

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

# Another Major Intercept: 393m at 0.32% Cu with Zones of High-Grade Porphyry-Related Mineralisation of up to 17.5% Copper, 1.60g/t Gold and 68g/t Silver

Wedge hole SMD044W1 intersects multiple zones of high-grade copper-gold mineralisation including <u>18m at 3.62% Cu</u> and 0.28g/t Au including <u>7m at 7.74% Cu</u> and 0.46g/t Au in copper lode-style mineralised structures

### **Highlights**

- Final assay results received for the interval 540m-1,008m of the Wedge 1 (W1) to breakthrough diamond hole SMD044, which recently yielded outstanding visual intercepts of bornite at Thursday's Gossan.
- > SMD044 had returned both the <u>largest and highest-grade intervals to date</u>, with multiple zones of well-developed copper-gold mineralisation encountered, including:
  - ❖ From 11m to 963m, a very large, low-grade interval of 952m at 0.23% Cu, including higher-grade intervals on the Copper Lode Splay (CLS) structure:
    - > 70m at 0.51% Cu from 580m, including:
      - 41m at 0.78% Cu, including:
        - 10m at 2.43% Cu, 0.30g/t Au and 11g/t Ag, including:
          - 1m at 8.97% Cu, 1.13g/t Au and 36g/t Ag
  - **❖** And, on the North-South Structure (NSS):
    - > 38.3m at 1.59% Cu, 0.27g/t Au and 8g/t Ag from 890m, including:
      - 6m at 2.75% Cu, 0.25g/t Au and 7g/t Ag; and
      - 12.3m at 2.59% Cu, 0.44g/t Au and 18g/t Ag, including:
        - 6.3m at 3.93% Cu, 0.67g/t Au and 27g/t Ag
- Recently received results for SMD044W1 have eclipsed the previous highest-grade intervals with a broad interval from 546-939m of 393m at 0.32% Cu, including:
  - On the North-South Structure (NSS) from 848m:
    - > 18m at 3.62% Cu, 0.28g/t Au and 15g/t Ag, including:
      - 7m at 7.74% Cu, 0.46g/t Au and 32g/t Ag, including:
        - 2m at 15.7% Cu, 1.07g/t Au and 65g/t Ag
- ▶ Drill hole SMD045, testing the southern extension of the high-grade structurally-controlled copper-gold mineralisation and located 100m south of SMD044, is currently in-progress at 1,212m depth¹.
- > Drill hole SMD046, which is collared some 800m south of SMD045, is also in-progress at 627m depth, testing the 'Victor' porphyry target.



<sup>&</sup>lt;sup>1</sup> As of the morning of 22 April 2019



Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is pleased to advise that it has received highly encouraging assay results for recently completed diamond drill hole wedge SMD044W1 at the **Thursday's Gossan prospect**, part of its 100%-owned Stavely Copper-Gold Project, located in western Victoria (Figures 1 and 2).

The results received to date have returned the highest-grade intervals seen at Thursday's Gossan to date, confirming the significance of the 'mother' drill hole SMD044 as a breakthrough hole, which encountered a very broad zone of copper sulphide mineralisation including the **first significant intervals containing bornite mineralisation** – the best visual intercept returned from the Project to date.

SMD044W1 was commenced as a wedge hole from 538m in SMD044 and drilled to a final depth of 1,008.4m down-hole.

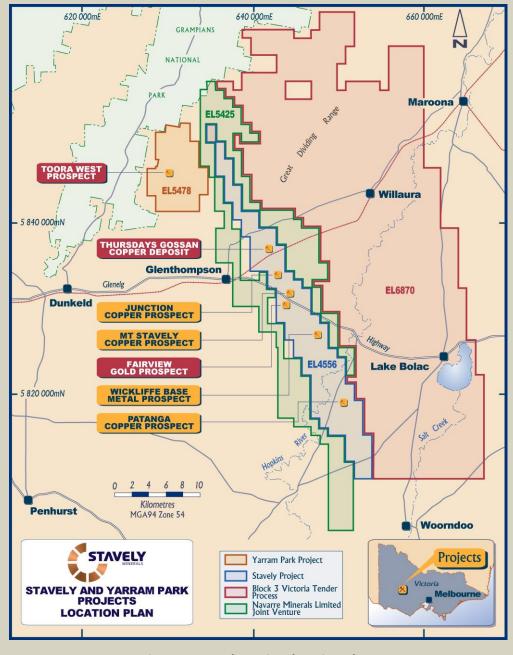


Figure 1. Stavely Project location plan.

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Stavely Minerals' Executive Chairman, Mr Chris Cairns, said the assay results received so far confirmed the significance of the two recently completed +1km deep holes as a pivotal development in the Company's ongoing search for a world-class porphyry discovery.

"Another intercept of high-grade structurally-controlled copper-gold -silver mineralisation provides further support for our mineralisation model. We believe these structurally-controlled zones are attractive targets in their own right but could also direct us into the copper-gold porphyry we have been hunting for," he said.

"The results from SMD044W1 we have announced today include another broad intercept of moderate-grade copper mineralisation of **393 metres at 0.32% copper**. We believe that this very broad zone of copper mineralisation reflects the very large scale of the mineralised hydrothermal system at Thursday's Gossan – and therefore reinforces the size of the prize.

"Also included in these results are the highest-grade intercepts over meaningful widths we have seen from our drilling to date with 18m at 3.62% copper, 0.28g/t gold and 15g/t silver including 2m at 15.7% copper, 1.07g/t gold and 65g/t silver on the North-South Structure.

"We have long said that we felt that Thursday's Gossan prospect had all the attributes of a well-mineralised porphyry copper-gold system and it is very pleasing to finally see the higher copper-gold grades we have been seeking. It is important to note that we are not yet into the target porphyry, but these results do represent a very significant step forward in that these structurally-controlled copper lodes are recognised as potentially proximal to a porphyry source in a similar manner that the Magma Copper Mine lodes are related to the recently discovered, very large and high-grade Resolution copper porphyry in Arizona, USA.

"The high copper-gold-silver grades hosted in these structures make them an attractive target in their own right and we will also be seeking to test them up towards surface with additional drilling.

"These structures, are predicted to converge south of where SMD044 was drilled and, as noted in other porphyry districts globally, this intersection is now the obvious location to host a well-mineralised copper-gold porphyry. Current drill hole SMD045 is collared 100m south towards this structural intersection."

#### Summary

The current drilling has been aiming to progress into the hotter part of the mineralised porphyry system at Thursday's Gossan, where higher-grade copper and significantly higher-grade gold are expected to be located.

Recently completed diamond drill hole SMD044W1 intersected broad intervals of moderate-grade copper mineralisation with **393m at 0.32% copper** from 546m drill depth.

