

# Key Breakthrough for Stavely with Strong Porphyry-Style Copper-Gold Mineralisation Intersected at Thursday's Gossan, Victoria

New RC drill results including 24m at 0.64% copper and 1.2 g/t gold support Stavely's conceptual model and suggest that it is now closing in on a major discovery opportunity

## **Highlights**

- Outstanding initial results received from recently completed shallow reverse circulation (RC) drilling at the Thursday's Gossan copper deposit, part of the 100%owned Stavely Project in western Victoria.
- > Strong porphyry-style copper-gold mineralisation intersected, with several RC holes ending in mineralisation. Intercepts include:
  - 24 metres at 0.64% copper and 1.2 g/t gold
  - 29 metres at 0.53% copper and 0.30 g/t gold to end-of-hole (EoH); including
    - o 4 metres at 1.39% copper and 0.5 g/t gold
  - 25 metres at 0.52% copper and 0.37 g/t gold to EoH
  - 3 metres at 4.14% copper and 0.36 g/t gold
- Copper-gold mineralisation intercepted over 400 metres strike extent and could easily extend beyond 1 kilometre.
- The strength and tenor of the mineralisation intersected, plus the higher gold grades, make these the most important results generated from the Stavely Project to date.
- The mineralisation is interpreted to be hosted within upper-level phyllic (sericite-pyrite) to argillic (kaolinite) alteration, meaning that even better developed mineralisation should be located at depth within the potassic (potassium feldspar-biotite-magnetite) alteration.
- > Selected RC drill holes have been extended with diamond drill hole 'tails' and assays are pending for these intersections, which are visually very encouraging.
- Follow-up deeper drilling is being planned as a priority to target the high-grade core of the Thursday's Gossan porphyry system.

Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is very pleased to advise that it has achieved a significant breakthrough in its ongoing search for a world-class porphyry copper-gold deposit at its 100%-owned **Stavely Project** in western Victoria (Figures 1, 2 and 3) after receiving the results of a recent 20-hole RC drilling programme at the Thursday's Gossan copper deposit.

The shallow drilling, which was designed to follow-up a new interpretation of the controls on high-grade copper-gold mineralisation in the near-surface chalcocite-enriched copper 'blanket' at Thursday's Gossan, has intersected thick zones of strong porphyry-style copper-gold mineralisation, representing a potentially highly significant development. This



new interpretation was developed from observations in drill core co-funded by the Victorian Government's Target Exploration Initiative.

As outlined in the Company's ASX announcement of 9 March, Stavely Minerals recently drilled four sections of five holes each for a total of 20 RC drill holes to confirm an interpretation that high-grade copper-gold mineralisation near surface at Thursday's Gossan is hosted by sulphide-rich veins in structures 'leaking' from a porphyry intrusion at depth (Figures 4 and 5).

Selected results from this highly successful drilling campaign include:

- > 24 metres at 0.64% copper and 1.2 g/t gold including
  - 14 metres at 0.82% copper and 1.99 g/t gold including
  - o 1 metre at 0.84% copper and 22.2 g/t gold
- > 29 metres at 0.53% copper and 0.30 g/t gold to end of hole (EoH), including
  - 4 metres at 1.39% copper, 0.5 g/t gold and 55 g/t silver
- > 25 metres at 0.52% copper and 0.37 g/t gold to EoH
- > 3 metres at 4.14% copper, 0.36 g/t gold and 59 g/t silver
- > 43 metres at 0.55% copper and 0.11 g/t gold
- > 28 metres at 0.59% copper and 0.19 g/t gold
- > 8 metres at 0.74% copper and 0.17 g/t gold
- > 25 metres at 0.30% copper and 0.29 g/t gold to EoH including
  - 3 metres at 1.24% copper and 1.31 g/t gold

Drill sections are provided in Figures 6 to 9.

These shallow copper-gold (and silver) intercepts are very significant for the potential development of the near-surface chalcocite enriched 'blanket' at Thursday's Gossan, demonstrating that significant gold and silver values exist within this zone.

All previous Mineral Resource estimates for the Thursday's Gossan chalcocite blanket (28Mt at 0.4% copper in Inferred Resources, see Stavely Minerals' Annual Report 2016) to date have only estimated the copper within the deposit, excluding gold and silver. This was mainly because previous explorers had not assayed for gold or silver in many drill holes within this zone. These results conclusively demonstrate that significant gold and silver grades are hosted within the Mineral Resource area.

A feature of these drill intercepts is that the mineralisation is not just limited to late porphyry sulphide-rich 'D' veins, but is in fact fairly consistently distributed throughout the intervals with higher-grade zones correlated with the more sulphide-rich 'D' veins. This is a common feature of many porphyry copper-gold deposits.

The mineralisation is associated with sericite-pyrite 'phyllic' alteration which, in classical porphyry zonation models could be expected to be located above and lateral to even stronger copper-gold mineralisation in the centrally located potassic alteration zone (Figure 4).

Stavely Minerals' exploration team has developed a conceptual model that there were two phases of mineralisation at Thursday's Gossan. The early porphyry phase is a low-grade copper-only phase that previous explorers had identified and is of little economic interest.



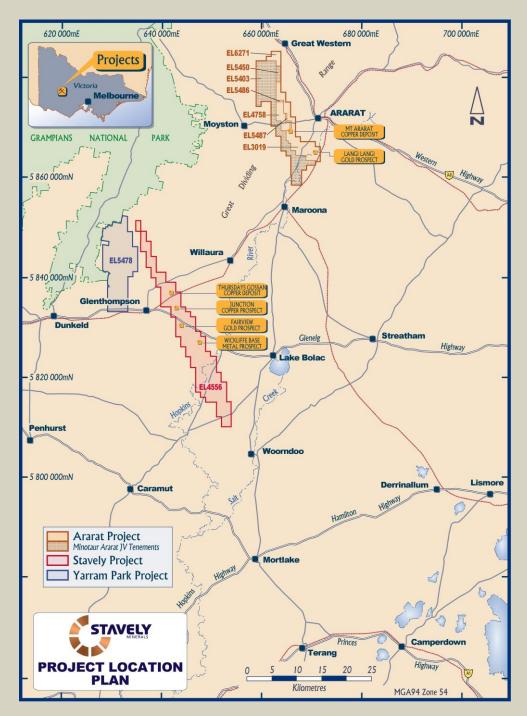


Figure 1. Project location plan.

Stavely Minerals' original interest in the project was based on the recognition, in previous explorers' drill core, of evidence of intense high-level alteration associated with strong copper-gold mineralisation. The Company's belief was that these attributes were indications that a second-phase copper-gold porphyry existed at depth that had not yet been seen in the historical drilling (Figure 5).

The Company's exploration team has identified distinct similarities in alteration styles and copper-gold drill results to those which were the precursor to the world-class Cadia Ridgeway copper-gold porphyry discovery in NSW (owned by Newcrest Mining Limited).



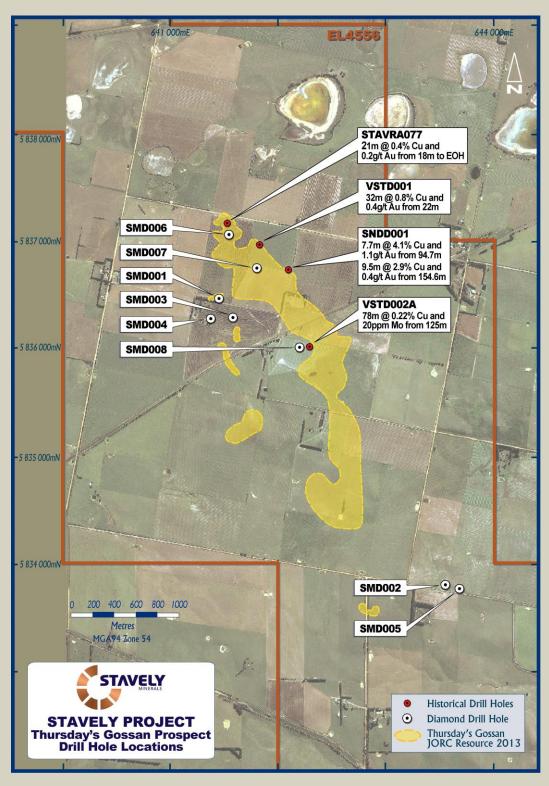


Figure 2. Thursday's Gossan diamond drill hole location plan.



