumgrained porphyritic diorite crackle brecciated by quartz veining. Strong pervasive brown alteration overprinting, pyrite replacing epidote. High quartz veining intensity.

108.3-109.3m - a Quartz vein with comb-Saccharoidal-bladed textures and carries pyrite and dark- silvery powdery sulphides in vugs/cavities.

111.6-114.70m: Diorite Highly silicified fine-medium grained grey to pale grey diorite with sparse



quartz veinlets and minor breccias. pyrite-cpy are mostly disseminated-fracture fill and minor clumpsmoderate hairline veinlets.

113.7-114.7m is an extremely silicified fine grained pale diorite with significant pyrite-cpy occurring as disseminations-veinlets and fracture fill.

114.7-115.9m: Andesite Dyke

Very fine grained green weak silicified volcanic dyke with sparse elongated-square coarse —sub rounded hornblende (hbl). Pervasively disseminated 5% fine grained- clumps-micro veinlets of pyrite-cpy.

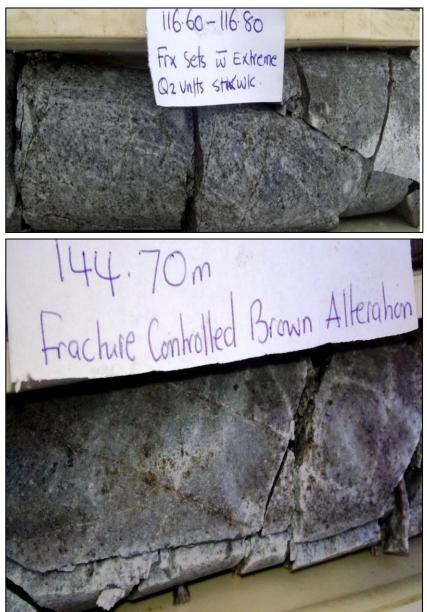
115.9-119.7m: Diorite

Fine-medium grained pale grey silicified diorite overprinted by brown coloration. Extreme silicification with significant pyritecpy from 115.9-116.6m. In brown altered zones pyrite-cpy replaces black minerals. A crackle quartz breccia (bx) at 119.3-119.5m with weak (wk) pyrite disseminated in fractures.

119.7-142.0m: Diorite

Fine – medium grained pale gravy to white diorite with moderate to strong pervasive brown coloration. In gravy zones pyrite replaces epidote /chlorite/ hbl /magnetite (mt)? while in bleached and brown zones pyrite replaces black minerals. White zones are moderate to extremely silicified (silica-quartz flooding) with quartz veinlets stwk producing crackle brecciation at Brown places. coloration is with/restricted associated to bleached /silicified zones. Pyritecpy occur as disseminationsfracture controlled veinlets (5-10%). Some silvery grey powdery stains observed in fractures within guartz veins. From 119.7-120.4m is an extremely fractured zone with stockwork quartz veinlets and weak weathering. Pyrite-cpy in fractures mostly replacing epidote/chlorite. From 120.4-121m is an extremely silicified zone with stockwork veinlets and minor pyrite. From





138.9-143.8m is a pale grey silicified medium grained diorite. Very weak brown coloration. Some quartz-pyrite veining.

142.0-151.2m: Diorite

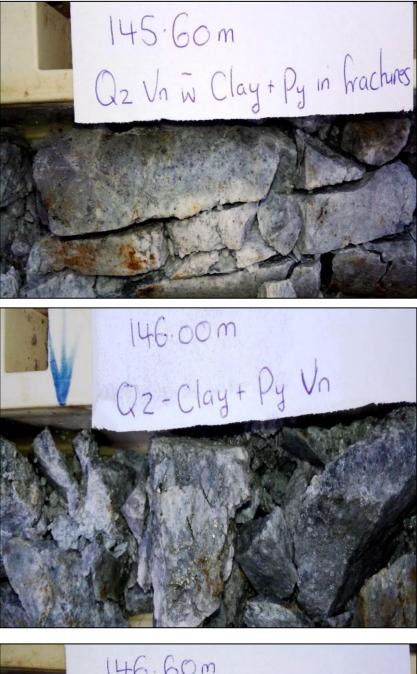
Strong to extremely silicified diorite with moderate-strong brown alteration mostly fracture controlled and selvaged along feldspar? /quartz+/-pyrite veinlets. Quartz veinlets-veins are vuggy to saccharoidal with pyrite as fracture fill to cavity fill and sometimes as clumps or clusters. Some quartzpyrite veinlets and veins have clay in them.

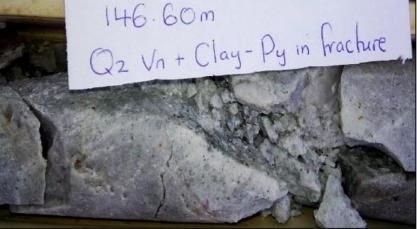
151.5-152.6m: Crowded Porphyritic Diorite