Further, well-developed bornite-covellite-chalcocite copper mineralisation (Photos 1 & 2) was intersected from 848m to 866m down-hole, associated with the **North South Structure** (**NSS**) including:

- > 18m at 3.62% copper, 0.28g/t gold and 15g/t silver, including:
  - 7m at 7.74% copper, 0.46g/t gold and 32g/t silver, including:
    - o 2m at 15.7% copper, 1.07g/t gold and 65g/t silver



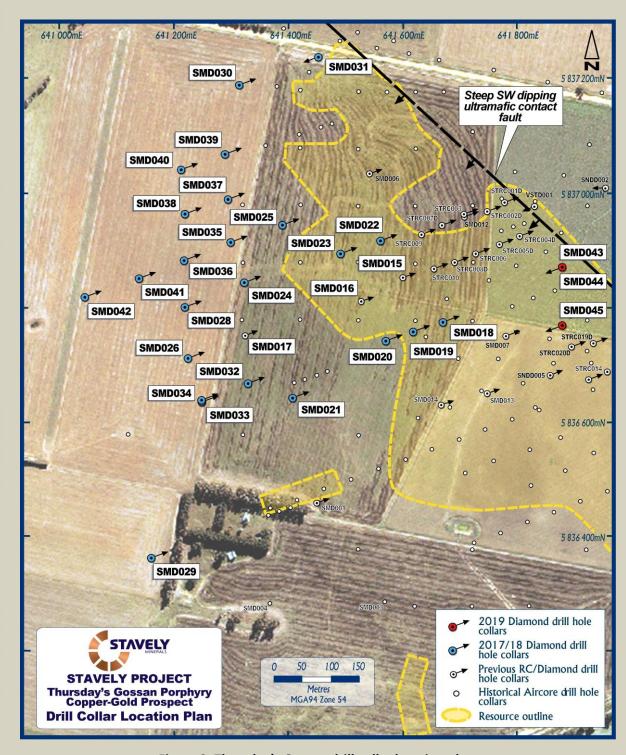


Figure 2. Thursday's Gossan drill collar location plan.

Given the increase in intensity of mineralisation from drill hole SMD028 to SMD044, Stavely now considers that the porphyry intrusion may be located to the south of SMD044 and is being progressively targeted by the next drill hole in-progress, SMD045.



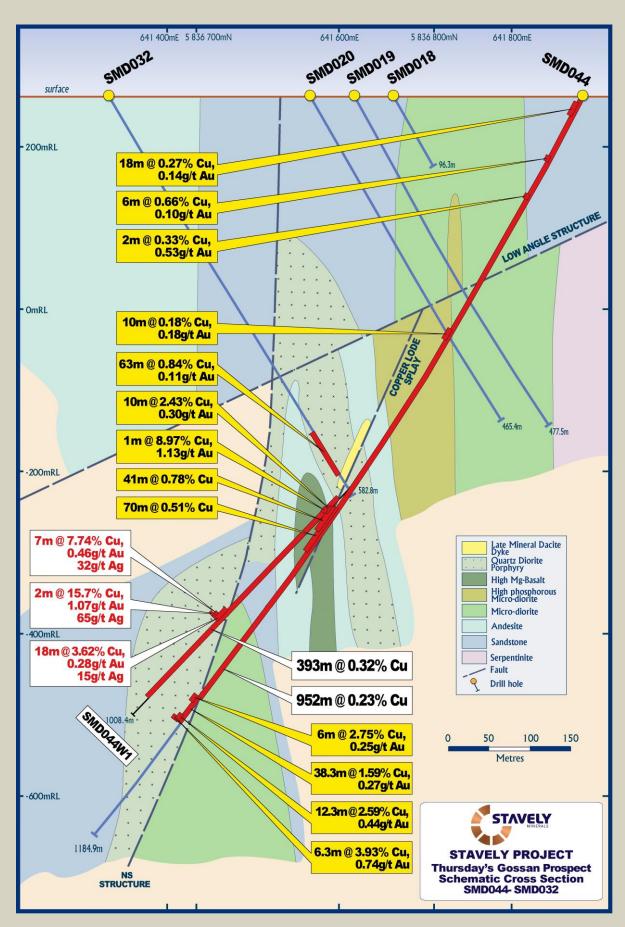


Figure 3. SMD044 Cross-section.





Photo 1. Pyrite vein with bornite-covellite-chalcocite(+-digenite) veining at 859.0m in SMD044W1.



Photo 2. Chalcocite(±digenite)-bornite-covellite veining at 859.0m in SMD044W1 (This photo is of the other side of the core in the previous photo).

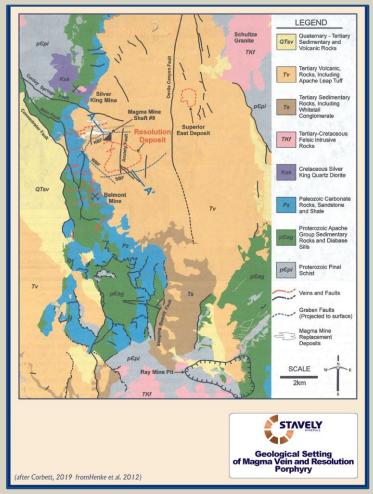


Figure 4. Geology plan of the Magma Copper Lodes and the Resolution porphyry projected to surface.



Significantly, and with the assistance of Dr Greg Corbett, the structurally-controlled copper-gold-silver mineralisation is now recognised as an early prograde event related to (at least) a second-phase, if not a third-phase porphyry intrusion. Dr Corbett's recent report on SMD044 is available at <a href="www.stavely.com.au">www.stavely.com.au</a>. A multi-phase intrusive and mineralisation history is considered conducive to a well-mineralised copper-gold porphyry system. The causative porphyry intrusion, which should contain the hottest and best-developed mineralisation, has not yet been seen.

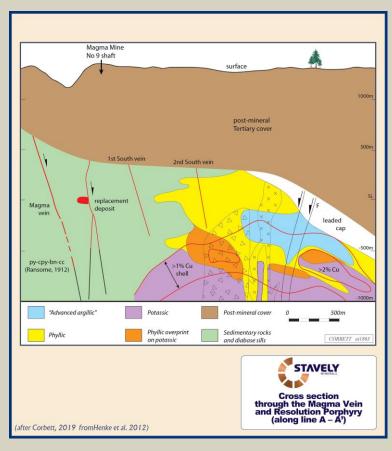


Figure 5. Cross section A-A' from Figure 4 showing the relationship between the Magma Mine copper lodes and the Resolution porphyry copper mineralisation.

