

# Stavely Identifies Significant New Drill Targets at Ararat Project from Successful Geophysics

Drilling planned to commence in October to test several strong chargeability anomalies identified from recent geophysical programmes at the Carroll's VMS prospect, the Mt Ararat VMS deposit, the Cathcart Hill gold prospect and several other unexplained targets

# **Highlights**

- A strong Induced Polarisation (IP) chargeability anomaly has been generated at the recently identified Carroll's VMS prospect coincident with a 1.5km long zinc-copper soil geochemical anomaly which has previously returned in-situ rock-chip results of 10.8% copper, 1.5 g/t gold and 0.4% zinc.
- A large and very strong IP chargeability anomaly has been identified in the footwall to the Mt Ararat VMS deposit (1.3Mt @ 2.0% copper, 0.5 g/t gold, 0.4% zinc and 6 g/t silver<sup>1</sup>). The known deposit is associated with a much smaller IP chargeability anomaly compared with the new footwall anomaly.
- A large IP chargeability anomaly has been identified at the Cathcart Hill gold prospect, coinciding with anomalous gold and arsenic soil geochemical anomalies and pseudogossan float samples with results of up to 0.8 g/t gold.
- Several additional strong IP chargeability features have been identified which are currently unexplained and will require follow-up. The shallow east dipping geometry of some of these features is consistent with observed dips in recently drilled gold mineralised structures (see ASX release 6 July 2015).
- Drilling of the main anomalies is planned to commence in October, weather permitting.

"Our regional 'back to basics' approach to identifying exploration opportunities at the Ararat Project has been extremely successful in identifying a number of significant new targets with the potential to host both VMS-style copper-gold-zinc mineralisation and Stawell-type gold mineralisation. Drilling of these targets should commence next month while ongoing reconnaissance soil geochemistry and mapping programmes will extend along the 15km of prospective stratigraphy within Stavely's Ararat tenure. These programmes may identify further opportunities for discovery, especially considering the propensity of VMS deposits to occur in clusters." – Stavely Managing Director, Chris Cairns

Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is pleased to advise that it has identified multiple new priority drill targets at its 100%-owned<sup>2</sup> **Ararat Project** in Western Victoria (Figures 1 and 2) after receiving highly encouraging IP geophysical results.

Following on from the regional soil geochemical sampling programmes completed earlier in 2015, Stavely Minerals has now completed major regional gravity and IP geophysical programmes over a 5 kilometre strike extent at the Ararat Project (Figure 3).

<sup>&</sup>lt;sup>1</sup>See ASX release 8 September 2015

<sup>&</sup>lt;sup>2</sup>Stavely Minerals is also earning an interest in EL5403 owned by Minotaur Operations Pty Ltd see ASX release 10 April 2015.



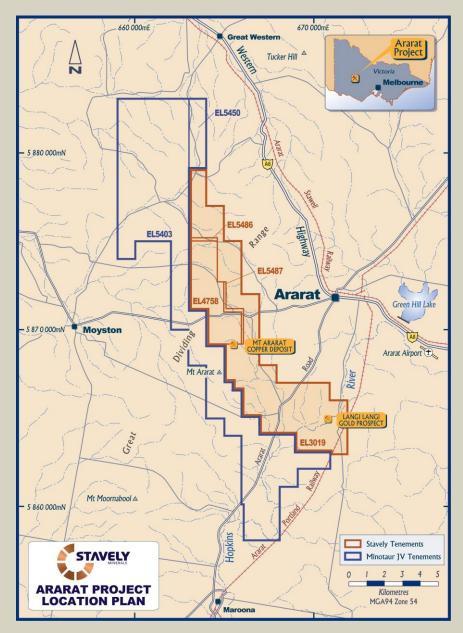


Figure 1. Tenement location map.

The gravity survey has provided important information with respect to the regional architecture and distribution of rock types at depth in the project area.

The regional IP survey has highlighted some very significant chargeability anomalies at key prospects which will require drill testing to ascertain if the anomalies are related to sulphide mineralisation.

### **Carroll's VMS Prospect**

The 2015 soil geochemical programme identified a 1.5km long x 500m wide zinc-copper anomaly at the Carroll's VMS prospect along with in-situ rock chip results which returned assays of up to 10.8% copper, 1.5 g/t gold and 0.4% zinc and results from a surface float sample which returned values of up to 24% copper, 1.1% zinc and 0.52 g/t gold.

This geochemical anomaly is now supported by a strong IP chargeability feature on Line 157700mN modelled from approximately 100m depth to 250m depth with the suggestion of a projection to surface in the vicinity of where the in-situ rock-chip sample was taken (Figure 4).



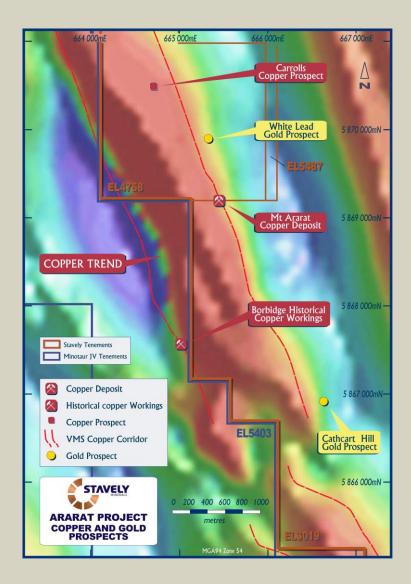


Figure 2. Prospect location map.

### **Mt Ararat VMS Deposit**

In the vicinity of the Mt Ararat VMS deposit (1.3Mt at 2.0% copper, 0.5 g/t gold, 0.4% zinc and 6 g/t silver), IP Line 156300mN has returned a very large and very strong (to 120mV/V) chargeability anomaly in the footwall to the known deposit. The existing deposit does appear to be reflected by a much smaller chargeability feature.

The known mineralisation dips ~70 degrees to the west. The new chargeability feature is modelled to extend from 150m below surface to more than 400m below surface (Figure 5). Previous drilling has not tested this position.

### **Cathcart Hill Gold Prospect**

The Cathcart Hill gold prospect was identified earlier in 2015 by reconnaissance soil geochemistry and float rock-chip sampling. The soils were analysed initially using a Thermo Instruments Niton® hand-held X-Ray fluorescence (XRF) instrument. This initial analysis identified an 800m long arsenic-chrome geochemical anomaly associated with iron-rich pseudo gossan with laboratory assay results of up to 0.45% arsenic and 0.8 g/t gold (see ASX release 28 April 2015).

# **ASX RELEASE**

25 September 2015



Subsequent laboratory analysis of the original soil samples returned very anomalous gold results including 622ppb, 447ppb and 426ppb amongst other strongly anomalous results.

Additionally, a diamond drill hole drilled in 1977 and located some 200m to the north-west of the main soil sample arsenic anomaly had returned an intersection of 2m at 5.0 g/t gold from 43m drill depth and is logged as a bedrock intercept.

In the vicinity of the Cathcart Hill gold prospect, IP Line 154500mN has returned a large and strong chargeability anomaly in the vicinity of the soil geochemical anomaly and another unexplained chargeability anomaly further to the west (Figure 6).