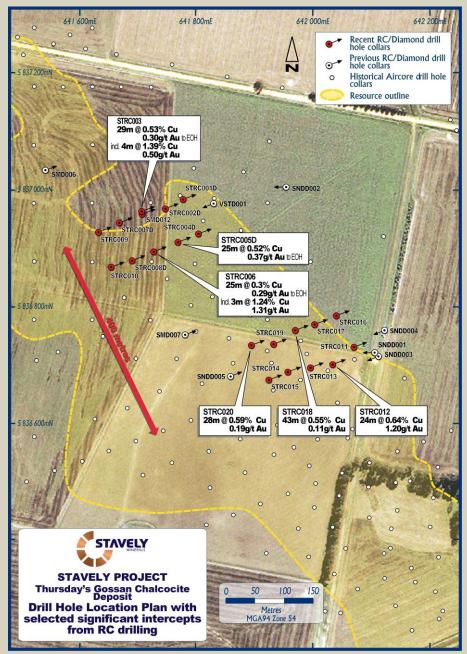


Figure 3. Current RC drill hole location plan.

For comparative purposes, it is instructive to note that the current Ore Reserves at the current underground operation at Cadia Ridgeway are 80 million tonnes at 0.28% copper and 0.54 g/t gold<sup>1</sup>. While the grades are comparable, Stavely Minerals' recent results are from as shallow as 22m drill depth and are interpreted to occur in the upper levels of a potentially higher-grade system at depth.

A table comparing the respective drill phases leading to the discovery of the Cadia Ridgeway deposit and Stavely Minerals' drilling at Thursday's Gossan is presented in Appendix 1. An illustrated history of drilling phases leading to the Cadia Ridgeway discovery is presented in plan in Appendix 2 and in section in Appendix 3 to this report.

<sup>&</sup>lt;sup>1</sup> 1 – Newcrest Mining Limited – Explanatory Notes to the Annual Mineral Resources and Ore Reserve Statement – 31 December 2016



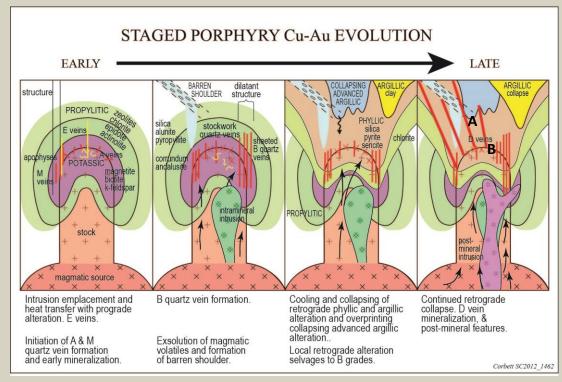


Figure 4. Evolution of a porphyry copper-gold deposit showing stages of zoned alteration (Corbett, 2012). Stavely Minerals' believes the current RC drilling is in the upper phyllic zone with argillic and advanced argillic alteration noted proximal to structures. In the right-hand figure, 'A' is where Stavely believes these RC drill results are coming from and 'B' marks where the higher-grade target is believed to be.

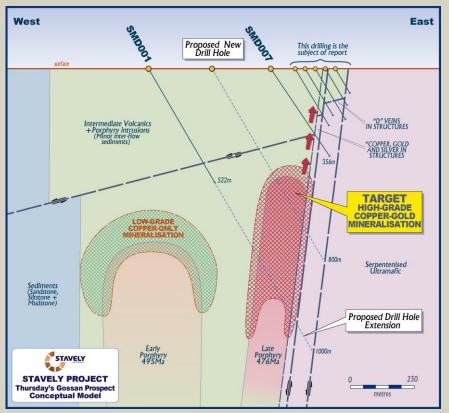


Figure 5. Stavely Minerals' conceptual model of two-phase porphyry intrusion with the second-phase porphyry driving the copper-gold-silver mineralisation with some leakage to surface along structures.

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While Stavely feels these early-stage exploration comparisons are appropriate, it must be noted that the target at Thursday's Gossan is conceptual in nature and it is uncertain that further exploration will result a discovery or the estimation of a Mineral Resource.

A number of the current programme RC drill holes were not completed to their planned depths and, consequently, incomplete RC holes were re-entered by a diamond drill rig providing diamond core 'tails' to the original planned depths.

Of the 20 RC drill holes, two were completed planned depth, six were extended to depth with diamond tails and one was re-drilled from surface with diamond core. A number of re-entries are planned to complete diamond tails on more of the incomplete RC drill holes.

Stavely Minerals' Managing Director, Mr Chris Cairns, said the recent RC drilling campaign potentially represented a key turning point in the Company's ongoing campaign to find a world-class porphyry deposit.

"The results are impressive in terms of the width and tenor of the mineralisation, combined with the fact that many holes ended in mineralisation. Importantly, this is the most convincing endorsement we have seen to date of our conceptual model that a second-phase porphyry intrusion is driving the copper-gold mineralisation at Thursday's Gossan.

"Given that these results are from a style of host-rock hydrothermal alteration typically located above and lateral to even stronger copper-gold mineralisation, I am confident that the best results are potentially yet to come with deeper drilling at Thursday's Gossan.

"We are very excited about the emerging discovery opportunity in front of us and we are looking forward to receiving the balance of the assay results and potentially getting a trackmounted rig back into the field as quickly as possible to drill some deeper holes targeting the high-grade centre of the porphyry system.

"In response to feedback from some shareholders and brokers, we have split this announcement into two sections. The first section above presents the results and what they mean in simple terms, the second below goes into greater technical detail describing the nature of the mineralisation, alteration and other technical details and a discussion of the implications of these results. Stavely Minerals' style of exploration is to apply the sophistication of the best science available in combination with the brute force of drilling often and not being afraid to drill deep. The reason why it is important to provide such depth of technical detail in our reports is that, to take your Company to the next level and realise the value we believe rests in your Company's assets, we will need technically sophisticated investors (or corporates) and institutions to pick-up the baton for funding / on-market share buying. The prize is potentially very large and of immense value but the search can also be very expensive when 1,000 metre drill holes are contemplated."



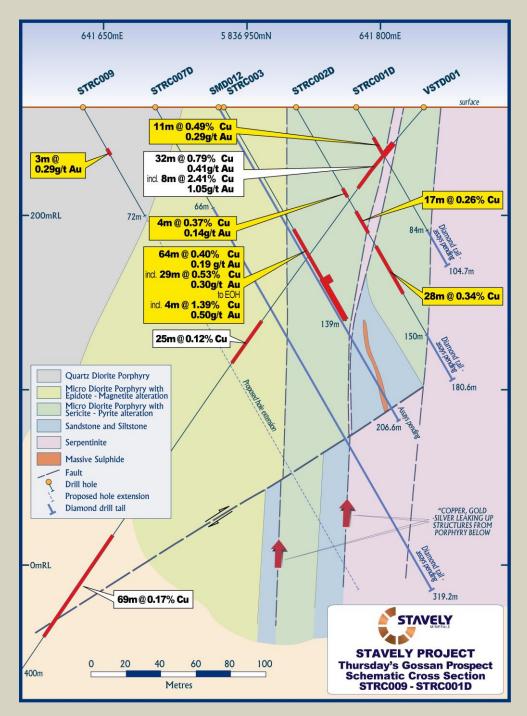


Figure 6. RC drill section STRC009-STRC001D.

Support for the existence of two phases of porphyry intrusion include a cluster of U-Pb isotopic age dates for porphyry intrusions of between 506.1 Ma (Geoscience Australia, Lewis et al, 2016) to 499.5Ma (unpublished data) and another single sample U-Pb average age date of 476.6 Ma (unpublished data) from Stavely Minerals' drill hole SMD001. This Early Ordovician age would place the interpreted second-phase intrusion closer in timing to the Cadia Ridgeway intrusions (circa 456 Ma, Wilson et al, 2007) than to the circa 500 Ma ages of the Stavely Volcanic Belt and the correlated Mt Read Volcanics (Crawford et al, 1996).