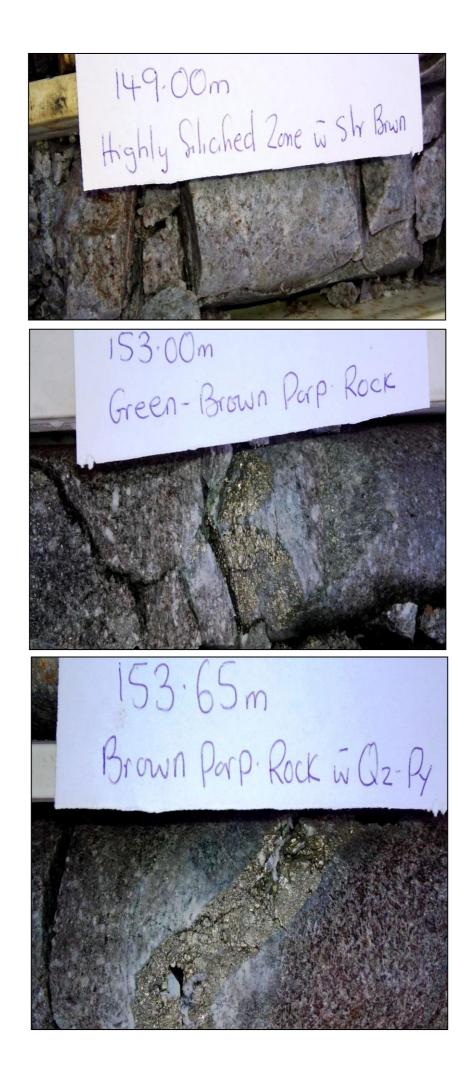
Highly silicified crowded medium grained porphyritic diorite. Angular xenoliths of altered very finegrained volcanics with wk magnetite and disseminated 1mm quartz crystals. Feldspar-Sericite matrix with disseminated biotite within the matrix. Chlorite-epidote veinlets partially replaced by pyrite.

152.6-154.4m: Dyke?

Green to strong pervasive brown altered weathered porphyritic rock. Green zones are silicified while the brown zones are weathered. 152.6-152.9m is a green silicified zone with white matrix with disseminated pyrite+/-chlorite-green acicular actinolite? /hbl? 152.9-153.9m is a zone of strong pervasive brown altered porphyritic diorite. Strong pervasive brown with Quartz (1mm) crystals + green chlorite-epidote. Massive pyrite vein (2cm) at 153 and 153.65 as fracture fill in quartz vein.







154.4-184.3m: Diorite

Grey to pale grey medium-grained (up to 2mm) crowded feldspar porphyritic diorite set in very finedgrained white siliceous feldspar (fspar) matrix. Black opaque and anhedral mineral set in fspar phenocrysts. Sparse epidote replaced by pyrite at places. Sparse biotite (bio)-magnetite (mt) observed at places too. pyrite is mostly disseminated to fracture fill. Pyrite is observed to intergrown with epidote or biotite (bio). Sparse elongated hbl. Feldspars are subhedral while pyrite are euhedral and well developed as clusters in fractures within quartz veinlets/veins. Minor brecciation at places. Patches and zones of brown alteration observed at places. Minor zones of fine-grained silicified zones at places.



184.3-194.2m: Diorite

Strongly silicified and altered medium-grained porphyritic diorite. Strong brown alteration pervasive patches

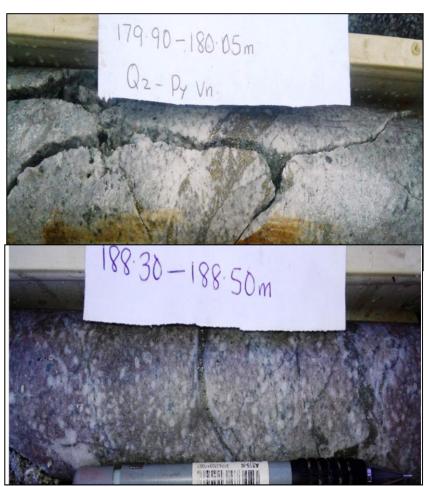
at places. Quartz-pyrite veinlets/veins at places. Massive pyrite clusters and veins in fractures. Epidote replaced by pyrite in grey (matrix) zones. Strong pyrite clusters and veins in felsic-brown zones. Brown matrix alteration at places with strong intensity. Hbl-epidote in grey zones. Few fspar micro veinlets. Bio-chlorite-epidote in brown zones.

192.4-194.9m: Diorite

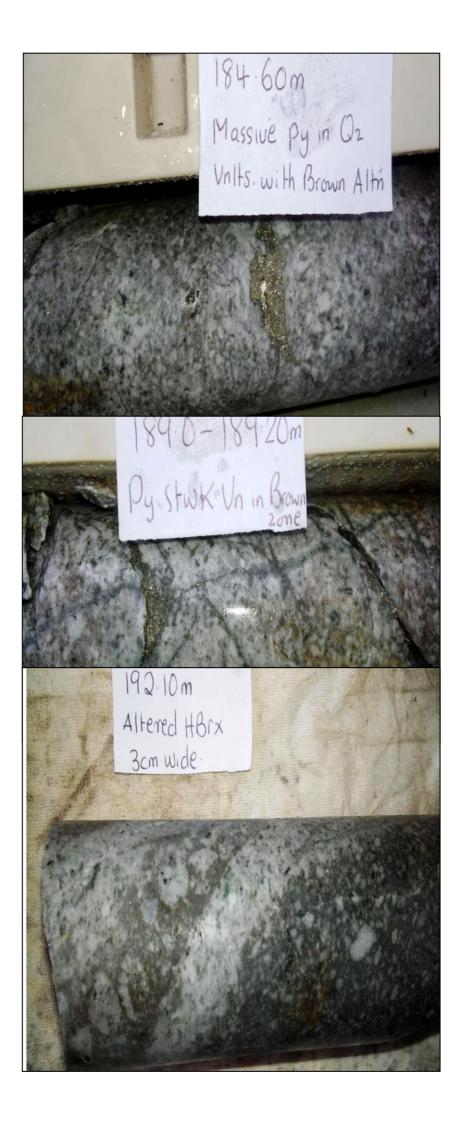
Grey-pale grey medium-grained crowded fspar (1mm) porphyritic diorite. Fspar (1mm) phenocrysts set in fine-grained grey-wk brown matrix. Pyrite is mostly disseminated in fractures. Minor chlorite-epidote-pyrite microveinlets with quartz. Sparsely disseminated bio. Weak quartzpyrite veinlets at places.