### **Other Chargeability Anomalies**

A number of other chargeability anomalies have been identified throughout the survey area. The large anomaly in the footwall to the existing Mt Ararat VMS deposit would appear to be expressed in a number of lines north and south of the Line 156300mN.

Additionally, on Lines 155100mN and Line 154500mN there are two chargeability features dipping shallowly to the east (Figures 6 & 7) – an orientation consistent with observed dips in recently drilled gold mineralised structures that had returned drill intercepts including **2m at 6.43 g/t gold** including **1m at 11.3 g/t gold** at the White Lead gold prospect located to the north of these anomalies (see ASX release 6 July 2015).

Drilling of these targets is planned to commence in October.

**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.

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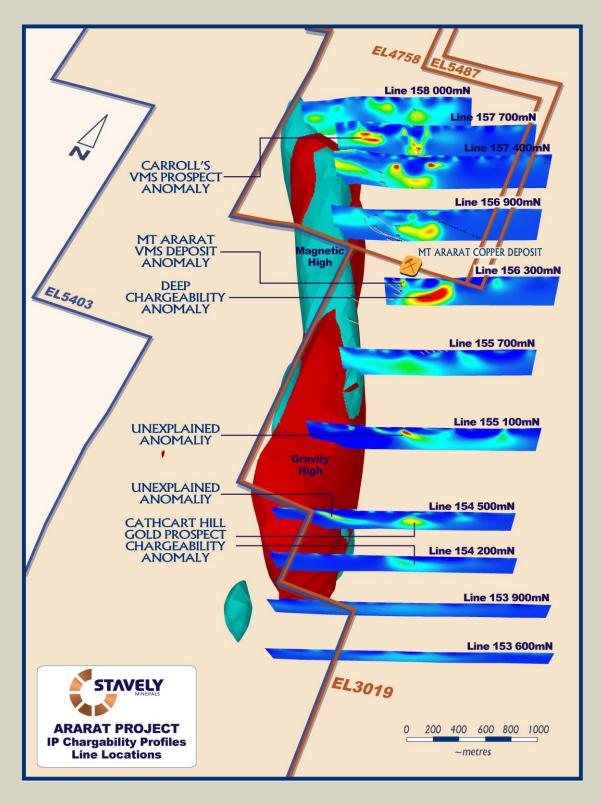


Figure 3. Oblique view of the stacked set of IP section lines looking NNW with approximately 30 degrees elevation. The large blue feature is the magnetic high shown in Figure 2 while the red feature is a coincident gravity high from recent data, both coincident with the main portion of the Carroll's Amphibolite - the metamorphic equivalent of the Magdala Basalt.



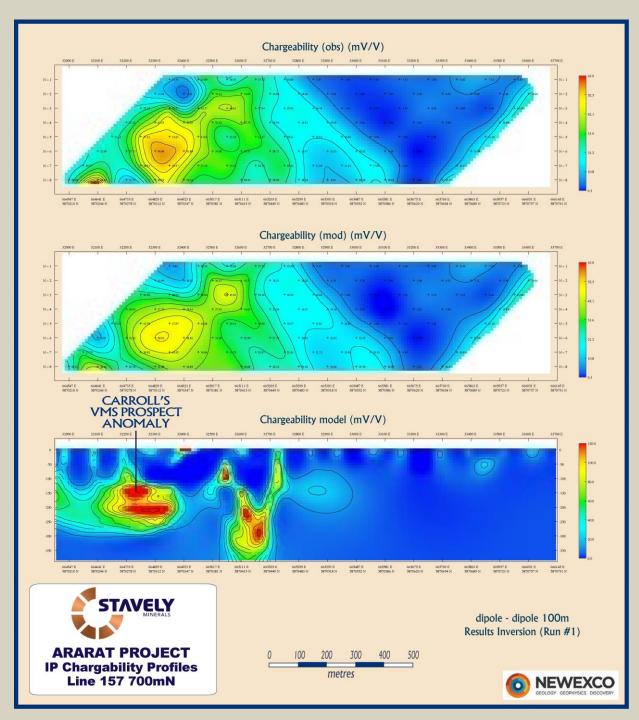


Figure 4. IP chargeability section for Line 157700mN.



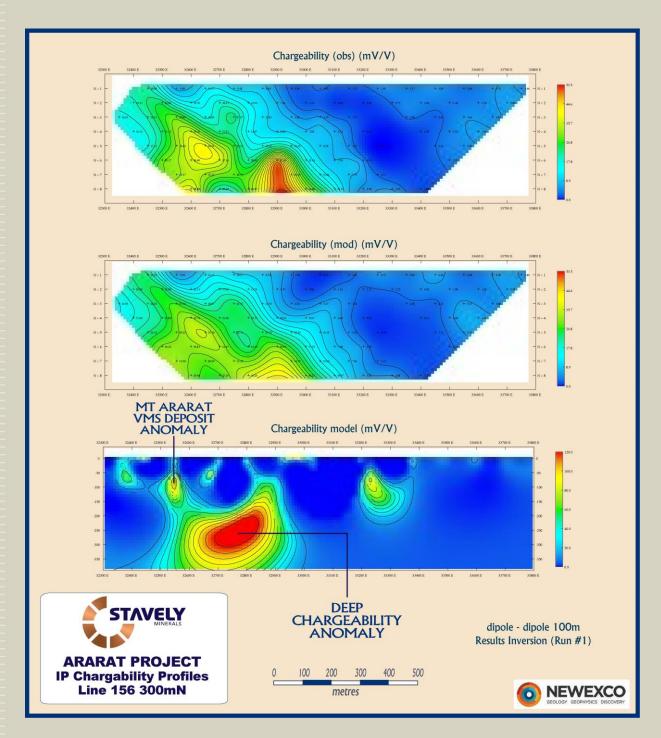


Figure 5. IP chargeability section for Line 156300mN.



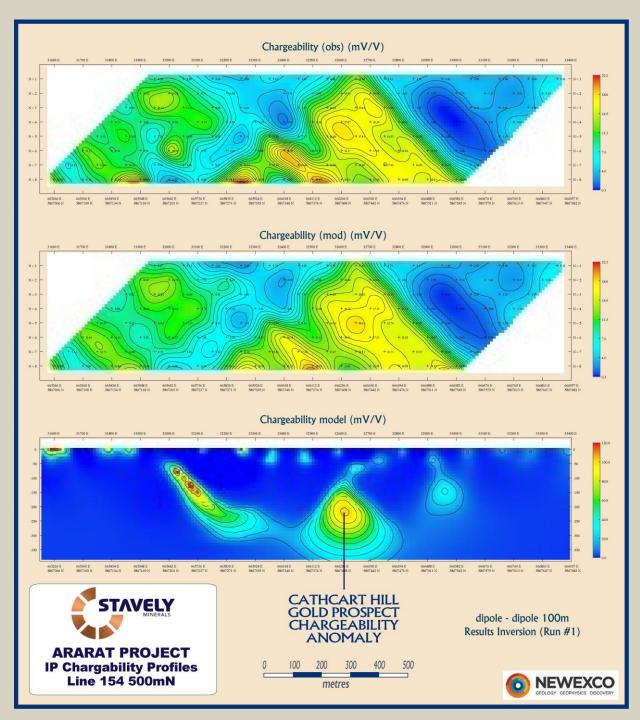


Figure 6. IP chargeability section for Line 154500mN.