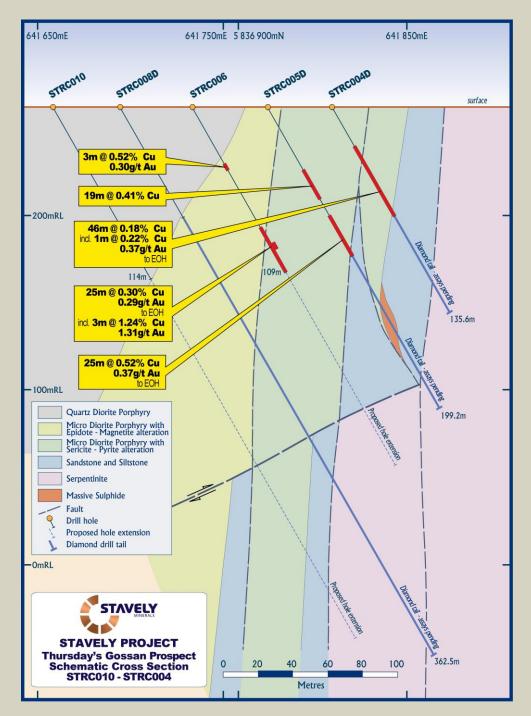


Figure 7. RC drill section STRC010-STRC004.

This is further supported by the recognition of a very mafic composition possible alkalic lamprophyre composition dyke in Stavely Minerals' drill hole SMD001 which, by crosscutting relationships and the relative lack of alteration would appear to reflect a resurgent phase of intrusion. Age dating of this unit is in-progress. The hypothesis is that early porphyry phases were of a felsic to intermediate composition and resulted in low-grade copper ± molybdenum mineralisation. Later resurgent intrusion / magma mixing with a more mafic composition magma resulted in second-phase porphyry intrusion and associated copper-gold-silver mineralisation. It is this second phase copper-gold-silver mineralised porphyry that Stavely Minerals has been seeking.



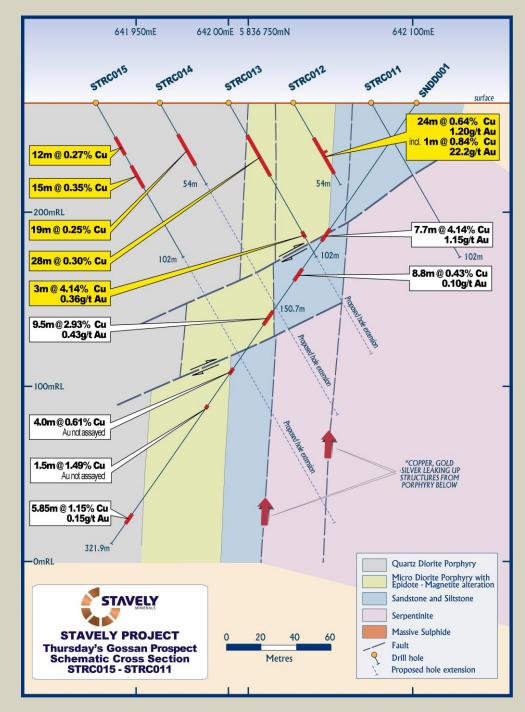


Figure 8. RC drill section STRC015-STRC011.

An example of this sequence of early low-grade copper mineralisation (circa 23 Ma) followed by materially later copper-gold mineralisation (circa 12 Ma) is the Tangeel and H14/H15 porphyry deposits at Reko Diq in Baluchistan (Perello et al, 2008).

The four RC drill sections were planned to straddle two diamond drill holes completed by previous explorers. Drill hole VSTD001 was drilled by Newcrest Mining Limited in 2002 and returned an intercept of 32 metres at 0.8% copper and 0.4 g/t gold from 22 metres drill depth (Figure 6). The northern two RC drill traverses were designed to test for structural 'leakage' in the vicinity of VSTD001. While the shallow copper and gold grades in VSTD001 presented a compelling target, additional supporting data included short wave infra-red (SWIR) data indicating that very short wavelength white mica absorption features in



VSTD001 may indicate proximity to a porphyry source. Further,  $\delta$ 34S sulphur isotope values from VSTD001 include -6.4% and -21% (some concern over this extreme value but not unheard of), both taken as also potentially indicating proximity to a porphyry source.

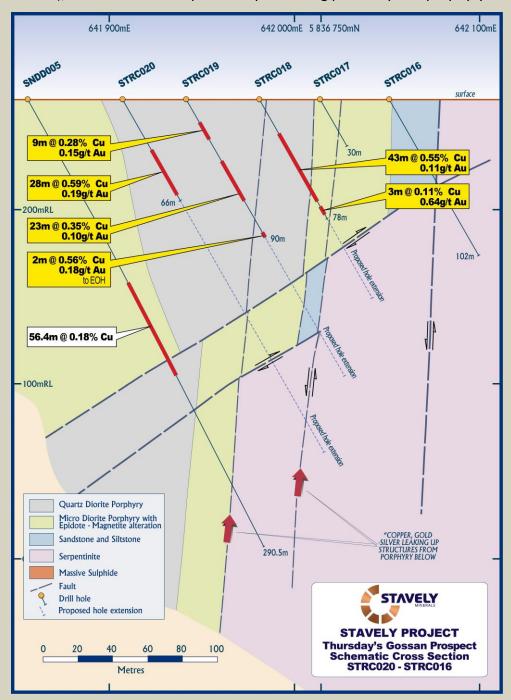


Figure 9. RC drill section STRC020-STRC016.

The southern pair of RC drill holes were designed to bracket SNDD001 drilled by Beaconsfield Gold Limited in 2008 which also had compelling copper-gold intercepts including 7.7 metres at 4.1% copper and 1.2 g/t gold and 9.5 metres at 2.9% copper and 0.4 g/t gold (Figure 8). SNDD001 also had returned a  $\delta$ 34S isotope result of -3.95% from the 7.7 metre intercept described above, likewise potentially indicating proximity to the porphyry source. In addition, SWIR HyLogger© data from SNDD001 includes intervals of pyrophyllite interpreted to reflect structurally controlled hot, low pH advanced argillic



alteration associated with the mineralised intervals quoted above. These attributes are considered to give credence to the structural 'leakage' model Stavely Minerals has developed. The current RC drill results would appear to provide compelling support for this model. Additional SWIR data have been collected on the recent drilling and additional sampling is underway for further  $\delta 34S$  analyses to assist deep drill hole targeting.

The diamond 'tails' to drill holes STRC001D, STRC002D, STRC007D, STRC004D, STRC005D, and STRC008D have been / are being sampled and assays are pending. In RC drill hole STRC003 the RC hammer was left in the hole and, consequently, the entire hole was twinned with diamond drill hole SMD012 which has been sampled and assays are pending. The diamond 'tails' and SMD012 are visually very encouraging.



Photo 1. STRC008D 157.1m – pyrite-chalcopyrite-bornite (purple) sulphide mineralisation.



Photo 2. STRC005D 139.9m – poly-phase silica / pyrite / hematite.

The identification of bornite (high-grade copper sulphide) in STRC008D is considered very encouraging, especially considering bornite is often associated with higher gold grades in porphyry copper-gold deposits (Photo 1). Assays are pending.





Photo 3. SMD012 181m – 'rotten' massive sulphide breccia. Note: green mineral is a chromium ?aluminosilicate - probably a result of chromium leaching from the serpentinised ultramafic by the hydrothermal fluids as they migrate up structures. Niton XRF spot analyses have commonly returned up to 0.1% nickel in the sulphides, also likely leached from the ultramafic.



Photo 4. SNDD001 269m – Hematite alteration of feldspars with minor sulphide mineralisation. Is this hematite dusting of feldspars similar to that reported by Newcrest in drill hole NC371 as a precursor to the discovery of Cadia Ridgeway?

