

# Significant New Breccia-Hosted Gold Target Identified at Ravenswood Project, Queensland

Outstanding discovery opportunity identified near Resolute Mining's 4.8Moz Ravenswood Gold Mine as a result of multi-pronged exploration programmes by Stavely's geological team

#### **Highlights**

- Exciting new gold exploration opportunity identified at Stavely's 100%-owned Ravenswood Project at a prospect known as "The Bank" breccia.
- Recent geochemical results from soil sampling and rock-chip sampling indicate a high-level of exposure indicative of a breccia-hosted intrusive-related gold system (IRGS).
- The dimensions of the breccia pipe are similar to that at the ~1Moz Mount Wright Gold Mine located 10km north of the 4.8Moz Ravenswood gold mining operation, owned by Resolute Mining Limited (ASX: RSG).
- "The Bank" breccia demonstrates a classic high-level geochemical signature with strong silver, arsenic, antimony and lead geochemical anomalism associated with typically spotty gold anomalism.
- This indicates that the best developed gold mineralisation should be preserved at depth below the current level of exposure (as was the case at the Mount Wright and Kidston Gold Mines).
- Notable IRGS gold deposits in north-east Queensland include Kidston (5Moz), Ravenswood (4.8Moz), Mount Leyshon (3.5Moz), Red Dome (2.1Moz) and Mungana (1.1Moz).
- Approvals and consents for diamond drill testing of this exceptional discovery opportunity are currently being fast-tracked.

Stavely Minerals Limited (ASX Code: **SVY** – "Stavely Minerals") is pleased to advise that it has identified an exceptional gold target at the Company's 100%-owned **Ravenswood Project** located just 10km west of the Ravenswood gold mining centre near Charters Towers in north- east Queensland (Figure 1).

The target was identified as a result of multi-pronged exploration programmes carried out by Stavely's geological team over recent months. The strength and quality of the target is such that the Company has decided to fast-track a diamond drilling programme which is planned to commence in the coming weeks.



The Bank breccia<sup>1</sup> is interpreted to be a sub-volcanic breccia pipe formed by deep seated explosive fracturing of a column of rock above a porphyry intrusive (Figure 2). The brecciated column of rock can be over 1km in vertical extent.

In north-east Queensland these breccia pipes are often associated with porphyritic rhyolite intrusions and, due to the additional porosity induced by the often multiple brecciation events, present ideal hosts for later IRGS gold mineralisation.

Other notable IRGS gold deposits in north-east Queensland include:

Kidston 5.0 million ounces of gold (breccia-hosted)

Ravenswood 4.8 million ounces of gold

Mount Leyshon 3.5 million ounces of gold (breccia-hosted)

Red Dome 2.1 million ounces of gold Mungana 1.1 million ounces of gold

Mount Wright 1.0 million ounces of gold (breccia-hosted)
Welcome 0.21 million ounces of gold (breccia-hosted)

The Bank breccia is located in granted EPM 26041 and is approximately 10km from the Ravenswood Gold Mine operated by Resolute Mining Limited (see Figure 1).

Stavely Minerals also has a number of additional EPM applications yet to be granted which significantly expand the project footprint.

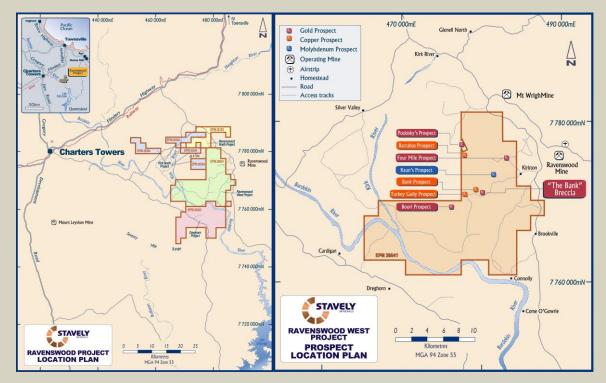


Figure 1. Ravenswood Project location plan.

<sup>&</sup>lt;sup>1</sup> Breccia (/'brɛtʃiə/ or /'brɛʃiə/) is a rock composed of broken fragments of minerals or rock cemented together by a fine-grained matrix that can be similar to or different from the composition of the fragments.



