

<u>Thursday's Gossan Porphyry Copper-Gold Project – Diamond Drilling Update</u>

# New High-Grade Assays from Step-Out and In-Fill Drilling Further Expand Shallow Copper-Gold Discovery

Grades of up to 10.87% copper in step-out drilling 40m to the north of discovery hole as in-fill drilling demonstrates down-plunge continuity below the Low Angle Structure (LAS)

#### **Highlights**

- > Diamond hole SMD054, located 40m along strike to the north-west of discovery hole SMD050, returns further outstanding high-grade assay results:
  - 11m at 4.62% copper, 0.57g/t gold and 25g/t silver from 86m down-hole, including:
    - 7m at 7.10% copper, 0.72g/t gold and 39g/t silver from 90m down-hole, including:
      - 3m at 10.87% copper, 0.67g/t gold and 52g/t silver from 92m down-hole
- Drill hole SMD054 also intercepted another overlapping interval of nickel mineralisation, with:
  - o 5m at 1.42% nickel and 0.05% cobalt from 96m down-hole
- Diamond hole SMD058, located between discovery holes SMD050 and the first stepout hole SMD051, intersected a broader zone of mineralisation, with:
  - 23m at 1.34% copper, 0.26g/t gold and 3.5g/t silver from 68m down-hole, including:
    - 3m at 6.33% copper, 0.27g/t gold and 2.9g/t silver from 88m down-hole
- Diamond hole SMD056, targeted 40m below the discovery hole SMD050, did not reach target depth due to the drill rods breaking but still intersected significant mineralisation including:
  - 8.3m at 1.65% copper, 0.23g/t gold and 7.2g/t silver from 157m down-hole, including:
    - 3m at 3.75% copper, 0.25g/t gold and 10.2g/t silver from 157m down-hole
  - o 3m at 1.68% copper, 0.18g/t gold and 8g/t silver from 79m down-hole
- Visual observations from recently completed in-fill drill holes SMD059 and SMD060, located 160m and 120m south of SMD050 respectively, indicate thick, well-developed mineralised intervals, as described in the attached drill logs. Assays for these holes are pending.
- Drilling to commence shortly to test the 100m of strike between SMD054 and historical hole SNDD001 (7.7m at 4.4% copper, 1.08g/t gold and 77g/t silver). If successful this would confirm the discovery over a 500m strike length.
- > Drilling continues with two drill rigs on-site and two additional drill rigs expected soon.



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Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is pleased to advise that assay results for diamond drill holes SMD054, SMD056 and SMD058, together with indications from ongoing drilling, continue to confirm and extend the shallow high-grade copper-gold discovery at the **Thursday's Gossan prospect**, part of its 100%-owned Stavely Copper-Gold Project in Victoria (Figure 1).

The Company has received assay results for diamond drill holes targeting shallow structurally controlled mineralisation within the Ultramafic Contact Fault (UCF) with SMD054, located 40m north-west of the discovery drill hole SMD050 (Figures 2 & 3), intersecting:

- 11m at 4.62% copper, 0.57g/t gold and 25g/t silver from 86m down-hole, including:
  - 7m at 7.10% copper, 0.72g/t gold and 39g/t silver from 90m down-hole, including;
    - 3m at 10.87% copper, 0.67g/t gold and 52g/t silver from 92m down-hole

Similar to discovery drill hole SMD050, which encountered a zone of high-grade nickel-cobalt mineralisation of **4.4m at 3.98% nickel and 0.23% cobalt** from 96.7m down-hole below the well-developed copper-gold mineralisation with **32m at 5.88% copper, 1.00g/t gold and 58g/t silver** from 62m down-hole (see ASX announcement 26 September 2019), drill hole SMD054 also intercepted (Figure 4):

o 5m at 1.42% nickel and 0.05% cobalt from 96m down-hole

SMD058, located 80m to the south-east of discovery drill hole SMD050, intersected a thicker zone of mineralisation including a narrower high-grade interval (Figure 5):

- 23m at 1.34% copper, 0.26g/t gold and 3.5g/t silver from 68m down-hole, including:
  - 3m at 6.33% copper, 0.27g/t gold and 2.9g/t silver from 88m down-hole

Diamond hole SMD056 (and SMD055), targeted 40m below (down-dip from) the discovery hole intersection in SMD050 did not reach target depth due to the drill rods breaking. Despite this, the hole still intersected a significant zone of mineralisation including (Figure 6):

- o 3m at 1.68% copper, 0.18g/t gold and 8g/t silver from 79m down-hole,
- 8.3m at 1.65% copper, 0.23g/t gold and 7.2g/t silver from 157m down-hole, including:
  - 3m at 3.75% copper, 0.25g/t gold and 10.2g/t silver from 157m down-hole

Further drilling will test the position down-dip of the discovery hole SMD050 in the next few weeks and we are confident that these holes can now be completed to their target depths.

Stavely Minerals' Executive Chairman, Chris Cairns, said:

"We are pleased that ongoing drilling continues to intersect well-developed, high-grade copper-gold-silver mineralisation with the added bonus of some quite unusual nickel-cobalt mineralisation. As expected, we continue to see variation in widths and grade along the strike length of the discovery, but overall the picture is continuing to build strongly."



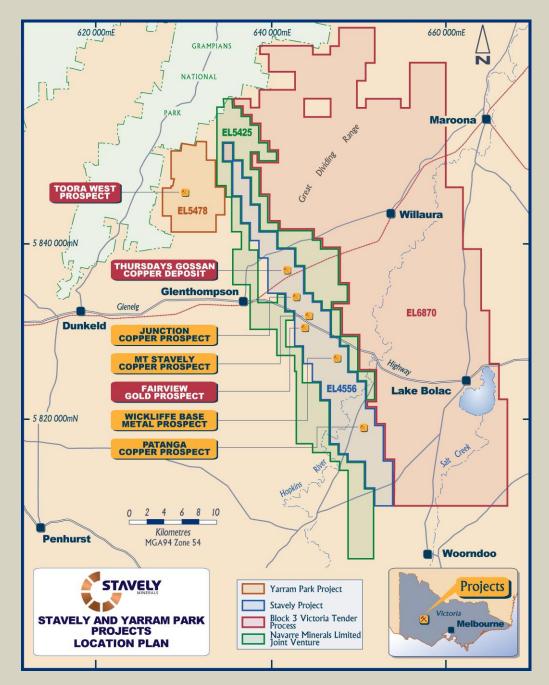


Figure 1. Stavely Project location map.

"Drill hole SMD054 has extended mineralisation to the north towards the historical drill hole SNDD001 reported in our Prospectus, which returned 7.7m at 4.14% copper, 1.08g/t gold and 77g/t silver from 94.7m depth and a second 9.5m interval of 2.93% copper, 0.44g/t gold and 42g/t silver from 154.6m. There is just over 100m between these holes and, assuming this gap is also mineralised – and this will be drill tested shortly – it will confirm a strike extent of approximately 500m which remains open in all directions.

"In terms of the down-dip continuity, we still have an incomplete picture but the early indications are extremely encouraging. Hole SMD056 failed to properly test the down-dip position 40m below the discovery hole, but still intersected a significant zone of economic mineralisation. Follow-up drilling in the coming weeks will give us a much clearer picture of what is going on at depth and where the broader potential of this discovery may lie."



"Of particular note from our recent drilling is that the visual observation of the mineralisation in SMD059 suggests that it extends beneath the low-angle structure (LAS). This provides encouragement that mineralisation does extend below the LAS and the depth potential of high-grade mineralisation is therefore not constrained by this structure. This opens up the entire discovery – and indeed the broader area below the shallow chalcocite blanket – quite significantly and represents a tantalising proposition.

"While drilling conditions remain challenging, we are seeing greatly improved recoveries in the problematic friable sulphide zones that we believe host the greatest abundance of hypogene chalcocite – and hence the higher-grade copper zones. The current challenge is to improve drill recoveries in 'green clay' zones that are associated with the nickel-cobalt mineralisation. We believe that the fluids responsible for this phase of mineralisation were particularly acidic and therefore that the puggy clays and associated nickel-cobalt mineralisation are an alteration product of these fluids.

"We have temporarily reduced to two drill rigs on-site as the rig that was demobilised did not have the capacity to complete the large diameter (PQ) drill holes we require to maximise the drill recoveries. Two larger capacity rigs are expected to arrive in coming weeks to accelerate the in-fill and extensional drilling of the UCF target and to drill test other similar regional targets."

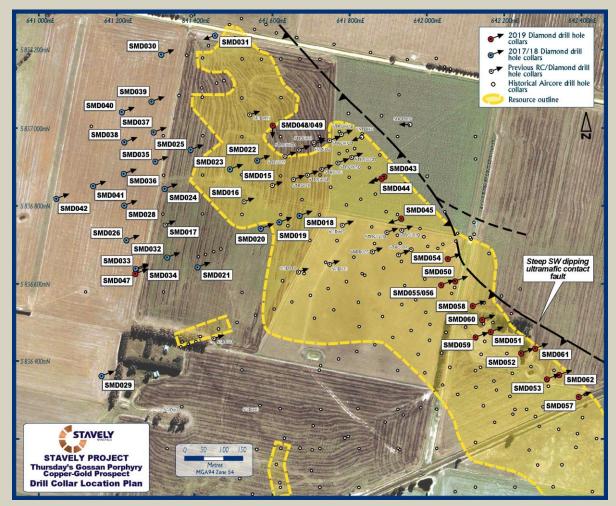


Figure 2. Thursday's Gossan drill collar location plan.