The analogy being applied is the relationship between the Magma Copper Mine structurally-controlled copper-lodes and the Resolution porphyry (1.8Bt at 1.53% copper — Rio Tinto, 2018), considered to be the source of the mineralising fluids being drawn away from the porphyry and migrating within dilatant structures (Figures 4 and 5). This copper lode-style of mineralisation is more proximal to the porphyry source than would be high sulphidation-style copper-gold mineralisation and provides very significant encouragement that the source porphyry is not far away. A brief report comparing the Magma / Resolution mineralisation and Thursday's Gossan is available at <a href="https://www.stavely.com.au">www.stavely.com.au</a>.

The mineralisation encountered on structures at Thursday's Gossan may also share some similarities in style and genesis with those at Butte, Montana ('the richest hill on earth') copper veins systems and the underlying porphyries in that district.



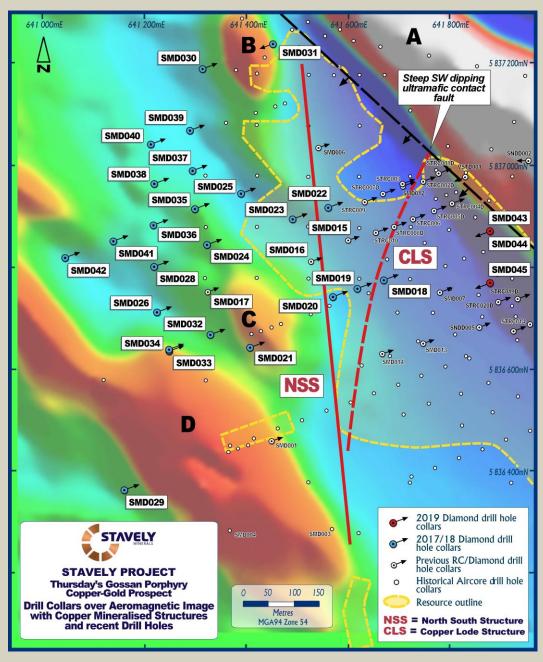


Figure 6. Aeromagnetic image with drill collars and the surface projection of the North-South Structure and the Copper Lode Splay.

The two strongly copper mineralised structures – the NSS and the CLS are projected to converge in the vicinity beneath drill hole SMD029W1 which was potentially drilled over the target zone (Figure 6). In other porphyry districts in Chile and the Philippines, for example, the convergence of splay or 'horse tail' structures are commonly the focus for porphyry intrusions such as the giant Chuquicamata porphyry copper deposit (Figure 7).



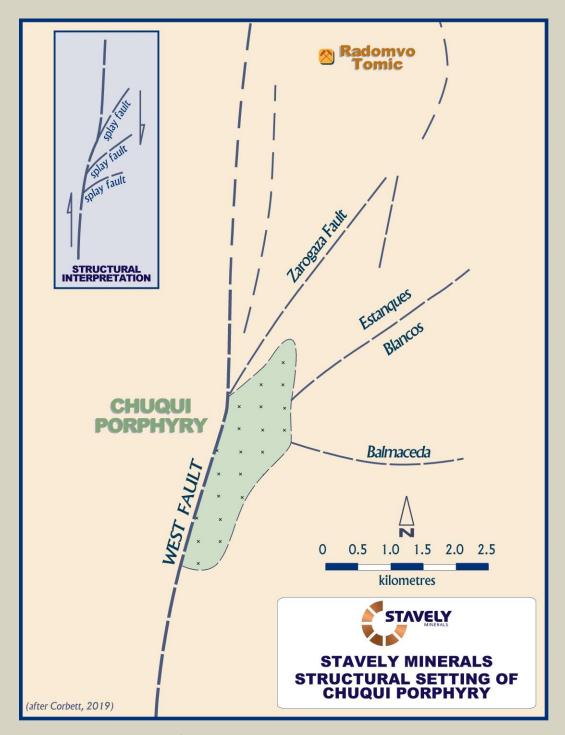


Figure 7. Structural setting of the Chuquicamata porphyry copper deposit. Intrusive phases, alteration and mineralisation are strongly influenced by the interaction between the West Fault and the splay faults.

#### **Technical Details**

Drill hole SMD044 and the wedge hole SMD044W1 were collared to test a target zone previously targeted by failed drill holes SMD033 and SMD034.

Stavely now believes that the difficult drilling conditions near surface in this area are caused by the abundant anhydrite veining seen at depth. Anhydrite is a sulphate mineral commonly occurring in porphyry systems. At shallower levels in the water table, the anhydrite is



hydrated to gypsum and is then easily dissolved by groundwater, leaving abundant open fractures which are very difficult to drill as 'broken ground'. Ironically, at depth these anhydrite veins can contain significant abundances of chalcopyrite. Consequently, SMD044 was drilled from the opposite direction thereby avoiding the zone of near-surface broken ground.

SMD044 was drilled into a target zone located approximately 200m south of SMD028 below the LAS. Below the LAS and east of the NSS, SMD028 returned the following intercepts (Figure 8):

- 73m at 0.32% copper and 0.13g/t gold from 577m, including:
  - 6m at 1.12% copper, 0.44g/t gold and 12g/t silver from 577m
  - 4m at 0.98% copper, 0.30g/t gold and 7.3g/t silver from 620m, and
  - 12m at 0.51% copper, 0.32g/t gold and 4.9g/t silver from 638m

The higher-grade intercept of **6m at 1.12% copper and 0.44g/t gold** at the top of the broader interval is likely part of the NSS (Photo 3).

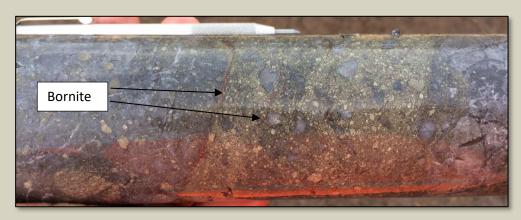


Photo 3. Structural breccia with pyrite clasts and later bornite veining at 580.8m in SMD028.

Drill hole SMD028 also returned a very high-grade result of **1m at 18.8g/t gold, 20g/t silver, 0.66% lead and 1.82% zinc** from 730m, associated with quartz-carbonate (rhodochrosite) veins and is interpreted to represent an example of carbonate / base-metal / precious metal style of mineralisation as a lower temperature style of mineralisation expected to be located well above a porphyry system. Of interest in SMD044W1 is **1m** at 4.66g/t gold from 782m depth and is also interpreted as a carbonate / base metal / precious metal style of mineralisation.