#### What Attracted Stavely Minerals to the Thursday's Gossan Prospect?

The simple answer was three attributes in the existing diamond drilling that the Company felt previous explorers had not recognised the significance of:

- 1. Drill holes SNDD001 and VSTD001 both demonstrated that there was a gold component in the system.
- 2. Significant intervals of hematite alteration in areas of copper-gold mineralisation (photo 4).
- 3. The recognition of argillic and advanced argillic alteration assemblages on structures associated with copper-gold mineralisation.





Photo 5. SNDD001 209m – kaolinite alteration of feldspars – argillic alteration.

These attributes led to an early recognition of the potential for a copper-gold porphyry system at depth. Figure 10 is from the Stavely Minerals' Prospectus in 2014. While certain details have changed with new knowledge, the concept remains intact and the opportunity for discovery would appear to have been materially enhanced with these recent RC drilling results.

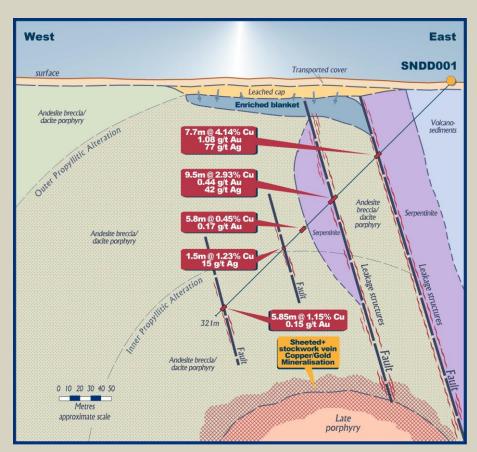


Figure 10. Stavely Minerals' Prospectus conceptual model for Thursday's Gossan.

Yours sincerely,

Chris Cairns
Managing Director

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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.

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# RC drill intercept table.

					Thu	rsday's G	ossan Pros	spect				
		MGA 94 zone 54							Inte	rcept		
Hole id	Hole Type	East	North	Dip/ Azimuth	RL	Total Depth	From	То	Width	Cu (%)	Au	Ag
					(m)	(m)	(m)	(m)	(m)		(g/t)	(g/t)
STRC001D	RC/ DD	641782	5836985		269	113.7	23	31	8	0.74	0.17	5
							58	60	2	0.68	0.33	18
STRC002D	RC/ DD	641751	5836969	-60/70	235	180.6	54	57	3	0.44	0.15	5
	טט						91	119	28	0.34	0.08	
CTDC000	D0	044744	5000050	00/70	004	139	75	97	22	0.38	0.12	6
STRC003	RC	641711	5836956	-60/70	264		110	139	29	0.53	0.30	15
							110	114	4	1.39	0.50	55
STRC005D	RC/	641772	5836911	-60/70	262	96	41	60	19	0.41	0.07	4
	DD						71	96	25	0.52	0.37	6
0770000				00/70		100	36	39	3	0.52	0.30	7
STRC006	RC	641732	5836894	-60/70	263	109	78	103	25	0.30	0.29	3
							91	94	3	1.24	1.31	8
0770040				00/70		54	22	46	24	0.64	1.20	4
STRC012	RC	642038	5836701	-60/70	263	incl.	32	46	14	0.82	1.99	
							33	34	1	0.84	22.20	8
STRC013	RC	642000	5836696	-60/70	264	102	19	47	28	0.30	0.06	
							87	90	3	4.14	0.36	59
STRC014	RC	641961	5836687	-60/70	265	54	21	40	19	0.25		
STRC015	RC	641926	5836674	-60/70	266	78	21	33	12	0.27		
							41	56	15	0.35		
STRC018	RC	641973	5836760	-60/70	263	78	22	65	43	0.55	0.11	3
						73	76	3	0.11	0.64	10	
							15	24	9	0.28	0.15	1
STRC019	RC	641937	5836736	-60/70	266	90	41	64	23	0.35	0.10	2
							88	90	2	0.56	0.18	3
STRC020	RC	641899	5836733	-60/70	263	66	33	61	28	0.59	0.19	3



# Appendix 1. Cadia Ridgeway discovery history<sup>2</sup> compared to Stavely Minerals' exploration at Thursday's Gossan to date.

#### **Cadia Ridgeway**

#### Thursday's Gossan

1995 - 3 diamond holes drilled to >500m
depth
Best result
NC371 - 118m at 0.10% Cu to EoH

NC371 - 196m at 0.13% Cu

SMD003 - 196m at 0.13% Cu

2017 – 4 fences of RC holes drilled to 200m
Best result in hole RGRC1

- 8m at 0.42 g/t Au and 0.53% Cu

2017 – 4 fences of RC holes drilled to 200m
Best results (so far)

- 24 m at 1.2 g/t Au and 0.64% Cu
- 29m (to EoH) at 0.3 g/t Au and 0.53% Cu,
- and
- 25m (to EoH) at 0.37 g/t Au and 0.52% Cu
both with diamond tails to come!

1996 - NC371 deepened to 858.4m

Best result

- 102m at 0.13 g/t Au and 0.40% Cu

2017 – SMD001 planned to be extended to 1000m New drill hole planned to 800m

Holes drilled 350m south and 175m north but no intersections

Late 1996 – drill hole NC498 drilled to 1026.0m

Best result

- 145m at 4.30 g/t Au and 1.20% Cu,

and

- 84m at 7.40 g/t Au and 1.27% Cu

#### **DISCOVERY!!**

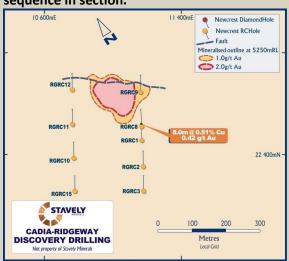
**Mineral Resource:** 

44Mt at 2.6 g/t Au and 0.82% Cu

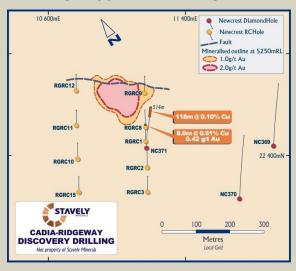
<sup>&</sup>lt;sup>2</sup> Discovery of the Cadia Ridgeway gold-Copper Porphyry Deposit, Holliday et al, Exploration Under Cover, Sydney, 1999



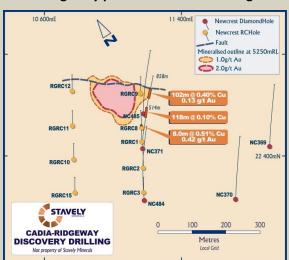
# Appendix 3. Cadia Ridgeway discovery sequence in section.



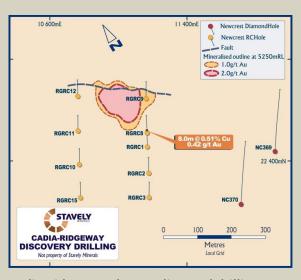
#### Cadia Ridgeway phase 1 RC drilling



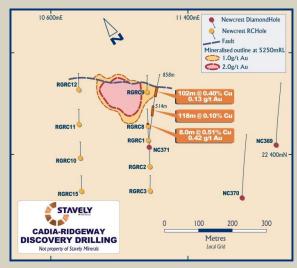
#### Cadia Ridgeway phase 3 diamond drilling



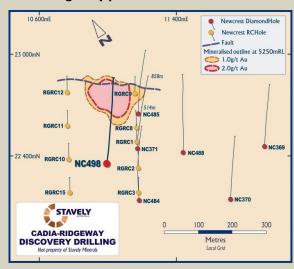
Cadia Ridgeway phase 6 diamond drilling



#### Cadia Ridgeway phase 2 diamond drilling



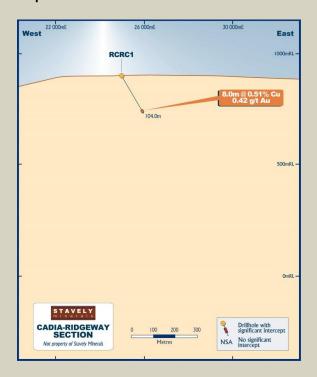
#### Cadia Ridgeway phase 4 drill hole extension



Cadia Ridgeway phase 7 diamond drilling – DISCOVERY!