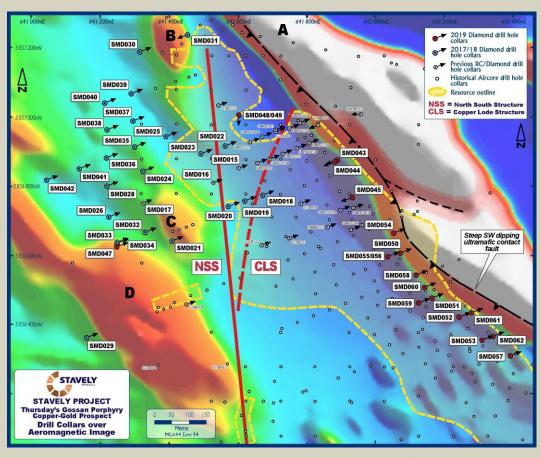


Figure 3. Aeromagnetic image with drill collars and the surface projection of the ultramafic contact structure.

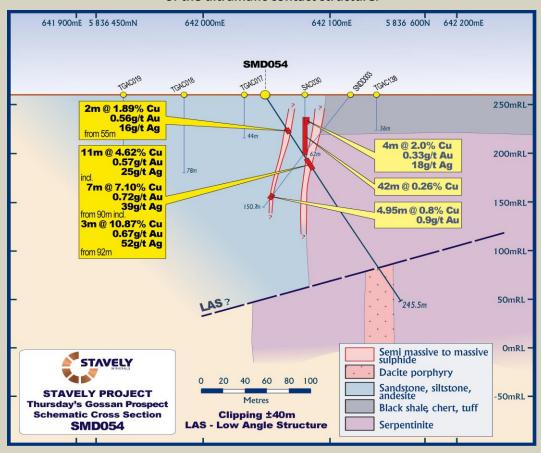


Figure 4. SMD054 drill section.



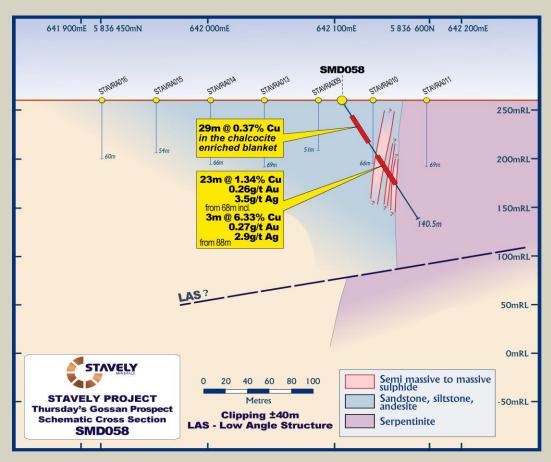


Figure 5. SMD058 drill section.

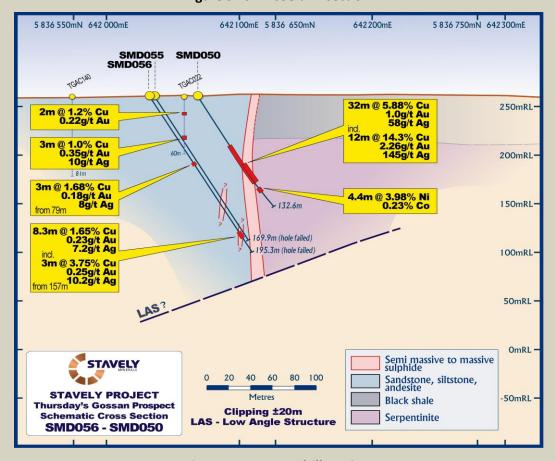


Figure 6. SMD056 drill section.



#### **Reporting of Visual Estimates**

Visual observations of drill core from drill holes SMD059 (drilling down-dip of SMD051, Figure 7) and SMD060 (located between SMD058 and SMD051, Figure 8) indicate that both of these holes encountered zones of massive to semi-massive mineralisation over significant down-hole widths. Assays for these holes are pending.

The Daily Drill Reports for the completed drill holes are provided as Appendices 1 and 2.

The growing body of evidence from the five drill holes for which assays have been received, combined with visual indications from ongoing drilling, suggest that the shallow zone of copper-gold mineralisation now being delineated at the UCF represents a major exploration breakthrough for the Company.

The reporting of visual estimates for this style of mineralisation is challenging given:

- The variety of copper sulphide minerals involved;
- That not all copper sulphides were created equal in respect to their copper content;
- Often the copper sulphides are irregularly distributed in micro-fractures, and
- The abundance highest copper content sulphide chalcocite is often difficult to estimate due to its lack of lustre and that it can be associated with zones of more friable sulphides.

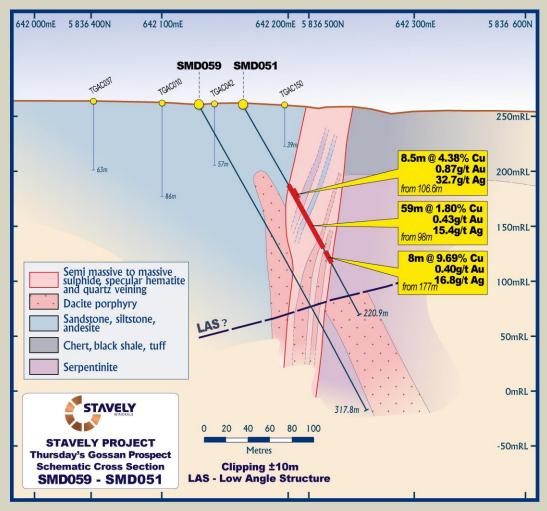


Figure 7. SMD059 drill section.



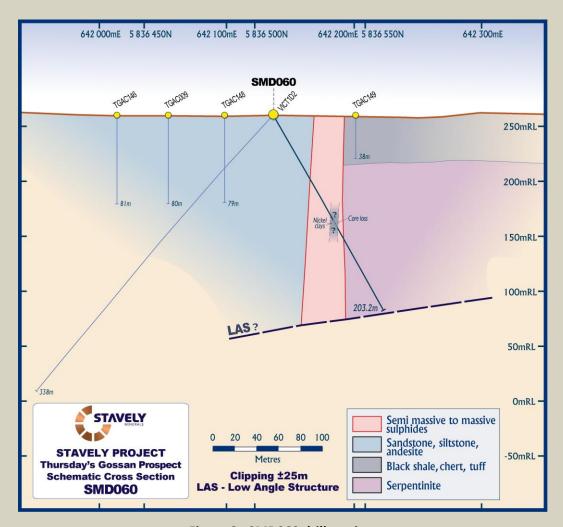


Figure 8. SMD060 drill section.

Likewise, the style of mineralisation is not conducive to estimates based on Niton<sup>©</sup> handheld XRF analysis because the mineralisation is so heterogeneous, and spot assays vary so wildly in grade, that it is considered an unreliable estimate of grade. The Niton<sup>©</sup> is best applied to mineral identification in this situation.

As a consequence, below are deliberately conservatively reported sulphide abundance and copper sulphide species observed in drill holes SMD059 and SMD060 (Figures 7 & 8).

#### SMD059 (intervals are drill depth in metres)

35.1-35.65	Massive sulphide – pyrite and clay, 70-80% sulphide.
35.65-41.15	Sandstone or microdiorite, medium grained, equigranular, strong to intense pervasive white and light grey clay, trace to 5% pyrite.
41.15-42.0	Massive sulphide – pyrite and clay, 60-70% sulphide.
42.0-49.9	Intense pervasive white and light grey clay.
49.9-52.2	Semi-massive sulphide in clay – 10-20% sulphide.
52.2-62.0	Microdiorite – medium grained sparsely feldspar phyric, 10% feldspar phenocrysts 2-6mm wide. Strong to intense pervasive white and light grey clay.



62.0-65.8	Intense pervasive white and light grey clay with 2x or 3x, 5-10cm massive sulphide veins, overall 5-6% sulphide.
65.8-66.7	Massive sulphide – pyrite+clay+?chalcocite. 95% sulphide, 5% clay, trace copper sulphide
66.7-67.2	Microdiorite – strong pervasive clay.
67.2-68.15	Massive sulphide – pyrite+clay, 95-98% sulphide, trace to 1% chalcocite?
68.15-69.5	Microdiorite? – fine grained granular texture, medium to strong pervasive clay.
69.5-92	Intense pervasive white and light grey clay. 4 x to 5x, 5-10cm zones of massive sulphide, pyrite, overall 1-5% sulphide.
92-125.9	Microdiorite or plagioclase rich volcanic sandstone. Patchy zones of clay alteration with pervasive trace chlorite and clay alteration throughout. Trace D veins occur. Trace pyrite, chalcopyrite and chalcocite occur in fractures.
125.9-131.1	Microdiorite – fine to medium grained, sparsely plagioclase phyric. Weak patchy clay over weak to moderate pervasive chlorite. 4x, 1-10cm massive pyrite±chalcopyrite veins and multiple pyrite stringers, all with sericite halos, overall, 2-5% sulphide.
131.1-138.45	Microdiorite as above – minor pyrite stringers and pyrite-filled fractures, overall 0.5-2% sulphide.
138.45-139.0	Massive sulphide – pyrite+clay, 60-70% sulphide.
139.0-141.4	Microdiorite – fine grained, moderate to strong pervasive chlorite+clay, strongly broken fragmented core.
141.4-155.6	Dacite porphyry – very coarse grained, 40-55% plagioclase phenocrysts and glomerocrysts, mostly 5-10mm long, all replaced by clay. Strong to locally intense pervasive clay.
155.6-162.3	Sandstone. Pervasive clay alteration. Trace disseminated pyrite throughout.
162.3-166.9	Dacite porphyry. Very coarse grained. Plagioclase phenocrysts occur up to 10mm. Strong clay replacement of plagioclase.
166.9-169.2	Sandstone. Hematite and trace magnetite alteration. Chalcopyrite and chalcocite on fracture surfaces. Weak disseminated pyrite throughout. <b>3% sulphide.</b>
169.2-191.1	Dacite porphyry. Very coarse grained. Plagioclase phenocrysts occur up to 10mm. Moderate pervasive clay+sericite replacement of plagioclase. Green alteration of plagioclase is likely epidote. Clay becomes more intense downhole.