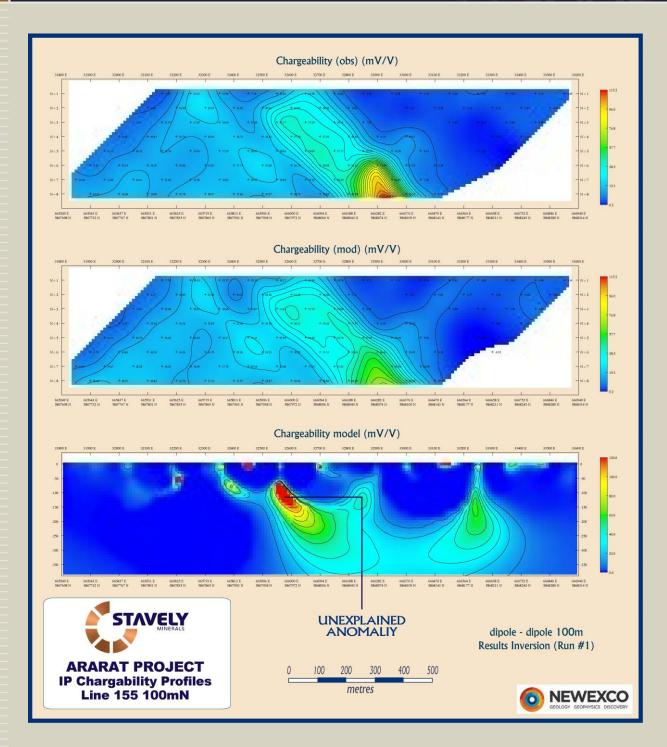


Figure 7. IP chargeability section for Line 155100mN.



# **JORC Code, 2012 Edition – Table 1**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals	Diamond Drilling Diamond drilling of hole SADD001 was used to produce drill core with a diameter of 85mm (PQ) from surface to a depth of 20.3m and then 63.5mm (HQ) to 192.9m (eoh). SADD001 was orientated at -50° toward magnetic azimuth 050° to target the gold intercepted in SARC001.
	under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Diamond drilling of hole SADD002 was used to produce drill core with a diameter of 85mm (PQ) from surface to a depth of 21.4m and then 63.5mm (HQ) to a depth of 119.5m and finally 50.5mm (NQ2) to a depth of 197.8m (eoh). SADD002 was orientated at -60° toward magnetic azimuth 050° to target the northern extension of the gold intercepted in SARC001.
		Diamond drilling of hole SADD003 was used to produce drill core with a diameter of 85mm (PQ) from surface to a depth of 23.6m and then 63.5mm (HQ) to 212.8m (eoh). SADD003 was orientated at -55° toward magnetic azimuth 050° to target the margins of rhyolite dyke beneath historical workings.
		Soil and Rock Chip Sampling The soil samples and gossanous rock chip samples were taken at the Carroll's Base Metals and White Lead Gold Prospects targeting base metal and gold mineralisation.
		The soil samples were taken at 20m intervals along lines spaced between 50m and 100m apart. The grid coordinates for the samples were planned in MapInfo. A handheld GPS was used to navigate to each sample point.
		Either a hand held auger or a pick was used to obtain an approximate 1kg soil sample at a depth of between 10cm and 20cm, so as to obtain a sample of the B soil horizon. The sample was then sieved using a coarse mesh (-2mm) sieve to remove organic matter and rock fragments. The sieved sample was placed in a numbered zip-lock bag and subsequently into an alike numbered calico bag. A sample data sheet was filled in at the sample site, which for each sample included the date, grid, sampler names, sample number, RL, soil type, regolith, substrate and

chip tray for ease of management. The remaining portion of the sample was returned to the original large zip-lock

Sample preparation was completed at Stavely Minerals' shed near Glenthompson. Each sample was sieved using a -80 mesh sieve to produce an approximate 40g sample and placed in a corresponding numbered small plastic geochem zip-lock bag in preparation for portable XRF analysis using a Niton XL3t 950+. The sieve was cleaned with a paint brush between each sample. Each small ziplock bag was placed sequentially in a division in an RC

comments.



Criteria	JORC Code explanation	Commentary
		bag and placed back in the calico bag.
		One complete line of samples from each of the Carroll's and White Leads grids was prepared for submission to ALS Laboratories for assay analysis to check the Niton® XRF results. Preparation involved sieving using a -80 mesh sieve to produce an approximate 100g to 150g sample, which was weighed on a digital kitchen scale and was subsequently placed in a corresponding numbered brown paper geochem bag. Damp samples were placed in an oven at low temperature to dry out prior to sieving. The remaining portion of the sample was returned to the original large zip-lock bag and placed back in the calico bag. The 100 – 150g -80 mesh samples were submitted to ALS Laboratory in Brisbane.
		In addition, samples which were considered to have returned anomalous Niton® XRF As or Cu values were selected for submission to ALS Laboratories in Brisbane. Sample preparation involved sieving using a -80 mesh sieve to produce an approximate 100g to 150g sample which was placed in a corresponding numbered brown paper geochem bag. The remaining portion of the sample was returned to the original large zip-lock bag and placed back in the calico bag.
		Resource Estimate Resource estimate underpinned by diamond drilling (DD) and reverse circulation drilling (RC) drilling samples.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Sample representivity was ensured by a combination of Company Procedures regarding quality controls (QC) and quality assurance/ testing (QA).
		Daily calibration of the Niton® XRF was undertaken.
		Examples of QC include (but are not limited to), daily workplace and equipment inspections, as well as drilling and sampling procedures.
		Examples of QA include (but are not limited to), collection of drilling duplicates ("field duplicates"),the use of certified standards and blank samples.
	Aspects of the determination of mineralisation that are	Soil sampling techniques are considered industry standard for the Ararat work programmes.
	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 warrant disclosure of	Drill sampling techniques are considered industry standard for the Ararat work programmes.
		Diamond Drilling The visually identified mineralised intervals as well as 5m above and below the interval were sampled. One metre half core samples were submitted to the laboratory for analysis. Sampling was conducted on holes SADD001, SADD0002 and SADD003 as well as historical hole M94-6, which was not previously sampled for gold mineralisation.
		The diamond drill samples were submitted to Australian Laboratory Services ("ALS") in Orange, NSW. Laboratory sample preparation involved:- sample crushed to 70% < 2mm, riffle/rotary split off 1kg, pulverize split to >85% passing 75 microns.
	detailed information.	Diamond core samples were analysed by ME-OG62 – ore