SMD044 was drilled to test a target zone below SMD032 below the LAS and on the east side of the NSS. On the east side of the NSS, SMD032 intersected the target quartz diorite porphyry but not the target porphyry M veins. On the contact with a dacite porphyry, the hole intersected a significant interval now recognised as copper lode-style copper-gold-silver mineralisation including (Figure 3):

- 63m at 0.84% copper and 0.11g/t gold from 517m, including:
  - 6m at 6.73% copper, 0.84g/t gold and 15g/t silver from 538m, including
    - 1m at 22.8% copper, 0.91g/t gold and 48g/t silver, and
  - 2m at 2.43% copper, 0.28g/t gold and 4.9g/t silver from 551m



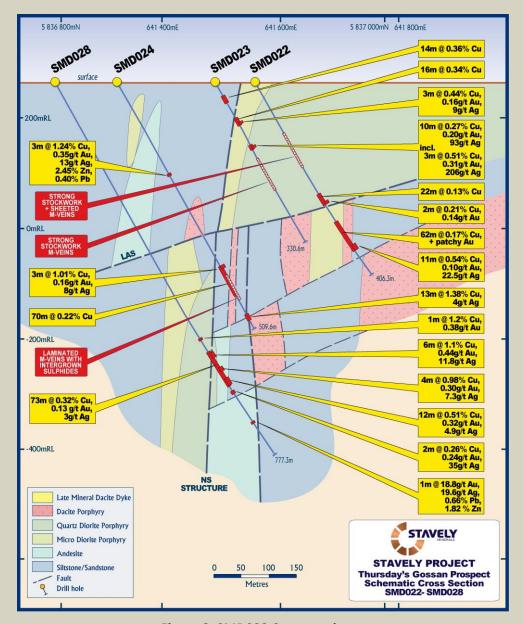


Figure 8. SMD028 Cross-section.

The high-grade copper intercepts of **6m at 6.73% copper** and **2m at 2.43% copper** are separated by a late mineral dacite dyke that possibly intruded into and destroyed some 7m of high-grade copper-gold mineralisation between the current intercepts. Given the late network veining of chalcocite in the very high-grade interval of **1m at 22.8% copper, 0.91g/t gold and 48g/t silver** (Photo 4), it is also possible that the late dacite dyke has remobilised and enriched the copper mineralisation in this interval.





Photo 4. Copper lode-style chalcopyrite-bornite-covellite-chalcocite mineralisation cutting earlier pyrite dominant porphyry D veins in the CLS from 542.5m in SMD032– note the chalcocite occurs as late network veins within the more massive sulphides. This interval returned an assay of 22% copper over 1m.



Photo 5. Late bornite-chalcocite cutting earlier pyrite dominant porphyry D veins from 924.2m in SMD044.

SMD044 intercepted a very broad zone of copper mineralisation from near surface to near the end of assays received to date. It is considered unlikely that the drill hole orientation had any meaningful impact on the width of this intercept given the nature of the porphyry-related mineralisation and the fact that the drill hole traversed in excess of 500m laterally from collar to end of hole. Mineralisation was hosted in a number of pre-porphyry emplacement host units including the Glenthompson sandstone (and associated



mudstones), the Fairview Andesite Breccia and minor tuff units of Cambrian age. Late Cambrian intrusive phases include the Victor suite of porphyries interpreted to be associated with a large, low-grade copper event with 3 clusters of Re/Os mineralisation ages of 510Ma, 505-503Ma and 500Ma. However, the quartz-diorite porphyry (QDP) and the high-P microdiorite (characterised by unusually high phosphorus +0.3% and titanium +1%) units have been dated at around 498Ma and 496Ma ± 8Ma and are considered younger than the Victor porphyries. The QDP unit is likely the intrusive responsible for the intense magnetite ± quartz ± actinolite ± chalcopyrite veining seen in drill holes SMD015, 016, 017, 022, 023 and to a lesser degree in other drill holes.

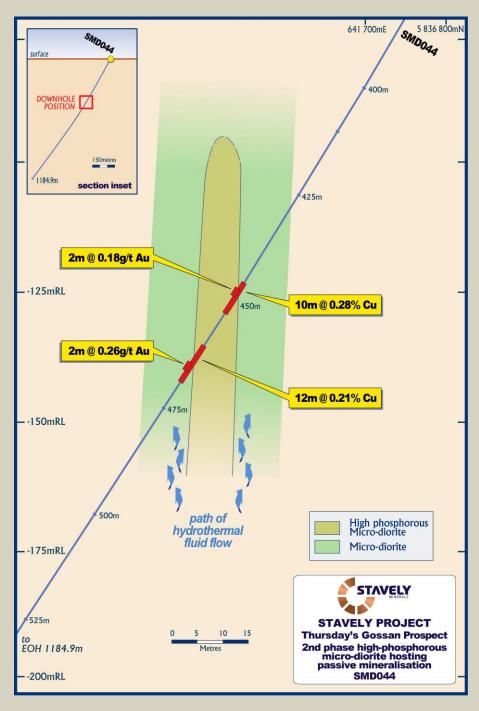


Figure 9. SMD044 showing 'passive' mineralisation on the margins of the phase-2 high-P microdiorite indicating the existence of a phase-3 porphyry responsible for this mineralisation and the high-grade copper lode-style mineralisation.

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Of particular interest is the likelihood that the high-grade structurally-controlled copper lode-style mineralisation observed in SMD028, SMD032, SMD044 and now SMD044W1 is emanating from yet a later phase of porphyry intrusion still to be seen. Along strike in both the NSS and the CLS there is recognised a temporal and spatial zonation of copper sulphide species from early pyrite  $\rightarrow$  chalcopyrite  $\rightarrow$  bornite  $\rightarrow$  chalcocite  $\rightarrow$  tennantite-tetrahedrite indicating an evolution of the fluids in space and time as they migrate north from the inferred source porphyry. The multi-phase nature of the alteration / mineralisation system is well noted at Thursday's Gossan with retrograde phyllic alteration and late-D vein mineralisation from an early phase porphyry being overprinted by early prograde alteration and mineralisation of the next porphyry phase. At least 3-phases are now inferred, the early Victor phase, the intermediate QDP / high-P microdiorite phase and now a third phase responsible for the copper lode-style mineralisation. Evidence for this third phase includes:

- 1. Late porphyry pyrite-dominant D veins of one phase are cut by prograde bornitechalcocite mineralisation from the next phase of porphyry (Photo 5), and
- 2. The second-phase high-P microdiorite is passively mineralised on its margins by the yet to be seen third-phase porphyry (Figure 9).

Dr Greg Corbett's recent report highlights 3 exploration targets (Figure 10):

- Target A with an 'A' priority target ranking being a porphyry located at the intersection of the North-South Structure (Dr Corbett refers to as the Thursday's Gossan Fault) and the Copper Lode Splay structure and responsible for the copper lode-style mineralisation
- 2. Target B structurally-controlled copper lode-style mineralisation as intercepted in SMD044 and SMD044W1 with an A/B priority ranking
- 3. Target C a speculated porphyry in the core of the Victor zoned alteration system and was given an 'A' priority.