191.1-197.0 Dacite porphyry – very coarse grained, 20-30% 5-10mm feldsperior phenocrysts. Moderate to strong pervasive chlorite+clay, weat fractures, feldspar phenocrysts replaced completely by chlorite	k clay-filled
197.0-198.05 Undifferentiated ultramafic – fine grained, vuggy, almost comreplaced by hematite, sulphide and clay. Intense pervasive he with patchy and disseminated pyrite, chalcopyrite, chalcocite specularite. Approximately 8-12% sulphide including 2-5% cosulphide.	matite+clay and
198.05-198.9 100% cream-coloured clay.	
198.9-200.3 Intense pervasive hematite+clay with patchy and disseminate pyrite, chalcopyrite and chalcocite. 5-6% sulphide including sulphide.	•
200.3-203.0 Undifferentiated ultramafic – fine grained, strong to intense postrongly foliated with shear foliation at <5° to core axis. Mino bands, parallel to the shear foliation and disseminated pyrite black chalcocite. 5-6% sulphide including ?1-2% copper sulphing	r pyrite e, trace sooty
203.0-203.9 Undifferentiated ultramafic breccia – intense pervasive clay, cultramafic surrounded by grey-green clay, intensely fractured	
203.9-208.5 Undifferentiated ultramafic – fine grained, breccia texture in proderately foliated, strong to intense pervasive clay, 1-2% py and disseminated.	•
208.5-209.5 Undifferentiated ultramafic – fine grained, moderate pervasiv weak serpentinite and magnetite. Fractured downhole margin filled fault with dacite porphyry.	•
209.5-227.3 Dacite porphyry – coarse to very coarse grained, 20-30% plagic phenocrysts 0.5-8mm long, moderately to strongly fractured, strong patchy clay+sericite over chlorite. Plagioclase phenocry completely replaced by chlorite and/or clay. 1-3% pyrite veins disseminated pyrite, rare chalcopyrite.	moderate to ysts are
227.3-227.6 Massive Sulphide – pyrite+clay, 85-90% sulphide.	
227.6-233.8 Dacite porphyry, strongly fractured, strong patchy to pervasiv pyrite.	e clay, 1-3%
233.8-235.3 Semi-massive sulphide, pyrite+chalcopyrite+chalcocite in cla sulphide, trace-1% copper sulphide.	у, 40-50%
235.3-236.25 Massive sulphide, pyrite+chalcopyrite+chalcocite in quartz+clay+hematite, 70-80% sulphide, 2-3% copper sulphide	de.



- 236.25-245.8 Dacite porphyry very coarse grained, 20-30% 1-5mm long plagioclase phenocrysts, completely replaced by chlorite and clay, Moderate clay overprinting moderate pervasive chlorite, trace pyrite-filled fractures, moderately to strongly fractured.
- 245.8-247.9 Semi-massive sulphide pyrite+chalcopyrite in red hematite clay+specularite host rock. 6-8% sulphide including 1-2% copper sulphide, mostly chalcopyrite.
- 247.9-248.15 Microgabbro dyke fine grained, moderate-strong pervasive clay, extending in from margins.
- 248.15-250.2 Semi-massive sulphide pyrite+chalcopyrite in red hematite clay+specularite host rock. 20-25% sulphide including 2-3% copper sulphide, mostly chalcopyrite, rare chalcocite. Includes 17cm interval of microgabbro at 248.9m.
- 250.2-251.7 Undifferentiated ultramafic fine grained, intense pervasive clay, strong shear foliation, minor patchy pyrite, 1-2% sulphide, <0.5% copper sulphide.
- 251.7-253.0 Semi-massive sulphide chalcopyrite+pyrite in hematite+magnetite+clay rock. 10-12% sulphide including 4-5% copper sulphide, mostly chalcopyrite, rare chalcocite. Magnetite abundance increases downhole.

#### SMD060 (intervals are drill depth in metres)

- 63.7-76.6 UCF. Massive to semi massive pyrite and quartz with trace to weak red hematite and trace fuchsite and chromite grains. At this stage sulphides consist of 80-90% pyrite with trace chalcopyrite and possible trace bornite and chalcocite. There is a zone from 65.6-65.9m where chalcopyrite is dominant. Very friable zones mixed with competent massive sulphide and quartz. The presence of chromite grains indicates that this zone is replacing ultramafic.
- 76.6-77.6 UCF. Strongly clay altered ultramafic. Trace disseminated pyrite throughout. Similar to clay altered zones encountered in SMD051.
- 77.6-82 UCF. Massive to semi massive pyrite and quartz. Trace to weak red hematite with trace fuchsite and chromite grains. >90% sulphide. Trace chalcopyrite, chalcocite and possible bornite occur. Very friable zones mixed with competent massive sulphide and quartz. The presence of chromite and fuchsite indicates that this zone is replacing ultramafic.
- 82-83.3 **UCF. Massive chalcopyrite and pyrite with quartz alteration. >90% sulphide with >10% copper sulphides.** Trace fuchsite and hematite alteration persist.
- 83.3-94 UCF. Massive pyrite with quartz alteration. Disseminated chalcopyrite and friable chalcocite occur. Variable between competent and friable zones.



	>90% sulphide. 1-2% copper sulphides. Trace fuchsite and hematite alteration persist.
94-108	UCF. Strongly clay altered serpentinite. Chromite grains visible. Likely still part of the UCF structure.
108-115.9	UCF. Strongly clay altered serpentinite. 5cm wide pyrite and trace chalcocite veins. Friable in places. Core recovery 50% in some runs.
115.9-118.5	UCF. Green black clays. Disseminated pyrite. 2% sulphide. Elevated Ni and Cr. 1.4m core loss at start of interval but recovery improves towards end of interval.
118.5-119.2	UCF. Strongly clay altered serpentinite. Trace disseminated pyrite throughout. Chromite grains occur within the clay altered matrix.
119.2-126.2	Core loss.
126.2-127.9	UCF. Still very poor core recovery. Grey clay with clasts of brown altered ultramafic similar to what we see immediately east of the UCF serpentinite contact. Some clasts contain disseminated pyrite and chalcopyrite.
127.9-129.2	UCF. Grey clay with disseminated pyrite and throughout. Some cave in but sample recovery ok.
129.2-130.6	UCF. Black and grey, friable clay, pyrite and chalcocite. Sulphides >50%. 10-20% copper sulphides.
130.6-135.15	UCF. Massive sulphide. Quartz alteration and veining occurs in most competent zones. Friable chalcocite occurs on vuggs and fracture throughout. Bornite occurs last a later phase infilling pore spaces between earlier pyrite. Chalcopyrite occurs as disseminations. Trace hematite dusting in places. Sulphide >90%. Copper sulphides 5-10%. High grade mineralisation on the contact with the serpentinite.
135.15-138.5	Strongly clay altered serpentinite. Trace disseminated pyrite.
138.5-141	Serpentinite. Vuggy texture. Disseminated pyrite is reducing. Brown iron alteration similar to previous holes on the transition from UCF into the serpentinite.

#### Visual Estimates for mineralised intervals in SMD059 and SMD060

For transparency, the full Daily Drill Reports for the completion dates of SMD059 and SMD060 are attached as Appendix 1 and 2.

The intention of the current program is to delineate high-grade, near-surface copper-gold-silver mineralisation over a significant strike extent that would complement the existing large Inferred Mineral Resource of 28 million tonnes at 0.4% copper (gold and silver not estimated)

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at Thursday's Gossan (see Stavely Minerals Limited 2018 Annual Report). Once the near surface potential is confirmed and some similar regional targets are tested, drilling will shift towards confirming the depth potential of the high-grade copper-gold-silver mineralisation on a number of mineralised structures including the Ultramafic Contact Fault (UCF), the North-South Structure (NSS) and the Copper Lode Splay (CLS).

Additionally, a regional airborne electro-magnetic (EM) geophysical survey was flown by North Limited in 1994. The 25-year-old data has been sent to Denmark for processing using modern software and computing power and is expected to provide support for identifying and ranking regional targets for drill testing. Preliminary results have been received. EM is considered the most suitable geophysical technique for identifying massive sulphide deposits.

Yours sincerely,

**Chris Cairns** 

**Managing Director** 

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Chris Cairns, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Cairns is a full-time employee of the Company. Mr Cairns is the Managing Director of Stavely Minerals Limited, is a substantial shareholder of the Company and is an option holder of the Company. Mr Cairns has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Cairns consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

For Further Information, please contact:

Stavely Minerals Limited Media Inquiries:

Phone: 08 9287 7630 Nicholas Read – Read Corporate

Email: info@stavely.com.au Phone: 08 9388 1474



# Appendix 1: SMD059 final Daily Drill Report (depths are in metres)

# **DAILY DRILLING REPORT**

# **10 November 2019**

#### **SUMMARY**

Rig	Hole ID	Prospect	Easting	Northing	Dip	Azimuth (Mag)	Planned EOH depth (m)	Current Depth (m)
15	SMD059	Thursdays Gossan	642122	5836461	-60	59.5	250	317.8 EOH

#### **SMD059**

SMD059 is targeting the UCF down-dip of SMD051. We anticipate this hole intersecting the UCF at around 150m before intersecting the LAS at 220m.