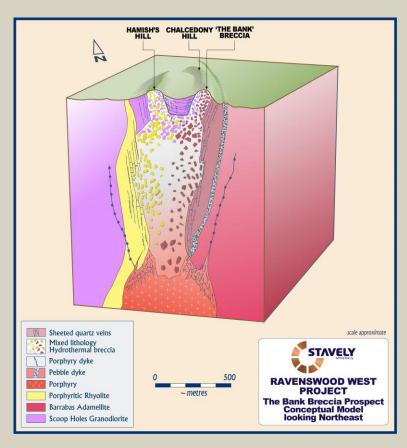


Figure 2. The Bank breccia conceptual model.

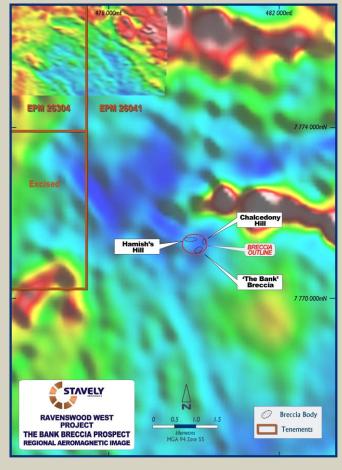


Figure 3. The Bank breccia location with reduced to pole magnetic image.



Many of the Permo-Carboniferous age IRGS breccia systems in north-east Queensland are characterised by a reversely magnetised magnetic signature and appear as intense 'lows' in magnetic images. While the source of this signature is often magnetite / biotite hornfelsing by the source intrusion at depth, and is strongly magnetic, the unusual intense low is a product of a global magnetic polarity switch at the time these intrusions were emplaced. The Bank breccia is likewise associated with a magnetic low and work is in progress to understand if it is a true reverse polarity low (Figure 3).

The Bank breccia is quite variable in its textures ranging from polymict (clasts of many different rock types) with silicified rock-flour / granodiorite mush matrix supported and clast supported breccia to monomict (clasts of one rock type) and quartz matrix supported breccia.

Peripheral sheeted quartz / iron oxide after weathered sulphide veins are noted in several locations, typically with dog's tooth quartz veining and iron oxides fill after weathered sulphides. Clast composition includes adamellite, granodiorite, rhyolite, aplite, brecciated quartz vein, brecciated chalcedony and re-brecciated granodiorite mush. Rhyolite and aplite dykes have been mapped and flow banding noted in some rhyolite dykes.



Figure 4. Brecciated chalcedonic silica fragments from Chalcedony Hill indicate a high level of exposure (ie. the best of the gold system could be preserved below).



Figure 5. Peripheral sheeted dog's tooth quartz veins with both interstitial and disseminated iron oxides after weathered sulphides from the southern edge of The Bank breccia.



There is evidence of poly-phase brecciation, quartz veining and sulphide mineralisation both as disseminations and as fill in the core of dog's tooth and banded quartz veins (Figures 4-6).



Figure 6. (left) Open space quartz veining and jigsaw breccia at Hamish's Hill, (right) zoom out of same shot showing large clast of granodiorite mush (top left), angular granodiorite clasts (bottom left and bottom centre), elongate rhyolite clast (right) with inverted 'Y' shaped quartz vein network with angular jigsaw breccia fragments of granodiorite. Image demonstrates polymict / poly-phase brecciation and creation of abundant porosity for subsequent mineralising fluids.

The breccia system appears to encompass three low hills including The Bank breccia to the south, Hamish's Hill to the north and Chalcedony Hill to the east (Figure 7).

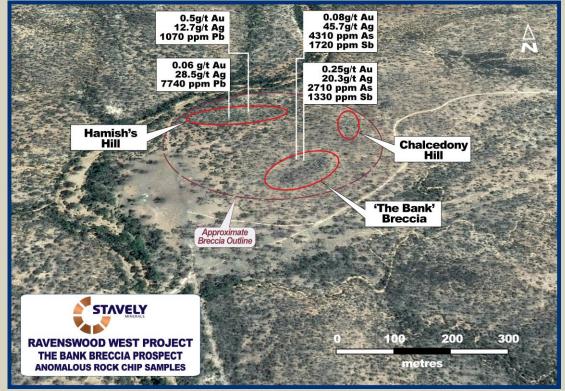


Figure 7. Google Earth image of The Bank breccia area. Note how the creek goes around the silica altered hills.

