

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

# Outstanding Shallow High-Grade Copper-Gold Discovery in First Diamond Hole at Ultramafic Contact Fault

Stunning grades of up to 40% Cu within 32m wide high-grade zone confirm significant shallow discovery while opening up opportunities for other structurally controlled zones

#### **Highlights**

- Exceptional results received from diamond hole SMD050 targeting high-grade structurally controlled copper-gold-silver mineralisation within the Ultramafic Contact Fault (UCF), immediately south-east of recent deep drilling.
- > Diamond hole SMD050 has intersected:
  - o 32m at 5.88% copper, 1.00g/t gold and 58g/t silver from 62m down-hole; including:
    - 12m at 14.3% copper, 2.26g/t gold and 145g/t silver; including:
      - 2m at 40% copper, 3.00g/t gold and 517g/t silver; and
  - o 4.4m at 3.98% nickel and 0.23% cobalt from 96.7m drill depth.
- The mineralisation is characterised by structurally controlled massive to semimassive sulphide and quartz-sulphide with early pyrite that is fractured and brecciated by later copper sulphides dominated by chalcopyrite, bornite and chalcocite.
- > Higher gold and silver grades are associated with bornite-dominant intervals.
- A surprising interval of high-grade nickel and cobalt mineralisation located just below the copper-gold-silver interval is interpreted to be a result of the hydrothermal fluid having acquired these metals in a similar circumstance to mineralisation at the Avebury nickel deposit.
- > Step-out hole SMD051, collared a further 160m south-west, has intersected an 85m wide structural zone including an aggregate of <u>~60m of massive to semi-massive sulphide including zones of strong copper sulphide mineralisation</u>. Assays are pending.
- > SMD052, collared a further 80m south-west of SMD051, is currently in-progress.
- > The shallow structurally controlled target at the UCF, which extends over a 500m strike length, was identified as a result of recent reviews of diamond drill core, assay results and other technical data from Thursday's Gossan.
- > This review has identified similarities in the styles of copper-gold-silver lode-style mineralisation to those seen at Butte, Montana and Magma, Arizona.
- > This new exploration model has led to a review of results from previous shallow Aircore and Reverse Circulation (RC) drilling.
- > Other occurrences of massive sulphide intercepted in shallow historical Air-core and RC drilling now present as high-priority targets for diamond drilling.





Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is pleased to advise that it has made a significant shallow high-grade copper-gold discovery at the **Thursday's Gossan prospect**, part of its 100%-owned Stavely Copper-Gold Project in Victoria (Figure 1).

The Company has received assay results for the first diamond hole targeting shallow structurally controlled mineralisation within the Ultramafic Contact Fault (UCF) (see ASX release, 11 September 2019). The hole intersected a thick zone of shallow high-grade copper-gold-silver mineralisation with stunning grades of up to 40% copper.

Together with visual observations of drill core from a second step-out hole located 160m to the south-west, which has also encountered a thick zone of massive to semi-massive mineralisation over a down-hole width of ~60 metres, the recent drilling represents a major exploration breakthrough for the Company.

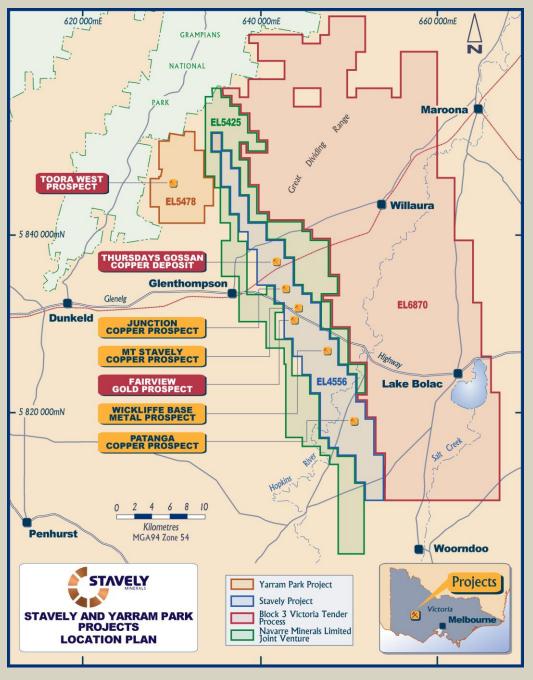


Figure 1. Stavely Project location map.