0 – 2.0	Soil and transported brown clay.
2.0-11.4	Upper saprolite – mottled red, white and brown clay.
11.4-21.5	Upper saprolite – white and brown clay.
21.5-22.5	Saprolite – transition to light grey clay, base of oxidation.
22.5-35.1	Lower saprolite – intense pervasive white and light grey clay.
35.1-35.65	Massive sulphide – pyrite and clay, 70-80% sulphide.
35.65-41.15	Sandstone or microdiorite, medium grained, equigranular, strong to intense pervasive white and light grey clay, trace to 5% pyrite.
41.15-42.0	Massive sulphide – pyrite and clay, 60-70% sulphide.
42.0-49.9	Intense pervasive white and light grey clay.
49.9-52.2	Semi-massive sulphide in clay – 10-20% sulphide.
52.2-62.0	Microdiorite – medium grained sparsely feldspar phyric, 10% feldspar phenocrysts 2-6mm wide. Strong to intense pervasive white and light grey clay.
62.0-65.8	Intense pervasive white and light grey clay with 2x or 3x, 5-10cm massive sulphide veins, overall 5-6% sulphide.
65.8-66.7	Massive sulphide – pyrite+clay+?chalcocite. 95% sulphide, 5% clay, trace copper sulphide
66.7-67.2	Microdiorite – strong pervasive clay.



67.2-68.15	Massive sulphide – pyrite+clay, 95-98% sulphide, trace to 1% chalcocite?
68.15-69.5	Microdiorite? – fine grained granular texture, medium to strong pervasive clay.
69.5-92	Intense pervasive white and light grey clay. 4 x to 5x, 5-10cm zones of massive sulphide, pyrite, overall 1-5% sulphide.
92-125.9	Microdiorite or plagioclase rich volcanic sandstone. Patchy zones of clay alteration with pervasive trace chlorite and clay alteration throughout. Trace D veins occur. Trace pyrite, chalcopyrite and chalcocite occur in fractures.
125.9-131.1	Microdiorite – fine to medium grained, sparsely plagioclase phyric. Weak patchy clay over weak to moderate pervasive chlorite. 4x, 1-10cm massive pyrite±chalcopyrite veins and multiple pyrite stringers, all with sericite halos, overall, 2-5% sulphide.
131.1-138.45	Microdiorite as above – minor pyrite stringers and pyrite-filled fractures, overall 0.5-2% sulphide.
138.45-139.0	Massive sulphide – pyrite+clay, 60-70% sulphide.
139.0-141.4	Microdiorite – fine grained, moderate to strong pervasive chlorite+clay, strongly broken fragmented core.
141.4-155.6	Dacite porphyry – very coarse grained, 40-55% plagioclase phenocrysts and glomerocrysts, mostly 5-10mm long, all replaced by clay. Strong to locally intense pervasive clay.
155.6-162.3	Sandstone. Pervasive clay alteration. Trace disseminated pyrite throughout.
162.3-166.9	Dacite porphyry. Very coarse grained. Plagioclase phenocrysts occur up to 10mm. Strong clay replacement of plagioclase.
166.9-169.2	Sandstone. Hematite and trace magnetite alteration. Chalcopyrite and chalcocite on fracture surfaces. Weak disseminated pyrite throughout. 3% sulphide.
169.2-191.1	Dacite porphyry. Very coarse grained. Plagioclase phenocrysts occur up to 10mm. Moderate pervasive clay+sericite replacement of plagioclase. Green alteration of plagioclase is likely epidote. Clay becomes more intense downhole.
191.1-197.0	Dacite porphyry – very coarse grained, 20-30% 5-10mm feldspar phenocrysts. Moderate to strong pervasive chlorite+clay, weak clay-filled fractures, feldspar phenocrysts replaced completely by chlorite.
197.0-198.05	Undifferentiated ultramafic – fine grained, vuggy, almost completely replaced by hematite, sulphide and clay. Intense pervasive hematite+clay with patchy and disseminated pyrite, chalcopyrite, chalcocite and specularite. Approximately 8-12% sulphide including 2-5% copper sulphide.



198.05-198.9	100% cream-coloured clay.
198.9-200.3	Intense pervasive hematite+clay with patchy and disseminated specularite, pyrite, chalcopyrite and chalcocite. 5-6% sulphide including ?1-2% copper sulphide.
200.3-203.0	Undifferentiated ultramafic – fine grained, strong to intense pervasive clay, strongly foliated with shear foliation at <5° to core axis. Minor pyrite bands, parallel to the shear foliation and disseminated pyrite, trace sooty black chalcocite. 5-6% sulphide including ?1-2% copper sulphide.
203.0-203.9	Undifferentiated ultramafic breccia – intense pervasive clay, clasts of ultramafic surrounded by grey-green clay, intensely fractured.
203.9-208.5	Undifferentiated ultramafic – fine grained, breccia texture in part, weakly to moderately foliated, strong to intense pervasive clay, 1-2% pyrite, patchy and disseminated.
208.5-209.5	Undifferentiated ultramafic – fine grained, moderate pervasive chlorite, weak serpentinite and magnetite. Fractured downhole margin. Small clayfilled fault with dacite porphyry.
209.5-227.3	Dacite porphyry – coarse to very coarse grained, 20-30% plagioclase phenocrysts 0.5-8mm long, moderately to strongly fractured, moderate to strong patchy clay+sericite over chlorite. Plagioclase phenocrysts are completely replaced by chlorite and/or clay. 1-3% pyrite veins and disseminated pyrite, rare chalcopyrite.
227.3-227.6	Massive Sulphide – pyrite+clay, 85-90% sulphide.
227.6-233.8	Dacite porphyry, strongly fractured, strong patchy to pervasive clay, 1-3% pyrite.
233.8-235.3	Semi-massive sulphide, pyrite+chalcopyrite+chalcocite in clay, 40-50% sulphide, trace-1% copper sulphide.
235.3-236.25	Massive sulphide, pyrite+chalcopyrite+chalcocite in quartz+clay+hematite, 70-80% sulphide, 2-3% copper sulphide.
236.25-245.8	Dacite porphyry – very coarse grained, 20-30% 1-5mm long plagioclase phenocrysts, completely replaced by chlorite and clay, Moderate clay overprinting moderate pervasive chlorite, trace pyrite-filled fractures, moderately to strongly fractured.
245.8-247.9	Semi-massive sulphide – pyrite+chalcopyrite in red hematite clay+specularite host rock. 6-8% sulphide including 1-2% copper sulphide, mostly chalcopyrite.
247.9-248.15	Microgabbro dyke – fine grained, moderate-strong pervasive clay, extending in from margins.



248.15-250.	Semi-massive sulphide - pyrite+chalcopyrite in red hematite clay+specularite host rock. 20-25% sulphide including 2-3% copper sulphide, mostly chalcopyrite, rare chalcocite. Includes 17cm interval of microgabbro at 248.9m.
250.2-251.7	Undifferentiated ultramafic – fine grained, intense pervasive clay, strong shear foliation, minor patchy pyrite, 1-2% sulphide, <0.5% copper sulphide.
251.7-253.0	Semi-massive sulphide – chalcopyrite+pyrite in hematite+magnetite+clay rock. 10-12% sulphide including 4-5% copper sulphide, mostly chalcopyrite, rare chalcocite. Magnetite abundance increases downhole.
253.0-256.4	Undifferentiated ultramafic – fine grained, intense pervasive clay, strong shear foliation. <1% pyrite.
256.4-261.0	Undifferentiated ultramafic – fine grained, strong to intense pervasive chlorite+serpentine, weakly foliated.
261.0-292.4	Serpentinite – fine grained, strong to intense pervasive serpentine+chlorite, weakly to moderately foliated.
292.4-293.2	Dacite porphyry – very coarse grained, weak pervasive chlorite.
293.25-317.	Serpentinite – fine grained, strong to intense pervasive chlorite+serpentinite, weakly to moderately foliated.



Pyrite and chalcocite on fracture surface at 61.9m.





Massive pyrite/chalcocite vein at 66.2m.



Sandstone with disseminated hematite/magnetite alteration and disseminated pyrite at 168m.



Partially dissolved, vuggy ultramafic with patchy and disseminated pyrite, chalcopyrite and specularite. 197.1m.





Hematite+specularite rock with disseminated pyrite and chalcopyrite. 199.8m.



Pyrite+quartz vein. 234.25m.



Semi-massive sulphide, pyrite+chalcopyrite in quartz+clay rock. 235.6m.





Chalcopyrite vein in hematite+specularite+quartz rock. 246.3m.



Chalcopyrite+pyrite in hematite+specularite+magnetite+quartz rock, breccia texture. 252.0m 4-5% copper sulphide in this 1.3m interval.