Drill hole SMD045 is collared ~100m south of SMD044 and drilled on a similar azimuth and dip. While this drill hole location will not directly test target 'A' from Dr Corbett's report, Stavely Minerals is reluctant to step too far south given the structural complexity of the system and maintaining a desire to be able to confidently connect lithologic units, structures, alteration and mineralisation between holes without introducing too much uncertainty with a larger step-out.

Drill hole SMD046 is in-progress targeting Dr Corbett's target 'C' in the centre of the Victor alteration zonation. A previous explorer, Newcrest attempted to test target 'C' with three vertical drill holes, VSTD004, 006 and 006W. VSTD004 failed at 138.5m, VSTD006 failed at 297.5m and VSTD006W failed at 324m. None of these drill holes penetrated beyond the base of intense argillic alteration (kaolinite / dickite) while abundant porphyry B quartz vein relicts remain in the drill core, all metals appear to have been stripped during the intense argillic alteration. It is possible that a large quantity of metal was stripped and remobilised during this process and was potentially reprecipitated over primary mineralisation at depth. This hypothesis has strong merit and has never been successfully drill tested but will be tested by SMD046.



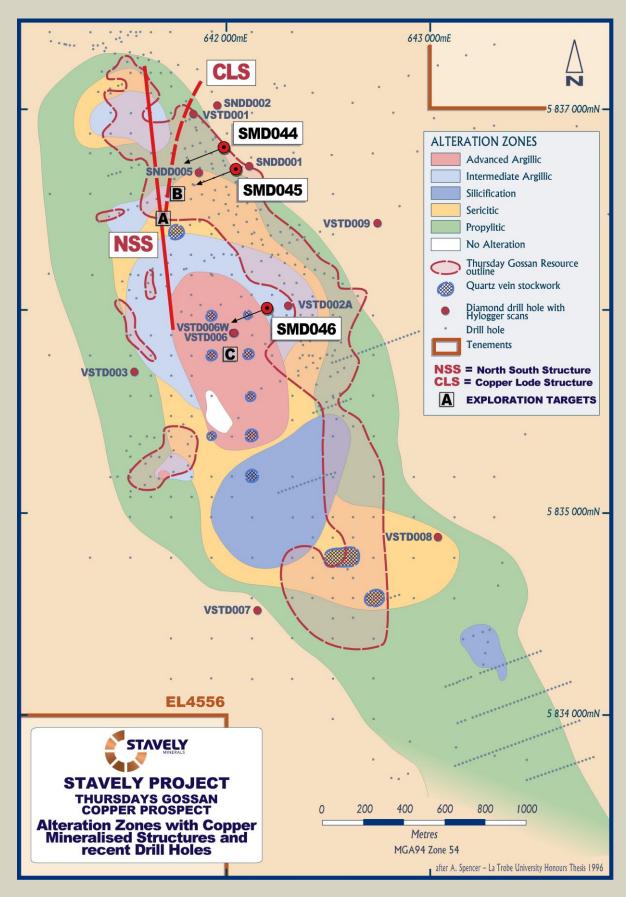


Figure 10. Alteration zonation from the early-phase Victor porphyry(s) showing recent / planned drill holes, the North-South Structure, the Copper Splay Structure and exploration targets 'A', 'B' and 'C' (after Spencer, 1996).

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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:

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			М				
Hole id	Hole Type	East	North	Dip/ Azimuth	RL (m)	Total Depth (m)	Comments
SMD017	DD	641325	5836750	-60/070	262	793.6	
SMD018	DD	641670	5836772	-60/070	264	96.3	Hole failed did not reach targe depth
SMD019	DD	641620	5836755	-60/070	264	477.5	
SMD020	DD	641570	5836740	-60/070	264	465.4	
SMD021	DD	641410	5836640	-60/070	264	534.9	
SMD022	DD	641560	5836915	-60/070	264	406.2	
SMD023	DD	641490	5836895	-60/070	264	330.6	
SMD024	DD	641315	5836835	-60/070	264	509.6	
SMD025	DD	641390	5836940	-60/070	264	399.2	
SMD026	DD	641225	5836710	-60/070	264	796	
SMD028	DD	641220	5836800	-60/070	264	777.3	
SMD029/ SMD029W1	DD	641164	5836363	-60/070	264	384/ 837.5	Hole wedged due to drilling problems in original hole
SMD030	DD	641315	5837185	-60/070	264	109.4	Hole failed did not reach targed
SMD031	DD	641455	5837235	-60/250	264	409.5	Redrill of SMD030 from opposite direction
SMD032	DD	641330	5836665	-60/070	264	582.8	
SMD033	DD	641250	5836635	-60/070	264	121.2	Drilling issues resulted in hol being abandoned
SMD034	DD	641250	5836635	-60/070	264	150	Redrill of SMD033, hole faile did not reach target depth
SMD035	DD	641300	5836910	-60/070	264	615.3	
SMD036	DD	641220	5836880	-60/070	264	654.2	
SMD037	DD	641295	5836985	-60/070	264	485.9	
SMD038	DD	641220	5836960	-60/070	264	573.5	
SMD039	DD	641290	5837065	-60/070	264	471.4	
SMD040	DD	641215	5837040	-60/070	264	570.4	
SMD041	DD	641140	5836850	-60/073	264	850	
SMD042	DD	641044	5836815	-60/070	264	1001.5	
SMD043	DD	641880	5836870	-60/250	264	249.1	Was terminated due to hole deviating from target
SMD044	DD	641880	5836870	-63/245	264	1189.4	
SMD044W1	DD	641880	5836870	-63/245	264	1008.4	Wedged off SMD044 at 536.8m
SMD045	DD	641930	5836765	-63/236	264	In progress	
SMD046	DD	642197	5836010	-63/234.5	264	In progress	



Thursday's	Gossan	Prospect -	Intercept Ta	ible									
		MGA 94 z	one 54				Interce	ot					Comments
	Hole			Dip/	RL	Total	From	То	Width	Cu	Au	Ag	
Hole id	Туре	East	North	Azimuth	(m)	Depth (m)	(m)	(m)	(m)	(%)	(g/t)	(g/t)	
SMD044	DD	641880	5836870	-63/245	264	1189.4	11	963	952*	0.23			
						incl.	6	24	18	0.27	0.14		
						and incl.	55	91	36	0.41			
						incl.	55	60	5	0.82		8	
						and incl.	81	87	6	0.66	0.10	6	
						and incl.	137	139	2	0.33	0.53	17	
						and incl.	276	281	5		0.40	2	0.14% Zn – possible carbonate-base metal affinity
						and incl.	324	334	10	0.18	0.18	6	
						and incl.	349	351	2	0.38	0.49	18	
						and incl.	371	379	8	0.39	0.16	11	
						and incl.	580	650	70	0.51			
						incl.	582	623	41	0.78			
						incl.	583	593	10	2.43	0.30	11	Copper Lode Splay
						incl.	585	586	1	8.97	1.13	36	Copper Lode Splay
						and incl.	743	750	7	0.20	0.22	5	
						and incl.	789	799	10	0.45	0.30	11	
						and incl.	890	928.3	38.3	1.59	0.27	8	North-South Structure
						and incl.	891	897	6	2.75	0.25	7	North-South Structure
						and incl.	916	928.3	12.3	2.59	0.44	18	North-South Structure
						incl.	922	928.3	6.3	3.93	0.67	27	North-South Structure
							1001	1025	24	0.15			
SMD044W1	DD	641880	5836870	-63/245	264	1008.4	546	939	393	0.32			
						incl.	699	866	167*	0.52			
							782	783	1	4.66		3	Litho-contact
						incl.	835	836	1	3.46	0.50	22	
						incl.	848	866	18	3.62	0.28	15	North-South Structur
						and incl.	858	865	7	7.74	0.46	32	North-South Structur
						and incl.	858	860	2	15.7	1.07	65	North-South Structure