The current phase of diamond drilling is being undertaken to evaluate the potential for near-surface high-grade mineralisation while the Company completes a review of all the results and data stemming from recent deep diamond drilling targeting the source porphyry.

The breakthrough stems from a recent review of drill core, assay results and other technical data undertaken in conjunction with Stavely's consultants, Drs Greg Corbett, Scott Halley and Paul Ashley. This review has significantly improved the Company's understanding of the mineralisation setting at the Thursday's Gossan prospect.

The review has highlighted significant similarities between the large mineral system at Thursday's Gossan and the world-class Butte, Montana (the richest hill on earth) and Magma, Arizona copper deposits. This prompted Stavely Minerals to test for similar highgrade lode-hosted copper-gold-silver mineralisation.

Stavely Minerals' Executive Chairman, Chris Cairns said:

"The recognition that we should be using a Magma / Butte high-grade structurally-controlled mineralisation model for our exploration drill targeting has been rewarded with spectacular success in the first diamond hole drilled to evaluate a shallow 500m long target at the Ultramafic Contact Fault.

"It's not often in the career of an explorer that you see 40% copper grades over sub-metre intervals, let alone over two metres – and those stunning copper numbers are accompanied by very significant gold and silver values as well.

"Encouragingly, our first step-out hole, collared some 160m to the south-west, has also intersected a thick zone of structurally controlled semi-massive to massive sulphide mineralisation. We are eagerly awaiting assays from that hole and results from further step-out drilling which is currently in progress.

"This new model has significantly expanded our 'search space' and a number of previous shallow historical air-core and RC intercepts of massive sulphides are clearly much more significant than previously thought and are now considered to be high-priority targets for diamond drill testing.

"Additional mineralised structures are thought to exist without surface expression but are expected to provide a strong conductive response to a ground EM survey which is being designed, also as a priority."

Drill hole SMD050 was designed to test for shallow, structurally-controlled high-grade copper-gold-silver mineralisation on the UCF. The drill hole successfully intersected a zone of **14.6 metres of semi-massive to massive sulphides including chalcopyrite, bornite and chalcocite from 79m to 93.6m drill depth** (Photos 1-3).



Assays have now been received for SMD050 including:

- 32m at 5.88% copper, 1.00g/t gold and 58g/t silver, from 62m drill depth including
  - 12m at 14.3% copper, 2.26g/t gold and 145g/t silver from 82m, including
    - 2m at 40% copper, 3.00g/t gold and 517g/t silver

Surprisingly, drill hole SMD050 also intersected:

4.4m at 3.98% nickel, 0.23% cobalt and >1% chrome

While there have been a number of >0.5% nickel drill intercepts in the serpentinised ultramafic, this is the first instance of >1% nickel at Thursday's gossan. It is suspected that the nickel has been sourced from the ultramafic by the hot and acidic hydrothermal fluids also responsible for the copper-gold-silver mineralisation.

At this stage, the Company does not understand why the nickel-cobalt mineralisation is spatially segregated, if only by a couple of metres, from the copper-gold-silver mineralisation, and the nickel-cobalt mineralisation requires further evaluation.

Drill hole SMD051, collared 160m further south-east of SMD050, has been completed. The hole successfully intersected a structural zone of 85.7m width with an aggregate of approximately 60m of semi-massive to massive sulphide-quartz veining from 97.2m to 182.9m down-hole (Figure 5). The size of the fault in this position is interpreted to be a result of structural thickening of the UCF.

Within the pyrite dominant sulphide-quartz veining there are high-grade copper sulphide dominant zones at 98m-99.6m (chalcopyrite), 106-116m (chalcopyrite, bornite, chalcocite), 133.9m-136.6m (chalcopyrite), 147.4m-150.8m (chalcopyrite, bornite, covellite – Photo 5), 155.8m-156.8m (chalcopyrite), and 177m-182.9m (chalcopyrite) and trace chalcopyrite throughout the rest of the interval.

The massive to semi-massive sulphide-quartz veining appears to be replacing ultramafic rocks as indicated by the presence of chromite crystals in the veins.

The sampled drill core has been driven to Adelaide for analysis. SMD052, which is located a further 80m south-east of SMD051, is in-progress.