194.9-197.4m: Diorite

Pale green-white altered crowded medium-grained fspar diorite. abundant chlorite-epidote as microveinlets and disseminations. Hbl and



bio disseminations. Micro-veinlets of black mineral (mt?). very weak brown coloration locally within bio phenocrysts. Clay alteration overprinting.



197.4-201.2m: Diorite

Crowded medium-grained fspar diorite. Fspar phenocrysts set in pale grey-brown matrix. Abundant micro-veinlets of vuggy quartz with pyrite in fractures. Euhedral angular quartz clasts (2cm milky barren) sparsely disseminated. Pervasive chlorite-epidote in grey zones while in brown matrix zones they have been moderately altered. Hbl + bio observed in grey zones.

201.2-206.2m: Diorite

Strong —moderately altered crowded mediumgrained Fspar porphyry diorite. Pale grey-wk brown alteration overprinting. Pale grey zone has epidotepyrite intergrown in fractures, micro pyrite veinlets and fracture fill. Wk to strong scaly silica in fractures. pyrite clusters with subhedral grains in fractures. Hydrothermal breccia observed at 205.9-206.2m.

206.2-208.1m: Diorite

Medium-grained (1mm) crowded feldspar porphyry diorite with grey to wk brown matrix. Pervasively disseminated hbl + bio +mt? and sparse epidote mostly in fractures. Quartz with pyrite disseminated in vugs and fractures at places (1cm quartz veinlts). pyrite is also observed as replacing epidote. Thin silica selvages quartz veinlts.

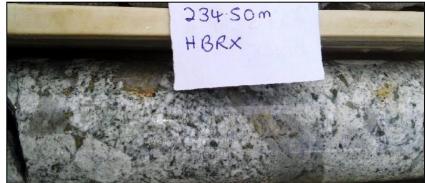


208.1-234m: Diorite

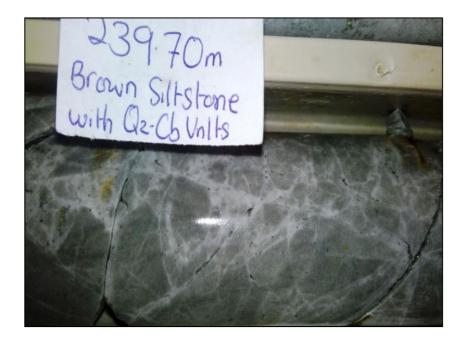
Pale spotty green siliceous and altered medium-grained diorite. Quartz-pyrite veining. Moderate alteration clay (argillic) overprinting. Ubiquitous micro veinlets, discontinuous pyrite pervasive chlorite-sericite. Altered medium-grained cloudy crowded fspar as matrix (phenocrysts supported). Epidote and pyrite intergrown in fractures. Pervasive hornblende + biotite+ chlorite+ epidote in weakly altered zones. Quartz veinlets to veins at places with pyrite clusters in vugs. Zones of pervasive brown alteration at places. Minor quartz-carbonatepyrite veining at places too. Minor brecciations (10-30cm) at places.

234.2-239.26m: Hydrothermal Intensely silicified, clast Breccia supported. Wk grey to strong brown silicified mostly euhedral angular clasts of siltstones and strongly altered bleached (white) fine to medium-grained diorite. Very strong pyrite + chalcopyrite ubiquitously occurring as discontinuous veinlets, fine massive clusters in fractures and cavities and disseminated replacing/intergrown round-rectangular with black mineral(s). brown siltstone clasts increase down Depth. The brown siltstone clasts are observed to be encompassed in diorite clasts. Quartz carbonate clasts are also observed. Quartz carbonate clasts are vuggy with pyrite in the pores and vugs. Pyrite + chalcopyrite is mostly around the edges of the siltstone clasts and within the diorite clasts. Brown siltstone clasts contain lattice network of white veinlets both closed and open. The open veinlets are filled by epidotepyrite-chalcopyrite. Diorite also has fine brown spots replacing black (mt?) mineral.













239.26-251.4m: Siltstone

Moderate brown altered siltstone with intense quartz carbonate? Stockwork veinlets. pyritechalcopyrite in cavities with guartz carbonate veinlets. Quartz carbonate veinlets show lattice bladed and saccharoidal textures. Weak grey-mod brown alteration cut by white bleaching imposed by white quartz carbonate veinlts. Pvrite-chalcopyrite are disseminated to fracture fill veinlets from 240.40-246.8m in a zone in extreme lattice network quartz carbonate veinlets giving a stockwork brecciation texture. Some massive pyrite veinlets with coarse euhedral crystals observed at places.