New results in BOLD

<sup>\*</sup>Includes intervals of up to 25m of unmineralised (<0.1% Cu) material, including late mineral dykes



# 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.
	Include reference to	Stavely Project
	measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		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.
	Aspects of the	Stavely Project
	determination of	Thursday's Gossan Prospect
	mineralisation that are	Stavely Minerals' Diamond Drilling
	Material to the Public Report - In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may	Drill sampling techniques are considered industry standard for the Stavely work programme.
		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.
		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.
		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.



### Stavely Minerals' RC Drilling Drill sampling techniques are considered in for the Stavely work programme.  The 1m split samples were submittee Laboratory Services ("ALS") in Orange, N sample preparation involved:- sample crus riffle/rotary split off 1kg, pulverize to >6 microns.  The RC samples were analysed by ME-IC digest with HF and ICPAES and ICPMS are assay with AAS finish.  **Drilling**   Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  #### Stavely Minerals' NC Drilling Drill sampling techniques are considered in for the Stavely work programme.  The 1m split samples were submittee Laboratory Services ("ALS") in Orange, N sample preparation involved:- sample crus riffle/rotary split off 1kg, pulverize to >6 microns.  **The RC samples were analysed by ME-IC digest with HF and ICPAES and ICPMS are assay with AAS finish.  **Stavely Project**  Thursday's Gossan Prospect  Stavely Minerals' Diamond Drilling Diamond drill holes were drilled by Titeling SMD001, SMD003 and SMD004) and SMD001, SMD003 and SMD0012). Diar completed on drill holes STRC001D STRC007D,		Commentary	JORC Code explanation	Criteria
Drill sampling techniques are considered in for the Stavely work programme.  The 1m split samples were submitte Laboratory Services ("ALS") in Orange, N sample preparation involved:- sample crus riffle/rotary split off 1kg, pulverize to >8 microns.  The RC samples were analysed by ME-IC digest with HF and ICPAES and ICPMS are assay with AAS finish.  Stavely Project  Thursday's Gossan Prospect Stavely Minerals' Diamond Drilling Diamond drill holes were drilled by Titeline (SMD001, SMD003 and SMD004) and SMD007, SMD008 and SMD0012). Diamond drills, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Strecouto, STRC005D, STRC005D, STRC005D, STRC0010,		<u> </u>	•	
Laboratory Services ("ALS") in Orange, N sample preparation involved:- sample crus riffle/rotary split off 1kg, pulverize to ≥6 microns.  The RC samples were analysed by ME-IC digest with HF and ICPAES and ICPMS are assay with AAS finish.  Drilling techniques  Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Stavely Project Thursday's Gossan Prospect Stavely Minerals' Diamond Drilling Diamond drill holes were drilled by Titeline (SMD001, SMD003 and SMD004) and SMD004, SMD001, SMD003 and SMD0012). Diar completed on drill holes STRC0015 STRC004D, STRC005D, STRC007D STRC019D and STRC020D. Holes SMD0 SMD015, SMD017, SMD018, SMD018, SMD015, SMD017, SMD018, SMD019, SMD015, SMD022, SMD023, SMD029W, SMD029W, SMD032, SMD033, SMD034, SMD	industry standard	Drill sampling techniques a	detailed information.	
circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Thursday's Gossan Prospect  Stavely Minerals' Diamond Drilling  Diamond drill holes were drilled by Titeline (SMD001, SMD003 and SMD004) and SMD007, SMD008 and SMD0012). Diar completed on drill holes STRC001E STRC004D, STRC005D, STRC007E STRC019D and STRC02DD. Holes SMD0 SMD015, were drilled in 2017 by Titeline SMD015, SMD017, SMD018, SMD019, SMD022, SMD023, SMD024, SMD028, SMD029, SMD029W, SMD SMD037, SMD038, SMD039, SMD040, SMD043, SMD044, SMD044, SMD044, SMD044, SMD044, SMD044, SMD044, SMD044, SMD045, and SMD046 are the diamond holes, drilling was used to produce drill core wie 63.5mm (HQ).  Diamond drilling was standard tube. Dia orientated by the Reflex ACT III core orients SMD003 was orientated at -60° towards and smooth of the same of th	NSW. Laboratory sh to 70% < 2mm, 85% passing 75	Laboratory Services ("ALS sample preparation involve riffle/rotary split off 1kg, microns.  The RC samples were and digest with HF and ICPAES		
hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Stavely Minerals' Diamond Drilling Diamond drill holes were drilled by Titeline (SMD001, SMD003 and SMD004) and SMD007, SMD008 and SMD012). Diar completed on drill holes STRC001 STRC004D, STRC005D, STRC007D STRC004D, STRC005D, STRC007D STRC019D and STRC02DD. Holes SMD0 SMD015 were drilled in 2017 by Titeline SMD016, SMD017, SMD018, SMD019, SMD022, SMD023, SMD024, SMD028, SMD029, SMD029W, SMD SMD037, SMD038, SMD039, SMD040 SMD042 were drilled in 2018 by Titeline SMD043, SMD044, SMD044W1 were departed by SMD044, SMD044 SMD046 are the diamond holes, drilling was used to pwith a diameter of 85mm (PQ) from surface was sufficiently consolidated and then core of 63.5mm (HQ).  Diamond drilling was standard tube. Dia orientated by the Reflex ACT III core orients SMD003 was orientated at -60° towards at -60° tow		Stavely Project	Drill type (eg core, reverse	Drilling
auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).  Stavely winnerals' Diamond drilled by Titeline (SMD001, SMD003 and SMD004) and SMD007, SMD008 and SMD0012). Diar completed on drill holes STRC001D STRC004D, STRC005D, STRC007D STRC019D and STRC020D. Holes SMD0 SMD015 were drilled in 2017 by Titeline SMD016, SMD017, SMD018, SMD019, SI SMD022, SMD023, SMD024, SMD SMD032, SMD033, SMD034, SMD SMD032, SMD033, SMD034, SMD SMD042 were drilled in 2018 by Titeline SMD043, SMD044, SMD044W1 were d Drilling in 2019. SMD045 and SMD046 are the diamond holes, drilling was used to p with a diameter of 85mm (PQ) from surface was sufficiently consolidated and then core of 63.5mm (HQ) was returned. For the drilling was used to produce drill core wi 63.5mm (HQ).  Diamond drilling was standard tube. Dia orientated by the Reflex ACT III core orien SMD003 was orientated at -60° towards a		Thursday's Gossan Pros	•	techniques
biamond drill holes were drilled by Titeling (SMD001, SMD003 and SMD004) and SMD007, SMD008 and SMD0012). Diar completed on drill holes STRC0011 STRC004D, STRC005D, STRC007D STRC004D, STRC005D, STRC007D STRC019D and STRC02D. Holes SMD015 were drilled in 2017 by Titeling SMD016, SMD017, SMD018, SMD019, SMD022, SMD023, SMD024, SMD022, SMD023, SMD024, SMD032, SMD033, SMD034, SMD037, SMD038, SMD039, SMD034, SMD037, SMD038, SMD039, SMD040 SMD042 were drilled in 2018 by Titeling in 2019. SMD045 and SMD046 are the diamond holes, drilling was used to p with a diameter of 85mm (PQ) from surface was sufficiently consolidated and then core of 63.5mm (HQ).  Diamond drilling was standard tube. Dia orientated by the Reflex ACT III core orient SMD003 was orientated at -60° towards at SMD003 was orientated at -60° toward		Stavely Minerals' Diamor	•	
SMD006, SMD007 and SMD008 were o towards azimuth 070° to depths of 353.3 240m respectively. SMD012 was orientate azimuth 065° to a depth of 206.6m.  SMD013, SMD014 and SMD015 were o towards azimuth 070° to depths of 573.9 448.1m respectively. SMD016 was orientate azimuth 080° to a depth of 467.6m.  The dips, azimuths and depths of ho SMD026, inclusive, and SMD028 to SMD0	2017 (SMD006, mond tails were 1D, STRC002D, D, STRC008D, 013, SMD014 and ne Drilling. Holes 5MD020, SMD021, 0025, SMD036, 0, SMD041 and ne Drilling. Hole drilled by Titeline re in progress. For produce drill core ce until the ground re with a diameter of the diamond tails, with a diameter of samond core was entation tool.  azimuth 060° to a corientated at -60° 1.3m, 355.6m and red at -60° towards orientated at -60° 1.9m, 738.9m and rientated at -60° 1.9m, 738.9m and	Diamond drill holes were of (SMD001, SMD003 and SMD007, SMD008 and completed on drill ho STRC004D, STRC005E STRC019D and STRC020 SMD015 were drilled in 2 SMD016, SMD017, SMD0 SMD022, SMD023, SI SMD028, SMD029, SM SMD032, SMD033, SI SMD037, SMD038, SME SMD042 were drilled in 2 SMD043, SMD044, SMD045 at the diamond holes, drilling with a diameter of 85mm (Fwas sufficiently consolidate of 63.5mm (HQ) was redrilling was used to produce 63.5mm (HQ).  Diamond drilling was star orientated by the Reflex Ad SMD003 was orientated at depth of 522.3m.  SMD006, SMD007 and Stowards azimuth 070° to 240m respectively. SMD01 azimuth 065° to a depth of SMD013, SMD014 and Stowards azimuth 070° to 448.1m respectively. SM towards azimuth 080° to a The dips, azimuths and	and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what	
provided in the Thursday's Gossan Prospe				