# Appendix 2: SMD060 final Daily Drill Report (depths are in metres)

# **DAILY DRILLING REPORT**

# **18 November 2019**

#### **SUMMARY**

Rig	Hole ID	Prospect	Easting	Northing	Dip	Azimuth (Mag)	Planned EOH depth (m)	Current Depth (m)
15	SMD060	Thursdays Gossan	642137	5836508	-60	59.5	150	203.2 (EOH)

#### **SMD060**

SMD060 is in infilling between massive sulphide intersected in SMD058 and SMD051. We anticipate intersecting the UCF around 90m before reaching the UM at around 160m. This interval should be prospective for massive sulphide mineralisation.

0-1.1	Brown surface soil
1.1-4.4	Upper saprolite mottled zone. Breccia. Chemical brecciation of surface clays. Hematite stained clasts in a strong clay altered matrix. White and red clay throughout.
4.4-10.7	Upper saprolite mottled zoned. Mottled red-brown and white clay. Strong clay alteration of sandstone. Trace quartz veining up to 7mm wide. Limonite and hematite staining on fractures. Strong white clay alteration with hematite staining.
10.7-19.3	Upper saprolite. Mostly orange-brown clay.
19.3-19.7	Transition to grey clay. Base of oxidation.
19.7-25.4	Lower saprolite. Mostly grey clay. Minor intensely weathered and clay- altered ?volcaniclastic sandstone
25.4-41.7	Volcaniclastic sandstone. Reducing clay alteration. Trace pyrite and very trace chalcocite on fractures.
41.7-63.7	Volcaniclastic sandstone. Very broken ground. Trace to moderate pyrite on fracture surfaces and broken ground. Trace disseminated chalcopyrite.
63.7-76.6	UCF. Massive to semi massive pyrite and quartz with trace to weak red hematite and trace fuchsite and chromite grains. At this stage sulphides consist of 80-90% pyrite with trace chalcopyrite and possible trace bornite and chalcocite. There is a zone from 65.6-65.9m where chalcopyrite is



	dominant. Very friable zones mixed with competent massive sulphide and quartz. The presence of chromite grains indicates that this zone is replacing ultramafic.
76.6-77.6	UCF. Strongly clay altered ultramafic. Trace disseminated pyrite throughout. Similar to clay altered zones encountered in SMD051.
77.6-82	UCF. Massive to semi massive pyrite and quartz. Trace to weak red hematite with trace fuchsite and chromite grains. >90% sulphide. Trace chalcopyrite, chalcocite and possible bornite occur. Very friable zones mixed with competent massive sulphide and quartz. The presence of chromite and fuchsite indicates that this zone is replacing ultramafic.
82-83.3	UCF. Massive chalcopyrite and pyrite with quartz alteration. >90% sulphide with >10% copper sulphides. Trace fuchsite and hematite alteration persist.
83.3-94	UCF. Massive pyrite with quartz alteration. Disseminated chalcopyrite and friable chalcocite occur. Variable between competent and friable zones. >90% sulphide. 1-2% copper sulphides. Trace fuchsite and hematite alteration persist.
94-108	UCF. Strongly clay altered serpentinite. Chromite grains visible. Likely still part of the UCF structure.
108-115.9	UCF. Strongly clay altered serpentinite. 5cm wide pyrite and trace chalcocite veins. Friable in places. Core recovery 50% in some runs.
115.9-118.5	UCF. Green black clays. Disseminated pyrite. 2% sulphide. Elevated Ni and Cr. 1.4m core loss at start of interval but recovery improves towards end of interval.
118.5-119.2	UCF. Strongly clay altered serpentinite. Trace disseminated pyrite throughout. Chromite grains occur within the clay altered matrix.
119.2-126.2	Core loss.
126.2-127.9	UCF. Still very poor core recovery. Grey clay with clasts of brown altered ultramafic similar to what we see immediately east of the UCF serpentinite contact. Some clasts contain disseminated pyrite and chalcopyrite.
127.9-129.2	UCF. Grey clay with disseminated pyrite and throughout. Some cave in but sample recovery ok.
129.2-130.6	UCF. Black and grey, friable clay, pyrite and chalcocite. Sulphides >50%. 10-20% copper sulphides.
130.6-135.15	UCF. Massive sulphide. Quartz alteration and veining occurs in most competent zones. Friable chalcocite occurs on vuggs and fracture throughout. Bornite occurs last a later phase infilling pore spaces between earlier pyrite. Chalcopyrite occurs as disseminations. Trace hematite dusting in places. Sulphide >90%. Copper sulphides 5-10%. High grade mineralisation on the contact with the serpentinite.



135.15-138.5 Strongly clay altered serpentinite. Trace disseminated pyrite.

138.5-141 Serpentinite. Vuggy texture. Disseminated pyrite is reducing. Brown iron alteration similar to previous holes on the transition from UCF into the serpentinite.

141-175.1 Serpentinite. Talc, chlorite and magnetite altered. Foliated in places.

175.1-176 Clay altered fault in serpentinite unit.

176-203.2 Serpentinite. Talc, chlorite and magnetite altered. Foliated in places.



Broken zone of fracture-controlled sulphide and broken sandstone at 44m.



Friable massive pyrite zone at 65m.





Chalcopyrite dominant part massive sulphide at 65.8m.



Massive to semi-massive pyrite+quartz with trace fuchsite and chromite grains at 68m.





 $Semi-massive\ pyrite+ quartz\ with\ weak\ hematite\ and\ trace\ fuch site\ and\ chromite\ grains\ at\ 71.4m.$ 



Friable massive pyrite mineralisation with hematite staining and silica alteration at 80.6m.



Massive pyrite with chalcopyrite throughout at 81.8m.





Green black clay with 2% disseminated pyrite and elevated Ni and Cr at 118m.



Strongly clay altered serpentinite at 118.5m.



Massive sulphide with later bornite at 130.6m.





High grade mineralisation on the ultramafic contact from 129.9-135.15m.



Altered and vuggy serpentinite at 140m.



Thursday's Gossan Prospect – Collar Table							
			М				
Hole id	Hole Type	East	North	Dip/ Azimuth	RL (m)	Total Depth (m)	Comments
SMD050	DD	642070	5836609	-60/59.5	264	132.6	
SMD051	DD	642160	5836476	-60/59.5	264	220.9	
SMD052	DD	642238	5836421	-60/59.5	264	271.7	
SMD053	DD	642302	5836355	-60/59.5	264	273.6	
SMD054	DD	642048	5836641	-60/59.5	264	245.5	
SMD055	DD	642032	5836595	-60/59.5	264	169.9	Hole failed prior to target depth
SMD056	DD	642031	5836590	-60/59.5	264	185.8	Hole failed prior to target depth
SMD057	DD	642386	5836309	-60/59.5	264	242.2	
SMD058	DD	642115	5836542	-60/59.5	264	140.5	
SMD059	DD	642122	5836461	-60/59.5	264	317.8	
SMD060	DD	642137	5836508	-60/59.5	264	203.2	
SMD061	DD	642276	586435	-60/59.5	264	219.5	
SMD062	DD	642337	5836367	-60/59.5	264	227.70	
SMD063	DD	642063	5836585	-60/59.5	264	In Progress	
SMD064	DD	642041	5836619	-60/59.5	264	In Progress	

Thursday's G	Thursday's Gossan Prospect – Intercept Table												
		MGA 94 z	one 54				Intercept						
Hole id	Hole Type	East	North	Dip/ Azimuth	RL (m)	Total Depth (m)	From (m)	To (m)	Width (m)	Cu (%)	Au (g/t)	Ag (g/t)	Ni (%)
SMD054	DD	642048	5836641	-60/59.5	264	245.5	55	57	2	1.89	0.56	16	
							86	97	11	4.62	0.57	25	
						Incl.	90	97	7	7.10	0.72	39	
						Incl	92	95	3	10.87	0.67	52	
							96	101	5				1.42
SMD056	DD	642031	5836590	-60/59.5	264	185.8	79	82	3	1.68	0.18	8	
							157	165.3	8.3	1.65	0.23	7.2	
						Incl.	157	160	3	3.75	0.25	10.2	
SMD0058	DD	642115	5836542	-60/59.5	264	140.5	19	48	29	0.37			
							68	91	23	1.34	0.26	3.5	
						Incl.	88	91	3	6.33	0.27	2.9	



# JORC Code, 2012 Edition – Table 1

# **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling	Nature and quality of	Stavely Project
techniques	sampling (eg cut channels,	Thursday's Gossan Prospect
	random chips, or specific	Stavely Minerals' RC Drilling
	specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as	Reverse Circulation (RC) percussion drilling was used to produce a 1m bulk sample (~25kg) which was collected in plastic bags and representative 1m split samples (12.5% or nominally 3kg) were collected using a cone splitter and placed in a calico bag. The cyclone was cleaned out with compressed air at the end of each hole and periodically during the drilling. The 1m split samples were submitted for analysis.
	limiting the broad meaning	Stavely Minerals' Diamond Drilling
	of sampling.	The diamond core for intervals of interest, ie. those that contained visible sulphides as well as 5m above and below were sampled. PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.4m or greater than 1.2m.
		Historical Drilling
		Historical diamond hole PEND1T was drilled by Penzoil of Australia in the late 1970's to a depth of 88.5m. Only portions of the hole were sampled, with composite samples varying from 1 to 8m. The samples were assayed for Au, Ag, As, Cu, Pb and Zn.
		Historical RAB drill holes with the prefix PENR were drilled by Penzoil of Australia in the 1970's. Alternate two metre composite samples were assayed for Ag, Cu, Pb and Zn.
		Historical aircore drill holes with the prefix STAVRA were drilled by North Limited in the early 1990's. Three metre composite samples were assayed for Au, Cu, Pb and Zn.
		Historical diamond hole VICT1D2 and VICT1D4 were drilled by North Limited in the early 1990's to a depth of 298m and 338m, respectively. For VICT1D2 the top 28m was not sampled, there after one metre or two metre composite samples were assayed for Au, Ag, Co and Mo. For VICT1D4 the top 27m was not sampled, there after one metre samples were assayed for Au, As, Cu, Mo, Pb and Zn.
		Historical holes with the prefix TGAC were drilled by Beaconsfield Gold Mines Pty Ltd (BCD).
		Historical aircore holes TGAC002 to TGAC125 were drilled in 2008- 2009. The top approximately 15 to 16 meters was not sampled, after that one metre intervals samples were taken for the remainder of the hole.