251.4-253.0m: Diorite

Weak grey to felsic silicified and altered fine-grained porphyritic diorite. Fracture fill pyrite + chalcopyrite discontinuous veinlets and clusters. Weak epidote in fractures at places.

253.0-261.10m: Hydrothermal Breccia in siltstone and diorite respectively. Strongly altered pale grey-felsic diorite clasts set in siltstone with quartz carbonate veinlets with vugs filled by pyrite clusters and veinlets. Vugs in quartz carbonate veinlets are bladed to scaly in texture. From 253-256.4m Hydrothermal the breccia comprises diorite clasts set in siltstone while from 256.40-261.1m the siltstone clasts are set in diorite. Quartz-carbonate-silica

veinlets/veins encompasses the clasts. Pyrite + chalcopyrite not common in siltstone but are common in diorite clasts. Weakmoderate pervasive brown alteration bleached by veinlets of quartz carbonate overprinting.

261.1-264.0m: Andesite - mid green fine-grained weakly porphyritic. ~1cm max width fracture fill white quartz carbonate vein with weak disseminated pyrite parallel to axis. Weak grey to mid green siliceous



258:30m Vuggy Qz-Cb Veins

thilitit

matrix. Pervasive chlorite-epidote disseminated, fine-grained black bio + hbl +/- Mt. pyrite + chalcopyrite intergrown with epidote.

264.0-274.9m: Diorite

Pale green to grey fine to mediumgrained crowded fspar fine porphyritic diorite. Weak to moderately silicified. Cl-epidotepyrite + chalcopyrite in fractures and disseminated patches to pervasive at places in green zones. 264.9-266.9m is a quartz carbonate flooding with strong cavities and vugs. Moderate weathering. Weak pyrite (1%).

266.9-269.3m is zone of fine porphyritic grey diorite with crowded fine-grained black mt grains and discontinuous microveinlets. Minor brown alteration patches at places with fine pyrite + chalcopyrite disseminated in fractures and in matrix.

From 269.3-270.5m is a pale to bleached altered dioritic hydrothermal breccia with silica flooding and quartz vuggy carbonate veinlets/veins encompassing brown altered siltstone clasts set in silicified dioritic matrix that has pyrite + chalcopyrite mostly in fractures and disseminations as well as clusters. Chlorite-epidote wk-mod in bleached zones.

From 270.5-274.9m is fine to medium-grained diorite with pyrite + chalcopyrite clusters fractures and pervasive disseminations. Epidote in fractures and micro-veinlets at places in grey diorite zones. From 269.7-270.7m is a quartz carbonate veinlets flooding-Hydrothermal breccia.





274.9-281.8m: Mudstone/Siltstone Partially altered black to weak to partially bleached brown mudstone. Very strong stockwork of quartz carbonate veinlets. Zones of diorite breccia at places. pyrite is mostly cavity fills in quartz carbonate veinlets and fractures. Bleaching in imposed by quartz carbonate veining and selvage the veinlets. Brown alteration overprints fresh black siltstone and is later bleached. From 277.1-278.9m is a very strong silica flooding with crackle brecciation. Strong pyrite + chalcopyrite veinlets-clumps-disseminationsfracture fill. This zone has greenmod brown alteration associated with it.









281.8-299.0m: Siltstone

Black siltstone with moderate brown alteration and strong bleaching associated with quartz carbonate veining. Strong quartz carbonate stockwork veinlets-veins, multiple zones of quartz-silica flooding that creates crackle brecciation textures with very strong pyrite clustering in fractures, fracture fill micro veinlets and disseminations. Brecciation zones comprise diorite and brown angular siltstone clasts of varying sizes. Breccias zones are from 1cm to 1m. quartz carbonate veinlets/veins are vuggy with pyrite in the vugs.













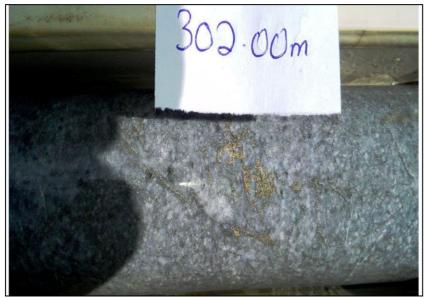


299.00-303.9m: Diorite

Medium-grained crowded porphyritic diorite with siliceous matrix. Grey to pale grey with weak brown alteration developing down the hole. Abundant and ubiquitous mt-bio grains with moderate brown alteration. Strong pyrite + disseminated chalcopyrite pervasively. Micro-veinlets of fine pyrite + chalcopyrite. Pyrite + chalcopyrite intergrown with mt-bio grains. Some crystals of hbl sparsely disseminated. Magnetite microveinlets observed at 299.0-300.7m. Quartz veining is weak from 299.0-303.7m. Chlorite-epidote-sericite observed at 300.7-303.4m with siliceous matrix and brown alteration developing. From 303.4-303.9m is a dark grey fine-grained porphyritic diorite that has strong stockwork of quartz carbonate veinlets developing and bleaching associated with it. Weak brown films selvage along the quartz carbonate veinlets and in the matrix. Brown alteration intensity is observed to be increasing down the hole.