Criteria	IORC Code explanation	Commentary
Criteria	JORC Code explanation	Commentary  Commentary
		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 5¹/₄" to 5³/₄" drill bits. A Reflex Digital Ezy-Trac survey camera was used.  The holes were oriented at -60° towards azimuth 070°.
Drill sample	Method of recording and	Stavely Project
recovery	assessing core and chip	Thursday's Gossan Prospect
	sample recoveries and	Stavely Minerals' Diamond Drilling
	results assessed.	Diamond core recoveries were logged and recorded in the database.
		Core recovery for SMD001, SMD003 and SMD007 was good. In general, the core recovery for SMD012 was good but there were several intervals where core was lost or there was poor core recovery.
		Core recoveries for SMD013, SMD014, SMD015, SMD016, and SMD017 were generally very good, with the vast majority of intervals returning +95% recovery and only a few intervals, mainly near the surface, returning poor (<50%) recoveries. Core recoveries for SMD018, SMD019, SMD020, SMD021, SMD022, SMD023 and SMD024 were good with the holes averaging above 92% recovery for the total hole. Core recovery for SMD025 averaged 84.5%. Core recovery for SMD026 and SMD028 was 91% and 95% respectively. Core recovery for SMD029 was 90% and for SMD029W was 93%. The core recovery for SMD030 was not good, at an average of 69%. SMD031 averaged 92%. Core recovery for SMD032 averaged 93%. Core recovery for SMD032 averaged 93%. Core recovery for SMD033 was good averaging 91%, however the hole was lost at 121.2m.  Core recovery for SMD034 was good averaging 90%, however the hole was lost at 150m.  Core recovery for SMD035 was good averaging 93%. Core recovery for SMD036 was good averaging 93%. Core recovery for SMD037 was very good averaging 97%. Core recovery for SMD039 was very good averaging 97%. Core recovery for SMD040 was very good averaging 97%. Core recovery for SMD041 was very good averaging 97%. Core recovery for SMD042 was very good averaging 97%. Core recovery for SMD043 was very good averaging 97%. Core recovery for SMD044 was very good averaging 97%. Core recovery for SMD044 was very good averaging 97%. Core recovery for SMD044 was very good averaging 97%. Core recovery for SMD044 was very good averaging 98%. Core recovery for SMD044 was very good averaging 98%. Core recovery for SMD044 was very good averaging 98%. Core recovery for SMD044 was very good averaging 98%. Core recovery for SMD044 was very good averaging 98%. Core recovery for SMD044 was very good averaging 98%.