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

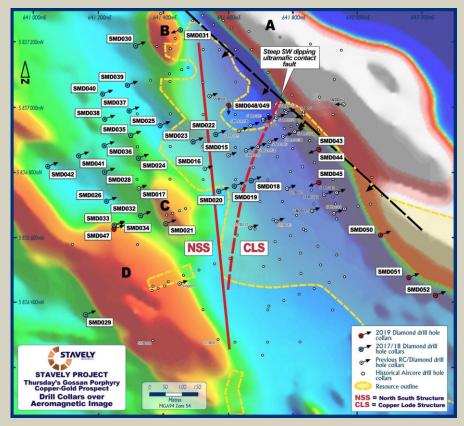


Figure 3. Aeromagnetic image with drill collars and the surface projection of the ultramafic contact structure.



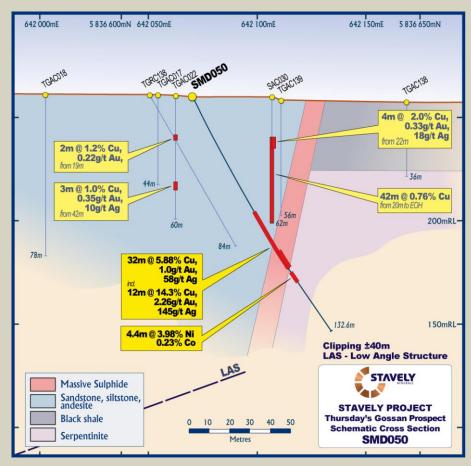


Figure 4. SMD050 drill section.

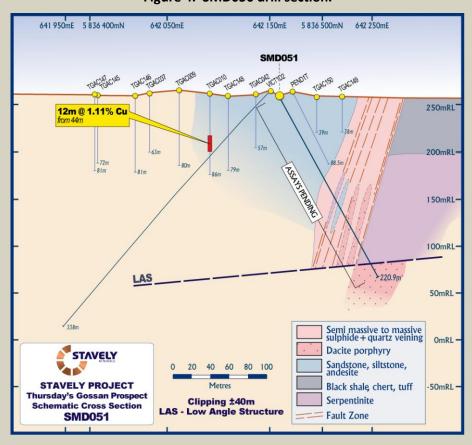


Figure 5. SMD051 drill section.





Photos 1 & 2. Massive sulphide interval from 82.6m to 89.4m drill depth in SMD050. Note the purple mineral is bornite.



Photo 3. High-grade pyrite-bornite mineralisation at 85m drill depth in SMD050.





Photo 4. Massive bornite, chalcocite and chalcopyrite at 86.5m in SMD050.



Photo 5. Quartz-pyrite-chalcopyrite-bornite veining at 150.1m in SMD051.

The intention of the current program is to delineate high-grade, near-surface copper-gold-silver mineralisation over a significant strike extent that would complement the existing large Inferred Mineral Resource of 28 million tonne at 0.4% copper (gold and silver not estimated) at Thursday's Gossan (see Stavely Minerals Limited 2018 Annual Report).

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

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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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Thursday's Goss	an Prospect – C	oliar l'able					
			М				
Hole id	Hole Type	East	North	Dip/ Azimuth	RL (m)	Total Depth (m)	Comments
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 target depth
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 hole being abandoned
SMD034	DD	641250	5836635	-60/070	264	150	Redrill of SMD033, hole failed 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	1257.4	
SMD045W1	DD	641930	5836765	-63/236	264	1071	Wedged off SMD045 at 417m
SMD045W2	DD	641930	5836765	-63/236	264	1233.3	Wedged off SMD044 at 403m
SMD046	DD	642197	5836010	-63/234.5	264	636.9	
SMD047	DD	641250	5836630	-60/070	264	842.5	
SMD048	DD	641600	5837000	-70/185.5	264	61.6	Hole failed
SMD049	DD	641601	5837002	-70/185.5	264	1767.6	Re-drill of SMD048
SMD050	DD	642070	5836609	-60/59.5	264	132.6	
SMD051	DD	642160	5836476	-60/59.5	264	220.9	
SMD052	DD	642238	5836421	-60/59.5	264	In Progress	



	Thursday's Gossan Prospect – Intercept Table														
			MGA 94 z	MGA 94 zone 54				Intercept							
//	Hole id	Hole Type	East	North	Dip/ Azimuth	RL (m)	Total Depth (m)	From (m)	To (m)	Width (m)	Cu (%)	Au (g/t)	Ag (g/t)	Ni (%)	Co (%)
	SMD050	DD	642070	5836609	-60/59.5	264	132.6	62	94	32	5.88	1.00	58		
							Incl.	82	94	12	14.3	2.26	145		
							and	85	87	2	40	3.00	517		
								96.7	101.1	4.4				3.98	0.23