GCZ 002 Selective Samples Descriptions Sample Number: 650085 Depth: 20.4-21.9m Highly silicified fine to coarse-grained diorite with quartz-pyrite vein at 21.3m

Sample Number: 650086 Depth: 26.2-27.2 Highly silicified medium-grained diorite with quartz-pyrite veinlets.

Sample Number: 650087 Depth: 31.2-32.4m Silicified-leached medium-grained diorite with quartz-pyrite veining and crackle breccia developing.

Sample Number: 650088 Depth: 40-41m Silicified-leached grey-weak brown medium-grained diorite with weak crackle brecciation by quartz veining. Minor pyrite in quartz veinlets.

Sample Number: 650089 Depth: 41-42.5m Weakly leached moderately silicified grey medium-grained diorite. Quartz veinlets with Fracture fill pyrite.

Sample Number: 650090 Depth: 42.5-44m Hydrothermal breccia with weak to moderate pervasive brown alteration. Highly silicified (quartz-silica matrix) with fracture fill and disseminated pyrite.

Sample Number: 650091 Depth: 44-45.5m Hydrothermal breccia-strongly leached medium-grained grey diorite with fracture fill and disseminated pyrite.

Sample Number: 650092 Depth: 45.5-46.5m Leached grey diorite. Faulted breccia with disseminated pyrite in fault gorge and fractures.

Sample Number: 650093 Depth: 61.7-62.7m Highly silicified medium-grained felsic diorite with quartz-pyrite veinlets.

Sample Number: 650094 Depth: 62.7-63.7m Highly silicified medium-grained felsic diorite with quartz-pyrite veinlets.

Sample Number: 650095 Depth: 65-66m Highly silicified medium-grained felsic diorite with quartz-pyrite veinlets.

Sample Number: 650096 Depth: 70.8-72 Strongly silicified medium-grained pale grey diorite. Hbl phenocrysts disseminations. pyrite is mostly disseminated and fracture fill.

Sample Number: 650097 Depth: 72-73.5m Strongly silicified medium-grained pale grey diorite with quartz-pyrite vein at 73.2m. pyrite is disseminated pervasively and as fracture fill.

Sample Number: 650098 Depth: 80-81m Silicified porphyritic diorite. Strong pervasive silicification with quartz veins with pyrites. Hydrothermal breccia with quartz-pyrite veinlets at 80-80.80m.

Sample Number: 650099 Depth: 81-82m Medium-coarse-grained grey diorite with quartz-pyrite veinlets with breccia at 81.3-82m.

Sample Number: 650100 Depth: 82-83m Extremely silicified medium-grained grey diorite with quartz breccia with pyrite disseminated and fracture fill.

Sample Number: 650101 Depth: 101.4-102.9m Medium-grained felsic diorite. Strongly silicified with quartz-pyrite vein at 101.8m.

Sample Number: 650102 Depth: 102.9-104.2m Medium-grained silicified felsic diorite with multiple quartz-pyrite veinlets at places.

Sample Number: 650103 Depth: 104.2-105.8m

Silicified medium-grained grey diorite with stockwork quartz veinlets with pyrite. Weak crackle brecciation by Quartz veinlets.

Sample Number: 650135 Depth: 232-234.3m

Pale-spotty green siliceous medium-grained diorite with quartz-pyrite veinlets and clay alteration overprinting and ubiquitous discontinuous micro pyrite veinlets. From 232-232.5m is medium-grained grey to pale grey crowded fspar porphyritic diorite. Fine grained hbl-bio-mt in grey to pale grey matrix. Fine pyrite-chalcopyrite in fractures. Sparse disseminated epidote, wk pyrite-chalcopyrite in wk quartz carbonate veinlets.

Sample Number: 650136 Depth: 234.3-235.8m

Hydrothermal breccia that is clasts supported and comprises strongly silicified angular clast of weak grey to strong brown siltstone and fine to medium-grained bleached diorite. Very strong ubiquitous pyrite + chalcopyrite as discontinuous veinlets, fine massive clusters and disseminations in fractures, cavities and pores as well as intergrown with black round-rectangular minerals. Brown siltstone clasts are observed as being encompassed by diorite clasts. Vuggy quartz carbonate with pyrite + chalcopyrite clasts are also observed as sparse disseminations.

Sample Number: 650137 Depth: 235.8-237.3m

Hydrothermal breccia that is clasts supported and comprises strongly silicified angular clast of weak grey to strong brown siltstone and fine to medium-grained bleached diorite. Very strong ubiquitous pyrite + chalcopyrite as discontinuous veinlets, fine massive clusters and disseminations in fractures, cavities and pores as well as intergrown with black round-rectangular minerals. Brown siltstone clasts are observed as being encompassed by diorite clasts. Vuggy quartz carbonate with pyrite + chalcopyrite clasts are also observed as sparse disseminations.

Sample Number: 650138 Depth: 237.3-238.8m

Hydrothermal breccia that is clasts supported and comprises strongly silicified angular clast of weak grey to strong brown siltstone and fine to medium-grained bleached diorite. Very strong ubiquitous pyrite + chalcopyrite as discontinuous veinlets, fine massive clusters and disseminations in fractures, cavities and pores as well as intergrown with black round-rectangular minerals. Brown siltstone clasts are observed as being encompassed by diorite clasts. Vuggy quartz carbonate with pyrite + chalcopyrite clasts are also observed as sparse disseminations.

Sample Number: 650139 Depth: 238.8-240.3m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. pyrite in siltstone as clusters, disseminations and fracture fill.