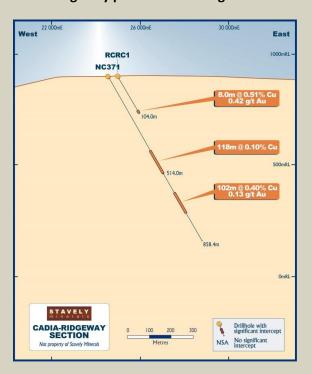


# Appendix 3. Cadia Ridgeway discovery sequence in section.



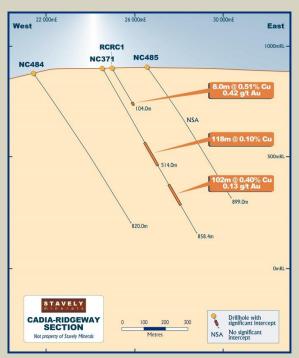
# ## RCRC1 | 1000mRL - | 1000mRL

#### Cadia Ridgeway phase 1 RC drilling



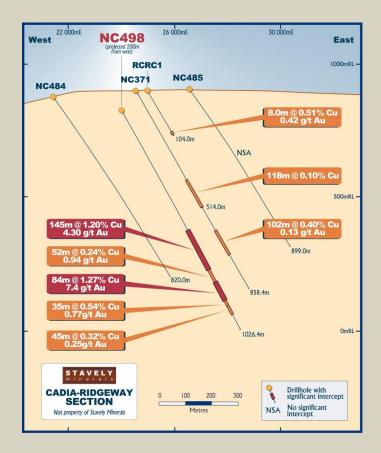
Cadia Ridgeway phase 4 diamond drillhole extension

Cadia Ridgeway phase 3 diamond drilling

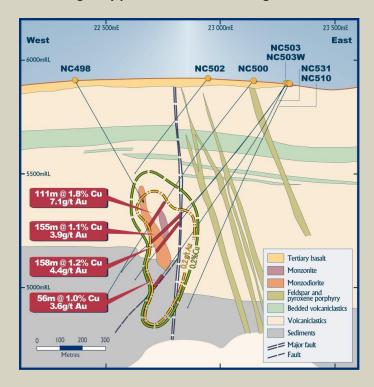


Cadia Ridgeway phase 6 diamond drilling





Cadia Ridgeway phase 7 diamond drilling - DISCOVERY!



Cadia Ridgeway discovery follow-up drilling.



# JORC Code, 2012 Edition – Table 1

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary				
Sampling	Nature and quality of	Stavely Project				
techniques	sampling (eg cut channels, random chips, or specific	Thursday's Gossan Prospect				
	specialised industry standard	Stavely Minerals' RC Drilling				
	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 limiting the broad meaning of sampling.	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 the entire hole was 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 0.3m or greater than 1.8m.				
		Historical Drilling				
		Historical aircore hole STAVRA077 was drilled by North Limited in 1994 to a depth of 39m at the Thursday's Gossan prospect. Three metre composite samples were analysed.				
		Historical diamond drill hole VSTD001 was drilled by Newcrest in 2002 to a depth of 520.7m to target the porphyry core. Two metre composite samples were taken to a depth of 62m and then one metre samples to eoh. The samples were analysed for Au, Ag, As, Bi, Cu, Mo, Pb, S and Zn.				
		Historical aircore hole TGAC004 was drilled by Beaconsfield Gold Mines Pty Ltd in 2006 to a depth of 80m. Three metre composite samples were taken for the entire hole.				
		Historical diamond hole SNDD001 was drilled by Beaconsfield Gold Mines Pty Ltd in 2008 to a depth of 321.9m. No sampling was done for the first 21m. From 21m to 321.9m composite samples based on lithology were analysed for Au, Ag, Co, Cu, Ni, Pb and Zn.				
		Historical aircore hole TGAC016 was drilled by Beaconsfield Gold Mines Pty Ltd in 2008 to a depth of 78m. Sampling was done at 1m intervals, apart from when sampling the oxide zone where two metre composite samples were collected.				

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MINERALS

Criteria	JORC Code explanation	Commentary
		Historical reverse circulation holes TGRC110 and TGRC136 were drilled by BCD in 2009 to a depth of 78m and 84m respectively. One metre interval samples were taken for the entire length of the holes.
		Historical aircore hole TGAC078 was drilled by BCD in 2009 to a depth of 59m. Two metre composite samples were taken for the entire length of the hole.
		Historical aircore holes SAC029 and SAC030 were drilled by BCD in 2010 to a depth of 65m and 62m respectively. One metre interval samples were taken for the entire length of the holes.
		Mineral Resource Estimate
		Mineral Resource estimate underpinned by diamond drilling (DD), aircore drilling (AC), reverse air blast drilling (RAB) and reverse circulation drilling (RC) samples: Pennzoil (1 RC, 14 RAB holes): 2m Samples selected where mineralisation observed. 13 RAB holes sampled every alternate 2m intervals. No details on sampling methods.
		North (4 DD, 1 AC, 85 RAB) and Newcrest (3 DD): Diamond holes ½ core sampled. No details on sampling of RC, RAB and Aircore holes.
		Beaconsfield Gold (2 DD, 78 AC): Diamond holes ½ core sampled. Aircore holes were sampled by spearing of material on 2m or 3m intervals where no mineralisation was observed and on 1m intervals where mineralisation was observed.
		TGM Group (26 AC): No details.
	Include reference to	Stavely Project
	measures taken to ensure sample representivity and the	Thursday's Gossan Prospect
	appropriate calibration of any measurement tools or	Stavely Minerals' Diamond and RC Drilling
	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 determination of mineralisation that are	Stavely Project
	Material to the Public Report -	Thursday's Gossan Prospect
	In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation	Stavely Minerals' Diamond Drilling  Drill sampling techniques are considered industry standard for the Stavely work programme.
	drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In	The diamond core for the entire hole has been sampled. PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in



Criteria	JORC Code explanation	Commentary			
Griteria	other cases more explanation	general were 1m. No intervals were less than 0.3m or			
	may be required, such as where there is coarse gold	greater than 1.8m.			
	that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	The diamond drill samples were submitted to Australian Laboratory Services ("ALS") in Orange, NSW. Laboratory sample preparation involved:- sample crush to 70% < 2mm, riffle/rotary split off 1kg, pulverize to >85% passing 75 microns.			
		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.			
		Stavely Minerals' RC Drilling			
		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, 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 diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drill holes were drilled by Titeline Drilling in 2014 (SMD001, SMD003 and SMD004) and 2017 (SMD006, SMD007 and SMD008). Diamond 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.			
		Diamond drilling was standard tube. Diamond core was orientated by the Reflex ACT III core orientation tool.			
		SMD003 was orientated at -60° towards azimuth 060° to a depth of 522.3m.			
		SMD006, SMD007 and SMD008 were orientated at -60° towards azimuth 070° to depths of 353.3m, 355.6m and 240m respectively.			
		Stavely Minerals' RC Drilling			
		The RC holes were drill 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			