# 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, random chips, or specific 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	Thursday's Gossan Prospect
		Stavely Minerals' RC Drilling
		Reverse Circulation (RC) percussion drilling was used to produce a 1m bulk sample (~25kg) which was collected in plastic bags and representative 1m split samples (12.5% or nominally 3kg) were collected using a cone splitter and placed in a calico bag. The cyclone was cleaned out with compressed air at the end of each hole and periodically during the drilling. The 1m split samples were submitted for analysis.
	limiting the broad meaning	Stavely Minerals' Diamond Drilling
	of sampling.	The diamond core for intervals of interest, ie. those that contained visible sulphides as well as 5m above and below were sampled. PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.4m or greater than 1.2m.
		Historical Drilling
		Historical diamond hole PEND1T was drilled by Penzoil of Australia in the late 1970's to a depth of 88.5m. Only portions of the hole were sampled, with composite samples varying from 1 to 8m. The samples were assayed for Au, Ag, As, Cu, Pb and Zn.
		Historical diamond hole VICTD2 was drilled by North Limited in 1993 to a depth of 338m. The top 28m was not sampled, there after one metre or two metre composite samples were assayed for Au, Ag, Co and Mo.
		Historical holes with the prefix TGAC were drilled by Beaconsfield Gold Mines Pty Ltd (BCD).
		Historical aircore holes TGAC009, TGAC010, TGAC037 & TGAC042 were drilled in 2008. The top approximately 15 to 16 meters was not sampled, after that one metre intervals samples were taken for the remainder of the hole.
		Aircore holes TGAC145, TGAC146, TGAC147, TGAC148, TGAC149 and TGAC150 were drilled in 2012. No samples were taken for the top 9 metres, after which three metre composite samples were collected for the remainder of the hole.
	Include reference to	Stavely Project
	measures taken to ensure	Thursday's Gossan Prospect
	sample representivity and	Stavely Minerals' Diamond and RC Drilling
	the appropriate calibration of any measurement tools or systems used.	Sample representivity was ensured by a combination of Company Procedures regarding quality control (QC) and

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RALS

Criteria	JORC Code explanation	Commentary				
		quality assurance/ testing (QA). Certified standards and				
		blanks were inserted into the assay batches.				
		Historical Drilling				
		No information available.				
	Aspects of the	Stavely Project				
	determination of	Thursday's Gossan Prospect				
	mineralisation that are Material to the Public	Stavely Minerals' Diamond Drilling				
	Report - In cases where 'industry standard' work	Drill sampling techniques are considered industry standard for the Stavely work programme.				
	has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m	PQ quarter core and HQ half core was submitted for analysis. Sample intervals were based on lithology but in general were 1m. No intervals were less than 0.3m or greater than 1.8m.				
	samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be	The diamond drill samples were submitted to Australian Laboratory Services ("ALS") in Adelaide, SA. Laboratory sample preparation involved:- sample crush to 70% < 2mm, riffle/rotary split off 1kg, pulverize to >85% passing 75 microns.				
	required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg	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%) reassaying was conducted by OG62, which is a four acid digest with ICP-AES or AAS finish.				
	submarine nodules) may warrant disclosure of	Stavely Minerals' RC Drilling				
	detailed information.	Drill sampling techniques are considered industry standard for the Stavely work programme.				
		The 1m split samples were submitted to Australian Laboratory Services ("ALS") in Orange, NSW. Laboratory sample preparation involved:- sample crush to 70% < 2mm, 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, face-sampling 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, SMD008 and SMD012). Diamond tails were completed on drill holes STRC001D, STRC002D, STRC004D, STRC005D, STRC007D, STRC008D, STRC019D and STRC020D. Holes SMD013, SMD014 and SMD015 were drilled in 2017 by Titeline Drilling. Holes SMD016, SMD017, SMD018, SMD019, SMD020, SMD021 SMD022, SMD023, SMD024, SMD025, SMD026, SMD028, SMD029, SMD029W, SMD030,				