Sample Number: 650140 Depth: 240.3-241.8m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill. This zone contains intense lattice network of quartz carbonate veinlets that resulted in a stockwork brecciation.

Sample Number: 650141 Depth: 241.8-243.4m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill. This zone contains intense lattice network of quartz carbonate veinlets that resulted in a stockwork brecciation.

Sample Number: 650142 Depth: 243.3-244.8m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill. This zone contains intense lattice network of quartz carbonate veinlets that resulted in a stockwork brecciation. 3 x massive pyrite veinlets (5mm) observed between 243.4-244.3m.

Sample Number: 650143 Depth: 244.8-246.3m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill. This zone contains intense lattice network of quartz carbonate veinlets that resulted in a stockwork brecciation.

Sample Number: 650144 Depth: 246.3-247.8m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill.

Sample Number: 650145 Depth: 247.8-249.3m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill.

Sample Number: 650146 Depth: 249.3-250.8m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-chalcopyrite. The vugs and cavities in quartz carbonate veinlets are lattice bladed and saccharoidal. Siltstone is weak grey-mid brown-partially bleached by quartz carbonate veinlets. Pyrite in siltstone as clusters, disseminations and fracture fill. High intensity of cavities and pores in this zone.

Sample Number: 650147 Depth: 250.8-252.3m

Mid brown siltstone with intense quartz carbonate stockwork veinlets with multiple vugs and cavities filled by pyrite-cpy and silicified pale grey to white fine-grained porphyritic diorite. Fracture fill discontinuous veinlets and disseminated pyrite + chalcopyrite. Fine pyrite + chalcopyrite clusters at places. Very weak epidote in fractures.

Sample Number: 650148 Depth: 252.3-253.8m

Silicified pale grey to white fine-grained porphyritic diorite. Fracture fill discontinuous veinlets and disseminated pyrite + chalcopyrite. Fine pyrite + chalcopyrite clusters at places. Very weak epidote in fractures. Breccia zone from 253-253.8m

Sample Number: 650149 Depth: 253.8-255.3m

Strongly silicified hydrothermal breccia that comprises clasts of siltstone and medium-grained pale greybleached porphyritic diorite. Vuggy quartz carbonate veinlets/veins with pyrite stringers. Pyrite + chalcopyrite in vugs and fractures in quartz carbonate veinlets/veins. The breccia comprises diorite clasts set in siltstone in this zone.

Sample Number: 650150 Depth: 255.3-256.8m

Strongly silicified hydrothermal breccia that comprises clasts of siltstone and medium-grained pale greybleached porphyritic diorite. Vuggy quartz carbonate veinlets/veins with pyrite stringers. Pyrite + chalcopyrite in vugs and fractures in quartz carbonate veinlets/veins. The breccia comprises diorite clasts set in siltstone in this zone.

Sample Number: 650151 Depth: 256.8-258.3m

Strongly silicified hydrothermal breccia that comprises clasts of siltstone and medium-grained pale greybleached porphyritic diorite. Vuggy quartz carbonate veinlets/veins with pyrite stringers. Pyrite + chalcopyrite in vugs and fractures in quartz carbonate veinlets/veins. The breccia comprises siltstone clasts set in diorite in this zone. Quartz-carbonate-silica veinlets/veins as matrix. Pyrite-cpy not common in siltstone clasts.

Sample Number: 650152 Depth: 258.3-259.8m

Strongly silicified hydrothermal breccia that comprises clasts of siltstone and medium-grained pale greybleached porphyritic diorite. Vuggy quartz carbonate veinlets/veins with pyrite stringers. Pyrite + chalcopyrite in vugs and fractures in quartz carbonate veinlets/veins. The breccia comprises siltstone clasts set in diorite in this zone. Quartz-carbonate-silica veinlets/veins as matrix. Pyrite-cpy not common in siltstone clasts.

Sample Number: 650153 Depth: 259.8-261.1m

Strongly silicified hydrothermal breccia that comprises clasts of siltstone and medium-grained pale greybleached porphyritic diorite. Vuggy quartz carbonate veinlets/veins with pyrite stringers. Pyrite + chalcopyrite in vugs and fractures in quartz carbonate veinlets/veins. The breccia comprises siltstone clasts set in diorite in this zone. Quartz-carbonate-silica veinlets/veins as matrix. Pyrite-cpy not common in siltstone clasts.

Bulago Valley Pad P3 Drilling Information								
Hole ID	ID Approx. Co-ordinates (AMG066) Azimut		uth °	Inclination	End of			
	Northing	Easting	RL (m)	(AMG °)	(MN °)	(degrees)	Hole Depth (m)	Comments
GCZ001	9399403N	0639382E	1,675	55	50	-50	88.2	Abandoned caving
GCZ002	9399403N	0639382E	1,675	55	50	-60	303.9	Cased, HQ to 105.8m, NQ to EOH

For additional information please visit the website at <u>www.frontierresources.com.au</u>.