Criteria	JORC Code explanation	Commentary
		were used and $5^{1}/_{4}$ " to $5^{3}/_{4}$ " drill bits. A Reflex Digital Ezy-
		Trac survey camera was used.
		The holes were oriented at -60° towards azimuth 070°.
		Historical Drilling
		Historical hole STAVRA077 is an aircore hole drilled by North Limited in 1994. The hole was drilled vertically. No other drilling details are known.
		Historical hole VSTD001 was drilled by Newcrest in 2002 using a diamond drill rig. The drilling was conducted by Silver City Drilling. The first 62m were drilled by aircore. HQ core was drilled between 62m and 255.7m and NQ core between 255.7m and 520.7m. The hole was oriented at -50° towards azimuth 256°.
		Historical aircore hole TGAC004 was drilled by Beaconsfield Gold Mines Pty Ltd in 2006 to a depth of 80m. The drilling was conducted by Blacklaws Drilling Services using a truck mounted Wallis Mantis rig with a 450cfm/200psi compressor.
		Historical hole SNDD001 was drilled by Beaconsfield Gold Mines Pty Ltd in 2008 using a diamond drill rig. The drilling was conducted by Silver City Drilling with a Mantis 700 rig. The hole was oriented at -50° towards magnetic azimuth 265°. HQ triple tube was drilled from 0m to 56.6m and then NQ to 321.9m.
		Historical aircore hole TGAC016 was drilled by Beaconsfield Gold Mines Pty Ltd in 2008 to a depth of 78m. The hole was drilled vertically by Wallis Drilling.
		Historical reverse circulation holes TGRC110 and TGRC136 were drilled by BCD in 2009 to a depth of 78m and 84m respectively. Drilling was conducted by Budd Exploration Drilling P/L using a Universal drill rig. TGRC110 was oriented at -60° towards magnetic azimuth 349°. TGRC136 was oriented at -60° towards magnetic azimuth 064°.
		Historical aircore hole TGAC078 was drilled by BCD in 2009 to a depth of 59m. Drilling was conducted by Budd Exploration Drilling P/L using a Universal drill rig. TGAC078 was oriented at -50° towards magnetic azimuth 231°.
		Historical aircore holes SAC029 and SAC030 were drilled by BCD in 2010 to a depth on 65m and 62m respectively. The holes were drilled vertically by Blacklaws Drilling Services.



Criteria	JORC Code explanation	Commentary						
		Mineral Resource Estimate						
		Drilling details for the Thursday's Gossan Chalcocite						
		Deposit (TGC) resource drill hole dataset						
		Drill Type   Company   Count   Av. DFrom to   Av. Dto to Min.   Av. Min. Int   Av. Cu (ppm)						
			BCD	78	Min. Top (m) 32	Base (m) 56	Length (m) 24	4080
		AC	North TGM Group	1 26	20 33	62 55	42 22	3090 3496
		AC Total	BCD	<b>105</b>	<b>32</b> 86	<b>56</b> 93	<b>24</b> 7	3926 23586
		DD	CRAE Newcrest	2	41 56	54 85	13 29	3237 3927
			North Pennzoil	4 1	37 20	63 28	26 8	3541 5250
		DD Total RAB	North	12 85	<b>49</b> 31	69 46	20 15	<b>7070</b> 2948
		RAB Total	Pennzoil	14 99	22 30	35 <b>45</b>	13 <b>15</b>	2587 <b>2897</b>
		RC	BCD Pennzoil	8 1	27 2	45 34	17 32	4498 11944
		RC Total Total A	ll Drilling	9 225	24 32	43 51	19 20	5326 3697
Drill sample	Method of recording and	Stavely	v Projec	:t				
recovery	assessing core and chip	•	Stavely Project Thursday's Gossan Prospect					
	sample recoveries and results assessed.		_		•			
		Stavely Minerals' Diamond Drilling  Diamond core recoveries were logged and recorded in the						
		database.						
		Core recovery for SMD001, SMD003 and SMD007 was good.						
		Stavely Minerals' RC Drilling						
		used to a signi visually	keep t	he s uanti	•	y despite	the hole properties	
		Historical Drilling						
		Diamond core recoveries were logged and recorded for historical drill hole SNDD001.						
		Mineral Resource Estimate						
		Recovery data available for 2 DD holes.						
		Generally no major sample loss or groundwater issues.						
	Measures taken to maximise	Stavel	y Projec	t				
	sample recovery and ensure representative nature of the	Thursday's Gossan Prospect						
	samples.	Stavely Minerals' Diamond Drilling						
		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.						



Criteria	JORC Code explanation	Commentary			
		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 exists	Stavely Project			
	between sample recovery and grade and whether	Thursday's Gossan Prospect			
	sample bias may have	Stavely Minerals' Diamond Drilling			
	occurred due to preferential loss/gain of fine/coarse	Not an issue relevant to diamond drilling.			
	material.	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 samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Stavely Project			
		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 qualitative	Stavely Project			
	or quantitative in nature. Core (or costean, channel, etc)	Thursday's Gossan Prospect			
	photography.	Stavely Minerals' Diamond Drilling			
		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				
		All logging is quantitative, based on visual field estimates.				
	The total length and	Stavely Project				
	percentage of the relevant 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's on-site geologist at the Company's core shed near Glenthompson.				
		Stavely Minerals' RC Drilling				
		All RC chip samples were geologically logged by Stavel 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 techniques	If core, whether cut or sawn	Stavely Project				
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.				
		Historical Drilling				
		For historical hole SNDD001 half core was sampled. No details are given for VSTD001.				
	If non-core, whether riffled, tube sampled, rotary split, etc	Stavely Project				
	and whether sampled wet or	Thursday's Gossan Prospect				
	dry.	Stavely Minerals' RC Drilling				
		Splitting of RC samples occurred via a rotary cone splitted 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.				



Criteria	JORC Code explanation	Commentary				
	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.				
		Mineral Resource Estimate				
		Pennzoil (1 RC, 14 RAB holes): No details on sampling and sample preparation methodology.				
		North (4 DD, 1 AC, 85 RAB) and Newcrest (3 DD): No details on sample preparation methodology.				
		Beaconsfield Gold (2 DD, 78 AC): No information on sample preparation methodology.				
		TGM Group (26 AC): No details.				
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Stavely Project				
		Thursday's Gossan Prospect				
		Stavely Minerals' Diamond and RC Drilling				
		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 for instance results for field	Stavely Minerals' Diamond and RC Drilling				
	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.				



Criteria	JORC Code explanation	Commentary				
		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	appropriateness of the assaying and laboratory	Thursday's Gossan Prospect				
laboratory tests	procedures used and whether the technique is considered	Stavely Minerals' Diamond and RC Drilling				
	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.				
		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 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 historical diamond hole SNDD001 were analysed at Amdel Laboratory. Gold was analysed by Fire assay and the multi-elements by aqua regia with ICPOES finish.				
		Samples from TGRC110, TGRC136 and TGAC078 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				



Criteria	JORC Code explanation	Commentary
		Adelaide or to Aminya Laboratories Pty Ltd (Onsite Laboratory Services) in Bendigo for analysis.
		Samples from TGAC016 were submitted to Amdel Laboratory for Au by Fire assay and Ag, As, Cu, Fe, S, Pb and Zn by ICP/OES.
		Samples for TGAC004 were submitted to Onsite Laboratory Services in Bendigo for Au analysis by Fire Assay and Cu by ICP/OES.
		Holes SAC029 and SAC030 were submitted to Onsite Laboratory Services in Bendigo. Au was analysed by Fire assay, Hg by cold vapour and Ag, As, Bi, Cu, Pb, S and Zn by ICP/OES.
		Mineral Resource Estimate
		Pennzoil (1 RC, 14 RAB holes): A base metal suite was assayed via AAS (digestion not specified) and Au was assayed via fire assay.
		North (4 DD, 1 AC, 85 RAB) and Newcrest (3 DD): A base metal suite was assayed via Mixed Acid digest, AAS detection and Au was assayed via fire assay.
		Beaconsfield Gold (2 DD, 78 AC): OnSite Laboratory Services (Bendigo) analysed all samples for Cu by aqua regia digest ICP-OES detection and repeated assays for samples returning greater than 5,000ppm Cu by Mixed Acid Digest ICP-OES detection. Au was assayed via fire assay.
		TGM Group (26 AC): No details. "Cherry-picking" of best assays from reassayed samples (85 of 160 substituted) has introduced a +10% relative bias for 9 holes used in the Mineral Resource estimate.
		No QC samples were inserted into any of the sample batches from the Thursday's Gossan drilling. No laboratory QC data was made available for assessment as part of this Mineral Resource estimate.
		Beaconsfield Gold undertook a limited (selective) umpire laboratory programme (29 samples), entire residual material assaying (94 intervals) and 66 sub-sample assays of residual material (66 intervals). These projects provide limited insight into sampling and assay reliability. This data indicates that:
		Both significant bias and precision issues are suspected in the Beaconsfield Gold dataset (OnSite Laboratory) and that there appears to be a period of instrument malfunction or systems/procedural breakdown at grades greater than 3,000ppm Cu at the laboratory.
		The spear vs total sample dataset shows a significant relative bias in favour of the spear sample, manifesting



Criteria	JORC Code explanation	Commentary
		greatest within samples containing higher copper grades.
	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.	N/A
	Nature of quality control procedures adopted (eg	Stavely Project
	standards, blanks, duplicates,	Thursday's Gossan Prospect
	external laboratory checks) and whether acceptable	Stavely Minerals' Diamond and RC Drilling
	levels of accuracy (ie lack of bias) and precision have been established.	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.
Verification of	3	Stavely Project
sampling and assaying		Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		Either Stavely Minerals' Managing Director or Technical Director has visually verified significant intersections in the core and RC chips at Thursday's Gossan.
		Historical Drilling
		Stavely Minerals' Managing Director has visually verified the significant intersections in historical diamond hole SNDD001.
		Mineral Resource Estimate
		Beaconsfield Gold undertook a limited (selective) umpire laboratory programme (29 samples), entire residual material assaying (94 intervals) and 66 sub-sample assays of residual material (66 intervals). These projects provide limited insight into sampling and assay reliability.
	The use of twinned holes.	No twinned holes have been drilled.