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Criteria	JORC Code explanation	Commentary
		SMD031, SMD032, SMD033, SMD034, SMD035, SMD036, SMD037, SMD038, SMD039, SMD040, SMD041 and SMD042 were drilled in 2018 by Titeline Drilling. Hole SMD043, SMD044, SMD044W1, SMD045, SMD045W1, SMD045W2, SMD046, SMD047, SMD048, SMD049, SMD050 and SMD051 were drilled by Titeline Drilling in 2019. For the diamond holes, drilling was used to produce drill core with a diameter of 85mm (PQ) from surface until the ground was sufficiently consolidated and then core with a diameter of 63.5mm (HQ) was returned. For the diamond tails, drilling was used to produce drill core with a diameter of 63.5mm (HQ).
		Diamond drilling was standard tube. Diamond core was orientated by the Reflex ACT III core orientation tool.  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. SMD012 was orientated at -60° towards azimuth 065° to a depth of 206.6m.
		SMD013, SMD014 and SMD015 were orientated at -60° towards azimuth 070° to depths of 573.9m, 738.9m and 448.1m respectively. SMD016 was orientated at -60° towards azimuth 080° to a depth of 467.6m.
		The dips, azimuths and depths of holes SMD017 to SMD026, inclusive, and SMD028 to SMD051, inclusive, are provided in the Thursday's Gossan Prospect Collar Table.
		Stavely Minerals' RC Drilling
		The RC holes were drilled by Budd Exploration Drilling P/L. The RC percussion drilling was conducted using a UDR 1000 truck mounted rig with onboard air. A Sullair $350/1150$ auxiliary compressor was used. 4" RC rods were used and $5^{1}/_{4}$ " 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 aircore holes TGAC009, TGAC010, TGAC037 & TGAC042 was drilled vertically by Beaconsfield Gold Mines Pty Ltd in 2008 by Wallis Drilling.
		TGAC145 to TGAC150 were drilled by BCD in 2012. The holes were drilled vertically by Broken Hill Exploration using a 700psi/300cfm aircore rig.
Drill sample	Method of recording and	Stavely Project
recovery	assessing core and chip sample recoveries and	Thursday's Gossan Prospect
	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. In general, the core recovery for SMD012 was good but there were several intervals where core was lost or



Criteria	JORC Code explanation	Commentary
		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%. SMD030 was abandoned at 109m. Core recovery for SMD031 averaged 92%. 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 94%.
		Core recovery for SMD036 was good averaging 93%.
		Core recovery for SMD037 was very good averaging 97%.
		Core recovery for SMD038 was very good averaging 96%.  Core recovery for SMD039 was very good averaging 97%.
		Core recovery for SMD040 was very good averaging 96%.
		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 96%.
		Core recovery for SMD044 was very good averaging 98%.
		Core recovery for SMD044W1 was very good averaging 96%.
		Core recovery for SMD045 was very good averaging 98%.
		Core recovery for SMD045W1 was very good averaging 98%.
		Core recovery for SMD045W2 was very good averaging 98%.
		Core recovery for SMD046 was good averaging 95%.
		Core recovery for SMD047 was good averaging 95%.
		Core recovery for SMD048 averaged 92%.
		Core recovery for SMD049 was very good averaging 97%.
		Core recovery for SMD050 averaged 82% with an average recovery of 76% in the mineralised zone between 79m and 93m.
		Core recovery for SMD051 averaged 86%. For the mineralised zone between 97m and 182m recovery averaged 76%, however between 98m and 127.7m the recovery only averaged 55%.



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.  Historical Drilling  Diamond core recoveries were logged and recorded for			
		historical drill hole SNDD001.			
	Measures taken to	Stavely Project			
	maximise sample recovery and ensure representative	Thursday's Gossan Prospect			
	nature of the 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.			
		Stavely Minerals' RC Drilling			
		The RC samples are collected by plastic bag directly from the rig-mounted cyclone and laid directly on the ground in rows of 10. The drill cyclone and sample buckets are cleaned between rod-changes and after each hole to minimise down-hole and/or cross contamination.			
		Historical Drilling			
		No details are available for the historical drill holes.			
	Whether a relationship	Stavely Project			
	exists between sample recovery and grade and	Thursday's Gossan Prospect			
	whether sample bias may	Stavely Minerals' Diamond Drilling			
	have occurred due to	Not an issue relevant to diamond drilling.			
	preferential loss/gain of fine/coarse material.	Stavely Minerals' RC Drilling			
	mre/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.			
		Historical Drilling			
Logging	Whether core and chip	No details are available for the historical drill holes.  Stavely Project			
Logging	samples have been	Thursday's Gossan Prospect			
	geologically and	Stavely Minerals' Diamond and RC Drilling			
	geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	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.			