#### ASX RELEASE

1 September 2016



Rock-chip sampling confirms the 'spotty' gold anomalism with more consistent anomalism in elements considered to reflect the very high level of exposure of the breccia pipe system. Rock-chips up to 0.5 g/t gold and high silver to 28.5 g/t with associated high lead values to 7,740 ppm characterise Hamish's Hill (Figure 7).

These results from Hamish's Hill are considered analogous to the high silver and lead values with rare surface rock-chip gold values above 0.2 g/t gold seen at the 1Moz Mount Wright gold deposit.

At The Bank breccia, rock-chip results have returned gold up to 0.25 g/t with high silver to 45.7 g/t associated with strong arsenic and antimony anomalism to 4,310 ppm and 1,720 ppm respectively (Figure 7).

This geochemical association is considered typical of a peripheral / high-level in the well documented zonation pattern of these intrusive related gold systems. The silver, antimony, arsenic peripheral geochemical association is well established at the 4.8Moz Ravenswood gold field.

In accordance with these IRGS models, the geochemical anomalism observed at The Bank breccia system indicates the best developed gold mineralisation is likely to remain preserved at depth. The Bank breccia system has never been drilled.

The high-level IRGS geochemical character of The Bank breccia system is also well reflected in wide-spaced (100m x 100m) soil sample geochemistry with a well-defined silver (Ag), antimony (Sb), arsenic (As), copper (Cu) and bismuth (Bi) anomaly and associated spotty gold anomalism (Figure 8).

Additionally, The Bank breccia system also demonstrates a classic lead, zinc, thallium peripheral soil geochemical anomaly consistent with other north-east Queensland IRGS deposits.

Morrison et al (2014,2016) have authored a number of relevant papers and presentations on intrusive related gold systems in north-east Queensland and two slides from these presentations demonstrating the geochemical zonation patterns at the Mt Wright and Ravenswood Gold Mines are included for reference as Appendix 1 to this report and hyperlinks to relevant presentations are provided below<sup>2</sup>.

-

<sup>&</sup>lt;sup>2</sup> http://www.terrasearch.com.au/pdf/05 NewGeneticModel Ravenswood GM.pdf



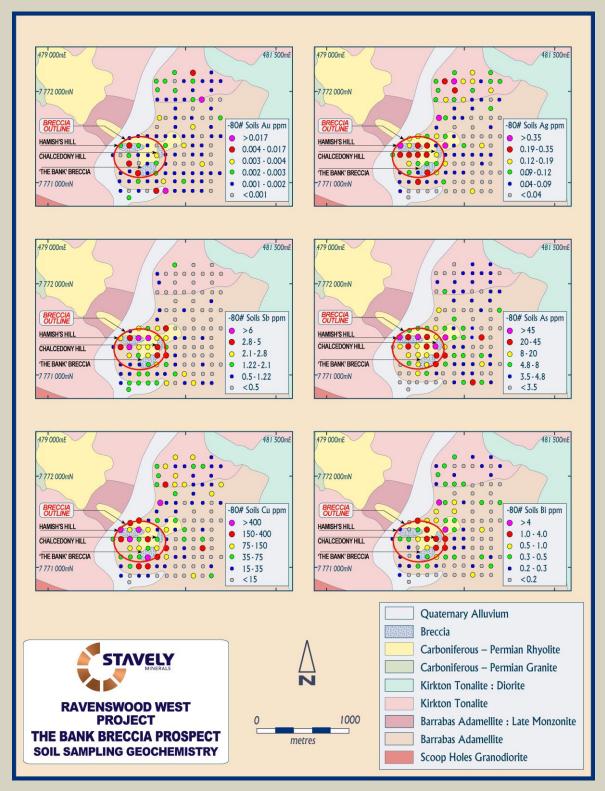


Figure 8. The Bank breccia soil sample geochemistry.

Stavely Minerals' Managing Director, Chris Cairns, said the "The Bank" breccia prospect was one of the best discovery opportunities he had seen in over 25 years of gold exploration.

"The prospect is ticking all the technical boxes as a genuine intrusive-related gold system – multiple phases of brecciation creating excellent permeability for later gold-bearing fluids."

#### **ASX RELEASE**

1 September 2016



"We know that those gold mineralising fluids have been through this system and the geochemical element associations we are seeing at surface are saying that the zone of best gold grades should be preserved beneath our feet. The only way to tell is to get the rotary lie detector out there and drill it. We are working as quickly as we can to make that happen."