FRONTIER RESOURCES LTD

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P.A. McNeil, M.Sc., MAIG Chairman and Managing Director

Competent Person Statement:

The information in this report that relates to Exploration Results is based on information compiled by Peter A. McNeil - Member of the Aust. Inst. of Geoscientists. Peter McNeil is the Chairman/Managing Director of Frontier Resources, who consults to the Company. Peter McNeil has sufficient experience which is relevant to the type of mineralisation and type of deposit under consideration to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Resources. Peter McNeil consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

		JORC CODE 2012			
Section 1 Sampling Techniques and Data					
Criteria		Explanation	Commentary		
Sampling techniques	0	Nature and quality of sampling	Core was drilled HQTT (triple tube) by a CSD500 rig and removed from the inner tube into core trays. The whole core was diamond saw cut to Quarter core that was put into calico bags for analysis.		
	0	Measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Supervised by Senior Geologist, marked up for sampling taking structural orientations into account and attempting to bisect them.		
	0	Aspects of the determination of mineralisation that are Material to the Public Report.	Material aspects of the mineralisation are noted in the text.		
Drilling techniques	0	Drill type and whether core is oriented.	HQ triple tube core drilling was un-oriented and not surveyed as the holes were all shallow and deviation would have been very minor.		
Drill sample recovery	0	Method of recording and assessing core recoveries and results assessed	Linear arithmetic, good recoveries.		
	0	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The remaining core was then geologically logged in detail. Downhole sample recovery was maximised by the drillers utilising appropriate downhole consumables at the appropriate times to 'consolidate' or hold the rock together combined with the fact that we utilise our own rig and drillers who are not paid meterage (speed) bonuses and are therefore more careful with core recovery than normal commercial drillers working on meterage bonuses. Supervised by Senior Geologist with sampling normally on a 1m or 2m basis, but lithologically, also depending on the site geologist's estimate of the intervals' mineralisation potential.		
	0	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred.	No relationship exists between sample recovery and grade. Recovery was good. No sample bias has occurred due to preferential loss/gain of core or fine/coarse material.		
Logging	0	Whether core samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Core samples were geologically and geotechnically logged to a level of detail to support appropriate Mineral		

			Resource estimation, mining studies and metallurgical studies.
	0	Whether logging is qualitative or quantitative in nature and photography.	Core logging is qualitative in nature, the core was photographed, measured for recovery, rough logged and marked up for sampling.
	0	The total length and percentage of the relevant intersections logged	All core in GCZ002 was logged and sampled.
Sub-sampling techniques and sample	0	If core, whether cut or sawn and whether quarter, half or all core taken.	Core was diamond blade sawn to quarter core and sampled. The other half remained in the core tray on site.
preparation	0	The nature, quality and appropriateness of the sample preparation technique.	Quarter core diamond blade cut core sampling is high quality and an appropriate sampling technique for all precious and base metal targets/deposits.
	0	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Standard laboratory procedures practised by ISO certified labs
	0	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate /second-half sampling.	Supervised by Senior Geologist and second half sampling is sometimes undertaken, but not herein due to the small number of samples.
	0	Whether sample sizes are appropriate to the grain size of the material being sampled.	Quarter core is an appropriate sample size for this type of investigation.
Quality of assay data and laboratory tests	0	and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.assayed for gold +40 element ICP with near tot were established and reported by the lab.Analysis was undertaken by SGS Australia – To Sample Preparation -Core PRP88: Dry, crush 6 Gold by fire assay Code: FAA505: The gold is d with a 50-gram sample charge weight. Detecti Base metals by 4 acid ICP-OES finish Code: DIG nitric, hydrochloric, hydrofluoric and perchlori possible.Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of have been established.The solution from the above DIG40Q digest elements of interest. Code: ICP40Q: Detection ppm, Te 10 – 10000 ppm, Al 100 – 400000 pp 10000 ppm, As 3 – 10000 ppm, Mg 20 – 1 5000 ppm, Mn 5 – 10000 ppm, Mg 20 – 1 5000 ppm, Sn 2 – 10000 ppm, Se 10 – 1000 10000 ppm, Sn 2 – 10000 ppm, Se 10 – 1000 10000 ppm, Sn 2 – 10000 ppm, Se 10 – 1000 ppm ppm, Cr 10 – 20000 ppm, Nb 10 – 10000 ppm ppm, Cr 10 – 20000 ppm, Nb 10 – 10000 ppm f the sample contained more of the element 1 using and 'Over-Range' method: 4 acid – ore g (df=500) is digested with nitric, hydrochloric, isolubility of the sample as possible. Code: AAFor geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including 	mm, Pulverize, 75 μ m, <3.0kg. letermined by fire assay by using lead collection technique ion limits: Au 0.01– 10000 ppm G40Q Total Geochem Digest: The sample is digested with ic acids to effect as near to total solubility of the sample as is presented to an ICP-OES for the quantification of the limits: Ag 0.5 – 200 ppm, Cu 5 – 10000 ppm, Ni 5 – 10000 pm, Fe 100 – 1000000 ppm, P 20 – 100000 ppm, Th 10 – 0 ppm, Pb 5 – 5000 ppm, Ti 10 – 20000 ppm, Ba 5 – 10000 n, U 10 – 10000 ppm, Be 0.5 – 5000 ppm, La 0.5 – 10000 5 – 10000 ppm, Li 1 – 10000 ppm, Sb 2 – 5000 ppm, W 10 L000000 ppm, Sc 0.5 – 500 ppm, Y 0.5 – 5000 ppm, Mo 5 m, Co 1 – 10000 ppm, Na 50 – 200000 ppm, Sr 1 – 10000 n, Ta 20 – 10000 ppm. than the method was capable of determining it was re-run grade, assay grade method Code: DIG41Q: The sample 0.2g hydrofluoric and perchloric acids to effect as near to total S41Q Description: AAS analysis following a DIG41Q digest. Not applicable. None used. Improved surveying required for a resource estimation.
Verification of sampling and	0	The verification of significant intersections by either independent or alternative company personnel.	Verified by Senior geologist Fred Iwei and all other geologists onsite at the time.
assaying	0	The use of twinned holes.	Nil per-se, but these were very close to hole SUG002.
	0	Documentation of primary data, data entry procedures, data	Normal field protocols were utilised whereby physical
	0	verification, data storage (physical and electronic) protocols. Discuss any adjustments to assay data.	data was transferred into a laptop generally each day. No adjustments made to assay data that are not reported in the if more than 1 assay exists, its average is quoted.
Location of data points	0	Accuracy + quality of surveys used to locate drill holes (collar + down- hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Hand held GPS at this stage.
	0	Specification of the grid system used. Quality and adequacy of topographic control.	Map datum is AGD 066. Topographic control is low with 40m contours from 1:100,000 plans and 10m contours from DTM contours.
Data spacing and	0	Data spacing for reporting of Exploration Results.	As noted in body of text and refer to any attached plans for details.
distribution	0	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied	Hole collar and hence data spacing and distribution is not yet sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures. Additional drilling is required.
Oriontation of	0	Whether sample compositing has been applied.	Not applied.
Orientation of data in relation to geological	0	Whether the orientation of sampling achieves unbiased sampling of possible structures to the extent this is known, considering the deposit type.	Orientation of cut from the diamond blade saw achieves unbiased sampling of possible structures to the extent this is known and determinable, considering the deposit type.
structure	0	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported.	The relationship between the drilling orientation and the orientation of key mineralised structures is considered