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MINERALS

Criteria	JORC Code explanation	Commentary
		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.
	Measures taken to	Stavely Project
	maximise sample recovery	Thursday's Gossan Prospect
	and ensure representative	Stavely Minerals' Diamond Drilling
	nature of the samples.	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.
	Whether a relationship	Stavely Project
	exists between sample	Thursday's Gossan Prospect
	recovery and grade and whether sample bias may have occurred due to preferential loss/gain of	Stavely Minerals' Diamond Drilling
		Not an issue relevant to diamond drilling.
		Stavely Minerals' RC Drilling
	fine/coarse material.	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.
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.
	Whether logging is	Stavely Project
	qualitative or quantitative in nature. Core (or costean,	Thursday's Gossan Prospect
	channel, etc) 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.
		Stavely Minerals' RC Drilling
		All logging is quantitative, based on visual field estimates.  Chip trays with representative 1m RC samples were



Criteria	JORC Code explanation	Commentary
		collected and photographed then stored for future reference.
	The total length and	
	The total length and percentage of the relevant	Stavely Project Thursday's Gossan Prospect
	intersections logged.	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.
Sub-sampling	If core, whether cut or sawn	Stavely Project
techniques	and whether quarter, half or all core taken.	Thursday's Gossan Prospect
and sample preparation	all core taken.	Stavely Minerals' Diamond Drilling
propulation.		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,	Stavely Project
	tube sampled, rotary split,	Thursday's Gossan Prospect
	etc and whether sampled wet or dry.	Stavely Minerals' RC Drilling
	wor or ary.	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.
	For all sample types, the	Stavely Project
	nature, quality and	Thursday's Gossan Prospect
	appropriateness of the sample preparation technique.	Stavely Minerals' Diamond and RC Drilling
		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.
	Quality control procedures	Stavely Project
	adopted for all sub-	Thursday's Gossan Prospect
	sampling stages to 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.
	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.

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Criteria	JORC Code explanation	Commentary
	Whether sample sizes are	Stavely Project
	appropriate to the grain	Thursday's Gossan Prospect
	size of the material being sampled.	Stavely Minerals' Diamond and RC Drilling
	Sampled.	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
tests	procedures used and	Stavely Minerals' Diamond and RC Drilling
	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 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.
	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.	



Criteria	JORC Code explanation	Commentary
Ciliena	<u> </u>	Commentary Stavely Project
	Nature of quality control procedures adopted (eg	
	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias)	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.
	and precision have been established.	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.
Verification of	The verification of	Stavely Project
sampling and	significant intersections by	Thursday's Gossan Prospect
assaying	either independent or alternative company	Stavely Minerals' Diamond and RC Drilling
	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	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.
	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	Stavely Minerals' Diamond and RC Drilling
	workings and other locations 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.
	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.



Criteria	JORC Code explanation	Commentary
		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 continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	No Mineral Resource and Ore Reserve estimation procedure(s) and classifications apply to the exploration data being reported.
	Whether sample	Stavely Project
	compositing has been	Thursday's Gossan Prospect
	applied.	Stavely Minerals' Diamond Drilling
		Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.4m or greater than 1.2m.
		Stavely Minerals' RC Drilling
		No sample compositing has been applied.
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of	Stavely Project
		Thursday's Gossan Prospect
geological structure	possible structures and the extent to which this is known, considering the deposit type.	Stavely Minerals' Diamond and RC Drilling  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	Thursday's Gossan & Mount Stavely Prospects
	mineralised structures is	Stavely Minerals' Diamond and RC Drilling
	considered to have introduced a sampling bias, this should be assessed and reported if material.	With SMD044 drilled to 250° grid azimuth, the drill hole may have intercepted the Copper Splay Structure at a lower angle than typical given the avoidance of bad ground and the desire to also intercept the steeply dipping North-South Structure in the one hole. Having said that, there is some uncertainty regarding the orientation of these structures within the reported intercepts given the closest intercepts from which to extrapolate are almost 200m away. It is likely that SMD044 intercepted the CLS at an angle of ~20°-25° NSS at an angle of 35°-40°.
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

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Criteria	JORC Code explanation	Commentary
		delivered to either Ararat or Hamilton from where the samples are couriered to ALS Laboratory in Adelaide, SA.
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, local ownership including agreements or matissues with third passuch as joint ventue partnerships, overr royalties, native title interests, historical wilderness or natio	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, wilderness or national park and environmental settings.	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 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 done by other parties	Acknowledgment and 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.

Criteria

JORC Code explanation



Sorto Sode explanation	
	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.
	Mount Stavely Prospect
	In 2013 Stavely Minerals completed a regional ground
	gravity survey over the central portion of EL4556.
	Processing of the gravity data revealed a gravity low at
	Mount Stavely. Porphyry intrusions are commonly less dense than the surrounding country rocks and produce a
	gravity low. A co-incident 'low' was identified in the
	airborne magnetic data which is interpreted to reflect
	magnetite destructive hydrothermal fluid alteration.
	The inferred porphyry is in proximity to the marginal gold
	mineralisation at the Fairview gold prospect.
	· .
	In early 2014 Stavely Minerals commissioned an Induced Polarisation (IP) survey over the Mount Stavely prospect. A
	chargeability anomaly of up to 20mV/V is located slightly
	offset from the gravity low and truncates a regionally
	extensive serpentinite horizon. The chargeability feature is
	interpreted as reflecting disseminated pyrite associated
	with retrograde phyllic alteration overprinting earlier
	prograde potassic/ propylitic alteration. At Thursday's
	Gossan deep diamond drilling has shown there to be an
	excellent correlation between IP chargeability features and
	phyllic alteration.
	Geochemical soil sampling over the Mount Stavely
	prospect returned anomalous arsenic, molybdenum and
	gold values. One diamond drill hole was co-funded by the
- 7	Victorian Government TARGET minerals exploration

Commentary

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Criteria	JORC Code explanation	Commentary
Official		initiative, to test the co-incident geophysical and geochemical anomalism, which together with the prospective host rocks define an excellent porphyry copper-gold target. The drill hole did encounter the ultramafics which were expected from the aeromagnetic signature in the area. While no mineralisation or porphyry alteration signatures were observed in the drill core, a pebble dyke characterised by rounded milled clasts in a pyrite altered rock flour matrix has been identified. Pebble dykes are commonly used to vector towards porphyry mineralisation and its' presence is considered to be extremely encouraging that there is a copper-gold porphyry in the Mount Stavely area.
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.
		Mount Stavely Prospect
		The Mount Stavely Copper-Gold prospect is 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 Mt Stavely target comprises a coincident gravity and magnetic low with an induced polarisation



Criteria	JORC Code explanation	Commentary
		chargeability feature and geochemical support within the prospective Mount Stavely Volcanic Complex.
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:  easting and northing of the	Included in the drill hole table in the body of the report.
	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 understanding of the report, the Competent Person should clearly explain why this is the case.	No material drill hole information has been excluded.
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.	Stavely Project 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.



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 clear statement to this effect (eg 'down hole length, true width not known').	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.  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.
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.





Criteria	JORC Code explanation	Commentary
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 Further deep diamond drilling has been planned to target the core of the porphyry at the intersection of the copper lode splay and the north south structure.