Criteria	JORC Code explanation	Comment	ary		
		grade four			analysis and AA25 -
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drilling used PQ (85mm internal diameter), (63.5mm internal diameter) and NQ2 (50.5mm internal diameter) diameter) diameter) drill bits. Diamond drilling was standard to Diamond core was orientated by the Reflex ACT III orientation tool.  Resource Estimate		Q2 (50.5mm internal g was standard tube. e Reflex ACT III core	
		Company	Hole_Type	Holes within Mt Ararat Prospect Area Count	Holes intercepting Mt Ararat Mineralisation Average Total Count
		Pennzoil	DD	19 Depth (n	n) Depth (m)
			DD		06 14 48
		Centaur	RC		7 20 48
		Beaconsfield	DD RC	6 2	21 4 121 27 6 27
		svy	DD	3 20	
		Tot	RC	7 12 82 11	
	sample recoveries and results assessed.  Measures taken to maximise	Resource No detaile Historic re core recov weathered indicates	Estimated informated informated ports stated veries, and oxion that sated years and oxion that sated years and years	se holes was good te ation or data: te that diamond he nd RC drilling enc idized mineralized amples from th promised by dr	ded in the database.  I.  Dies had relatively low ountered water in the dizone. Limited data is material will be illing and sampling
	sample recovery and ensure representative nature of the samples.	Diamond angle iron checked a rod counts	core is re n cradle ngainst the sare rout	for orientation	continuous runs on an marking. Depths are the core blocks and y the driller.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	whether preferentia	sis has sample al loss/gad to have	bias may have ain of fine/coarse a a material effect	en as yet regarding e occurred due to material and is not given the competent
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies	industry c including	I logging ommon p (but no veining addition	oractice. Qualitativot limited to); li and weathering. I al fields such	owing Company and re logging of samples thology, mineralogy, Diamond core logging as structure and





Criteria	JORC Code explanation	Commentary
	and metallurgical studies.	The quality of core from SADD001, SADD002 and SADD003 was good and consequently the confidence in the orientations is high and structural measurements could be taken.
		Resource Estimate Lithological drill logs generated by workers but not utilised in generating resource estimate.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	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.
	The total length and percentage of the relevant intersections logged.	Diamond Drilling Detailed diamond core logging, with digital capture was conducted for 100% of the core by Stavely's on-site geologist at the Company's core shed near Glenthompson.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Resource Estimate Pennzoil: Half-core samples were taken from core showing visible mineralisation. Centaur Mining:  MA24 to MA38: Half-core samples were taken from core showing visible mineralisation. Sample reduction process unknown.  MA39A to MA58: 130mm RC chips from drilling configuration utilising back-end cross-over sub to return sample. Sample collection by splitting (details unknown) and sample reduction process unknown.  M94_1 to M94_4: Half-core samples were taken from core showing visible mineralisation. Sample reduction process unknown.  Beaconsfield Gold:  ARD001 to ARD004: diamond drilling – sampling method and reduction unknown.  ARC001 to ARC006: 84mm RC chips. Sample collected by passing through 3 tiered riffle splitter. Sample reduction process unknown.  Stavely Minerals:  SADD001 to SADD003: diamond drilling – ½ HQ core sampled by core saw. Crush-split and pulverise to 85% passing -75micon  SARC00[1,2,4 - 9]: RC drilling – cone splitter. Crush-split and pulverise to 85% passing -75micon
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	
	For all sample types, the nature, quality and appropriateness of the sample preparation 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.
	Quality control procedures adopted for all sub-sampling stages to maximise	Diamond Drilling Blanks and certified reference materials are submitted with the samples to the laboratory as part of the quality





Criteria	JORC Code explanation	Commentary
	representivity of samples.	control procedures.
		Soil Sampling Duplicate analysis, blanks and certified reference materials were included in the Niton® XRF analysis process as part of the quality control procedures. Eight separate standards were employed on a 1:10 basis while duplicate analyses and blanks were employed on a 1:20 basis.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	Diamond Drilling  No second-half sampling has been conducted at this stage.  Soil Sampling  No field duplicates were collected for the soil sampling.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Diamond Drilling The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.  Soil Sampling The sample sizes are considered to be appropriate to correctly represent the sought mineralisation.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Diamond Drilling  The half core samples from the mineralised zone and 5 metres into both the foot and hanging wall and were analysed by multi-element ICPAES Analysis – Method ME-OG62. A 0.4g finely pulverized sample is digested in nitric, perchloric and hydrofluoric acids. The digestion mixture is evaporated to incipient dryness (moist salts). The residue is cooled, then leached in concentrated hydrochloric acid and the solution is diluted to a final volume of 100mls. Final acid concentration is 20%. Elemental concentrations are determined by ICPAES. An internal standard is used to enhance accuracy and precision of measurement. This technique approaches total dissolution of most minerals and is considered an appropriate assay method.
		The core samples were also analysed for gold using Method Au-AA25. Up to a 30g sample is fused at approximately 1100°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.
		Soil Sampling Niton® pXRF analysis of samples was conducted with the



Criteria	JORC Code explanation	Commentary
		instrument in a portable test stand and was remotely controlled by connection to a laptop computer. Each day the instrument was allowed to warm up for at least 10 minutes before being calibrated.
		Samples were sequentially stored in small zip-lock bags in 20-compartment RC chip trays. For each tray a standard was analysed at the beginning and the end of the tray. A blank was analysed after the 10 <sup>th</sup> sample in the tray and after the end of the tray was complete and the second standard analysed, a duplicate analysis of the tenth sample was completed.
		Data was downloaded for each RC chip tray – amounting to 24 analyses with 20 samples, 2 standards, a blank and a duplicate. Each RC tray 'sequence' was saved as an individual Excel file named with the corresponding sample number range. The data from each of these files, was in sequence, saved to a master analysis electronic data sheet and sample numbers and sample type designations added.
		The sieved -80 mesh soil samples were analysed for gold by Method Au-TL43 and for a range of multi-elements, including Ag, As, Bi, Co, Cu, Fe, Mn, Mo, Ni, Pb and Zn by Method ME-ICP43 at Australian Laboratory Services ("ALS") in Brisbane, Queensland.
		No sample preparation was required by the laboratory.
		Gold by Method Au-TL43, is by aqua regia extraction with ICP-MS finish. Up to a 25g sample is digested in aqua regia, and the acid volume is partially reduced by evaporation. The solution is diluted to volume and mixed thoroughly. Gold content is measured by ICP mass spectrometry. Alternatively, an aliquot is taken, a complexing agent added and the gold complex is extracted into an organic solvent. Gold concentration can be measured by flame AAS using matrix matching standards.
		The selected multi-elements by Method ME-ICP43 are analysed by using an aliquot of the gold digestion liquor Au-TL43 for simultaneous analysis by ICP Atomic Emission Spectrometry.
		The determination of gold in soils by aqua regia digest offers very low detection limits, making it an attractive option for geochemical orientation surveys. Aqua regia effectively dissolves both native gold as well as gold bound in sulphide ore minerals.
		Aqua Regia is a partial digestion method and will not digest silicate minerals present in the sample.
		Rock Chip Sampling The rock chip samples were submitted to Australian Laboratory Services ("ALS") in Orange, NSW. Laboratory sample preparation involved:- sample crushed to 70% < 2mm, riffle/rotary split off 1kg, pulverize split to >85% passing 75 microns.
		Rock chip samples were analysed by ME-ICP61 - Multi acid digest with HF and ICPAES and ICPMS and Au-AA23 - fire assay with AAS finish.
		- 15 -