Criteria	JORC Code explanation	Commentary			
	Whether logging is	Stavely Project			
	qualitative or quantitative in	Thursday's Gossan Prospect			
	nature. Core (or costean,	Stavely Minerals' Diamond Drilling			
	channel, etc) photography.	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 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			
	intersections logged.	Stavely Minerals' Diamond Drilling			
		Detailed diamond core logging, with digital capture, was conducted for 100% of the core by Stavely Minerals' onsite geologist at the Company's core shed near Glenthompson.			
		Stavely Minerals' RC Drilling			
		All RC chip samples were geologically logged by Stavely Minerals' on-site geologist on a 1m basis, with digital capture in the field.			
		Historical Drilling			
		Historical holes have been logged in their entirety.			
Sub-sampling	If core, whether cut or sawn	Stavely Project			
techniques	and whether quarter, half or	Thursday's Gossan Prospect			
and sample	all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Stavely Minerals' Diamond Drilling			
preparation		Quarter core for the PQ diameter diamond core and half core for the HQ diameter core was sampled on site using a core saw.			
		Stavely Project			
		Thursday's Gossan Prospect			
		Stavely Minerals' RC Drilling			
		Splitting of RC samples occurred via a rotary cone splitter by the RC drill rig operators. Cone splitting of RC drill samples occurred regardless of whether the sample was wet or dry.			
		Historical Drilling			
		No details are given for historical aircore and RC holes.			
	For all sample types, the	Stavely Project			
	nature, quality and	Thursday's Gossan Prospect			
	appropriateness of the 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.			





Criteria	JORC Code explanation	Commentary				
Criteria	JONG Gode explanation	Historical Drilling				
		No details of sample preparation are given for the historical drilling.				
-	Quality control procedures	Stavely Project				
	adopted for all sub-	Thursday's Gossan Prospect				
	sampling stages to maximise representivity of samples.	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	Stavely Minerals' Diamond and RC Drilling				
	for instance results for field duplicate/second-half sampling.	No second-half sampling of the diamond core or field duplicates for the RC drilling has been conducted at this stage.				
		Historical Drilling				
		No details are given for the historical drilling.				
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Stavely Project				
		Thursday's Gossan Prospect				
		Stavely Minerals' Diamond and RC Drilling				
		The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.				
		Historical Drilling				
		The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.				
Quality of	The nature, quality and	Stavely Project				
assay data and laboratory	appropriateness of the assaying and laboratory	Thursday's Gossan Prospect				
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.				



Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	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 TGAC009, TGAC010, TGAC037 and TGAC042 were submitted for the analysis of Au, Ag, As, Cu, Co, Fe, Ni, Pb, S and Zn. All elements except Au were assayed by ICP/OES methods. Gold was analysed using the Fire Assay method. Samples were submitted to either Genalysis Laboratory Services Pty Ltd (Amdel) in Adelaide or to Aminya Laboratories Pty Ltd (Onsite Laboratory Services) in Bendigo for analysis.  Samples from TGAC1145 to TGAC150 were submitted to Onsite Laboratory Services in Bendigo for Au by Fire assay and Ag, As, Cu, Fe, S, Pb and Zn by ICP/OES.
	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.	
	Nature of quality control	Stavely Project
	procedures adopted (eg standards, blanks,	Thursday's Gossan Prospect
	duplicates, external	Stavely Minerals' Diamond and RC Drilling
	laboratory checks) and whether acceptable 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.