Criteria	IOPC Code explanation	Commentary
Griteria	JORC Code explanation  Documentation of primary	Commentary Stavely Project
	data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		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
		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 holes (collar and down-hole	Thursday's Gossan Prospect
	surveys), trenches, mine workings and other locations	Stavely Minerals' Diamond and RC Drilling
	used in Mineral Resource estimation.	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.
		Downhole surveying was conducted for SNDD001 and VSTD001.
		Mineral Resource Estimate
	Specification of the grid system used.  Quality and adequacy of topographic control.	Holes within the Thursday's Gossan area are recorded as being surveyed under three systems: AMG66 zone 54S, MGA zone 54 and GDA94 zone 54S. All coordinates were converted to GDA94 zone 54S by previous workers. These conversions have not been checked by Stavely Minerals or Hackman & Associates. The August 2013 estimate is undertaken using the supplied GDA94 54S grid references.
		Beaconsfield Gold holes were located by hand held GPS.  No information on survey methods for other workers.
		The grid system used is GDA94, zone 54.
		At the Thursday's Gossan prospect topographic control is achieved via use of DTM developed from a 2008 airborne magnetic survey conducted by UTS contractors



	JORC Code explanation	Commentary
Criteria	CONTO COGO EXPIGNACION	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 for reporting of Exploration Results.	The drill hole spacing is project specific, refer to figures in text.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore	Mineral Resource Estimate  Area showing the thickest and highest tenor of mineralisation tested at nominal 50m centres by predominantly vertical holes.
	Reserve estimation procedure(s) and classifications applied.	Areas less well mineralised tested mostly at 100m centres by vertical drill holes.
	Whether sample compositing	Stavely Project
	has been applied.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond Drilling
		Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.3m or greater than 1.8m.
		Stavely Minerals' RC Drilling
		No sample compositing has been applied.
		Historical Drilling
		Sample compositing based on lithology was applied for historical drill hole SNDD001.
		Three metre compositing was applied for historical drill holes STAVRA077 and TGAC004.
		Two metre compositing was applied for historical drill hole TGAC078.
		TGRC110, TGRC136, SAC029 and SAC030 were sampled on a one metre basis.
		A combination of one metre and two metre composite sampling was applied for VSTD001.
	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Stavely Project
relation to		Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		The RC pre-collars and diamond tails were orientated at -60° toward 070° to perpendicularly intercept the sulphide rich 'D' veins within the low angle structure.



Criteria	JORC Code explanation	Commentary
		Mineral Resource Estimate
		Drill orientation appropriate for testing of flat-lying mineralisation.
		Underlying geology indicates that primary mineralisation may be sub vertical. Supergene mineralisation is controlled by pre-existing geology, groundwater movement and surface/weathering events. It is unknown from the current dataset if there is any sub-vertical fabric within the supergene mineralisation and if so then vertical holes will not adequately sample this feature of the mineralisation.
	If the relationship between the drilling orientation and the	Stavely Project
	orientation of key mineralised	Thursday's Gossan Prospect
	structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	Stavely Minerals' Diamond and RC Drilling
		There is insufficient drilling data to date to demonstrate continuity of mineralised domains and determine if any orientation sampling bias can be identified in the data.
Sample	The measures taken to ensure sample security.	Stavely Project
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 Hamilton from where the samples are couriered to ALS Laboratory in Orange, NSW.
		Historical Drilling
		No available data to assess security.
		Mineral Resource Estimate
		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.
		Mineral Resource Estimate
		Basic checking of data integrity.



## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral	Type, reference	Stavely Project
tenement and land tenure status	name/number, location and ownership including agreements or material issues	The diamond drilling and RC drilling at Thursday's Gossan was located on EL4556, which forms the Stavely Project.
	with third parties such as joint ventures, partnerships, overriding royalties, native title	The mineralisation at Thursday's Gossan is situated within exploration licence EL4556.
	interests, historical sites, wilderness or national park and environmental settings.	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 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	Stavely Project
	held at the time of reporting along with any known impediments to obtaining a	A retention licence, RL2017, was applied for over the majority of EL4556 in May 2014.
	licence to operate in the area.	The tenement is in good standing and no known impediments exist.
Exploration		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 supergene-enriched 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



Criteria	JORC Code explanation	Commentary		
		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 of 1.08 g/t Au and 4.14% Cu from 95.3m and 9.5m of 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.		
		Mineral Resource Estimate		
		Pennzoil: 1 RC, 14 RAB holes		
		North: 4 DD, 1 AC, 85 RAB holes		
		TGM Group: 26 AC holes		
		Beaconsfield Gold: 2 DD, 78 AC holes		
		Beaconsfield Gold: Mineral Resource Estimate undertaken by Coffey Mining Pty Ltd (2008).		
Geology	Deposit type, geological	Stavely Project		
	setting and style of mineralisation.	Thursday's Gossan Prospect		
		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 east-west by up to 60 metres thick with an average thickness of approximately 20 metres commencing at an average depth below surface of		



Ī	Criteria	JORC Code explanation	Commo	entary					
			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.					one of	
			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.						
			Minera	Resour	ce Estima	ite			
			rocks,	where fir	chment one grained by grained and grained by the comments of t	chalco	cite and	covellite	
-	Drill hole	A summary of all information	Minera	Resour	ce Estima	ite			
	Information	material to the understanding of the exploration results	225 hol	es drilled	in the pro	spect.			
		including a tabulation of the following information for all Material drill holes:  o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and	Collar locations not verified however plot within acceptable levels from SRTM derived topographic surface.						
			location holes d Pennzo mineral	s availat rilled. il assaye isation.	eys for desple for 4 or ed interval	f 40 ang Is logged wn:	led holes	. 185 v	vertical
		interception depth	Drill Type	Company	0 to 1m	1 to 2m		ns 3 to 5m	Total
		o hole length.	••	BCD	833	258	177	1	1269
			AC	North TGM Group		21	187		21 187
			AC Total		833	279	364	1	1477
				BCD CRAE	3	10	2	1	13
			DD	Newcrest	38	25			63
				North	96	4			100
			DD Total	Pennzoil	8 <b>146</b>	43	3	1	193
			RAB	North		1	436	2	439
			RAB Total	Pennzoil	1 1	92 <b>93</b>	436	2	93 <b>532</b>
			RC	BCD	136	33	1	2	137
				Pennzoil	420	16			16
			RC Total	otal	136 1116	431	804	4	153 2355
			Litholog holes.	y logs	through r	nineralisa	ation ava	ilable	for all

(utilised to determine base of supergene zone).