Criteria	JORC Code explanation	Commentary
		The rock chip samples were analysed by multielement ICPAES Analysis - Method ME-ICP61. A 0.25g sample is pre-digested for 10-15 minutes in a mixture of nitric and perchloric acids, then hydrofluoric acid is added and the mixture is evaporated to dense fumes of perchloric (incipient dryness). The residue is leached in a mixture of nitric and hydrochloric acids, the solution is then cooled and diluted to a final volume of 12.5mls. Elemental concentrations are measured simultaneously by ICP Atomic Emission Spectrometry. This technique approaches total dissolution of most minerals and is considered an appropriate assay method for porphyry copper-gold systems.
		The rock chip samples were also analysed for gold using Method Au-AA23. Up to a 30g sample is fused at approximately 1100°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.
		Rock chip samples which returned >1% Cu or > 1% Zn by ICPAES Analysis - Method ME-ICP61 were re-analysed for Cu and Zn by multi-element ICPAES Analysis - Method ME-OG62. A 0.4g finely pulverized sample is digested in nitric, perchloric and hydrofluoric acids. The digestion mixture is evaporated to incipient dryness (moist salts). The residue is cooled, then leached in concentrated hydrochloric acid and the solution is diluted to a final volume of 100mls. Final acid concentration is 20%. Elemental concentrations are determined by ICPAES. An internal standard is used to enhance accuracy and precision of measurement. This technique approaches total dissolution of most minerals and is considered an appropriate assay method for ore grade rock chip samples.
		Resource Estimate  Pennzoil: A base metal suite was assayed via AAS (digestion not specified) and Au was assayed via fire assay.  Centaur Mining:  MA24 to MA38: A base metal suite was assayed via AAS (digestion not specified) and Au was assayed via fire assay.  MA39A to MA58: A base metal suite was assayed via AAS (digestion not specified) and Au was assayed via AAS (digestion not specified) and Au was assayed via fire assay.  M94_1 to M94_4: A base metal suite was assayed 4 acid digest with AAS finish and Au was



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		assayed via fire assay.  Beaconsfield Gold:  ARD001 to ARD004: Assay Lab – Onsite Lab Services. Cu initially by method B101 - AR digest ICP finish. If higher than 5000ppm then A101 - Ore grade digest (details unknown) with AA finish. Au by PE01S - 25g Fire Assay.  ARC001 to ARC006: Assay Lab – Onsite Lab Services. Cu initially by method B101 - AR digest ICP finish. If higher than 5000ppm then A101 - Ore grade digest (details unknown) with AA finish. Au by PE01S - 25g Fire Assay.  No quality control samples submitted with any historic routine samples
		Stavely Minerals: SADD00[1 – 3], SARC00[1,2,4 - 9]: Australian Laboratory Services, Orange. Cu, Ag and Zn by four acid digest (including HF), ICP-AES determination (ALS code ME-ICP61). Samples >1% Cu re-assayed by ore grade four acid digest, ICP-AES determination (ALS code ME-OG62). Au by 30g fire assay, AAS determination (ALS codes Au-AA23 and Au-AA25). Client and Laboratory QC data inserted with routine samples and establish acceptable reliability of assays.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in	Soil Sampling All the soil samples were analysed by portable XRF using a Niton XL3t 950+. The following procedure was employed for the analysis.
	and model, reading times, calibrations factors applied analysis. Any samples which displayed conditions the inside of the plastic bag were heated in the torong all majeture.	It was ensured that all samples were dry at the time of analysis. Any samples which displayed condensation on the inside of the plastic bag were heated in the microwave to remove all moisture.
	and their derivation, etc.	The Niton was placed in a purpose built stand.
		The Niton was set to SOILS analytical mode for the analysis.
		The instrument was allowed to warm up for 10 minutes prior to the start of any analyses.
		Each sample was placed in the sample chamber and analysed in soil mode for a total of 90 seconds.
		The following elements and their respective errors were recorded for each sample – Mo, Zr, Sr, U, Rb, Th, Pb, Au, Se, As, Hg, Zn, W, Cu, Ni, Co, Fe, Mn, Cr, Ti, Sc, Ca, K and S.
		After ever 20 samples analysed, the sample chamber was flushed with compressed air.
		No calibration factors have been applied.
		Ground IP Survey Survey Specification
		Array: Dipole - Dipole Line spacing: < 600 m Rx Dipole Separation: 100 m Tx Dipole Separation: 100 m Max N separation: 8



Criteria	JORC Code explanation	Commentary
		Coordinate System: Stavely Local Grid Base Frequency: 0.0125 Hz Total chargeability integration time: 860 ms Typical Current: 4 A Max Current: 6.6 A Min Current: 2.3 A
		Equipment
		Transmitter: GDD TX II Output: 10 kVA Max Current: 10 A Max Voltage: 2.4 kV Current at max Voltage: 2.1 A Motor Generator: Kubota 9 kVA  Receiver
		Make: EMIT - SMARTem 24 Channels: 8 Sample Rate: 20 kHz Software: Scientific Computing Applications - TQIPdb
		Electrodes Type: Copper Sulphate ½ cell Size: Standard porus pot, 100 mm diameter Holes: Pre-dug, watered and settled Orientation: Along line Pattern: Dipole – Dipole
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Diamond Drilling Laboratory QAQC involved the submission of standards and blanks. For each 20 samples, either a Certified Reference Material (CRM) standards or a blank was submitted.
		The analytical laboratory also 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.
		Soil sampling 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.
		The Niton® XRF analysis was performed by Chris Cairns, whom is trained in operating the instrument.
		For the Niton® XRF analysis for every 20 samples, one duplicate, one blank and two standards were analysed. The standards used were a combination of Niton Standards and Certified Reference Material (CRM).
		The Niton® XRF results are used only as semi- quantitative and preliminary.



Criteria	JORC Code explanation	Commentary
		Quality control was conducted on the Niton® XRF analysis for Cu, Cr, Zn and As, which are the primary elements of interest.
		Duplicate analysis of the sample material was undertaken to allow estimation of analytical variance over a range of element concentrations.  Statistics for the duplicates for Cu, As, Cr and Zn are presented below.
		Cu
		Precision and bias analysis Stavely Minerals Niton Cu Duplicates
		Scatter Plot  100 90 80 70 70 86 60 20 40 30 20 y=0.98824 17731 30 40 50 60 70 80 90 100 Original
		Duplicate statistics Original Repeat
		Number of data       47       47         Maximum       94.030       86.930         Minimum       11.920       13.190         Mean       29.882       31.262         First quartile       18.525       19.225         Median       27.380       27.730         Third quartile       35.375       36.755         Skewness       1.937       1.685         Standard deviation       15.678       17.010         Coeff. of variation       0.525       0.544
		Cr
		Niton Cr Duplicates  Scatter Plot
		y=0.8814X+10.132 <sup>TO</sup> 120 Original 170 220 Original



Criteria	JORC Code explanation	Commentary
		Duplicate statistics           Number of data         48         48           Maximum         229.340         255.940           Minimum         33.440         31.470           Mean         93.336         92.402           First quartile         63.188         61.438           Median         90.310         90.445           Third quartile         115.290         114.900           Skewness         0.871         1.424           Standard deviation         39.969         40.794           Coeff. of variation         0.428         0.441
		Zn Niton Zn Duplicates  Scatter Plot  180 180 180 180 180 180 180 180 180 18
		Number of data
		Scatter Plot  20 18 16 14 14 12 12 8 6 4 2 10 15/11x-0/3047 6 8 10 12 14 16 18 20 0riginal