				to be appropriate as discussed and has not introduced a sampling bias.	
Sample security	0	Measures taken to ensure sample securit	ÿ	Sample were transported by the MD in checked baggage from site to Perth.	
Audits or reviews	0	Results of any audits or reviews of sampl	ing techniques and data.	No specific audits or reviews of sampling techniques and data have been undertaken.	
		Section 2	Reporting of Exploration Re	sults	
Criteria		Explanation	Commentary		
Tenure	0	The security of the tenure held at the ti any known impediments to obtaining a lic		As noted in body of text.	
Exploration done by others	0	exploration by other parties. search. It was explored		the late 1960s was part of a PNG porphyry copper deposit for gold initially in the mid 1980's. Refer previous aries to the ASX for previous work.	
Geology	0	Deposit type, geological setting and style of mineralisation.	•	related targets, porphyry copper-gold - molybdenum and nc-lead skarns in the Fold belt of Papua New Guinea.	
Drill hole o information		A summary of all information material t exploration results including a tabulation for all Material drill holes:		This drill Information is tabulated in body of text.	
		Easting and northing of the drill hole of Elevation or RL (Reduced Level- ele metres) of the drill hole collar		This information tabulated in the text of the release. Information tabulated in the text.	
		Dip and azimuth of the hole		This drill Information is tabulated in body of text.	
		Down hole length and interception de	pth	This information tabulated in the text of the release.	
Data	0	Hole length In reporting Exploration Results, weighting averaging techniques,		This drill Information is tabulated in body of text. Tables of results included show data aggregation if	
aggregation methods	0	maximum and/or minimum grade trunc grades) and cut-off grades are usually Ma	ations (e.g. cutting of high	applied. Core intercepts are weighted averages of the averaged (when possible or individual otherwise) assay results.	
		Where aggregate intercepts incorporate results and longer lengths of low grade for such aggregation should be stated ar such aggregations should be shown in de	results, the procedure used ad some typical examples of	If this occurred, it is stated in the text with appropriate cut off grades provided.	
	0	The assumptions used for any reporting should be clearly stated.		No metal equivalent values are reported.	
Relationshipobetween		These relationships are particularly imp Exploration Results.		The relationship between mineralisation widths & intercept lengths is moderately well understood.	
		If the geometry of the mineralisation wit is known, its nature should be reported.	h respect to drill hole angle	If the geometry of the mineralisation with respect to drill hole angle is known, it is reported in body of text.	
intercept lengths	0	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').			
Diagrams	0	Appropriate maps and sections (with intercepts should be included for any reported These should include, but not drill hole collar locations and appropriate	significant discovery being be limited to a plan view of	Appropriate maps, sections and tabulations of intercepts are included as possible.	
Balanced reporting	0	Where comprehensive reporting of all practicable, representative reporting of and/or widths should be practiced to av Exploration Results.	both low and high grades oid misleading reporting of	Comprehensive reporting of Exploration Results has been undertaken.	
Other substantive exploration data	0	Other exploration data, if meaningfu reported including (but not limited to geophysical survey results; geochemical - size and method of treatment; met density, groundwater, geotechnical potential deleterious or contaminating su): geological observations; survey results; bulk samples allurgical test results; bulk and rock characteristics;	All meaningful exploration data has been included in this and many previous releases to the ASX.	
Further work	0	The nature and scale of planned further	work	Future work is dependent on available capital.	
o		Diagrams clearly highlighting the area including the main geological interpre areas, provided this information is not co	tations and future drilling	Appropriate plans are included, as possible.	