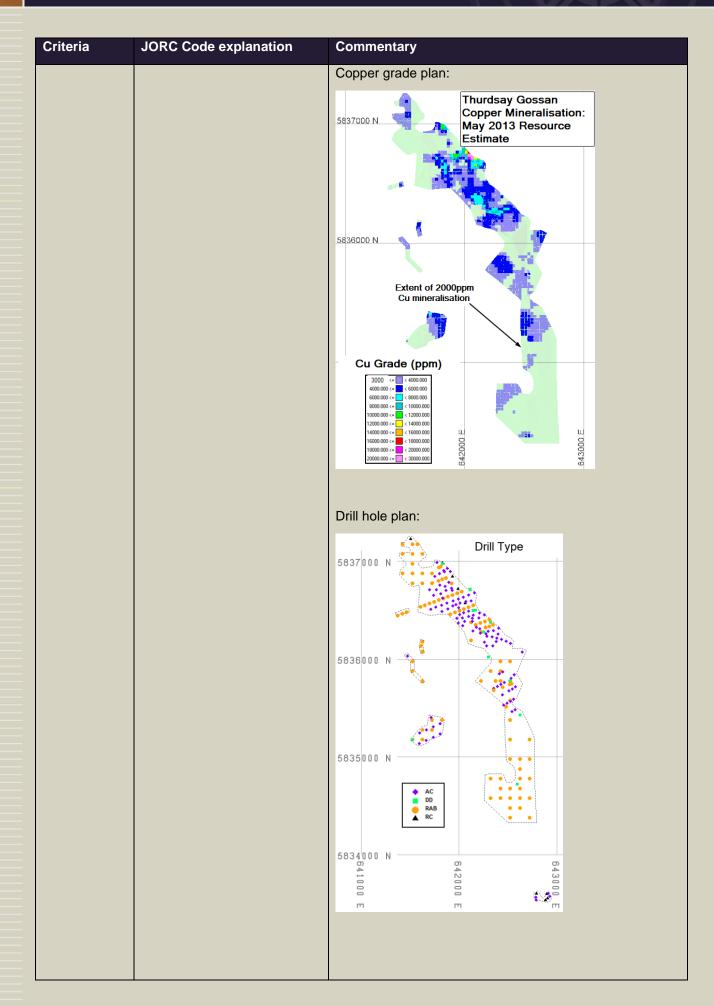


Criteria	JORC Code explanation	Commentary
		Summary moisture data available for 28 AC/RC holes show that all bar one hole encountered water through the mineralised interval.
		Recovery data available for 2 DD holes.
		SG measurements taken from Beaconsfield Gold hole TGDD46. No mention of drying samples. May be more akin to bulk density measurements than dry bulk density measurements.
	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 understanding of the report, the Competent Person should clearly explain why this is the case.	No material drill hole information has been excluded.
Data	In reporting Exploration	Stavely Project
aggregation methods	Results, weighting averaging techniques, maximum and/or	Thursday's Gossan Prospect
	minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	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.
		Mineral Resource Estimate
		Assays composited to 3m for resource estimation.
	Where aggregate intercepts incorporate short lengths of	Stavely Project
	high grade results and longer	Thursday's Gossan Prospect
	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.	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.
		Historical Drilling
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	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.
		No metal equivalent values are used for reporting exploration results.



Criteria	JORC Code explanation	Commentary		
Relationship	These relationships are	Stavely Project		
between mineralisation widths and intercept lengths	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.  If it is not known and only the down hole lengths are reported, there should be a	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 interceptlengths.  Mineral Resource Estimate  No obvious association other than, as expected with supergene mineralisation, globally thicker mineralisation has higher tenor of copper.  Refer to the Tables and Figures in the text.		
	clear statement to this effect (eg 'down hole length, true width not known').			
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.  Mineral Resource Estimate  No historic or client produced diagrams available for review.  Thickness plan:  TGC - Resource Model Thickness Contours  5835000 N  Thickness Contours  5836000 N  Thickness Contours  5836000 N  Thickness Contours  5836000 N  Thickness Contours  5836000 N  Thickness Contours  TGC - Resource Model Thickness Contours  Thickness Contours		







Criteria JORC Code explanation		Commentary		
Balanced	Where comprehensive	Stavely Project		
reporting	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	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.		
	reporting of Exploration Results.	Mineral Resource Estimate		
	results.	Selective sampling of holes where mineralisation observed considered acceptable for estimating sulphide resources.		
		Alternative sampling and "cherry picking" practices assessed as having negligible effect on global estimate but will be a limiting factor in lifting local resources to higher than Inferred classification under the JORC Code (2012 Edition).		
		66 of the 225 holes terminate within mineralisation; however surrounding holes adequately define the base of mineralisation.		
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.  Mineral Resource Estimate  A further 683 holes within and surrounding the prospect area were utilised for defining the resource mineralisation.		
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		Stavely Project Thursday's Gossan Prospect The diamond tails for holes drilled to test the near-surface expressions of the sulphide-rich 'D' veins will be completed. In addition a deep diamond hole ('800m deep) has been planned to test the targeted high grade coppergold mineralisation at depth. A decision will be made as to		
	geological interpretations and future drilling areas, provided this information is not commercially sensitive.	whether hole SMD001 will be extended.  Mineral Resource Estimate		
		Evaluation of area for discovery of styles of mineralisation other than the defined supergene mineralisation.		



## **Section 3 Estimation and Reporting of Mineral Resources**

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
integrity that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral		Data management protocols and provenance unknown.  Limited cross checks with paper records of drill hole and assay data.  Relational and spatial integrity assessed and considered acceptable.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.	Not undertaken by CP.  CP has viewed photos of chip trays with mineralisation taken by Stavely Minerals' personnel.
Geological interpretation	Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.  Nature of the data used and of any assumptions made.  The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	Single planar flat-lying horizon of supergene mineralisation containing areas where mineralisation thickens and copper grade tenor increases. A 0.2% Cu cut was utilised to domain the extents of the better mineralisation and this domain used as a hard boundary for grade interpolation.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Extends intermittently for a strike length of 4,000m (NS) a breadth of 1,500m and vertically up to 60m thick. The model includes prospects known as Thursday's Gossan Chalcocite Copper, Junction and Drysdale.  The block model and grade estimate encompasses the extent of the mineralisation.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted	Copper grades were interpolated into a Vulcan <sup>™</sup> non-regular block model with 20x20x10 metre parent blocks – subblocked to 2.5x2.5x2.5 metre minimum block dimensions.  3m composite intervals utilised.  No high grade sample treatment applied.  Single pass ID2 interpolation run employed utilising 200m

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Criteria	JORC Code explanation	Commentary
	estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of byproducts.  Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	sample search within the plane of mineralisation (97.8% of blocks within the TIN domain estimated).  Minimum of 10 and maximum of 20 composites utilised to estimate grade.  The Mt Ararat Mineral Resource is classified as Inferred under the guidelines set out in the 2012 JORC Code.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	27 of 28 AC/RC holes with moisture information recorded wet drilling conditions through the mineralisation. It is unknown if the wet conditions has introduced bias or contamination into the dataset as relevant/detailed information is not available.  Available core recovery data suggests that biases caused by both loss and enrichment may be affecting the resource dataset.
Cut-off parameters	The basis of the adopted cut- off grade(s) or quality	The Mineral Resource estimate is reported at 0.2%, 0.3% and 0.5% Cu cuts and by three mineralised thickness



Criteria	JORC Code explanation	Commentary
	parameters applied.	domains - <10m, 10-20m and >20m thick. These breakdowns and grade tonnage plots are reported to allow differing economic assessment on the project.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Not applied, however resource is reported at three thicknesses for input into this discipline.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Not evaluated as risks associated with historic data over- riding feature affecting the confidence of the estimate.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of	Not evaluated as risks associated with historic data over- riding feature affecting the confidence of the estimate.



Criteria	JORC Code explanation	Commentary
	early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	A single tonnage factor of 2.10 tonnes/m <sup>3</sup> was applied to all mineralisation.
	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.  Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations,	The estimate is classified as Inferred under the JORC Code (2012 Edition). Absence of QA/QC, the indicated sampling and assaying issues and absence of important data for evaluating other risks to the estimate (such as recover and moisture versus grade) are key factors in assigning an Inferred Classification.
	reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	
	Whether the result appropriately reflects the Competent Person's view of the deposit.	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audit or review of Mineral Resource estimate undertaken.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or	Not undertaken other than that stated under the classification section.

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Criteria	JORC Code explanation	Commentary
	procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	