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



Criteria	JORC Code explanation	Commentary
	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.	procedure(s) and classifications apply to the exploration data being reported.
	Whether sample compositing has been	Stavely Project 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.  Historical Drilling
		Sample compositing was applied for historical drill holes PEND1T and VSTD1D2.
		Three metre compositing was applied for historical drill holes TGAC009, TGAC010 and TGAC145 to TGA150.
		One metre and two metre compositing was applied for historical drill holes TGAC037 and TGAC042.
Orientation of	Whether the orientation of	Stavely Project
data in	sampling achieves	Thursday's Gossan Prospect
relation to	unbiased sampling of	Stavely Minerals' Diamond and RC Drilling
geological structure	possible structures and the extent to which this is known, considering the deposit type.	The orientation of RC and diamond drill holes is tabulated in the Drill Hole Collar Table included in this report. As best as practicable, drill holes are designed to intercept targets and structures at a high angle. Some practical limitations apply in the context of collars being sited to avoid poor drilling conditions / bad ground. In the case of SMD044, the hole was drilled 180 degrees opposite (250° grid rather than 070° grid) to avoid known bad ground.
	If the relationship between	Stavely Project
	the drilling orientation and the orientation of key mineralised structures is	Thursday's Gossan & Mount Stavely Prospects
		Stavely Minerals' Diamond and RC Drilling
	considered to have introduced a sampling bias, this should be assessed and reported if material.	With SMD050 drilled to 070° grid azimuth, the drill hole has intersected the mineralised zone along the ultramafic contact approximately perpendicularly.
Sample	The measures taken to	Stavely Project
security	ensure sample security.	Thursday's Gossan Prospect
		Stavely Minerals' Diamond and RC Drilling
		Samples in closed poly-weave bags were collected from the Company's Glenthompson shed by a contractor and delivered to either Ararat or Hamilton from where the samples are couriered to ALS Laboratory in Adelaide, SA.





Criteria	JORC Code explanation	Commentary
		Historical Drilling  No available data to assess security.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the data management system has been carried out.

# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and	Type, reference name/number, location and	Stavely Project The diamond drilling and RC drilling at Thursday's Gossan
land tenure status	land tenure ownership including	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
	The security of the tenure	to reduce this to 1% upon payment of \$500k.  Stavely Project
	held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	A retention licence, RL2017, was applied for over the majority of EL4556 in May 2014.
		The tenement is in good standing and no known impediments exist.
Exploration	Acknowledgment and	Stavely Project
done by other	appraisal of exploration by	Thursday's Gossan Prospect
parties	other parties.	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



Criteria	JORC Code explanation	Commentary
		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.
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 east-west 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



Criteria	JORC Code explanation	Commentary
		Minerals believes the technical evidence indicates there is significant porphyry copper-gold mineralisation potential at depth at Thursday's Gossan.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:  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	In reporting Exploration	Stavely Project
aggregation methods	Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Thursday's Gossan Prospect  Exploration results are nominally reported where copper results are greater than 0.1% Cu over a down-hole width of a minimum of 3m.  No top-cutting of high grade assay results have been applied, nor was it deemed necessary for the reporting of significant intersections.
	Where aggregate intercepts	Stavely Project
	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.	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	particularly important in the	Thursday's Gossan Prospect
mineralisation	reporting of Exploration	There is insufficient drilling data to date to demonstrate
widths and	Results.	continuity of mineralised domains and determine the
intercept lengths	If the geometry of the	relationship between mineralisation widths and intercept
lenguis	mineralisation with respect	lengths.
	to the drill hole angle is known, its nature should be	
	reported.	
	If it is not known and only	Refer to the Tables and Figures in the text.
	the down hole lengths are	There is the rubble and rigaree in the text.
	reported, there should be a	
	clear statement to this effect	
	(eg 'down hole length, true	
	width not known').	
Diagrams	Appropriate maps and	Refer to Figures in the text. A plan view of the drill hole
	sections (with scales) and	collar locations is included.
	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.	
Balanced reporting	Where comprehensive reporting of all Exploration	Stavely Project
reporting	Results is not practicable,	Thursday's Gossan Prospect
	representative reporting of	All copper and gold values considered to be significant for
	both low and high grades	porphyry mineralisation have been reported. Some subjective judgement has been used.
	and/or widths should be	aubjeouve judgement has been used.
	practiced to avoid	
	misleading reporting of Exploration Results.	
Othor	·	All relevant evaluration data is shown on figures and
Other substantive	Other exploration data, if meaningful and material,	All relevant exploration data is shown on figures and discussed in the text.
exploration	should be reported	discussed in the text.
data	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.	
Further work	The nature and scale of	Stavely Project
	planned further work (eg tests for lateral extensions	Thursday's Gossan Prospect
	or depth extensions or	Diamond drilling has been planned to test the mineralised
	large-scale step-out	structures at shallower depths along the ultramafic



Criteria	JORC Code explanation	Commentary
	drilling).	contact.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	