Criteria	JORC Code explanation	Commentary			
Onteria	JONG Gode explanation	Aircore holes TGAC126 to TGAC159 were drilled in 2012.  No samples were taken for the top 9 metres, after which three metre composite samples were collected for the remainder of the hole.			
		Historical holes with the prefix SAC were drilled by Beaconsfield Gold Mines Pty Ltd (BCD). Aircore holes SAC001 to SAC031 were drilled in 2009. The top approximately 5 to 30m were not sampled, after which three metre composite samples were assayed for Au, Ag, As, Bi, Cu, Hg, Pb, S and Zn.			
		Historical holes with the prefix TGRC were drilled by Beaconsfield Gold Mines Pty Ltd (BCD) in 2009. One metre samples were assayed for Au, Ag, As, Co, Cu, Fe, Ni, Pb, S and Zn.			
	Include reference to	Stavely Project			
	measures taken to ensure	Thursday's Gossan Prospect			
	sample representivity and the appropriate calibration	Stavely Minerals' Diamond and RC Drilling			
	of any measurement tools or systems used.	Sample representivity was ensured by a combination of Company Procedures regarding quality control (QC) and quality assurance/ testing (QA). Certified standards and blanks were inserted into the assay batches.			
		Historical Drilling			
		No information available.			
	Aspects of the	Stavely Project			
	determination of mineralisation that are	Thursday's Gossan Prospect			
	Material to the Public	Stavely Minerals' Diamond Drilling			
	Report - In cases where 'industry standard' work	Drill sampling techniques are considered industry standard for the Stavely work programme.			
	has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m	PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.3m or greater than 1.8m.			
	samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be	The diamond drill samples were submitted to Australian Laboratory Services ("ALS") in Adelaide, SA. Laboratory sample preparation involved:- sample crush to 70% < 2mm, riffle/rotary split off 1kg, pulverize to >85% passing 75 microns.			
	required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may	Diamond core samples were analysed by ME-ICP61 – multi acid digest with HF and ICPAES and ICPMS and Au-AA23 – fire assay with AAS finish. For sample that returned Cu values greater than 10 000ppm (1%) re-assaying was conducted by OG62, which is a four acid digest with ICP-AES or AAS finish.			
	warrant disclosure of	Stavely Minerals' RC Drilling			
	detailed information.	Drill sampling techniques are considered industry standard for the Stavely work programme.			
		The 1m split samples were submitted to Australian Laboratory Services ("ALS") in Orange, NSW. Laboratory sample preparation involved:- sample crush to 70% < 2mm,			



Critoria	IODC Code evalenction	Commentary
Criteria	JORC Code explanation	Commentary
		riffle/rotary split off 1kg, pulverize to >85% passing 75 microns.
		The RC samples were analysed by ME-ICP61 – multi acid
		digest with HF and ICPAES and ICPMS and Au-AA23 – fire assay with AAS finish.
		Historical Drilling
		No sample preparation is available for the historical drilling.
Drilling	Drill type (eg core, reverse	Stavely Project
techniques	circulation, open-hole hammer, rotary air blast,	Thursday's Gossan Prospect
	auger, Bangka, sonic, etc)	Stavely Minerals' Diamond Drilling
	and details (eg core	Diamond drill holes were drilled by Titeline Drilling in 2014
	diameter, triple or standard	(SMD001, SMD003 and SMD004) and 2017 (SMD006, SMD007, SMD008 and SMD012). Diamond tails were
	tube, depth of diamond tails, face-sampling bit or	completed on drill holes STRC001D, STRC002D,
	other type, whether core is	STRC004D, STRC005D, STRC007D, STRC008D,
	oriented and if so, by what	STRC019D and STRC020D. Holes SMD013, SMD014 and SMD015 were drilled in 2017 by Titeline Drilling. Holes
	method, etc).	SMD016, SMD017, SMD018, SMD019, SMD020, SMD021
		SMD022, SMD023, SMD024, SMD025, SMD026,
		SMD028, SMD029, SMD029W, SMD030, SMD031,
		SMD032, SMD033, SMD034, SMD035, SMD036, SMD037, SMD038, SMD039, SMD040, SMD041 and
		SMD042 were drilled in 2018 by Titeline Drilling. Hole
		SMD043, SMD044, SMD044W1, SMD045, SMD045W1,
		SMD045W2, SMD046, SMD047, SMD048, SMD049, SMD050, SMD051, SMD052, SMD053, SMD054,
		SMD055, SMD056, SMD057, SMD058, SMD059,
		SMD060, SMD061 and SMD062 were drilled by Titeline
		Drilling in 2019. Hole SMD063 and SMD064 are in progress. For the diamond holes, drilling was used to
		produce drill core with a diameter of 85mm (PQ) from
		surface until the ground was sufficiently consolidated and
		then core with a diameter of 63.5mm (HQ) was returned.
		For the diamond tails, drilling was used to produce drill core with a diameter of 63.5mm (HQ).
		Diamond drilling was standard tube. Diamond core was orientated by the Reflex ACT III core orientation tool.
		The dips, azimuths and depths of holes SMD050 to
		SMD064, inclusive are provided in the Thursday's Gossan Prospect Collar Table.
		Stavely Minerals' RC Drilling
		The RC holes were drilled by Budd Exploration Drilling P/L.
		The RC percussion drilling was conducted using a UDR 1000 truck mounted rig with onboard air. A Sullair 350/1150
		auxiliary compressor was used. 4" RC rods were used and
		5 <sup>1</sup> / <sub>4</sub> " to 5 <sup>3</sup> / <sub>4</sub> " drill bits. A Reflex Digital Ezy-Trac survey camera was used.
		The holes were oriented at -60° towards azimuth 070°.
		Historical Drilling
		Historical aircore holes TGAC002 to TGAC125 were drilled
		vertically by Beaconsfield Gold Mines Pty Ltd in 2008 - 2009 by Wallis Drilling.



Criteria	JORC Code explanation	Commentary
		Historical aircore hole with the prefix SAC were drilled by
		BCD in 2009. The hole was drilled vertically by Blacklaws Drilling Services.
		Historical reverse circulation hole TGRC082 to TGRC143 were drilled by BCD in 2009. Drilling was conducted by Budd Exploration Drilling P/L using a Universal drill rig. TGRC138 was oriented at -60° towards magnetic azimuth 55°.
		Historical drill holes TGAC126 to TGAC159 were drilled by BCD in 2012. The holes were drilled vertically by Broken Hill Exploration using a 700psi/300cfm aircore rig.
Drill sample	Method of recording and	Stavely Project
recovery	assessing core and chip	Thursday's Gossan Prospect
	sample recoveries and results assessed.	Stavely Minerals' Diamond Drilling
	results assessed.	Diamond core recoveries were logged and recorded in the database.
		Core recovery for SMD050 averaged 82% with an average recovery of 76% in the mineralised zone between 79m and 93m.
		Core recovery for SMD051 averaged 86%. For the mineralised zone between 97m and 182m recovery averaged 76%, however between 98m and 127.7m the recovery only averaged 55%.
		Core recovery for SMD052, including the mineralised zone averaged 94%.
		Core recovery for SMD053 was on average 87%, however the in the final meter of the mineralised zone there was only 46% recovery.
		Core recovery for SMD054 averaged 87%.
		Core recovery for SMD055 averaged 91%. This hole was lost at a depth of 169.9m.
		Core recovery for SMD056 averaged 94%. This hole was lost at a depth of 185.8m.
		Core recovery for SMD057 averaged 94%.
		Core recovery for SMD058 averaged 94%.
		Core recovery for SMD059 averaged 95%.
		Core recovery for SMD060 averaged 85%. However, core recovery between 104m and 116m was very poor at less than 50% and between 119.9m and 126.2m there was 100% core loss.
		Core recovery for SMD061 averaged 95%.
		Core recovery for SMD062 averaged 95%.
		Stavely Minerals' RC Drilling
		RC sample recovery was good. Booster air pressure was used to keep the samples dry despite the hole producing a significant quantity of water. RC sample recovery was visually checked during drilling for moisture or contamination.