Criteria	JORC Code explanation	Commentary
		Duplicate statistics           Number of data         Original 20 20 20 20 20 20 20 20 20 20 20 20 20
		A silicon blank sample was analysed every 20 sample readings to monitor for dust contamination of the detector window. For the blanks, apart from one Cu reading of 12 ppm and one Zn reading of 6.7 ppm the remaining 46 blanks returned BDL for the elements of interest, Cu, Cr, Zn and As for all readings.
		The Certified Reference Material (CRM) was placed into the same small plastic geochem ziplock bag used for the samples, prior to it being analysed. The CRM's were selected to cover a range of expected values for the elements of interest. Two standards were analysed per 20 sample readings.
		The Niton specific standards which cover a range of values for the elements of interest, namely As, Cr, Cu and Zn and, which included TILL-4PP, 2780PP and 2709a performed well with respect to expected values and repeatability.
		The CRM material including OREAS200, OREAS45D, OREAS 901 and G907-8 performed well on the repeatability for As, Cu, Zn and Cr and were within an acceptable difference from the expected value for As and Cu. However the Cr and Zn reading varied significantly from the expected values but performed well in repeatability. It is worth noting that these standards are not certified for these elements.
		Laboratory check samples were submitted to ALS Laboratories to establish correlation with the pXRF data. One entire traverse of samples in the centre of the grid was submitted for laboratory analysis to verify the pXRF results.
		ICPMS arsenic results correlate very closely with the pXRF but there was an approximate 30% over estimation of copper abundance by the pXRF relative to the ICPMS but this did not appear to affect the relativity of anomalous samples.



Criteria	JORC Code explanation	Commentary
		Arsenic ICPMS v pXRF  200 150 150 R <sup>2</sup> = 0.9884  50 0 50 100 150 200 As ICPMS
		Copper ICPMS v pXRF  140 120 y = 1.3038x + 14.879 R <sup>2</sup> = 0.9285  20 0 0 20 40 100 80 100
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Diamond Drilling Either Stavely Minerals' managing director or technical director have visually verified significant intersections.  Resource Estimate No available data available for analysis.
	The use of twinned holes.	Diamond Drilling  No twinned holes have been drilled.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Diamond 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.
		Soil Sampling Primary data was collected for soil sample and rock chip samples using a paper sample sheet. The sampling data was entered into an Excel spreadsheet. The information was then 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.



Criteria	JORC Code explanation	Commentary
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Diamond Drilling  Drill collar locations for SADD001, SADD002 and SADD003 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.  Down-hole single shot surveys were conducted by the drilling contractor. Surveys were conducted at approximately every 30m down-hole.  Resource Estimate  Historic drillholes originally located according to two local grids (details unknown). Collar coordinates were converted to GDA94 zone 54S (MGA94 54S) by historic workers. Conversion details are unknown. Stavely Minerals' holes located in MGA94 54S. The estimate is undertaken using the supplied MGA94 54S grid references.  GPS checking of 2 Pennzoil, 3 Centaur Mining and 4 Beaconsfield Gold hole collar locations show holes
	Specification of the grid system used.	located with acceptable accuracy for reporting of Inferred and Indicated Resources.  The grid system used is GDA94, zone 54.
	Quality and adequacy of topographic control.	The RL was recorded for each soil sample and drill hole location from the GPS. Accuracy of the GPS is considered to be within 5m.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Soil Sampling The soil spacing is prospect specific, refer to figures in text.  Diamond Drilling The drill hole spacing is project specific, refer to figures in text.
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Diamond Drilling The drilling for gold mineralisation is reconnaissance in nature and not appropriate for Mineral Resource or Ore Reserve Estimations.  Resource Estimate Within the central 500m of mineralisation (strike length):  Oxide mineralisation – drill tested on 50m centred section lines Fresh Indicated Resources –tested at nominal 50m centres. Other areas and mineralisation extent tested by 8 holes.
	Whether sample compositing has been applied.	Soil Sampling No sample compositing has been applied to the soil samples.  Diamond Drilling No sample compositing has been applied to the drill data.



Critorio	IOBC Code explanation	Commentary
Criteria	JORC Code explanation	Commentary
Orientation of data in relation to	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Soil Sampling The soil sampling grid is approximately perpendicular to the strike of the lithological and structural boundaries.
geological structure		Diamond Drilling SADD001 and SADD002 holes were orientated in an ENE (060) direction perpendicular to stratigraphy. The drill holes have intercepted the mineralised quartz veins at an oblique angle.
		SADD003 was drilled perpendicular to the Rhyolite dyke and associated bounding mineralised quartz veins.
		Resource Estimate Holes angled mostly between 50 and 70 degrees easterly. Mineralised plane dips westerly ~60degrees. Holes drilled mostly at 80° (azimuth) and 40-50° (sectional) to planar mineralisation.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed	Diamond Drilling The mineralised quartz veins cross-cut the stratigraphy. The drilling orientation is oblique to the orientation of the mineralised quartz veins as shown in the respective sections, and hence the mineralised intervals will not be true widths.
	and reported if material.	For the VMS mineralisation the RC and diamond holes have been orientated in an ENE (060) direction to intercept at a perpendicular angle the known mineralisation and the WSW (~240°) striking and -60° dipping EM plates and therefore is not considered to have introduced any sampling bias.
Sample security	The measures taken to ensure sample security.	Soil Sampling The brown paper geochem sample bags containing the sieved soil samples were enclosed in a waterproof RC sample bag and packaged in a cardboard box for despatch by TNT Transport by Stavely Minerals' personnel. The samples were delivered to ALS in Brisbane, Queensland.
		Rock Chip Sampling The rock chip samples in numbered calico sample bags were packaged in a cardboard box and despatched by TNT Transport by Stavely Minerals' personnel. The samples were delivered to ALS in Orange, NSW for sample preparation. Subsequently the samples were sent to ALS in Brisbane, Queensland for analysis.
		Diamond Drilling Samples are delivered in closed poly-weave bags to the courier in Ararat by Stavely Minerals' personnel. The samples are couriered to ALS in Orange, NSW.
		Resource Estimate No available data to assess security.
Audits or reviews	The results of any audits or reviews of sampling	No audits or reviews of the data management system has been carried out.
	techniques and data.	Resource Estimate GPS checking of 9 hole collar locations. Basic checking of data integrity.



# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The soil sampling, rock chip sampling, IP surveying, gravity surveying and diamond drilling was conducted in the Ararat Project, comprising EL4758 and EL3019. The Ararat Project was purchased by Stavely Minerals (formerly Northern Platinum) from BCD Resources Limited in May 2013. Stavely Minerals hold 100% ownership of the Ararat Project Tenements.  Mineralisation at Mt Ararat straddles the boundary between exploration licences EL4758 and EL3019.  Apart from a small area which overlaps the Ararat Hills Regional Park (not an area of interest for exploration at this stage) the tenements are on freehold land and are not subject to native title claim.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a	A retention licence – RL2020 was applied for over an area of interest, including the Mt Ararat, Carroll's and Cathcart Hill Prospects on EL4758 and EL3019 in June 2014.
	licence to operate in the area.	The tenements are in good standing and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	White Lead Gold Prospect The Mount Ararat Copper Deposit was discovered by Pennzoil of Australia Ltd using stream, soil and rock geochemistry followed by drill testing in the late 1970s. The exploration licence then passed to Centaur Mining & Exploration Ltd who undertook further drilling of the deposit, culminating in a Mineral Resource estimate in 1994. Centaur Mining & Exploration went into receivership in 2002 and the license passed to Range River Gold NL.  Newcrest Operations Limited explored the Ararat Project under option from Range River Gold NL and undertook gravity and airborne VTEM surveys.  BCD Metals Pty Ltd optioned the Project from Range
		River Gold NL in 2009 and full control was granted to BCD Metals when Range River went into voluntary administration in April 2011.
		In 2009 BCD Metals drilled 4 diamond holes for a total of 484.7m, targeting shoot plunges in the primary mineralised zone beneath the oxide zone at the Mt Ararat Copper Deposit. Six reverse circulation drill holes were drilled by BCD Metals in 2010 at the Mt Ararat Copper Deposit targeting copper-oxide mineralisation and to retrieve bulk oxide ore samples for metallurgical test work. In 2010, metallurgical test work flotation and mineralogical assessment was undertaken.
		Previous exploration is considered to be of good quality.
		In 2014 Stavely Minerals drilled an RC hole SARC001 into the northern end of the Mount Ararat VMS deposit. Unexpectedly in the footwall to the VMS mineralisation a gold intercept of 12m @ 0.97g/t Au to eoh, within a 13 metre interval, including 3m @ 3.04g/t Au was returned.



Criteria	JORC Code explanation	Commentary
		Carroll's Base Metals Prospect Pennzoil of Australia Ltd held the tenement which covers the Carroll's Base Metals Prospect between 1973 and 1983. Pennzoil conducted soil sampling over an area to the east and south of the Carroll's Base Metals Prospect. That area, which became the Mt Ararat VMS Deposit, returned a coincident soil copper +/- zinc anomaly.
		Newcrest Operations Limited explored the Ararat Project under option from Range River Gold NL and undertook gravity and airborne VTEM surveys in 2007. The VTEM survey identified an EM anomaly which coincided with the Pennzoil soil CU and Zn anomaly.
		The work conducted by previous operators at the Mt Ararat VMS Deposit is considered to be of a high quality.
		Previous exploration is considered to be of good quality.
		Mount Ararat VMS Deposit  The Mount Ararat Copper Deposit was discovered by Pennzoil of Australia Ltd using stream, soil and rock geochemistry followed by drill testing in the late 1970s. The exploration licence then passed to Centaur Mining & Exploration Ltd who undertook further drilling of the deposit, culminating in a Mineral Resource estimate in 1994. Centaur Mining & Exploration went into receivership in 2002 and the license passed to Range River Gold NL.
		Newcrest Operations Limited explored the Ararat Project under option from Range River Gold NL and undertook gravity and airborne VTEM surveys.
		BCD Metals Pty Ltd optioned the Project from Range River Gold NL in 2009 and full control was granted to BCD Metals when Range River went into voluntary administration in April 2011.
		In 2009 BCD Metals drilled 4 diamond holes for a total of 484.7m, targeting shoot plunges in the primary mineralised zone beneath the oxide zone at the Mt Ararat Copper Deposit. Six reverse circulation drill holes were drilled by BCD Metals in 2010 at the Mt Ararat Copper Deposit targeting copper-oxide mineralisation and to retrieve bulk oxide ore samples for metallurgical test work. In 2010, metallurgical test work flotation and mineralogical assessment was undertaken.
		Previous exploration is considered to be of good quality.
		Mount Ararat Resource Pennzoil: 12 holes drilled into mineralisation. Centaur Mining: 38 holes drilled into mineralisation. Beaconsfield Gold: 10 holes drilled into mineralisation Stavely Minerals: 9 holes drilled into mineralisation
Geology	Deposit type, geological setting and style of mineralisation.	White Lead Gold Prospect The potential gold mineralisation at the White Lead Gold Prospect is considered to be analogous to the mineralisation at the Stawell Gold Mine. The host lithologies to the Stawell Gold Mine are analogous to the lithologies in the White Lead area with the local Carroll's



Criteria	JORC Code explanation	Commentary
		Amphibolite considered to be the metamorphosed equivalent to the Magdala Basalt at the Stawell Gold Mine. The Mt Ararat Granite which intrudes the Carroll's Amphibolite is contemporaneous with and of similar composition to the Stawell Granite which likewise intrudes the Magdala Basalt.
		The Stawell mineralisation is strongly associated with arsenopyrite. Strong arsenic anomalism has been observed in the White Lead and Carroll's Prospects.
		The Stawell Goldfield has produced over 6 million ounces of historic and modern gold production with the modern Stawell Gold Mine having been in continuous operation since the mid 1980's and having produced in excess of 2 million ounces of gold.
		Carroll's Base Metals Prospect The Carroll's Base Metals Prospect is associated with the Cambrian volcanogenics and tholeiitic basalts of the metamorphosed Magdala Volcanics. The Carroll's Base Metals Prospect is potentially "Besshi" type volcanic massive sulphide (VMS) mineralisation which resulted "from the exhalation of sulphides onto the sea floor".
		VMS deposits are typically polymetallic massive sulphide deposits formed at or near the sea floor during submarine hydrothermal activity. They can contain stratiform to strata-bound concentrations of copper, zinc, lead, gold and silver, depending on the geological setting of the deposits, and often form clusters of deposits. Those formed in dominantly basalt sequences in back-arc tectonic settings tend to be copper- and zinc-rich and are often referred to as "Besshi" type.
		Mount Ararat VMS Deposit The Mount Ararat VMS deposit is associated with the Cambrian volcanogenics and tholeiitic basalts of the metamorphosed Magdala Volcanics. The Mount Ararat VMS is a "Besshi" type volcanic massive sulphide (VMS) mineralisation which resulted "from the exhalation of sulphides onto the sea floor".
		VMS deposits are typically polymetallic massive sulphide deposits formed at or near the sea floor during submarine hydrothermal activity. They can contain stratiform to strata-bound concentrations of copper, zinc, lead, gold and silver, depending on the geological setting of the deposits, and often form clusters of deposits. Those formed in dominantly basalt sequences in back-arc tectonic settings tend to be copper- and zinc-rich and are often referred to as "Besshi" type.
		Mount Ararat Resource Steeply westerly dipping, single planar massive sulphide horizon (historically described as VMS).
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:  o easting and northing of	Resource Estimate 82 holes drilled in the prospect area, 64 holes intercepted mineralisation, 5 holes define the strike extent of mineralisation. Collar locations verified as acceptable through field checking of 9 holes Downhole surveys for describing hole trace and sample
	o easting and northing of	Downhole surveys for describing hole trace and sample locations available for 32 holes:



Criteria	JORC Code explanation	Commentary
	the drill hole collar	
	o elevation or RL	HoleID   Number of   TDepth   HoleID   Number of   TDepth   HoleID   Number of   TDepth
	(Reduced Level – elevation above sea	HoleID   Number of   TDepth   Hole   DH Surveys   Hole   DH Surveys   Hole   HoleID   Number of   TDepth
	level in metres) of the	ARD002 6 114 PENZ006 1 152 SADD002 6 197.8 ARD003 5 142 PENZ007 1 115 SADD003 8 212.8
	drill hole collar	ARDOO4 5 118 PENZO09 1 219 SARCO01 12 114.0 M94 1 4 221 PENZO10 1 252 SARCO04 16 153.0
	o dip and azimuth of the	M94 2 4 198 PENZO11 1 381 SARCO05 15 135.0 M94 3 3 192 PENZO19 6 381 SARCO06 13 123.0
	hole	M94_4
	o down hole length and	M94_6 4 214 SP01 1 110 SARC009 12 123.0 PENZ001 1 133 SP02 1 111
	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.	Assaying of those samples logged with visible sulphide mineralisation Lithology logs available for all holes Oxidation state available for 34 Centaur Mining holes. Summary moisture data available for 18 Centaur Mining RC holes. 39 SG measurements taken from 4 Beaconsfield Go holes ARD[001-004]  No material drill hole information has been excluded.
		No material unii nole illiomation nas 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.	RC Drilling  No top-cutting of high grade assay results has bee applied, nor was it deemed necessary for the reporting significant intersections.  Resource Estimate  Assay sample intervals:    Count of Sample Lengths   Count o
		Type
		Composited to 1m intervals for resource estimate.
	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.	Diamond Drilling  Exploration results are nominally reported where copp results are greater than or equal to one metre at 0.3% of for the VMS copper-gold mineralisation.  Exploration results are nominally reported where go results are greater than or equal to one metre at 0.1 gold for the gold mineralisation.  No top-cutting of high grade assay results has been applied, nor was it deemed necessary for the reporting significant intersections.
	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 between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Diamond Drilling The diamond holes have been orientated in an ENE (050) direction to intercept at a perpendicular angle the stratigraphy. The orientation of the gold bearing veins cross cuts stratigraphy and hence will be oblique to the drill hole as shown in the respective sections.  Resource Estimate No apparent association when data assessed by drill type and mineralisation style breakdown.  Significant relationship differences when assessing DD vs RC holes:    Drill Type
	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').	Diamond Drilling  The true width for the gold intercepts in the mineralised quartz veins is estimated to be sub 1 metre for drill holes SADD001 and SADD002 while intercept widths for SADD003 would approximate true width.
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 body of text.  Resource Estimate  Historic cross sections and plans were reviewed  Long section thickness and drillhole intercept figure:  Wouthered  Supergree  Fresh  Indicated Resource  O Historic Hole  Menoralisation Thickness  In Bing  In B
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.	Diamond Drilling All Cu values greater than one metre at 0.3% have been reported.  Soil Sampling Anomalous thresholds are shown in the attached plans.  Resource Estimate Selective sampling of holes where mineralisation observed considered acceptable for estimating sulphide resources. Any gold or silver mineralisation intercepted by drilling with no associated sulphides will not be identifiable in the current dataset. Stavely Minerals



Criteria	JORC Code explanation	Commentary
		identified younger gold only mineralisation proximal to but not genetically related to the VMS mineralisation.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data is shown on figures and discussed in the text.  Resource Estimate A further 53 holes have been drilled within the exploration tenements.
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.	White Lead Gold Prospect and Carroll's Base Metals Prospect Diamond/RC drilling has been planned to test the coincident soil and IP anomalies and to follow-up the gold mineralisation intercepted in SADD001 and SADD002.  There are also plans to extend the current soil sample grids.  Mount Ararat Resource Mineralisation thins but is open at depth and opportunities for defining drilling targets (thick shoots). Additional resources may be identified by better definition of the thick mineralisation directly below the Indicated Resources.



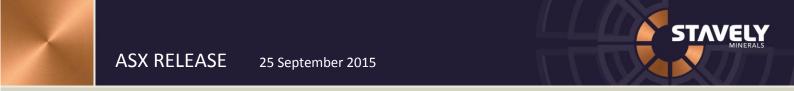
# **Section 3 Estimation and Reporting of Mineral Resources**

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

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.  Data validation procedures	Data management protocols and provenance largely unknown for historic data  Limited cross checks with paper records of drill hole and assay data for historic data  Field verification of 9 historic hole collar locations.  Relational and spatial integrity assessed and considered
	used.	acceptable.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.  If no site visits have been undertaken indicate why this is the case.	Not undertaken by CP.  Stavely Minerals personnel verify existence of core. CF has viewed photos of chip trays with mineralisation taker by Stavely Personnel and 2015 diamond drill core photos.
Geological interpretation	Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.  Nature of the data used and of any assumptions made.  The effect, if any, of alternative interpretations on Mineral Resource estimation.  The use of geology in guiding and controlling Mineral Resource estimation.  The factors affecting continuity both of grade and geology.	Single planar mineralised massive sulphide body interpreted and modelled for grade interpolation.  Oxide state modelled and utilised for grade interpolation and reporting of resource estimate.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	Mineralisation extends for a strike length of 830m (towards 335deg), vertically for 350m and ranges mostly between 1m and 3m thick (total massive + sub-massive + stringer mineralisation). The mineralisation is modelled between 4m and 14m thick in the upper 50m (this may be real, due to supergene actions or introduced due to the suspected wet/difficult RC drilling conditions)  The block model and grade estimate encompasses the extent of the mineralisation.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining,	Copper, gold, silver and zinc grades were interpolated into a Vulcan non-regular block model with 10x10x10 metre parent blocks – subblocked to 1x1x1 metre minimum block dimensions.  Hard boundaries utilised to estimate weathered domain



Criteria	JORC Code explanation	Commentary
	interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of byproducts.  Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	separate from supergene-fresh domain.  1m composite intervals utilised.  Grades greater than:
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content	15 of 18 RC holes drilled by Centaur Mining encountered wet drilling through the mineralisation. Grade profiles suggest down hole smearing of grade (cross-contamination) in the oxide/supergene mineralisation.  Core recovery averages 85% through the oxide/weathered mineralisation, down from >97% recorded for the supergene and primary mineralisation. There is no information or data to assess the affect core



Criteria	JORC Code explanation	Commentary
		loss has on grade.
Cut-off parameters	The basis of the adopted cut- off grade(s) or quality parameters applied.	The resource is reported by weathering and oxidation state. Cuts of 1.0% and 2.0% copper were applied. The breakdowns and grade tonnage plots are reported to allow differing economic assessment on the project.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Reporting cuts similar to those utilised in operating VMS mines. Indicated Resources centred on mineralisation of similar thicknesses as those exploited in operating VMS mines.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Not evaluated.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields	Not evaluated.



Criteria	JORC Code explanation	Commentary
	project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.  The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	A single tonnage factor of 3.17 tonnes/m³ was applied to all mineralisation.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.  Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).  Whether the result appropriately reflects the Competent Person's view of the deposit.	The estimate is classified as Indicated and Inferred under the JORC Code (2012 Edition). Indicated classification assigned to thicker mineralisation drilled at nominal 50m centres and informed by recent Stavely Minerals drill samples. Important data for evaluating risk to the estimate (such as recover and moisture versus grade) are key factors in assigning an Inferred Classification to weathered mineralisation.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No Audit or Review of estimate undertaken.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource	Not undertaken other than that stated under the classification section.



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