Criteria	JORC Code explanation	Commentary
		Historical Drilling
		Core recovery for VICT1D2 averaged 88.6%.
		Core recovery for VICT1D4 averaged 97%.
	Measures taken to	Stavely Project
	maximise sample recovery	Thursday's Gossan Prospect
	and ensure representative nature of the samples.	Stavely Minerals' Diamond Drilling
	nataro er uno camproci	Diamond core is reconstructed into continuous runs on an angle iron cradle for orientation marking. Depths are checked against the depth given on the core blocks and rod counts are routinely carried out by the driller.
		Stavely Minerals' RC Drilling
		The RC samples are collected by plastic bag directly from the rig-mounted cyclone and laid directly on the ground in rows of 10. The drill cyclone and sample buckets are cleaned between rod-changes and after each hole to minimise down-hole and/or cross contamination.  Historical Drilling
		No details are available for the historical drill holes.
	Whether a relationship	Stavely Project
	exists between sample	Thursday's Gossan Prospect
	recovery and grade and	Stavely Minerals' Diamond Drilling
	whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Not an issue relevant to diamond drilling.
		Stavely Minerals' RC Drilling
		No analysis has been undertaken as yet regarding whether sample bias may have occurred due to preferential loss/gain of fine/coarse material and is not considered to have a material effect given the good sample recovery.
		Historical Drilling
		No details are available for the historical drill holes.
Logging	Whether core and chip	Stavely Project
	samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		Geological logging of samples followed Company and industry common practice. Qualitative logging of samples including, but not limited to, lithology, mineralogy, alteration, veining and weathering. Diamond core logging included additional fields such as structure and geotechnical parameters.
		Magnetic Susceptibility measurements were taken for each 1m RC and diamond core interval.
		Historical drilling
		All holes were geologically logged.
	Whether logging is	Stavely Project
	qualitative or quantitative in	Thursday's Gossan Prospect
	nature. Core (or costean, channel, etc) photography.	Stavely Minerals' Diamond Drilling
	Ename, etc, protography.	All logging is quantitative, based on visual field estimates. Systematic photography of the diamond core in the wet and dry form was completed.



Criteria	JORC Code explanation	Commentary
		Stavely Minerals' RC Drilling
		All logging is quantitative, based on visual field estimates. Chip trays with representative 1m RC samples were collected and photographed then stored for future reference.
		Historical Drilling
	T	All logging is quantitative, based on visual field estimates.
	The total length and percentage of the relevant	Stavely Project
	intersections logged.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond Drilling
		Detailed diamond core logging, with digital capture, was conducted for 100% of the core by Stavely Minerals' on-site geologist at the Company's core shed near Glenthompson.
		Stavely Minerals' RC Drilling
		All RC chip samples were geologically logged by Stavely Minerals' on-site geologist on a 1m basis, with digital capture in the field.
		Historical Drilling
		Historical holes have been logged in their entirety.
Sub-sampling	If core, whether cut or sawn	Stavely Project
techniques and sample	and whether quarter, half or all core taken.	Thursday's Gossan Prospect
preparation		Stavely Minerals' Diamond Drilling
, ,,		Quarter core for the PQ diameter diamond core and half core for the HQ diameter core was sampled on site using a core saw.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Stavely Project
		Thursday's Gossan Prospect
		Stavely Minerals' RC Drilling
		Splitting of RC samples occurred via a rotary cone splitter by the RC drill rig operators. Cone splitting of RC drill samples occurred regardless of whether the sample was wet or dry.
		Historical Drilling
		No details are given for historical aircore and RC holes.
	For all sample types, the	Stavely Project
	nature, quality and appropriateness of the	Thursday's Gossan Prospect
	sample preparation	Stavely Minerals' Diamond and RC Drilling
	technique.	Company procedures were followed to ensure sub- sampling adequacy and consistency. These included, but were not limited to, daily work place inspections of sampling equipment and practices.
		Historical Drilling
		No details of sample preparation are given for the historical drilling.



Criteria	IOPC Code explanation	Commentary
Criteria	JORC Code explanation	Commentary Stavely Project
	Quality control procedures adopted for all sub-	Stavely Project
	sampling stages to	Thursday's Gossan Prospect
	maximise representivity of	Stavely Minerals' Diamond and RC Drilling
	samples.	Blanks and certified reference materials are submitted with the samples to the laboratory as part of the quality control procedures.
		Historical Drilling
		No details of quality control procedures are given for the historical drilling.
	Measures taken to ensure	Stavely Project
	that the sampling is representative of the in situ	Thursday's Gossan Prospect
	material collected, including	Stavely Minerals' Diamond and RC Drilling
	for instance results for field duplicate/second-half sampling.	No second-half sampling of the diamond core or field duplicates for the RC drilling has been conducted at this stage.
		Historical Drilling
		No details are given for the historical drilling.
	Whether sample sizes are	Stavely Project
	appropriate to the grain size of the material being	Thursday's Gossan Prospect
	sampled.	Stavely Minerals' Diamond and RC Drilling
		The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.
		Historical Drilling
		The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.
Quality of	The nature, quality and	Stavely Project
assay data and laboratory	appropriateness of the assaying and laboratory	Thursday's Gossan Prospect
•	procedures used and	Stavely Minerals' Diamond and RC Drilling
tests	whether the technique is considered partial or total.	The core samples and 1m RC split samples were analysed by multielement ICPAES Analysis - Method ME-ICP61. A 0.25g sample is pre-digested for 10-15 minutes in a mixture of nitric and perchloric acids, then hydrofluoric acid is added and the mixture is evaporated to dense fumes of perchloric (incipient dryness). The residue is leached in a mixture of nitric and hydrochloric acids, the solution is then cooled and diluted to a final volume of 12.5mls. Elemental concentrations are measured simultaneously by ICP Atomic Emission Spectrometry. This technique approaches total dissolution of most minerals and is considered an appropriate assay method for porphyry copper-gold systems.
		For samples which returned a Cu assay value in excess of 10,000ppm (1%) the pulp was re-assayed using Cu-OG62 which has a detection limit of between 0.001 and 40% Cu. This technique is a four acid digest with ICP-AES or AAS
		finish.
		The core samples and 1m RC split samples were also analysed for gold using Method Au-AA23. Up to a 30g sample is fused at approximately 1,100°C with alkaline fluxes including lead oxide. During the fusion process lead



Criteria	JORC Code explanation	Commentary
Cittella	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	oxide is reduced to molten lead which acts as a collector for gold. When the fused mass is cooled the lead separates from the impurities (slag) and is placed in a cupel in a furnace at approximately 900°C. The lead oxidizes to lead oxide, being absorbed by the cupel, leaving a bead (prill) of gold, silver (which is added as a collector) and other precious metals. The prill is dissolved in aqua regia with a reduced final volume. Gold content is determined by flame AAS using matrix matched standards. For samples which are difficult to fuse a reduced charge may be used to yield full recovery of gold. This technique approaches total dissolution of most minerals and is considered an appropriate assay method for detecting gold mineralisation.  Historical Drilling  Samples from TGAC002 to TGAC125 were submitted for the analysis of Au, Ag, As, Cu, Co, Fe, Ni, Pb, S and Zn. All elements except Au were assayed by ICP/OES methods. Gold was analysed using the Fire Assay method. Samples were submitted to either Genalysis Laboratory Services Pty Ltd (Amdel) in Adelaide or to Aminya Laboratories Pty Ltd (Onsite Laboratory Services) in Bendigo for analysis. Samples from TGAC126 to TGAC159 were submitted to Onsite Laboratory Services in Bendigo for Au by Fire assay and Ag, As, Cu, Fe, S, Pb and Zn by ICP/OES.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Stavely Project Thursday's Gossan Prospect Stavely Minerals' Diamond and RC Drilling Laboratory QAQC involved the submission of standards and blanks. For every 20 samples submitted either a standard or blank was submitted. The analytical laboratory provide their own routine quality controls within their own practices. The results from their own validations were provided to Stavely Minerals. Results from the CRM standards and the blanks gives confidence in the accuracy and precision of the assay data returned from ALS. Historical Drilling No quality control data available for historical drilling.



Criteria	JORC Code explanation	Commentary
Verification of	The verification of	Stavely Project
sampling and	significant intersections by	Thursday's Gossan Prospect
assaying	either independent or	Stavely Minerals' Diamond and RC Drilling
	alternative company personnel.	Either Stavely Minerals' Managing Director or Technical Director has visually verified significant intersections in the core and RC chips at Thursday's Gossan.
	The use of twinned holes.	No twinned holes have been drilled.
	Documentation of primary data, data entry	Stavely Project
	procedures, data	Thursday's Gossan Prospect Stavely Minerals' Diamond and RC Drilling
	verification, data storage (physical and electronic) protocols.	Primary data was collected for drill holes using the OCRIS logging template on Panasonic Toughbook laptop computers using lookup codes. The information was sent to a database consultant for validation and compilation into a SQL database.
		Historical Drilling
	D'access of a factor of the	No details provided for historical drilling.
	Discuss any adjustment to assay data.	No adjustments or calibrations were made to any assay data used in this report.
Location of	Accuracy and quality of	Stavely Project
data points	surveys used to locate drill	Thursday's Gossan & Mount Stavely Prospects
	holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Stavely Minerals' Diamond and RC Drilling  Drill collar locations were pegged before drilling and surveyed using Garmin handheld GPS to accuracy of +/-3m. Collar surveying was performed by Stavely Minerals' personnel. This is considered appropriate at this early stage of exploration.
		For the diamond holes, down-hole single shot surveys were conducted by the drilling contractor. Surveys were conducted at approximately every 30m down-hole.
		Historical Drilling
		No details provided for drill collar locations for historical drilling.
	Specification of the grid system used.	The grid system used is GDA94, zone 54.
	Quality and adequacy of topographic control.	At the Thursday's Gossan and Mount Stavely prospect topographic control is achieved via use of DTM developed from a 2008 airborne magnetic survey conducted by UTS contractors measuring relative height using radar techniques.
		For Stavely Minerals' exploration, the RL was recorded for each drill hole and soil sample location from the GPS. Accuracy of the GPS is considered to be within 5m.
Data spacing and	Data spacing for reporting of Exploration Results.	The drill hole spacing is project specific, refer to figures in text.
distribution	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade	No Mineral Resource and Ore Reserve estimation procedure(s) and classifications apply to the exploration data being reported.



Criteria	JORC Code explanation	Commentary
	continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	
	Whether sample	Stavely Project
	compositing has been applied.	Thursday's Gossan Prospect
	αρριιεα.	Stavely Minerals' RC Drilling
		Reverse Circulation (RC) percussion drilling was used to produce a 1m bulk sample (~25kg) which was collected in plastic bags and representative 1m split samples (12.5% or nominally 3kg) were collected using a cone splitter and placed in a calico bag. The cyclone was cleaned out with compressed air at the end of each hole and periodically during the drilling. The 1m split samples were submitted for analysis.
		Stavely Minerals' Diamond Drilling
		The diamond core for intervals of interest, ie. those that contained visible sulphides as well as 5m above and below were sampled. PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.4m or greater than 1.2m.
		Historical Drilling
		Historical diamond hole PEND1T was drilled by Penzoil of Australia and only portions of the hole were sampled, with composite samples varying from 1 to 8m.
		Historical RAB drill holes with the prefix PENR were drilled by Penzoil of Australia and alternate two metre composite samples were assayed for Ag, Cu, Pb and Zn.
		Historical aircore drill holes with the prefix STAVRA were drilled by North Limited and three metre composite samples were assayed for Au, Cu, Pb and Zn.
		Historical diamond hole VICT1D2 and VICT1D4 were drilled by North Limited there after one metre or two metre composite samples were assayed for Au, Ag, Co and Mo in VICT1D2. For VICT1D4 the top 27m was not sampled, there after one metre samples were assayed for Au, As, Cu, Mo, Pb and Zn.
		For historical aircore holes TGAC002 to the top approximately 15 to 16 meters was not sampled, after that one metre intervals samples were taken for the remainder of the hole.
		For aircore holes TGAC126 to TGAC159 no samples were taken for the top 9 metres, after which three metre composite samples were collected for the remainder of the hole.
		For aircore holes SAC001 to SAC031 the top approximately 5 to 30m were not sampled, after which three metre composite samples were assayed for Au, Ag, As, Bi, Cu, Hg, Pb, S and Zn.



Criteria	JORC Code explanation	Commentary
		For historical holes with the prefix TGRC one metre samples were assayed for Au, Ag, As, Co, Cu, Fe, Ni, Pb, S and Zn.
Orientation of	data in sampling achieves relation to unbiased sampling of geological possible structures and the	Stavely Project
data in		Thursday's Gossan Prospect
10101111111		Stavely Minerals' Diamond and RC Drilling
structure		The orientation of RC and diamond drill holes is tabulated in the Drill Hole Collar Table included in this report. As best as practicable, drill holes are designed to intercept targets and structures at a high angle. Some practical limitations apply in the context of collars being sited to avoid poor drilling conditions / bad ground. In the case of SMD044, the hole was drilled 180 degrees opposite (250° grid rather than 070° grid) to avoid known bad ground.
	If the relationship between	Stavely Project
	the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Thursday's Gossan & Mount Stavely Prospects
		Stavely Minerals' Diamond and RC Drilling
		With holes SMD050 to SMD062 drilled to 070° grid azimuth, the drilling has intersected the mineralised zone along the ultramafic contact approximately perpendicularly.
Sample	The measures taken to	Stavely Project
security	ensure sample security.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		Samples in closed poly-weave bags were collected from the Company's Glenthompson shed by a contractor and delivered to either Ararat or Hamilton from where the samples are couriered to ALS Laboratory in Adelaide, SA.
		Historical Drilling
		No available data to assess security.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the data management system has been carried out.

# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites,	Stavely Project The diamond drilling and RC drilling at Thursday's Gossan and Mount Stavely are located on EL4556, which forms the Stavely Project. The mineralisation at Thursday's Gossan is situated within exploration licence EL4556. The Stavely Project was purchased by Stavely Minerals (formerly Northern Platinum) from BCD Resources Limited in May 2013. Stavely Minerals hold 100% ownership of the



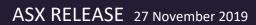
Criteria	JORC Code explanation	Commentary
	wilderness or national park and environmental settings.	Stavely Project tenements. The Stavely Project is on freehold agricultural land and not subject to Native Title claims.
		New Challenge Resources Pty Ltd retains a net smelter return royalty of 3% in EL4556, although there is an option to reduce this to 1% upon payment of \$500k.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	Stavely Project  A retention licence, RL2017, was applied for over the majority of EL4556 in May 2014.  The tenement is in good standing and no known impediments exist.
Exploration	Acknowledgment and	Stavely Project
done by other parties	appraisal of exploration by other parties.	Thursday's Gossan Prospect
		Exploration activity became focused on Thursday's Gossan and the Junction prospects following their discovery by Pennzoil of Australia Ltd in the late 1970s. North Limited continued to focus on Thursday's Gossan in the 1990s. North's best drill result at Thursday's Gossan came from VICT1D1 which gave 161m of 0.26% Cu from 43m, including 10m of 0.74% Cu from 43m from a supergeneenriched zone containing chalcocite.
		The tenement was optioned to CRA Exploration between 1995 and 1997. CRAE drilled several deep diamond drill holes into Thursday's Gossan, including DD96WL10, which intersected 186m from 41m of 0.15% Cu and DD96WL11, which intersected 261.7m from 38.3m of 0.13% Cu.
		EL4556 was further explored by Newcrest Operations Limited under option from New Challenge Resources Ltd between 2002 and 2004. Their main focus was Thursday's Gossan in order to assess its potential as a porphyry copper deposit. One of their better intersections came from drill hole VSTD01 on the northern edge of the deposit which gave 32m at 0.41 g/t Au and 0.73% Cu from 22m in supergene-enriched material.
		The Stavely Project was optioned to Beaconsfield Gold Mines Pty Ltd in 2006 who flew an airborne survey and undertook an extensive drilling programme focused on several prospects including Thursday's Gossan. One of their diamond drill holes at Thursday's Gossan, SNDD001, encountered zones with quartz- sulphide veins assaying 7.7m at 1.08 g/t Au and 4.14% Cu from 95.3m and 9.5m at 0.44 g/t Au and 2.93% Cu from 154.6m along silicified and sheared contacts between serpentinite and porphyritic intrusive rocks.
		Once Beaconsfield Gold Mines Pty Ltd had fulfilled their option requirements, title of EL4556 passed to their subsidiary company, BCD Metals Pty Ltd, who undertook a gravity survey and extensive drilling at prospects including Thursday's Gossan. They also commissioned a maiden Mineral Resource estimate for Thursday's Gossan.
		All work conducted by previous operators at Thursday's Gossan is considered to be of a reasonably high quality.



Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological	Stavely Project
	setting and style of	Thursday's Gossan Prospect
	mineralisation.	The Thursday's Gossan and Junction prospects are located in the Mount Stavely Volcanic Complex (MSVC). Intrusion of volcanic arc rocks, such at the Mount Stavely Volcanic Complex, by shallow level porphyries can lead to the formation of porphyry copper ± gold ± molybdenum deposits.
		The Thursday's Gossan Chalcocite deposit (TGC) is considered to be a supergene enrichment of primary porphyry-style copper mineralisation. Mineralisation is characterised by chalcopyrite, covellite and chalcocite copper sulphide mineralisation within a sericite, illite and kaolin clay alteration assemblage. Copper mineralisation is within a flat lying enriched 'blanket' of overall dimensions of 4 kilometres north-south by up to 1.5 kilometres eastwest by up to 60 metres thick with an average thickness of approximately 20 metres commencing at an average depth below surface of approximately 30 metres. The majority (circa 60%) of the Mineral Resources reside within a higher-grade zone of approximate dimensions of 1 kilometre x 300 metres by 35 metres thick.
		The Thursday's Gossan area hosts a major hydrothermal alteration system with copper-gold mineralisation over a 10 kilometre long corridor. The Junction porphyry target is defined by a coincident magnetic high, strong soil copper geochemistry, RAB drilling copper anomalism. Stavely Minerals believes the technical evidence indicates there is significant porphyry copper-gold mineralisation potential at depth at Thursday's Gossan.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Included in the drill hole table in the body of the report.
	easting and northing of the drill hole collar	
	elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the	No material drill hole information has been excluded.



Criteria	JORC Code explanation	Commentary
	understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Thursday's Gossan Prospect  Exploration results are nominally reported where copper results are greater than 0.1% Cu over a down-hole width of a minimum of 3m.  No top-cutting of high grade assay results have been applied, nor was it deemed necessary for the reporting of significant intersections.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	Stavely Project Thursday's Gossan Prospect In reporting exploration results, length weighted averages are used for any non-uniform intersection sample lengths. Length weighted average is (sum product of interval x corresponding interval grade %) divided by sum of interval length.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Stavely Project Thursday's Gossan Prospect There is insufficient drilling data to date to demonstrate continuity of mineralised domains and determine the relationship between mineralisation widths and intercept lengths.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Refer to the Tables and Figures in the text.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in the text. A plan view of the drill hole collar locations is included.





Criteria	JORC Code explanation	Commentary
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Stavely Project Thursday's Gossan Prospect All copper and gold values considered to be significant for porphyry mineralisation have been reported. Some subjective judgement has been used.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data is shown on figures and discussed in the text.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Stavely Project Thursday's Gossan Prospect Diamond drilling has been planned to test the mineralised structures at shallower depths along the ultramafic contact.