**Chris Cairns** 

**Managing Director** 

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

#### For Further Information, please contact:

**Stavely Minerals Limited** 

Phone: 08 9287 7630

Email: info@stavely.com.au

**Media Inquiries:** 

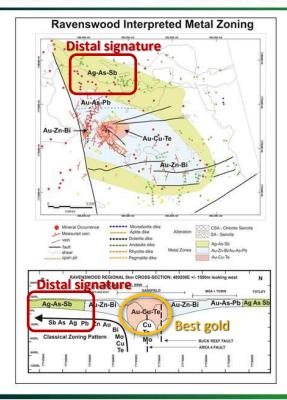
Nicholas Read – Read Corporate

Phone: 08 9388 1474



#### Appendix 1: Slides from Gregg Morrison's presentations

#### Ravenswood District: Ravenswood Town metal zoning



Centred on Area 4 Fault in Sarsfield pit With the deepest mineralisation

Zoning of key metals up & out Mushroom shape from to central feeder and dispersion in re-activated structures

Zoning reflects declining temperature Consistent with alteration zones

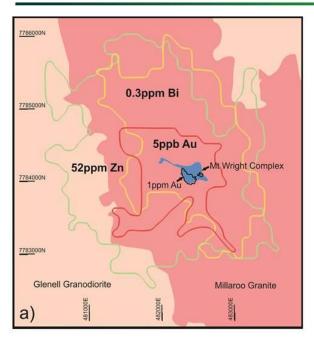
best ore shallow central

Ore by fluid decompression At structure intersection

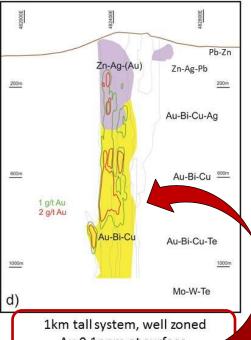
KLONDIKE

KLONDIKE

## IRGS NQ Mt Wright soil and rock metal zoning



3km diameter soil anomaly Zn, Bi, Au only 5ppb on hill



1km tall system, well zoned Au 0.1ppm at surface, Best Au ore 500-800m below



# JORC Code, 2012 Edition – Table 1

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

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

Criteria	JORC Code explanation	Commentary
Nature and quality of 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 limiting the broad meaning of sampling.		The Bank Breccia Prospect
	random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or	Soil sampling and rock chipping was conducted at "The Bank" breccia prospect at the Ravenswood West Project.
		The soil samples were taken at either 100m or 200m intervals along lines spaced at 100m apart. The grid coordinates for the samples were planned in MapInfo. A handheld GPS was used to navigate to each sample point.
	not be taken as limiting the	A pick was used to obtain an approximate 1 kg 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 comments.
	Sample preparation was completed by Stavely Minerals' personal. Preparation involved mechanical sieving using a -80 mesh sieve stack to produce an approximately 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 sun dried prior to sieving. The 100 – 150g -80 mesh samples were submitted to ALS Laboratory in Townsville.	
		The rock-chip samples were also submitted to ALS Laboratory in Townsville.
		Bank Porphyry Prospect
		In 1967 Asarco Australia drilled 11 Rotary Percussion holes in the prospect for a total of 942 feet (287m) maximum was 100 feet (30.5m) vertical and sank three shallow pits along the 2,000 feet of mineralisation.
	Include reference to	The Bank Breccia Prospect
	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).
		Bank Porphyry Prospect
		Noranda Australia Limited reported in 1968 that the sampling was considered to be fairly representative of the first 100 feet (30.5m).
	Aspects of the determination of mineralisation that are	No sample preparation is available for the historical drilling stream sediment sampling, or rock chip sampling.
	Material to the Public Report - In cases where 'industry	The Bank Breccia Prospect
	standard' work has been	Soil sampling techniques are considered industry



Criteria	JORC Code explanation	Commentary
	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 detailed information.	standard for the Ravenswood West work programmes.
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).	Bank Porphyry Prospect In 1967 Asarco Australia drilled 11 Rotary Percussion holes in the prospect for a total of 942 feet (287m) - maximum was 100 feet (30.5m) vertical and sank three shallow pits along the 2000 feet of mineralisation.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Bank Porphyry Prospect  No details are available for the historical drill holes.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Bank Porphyry Prospect  No details are available for the historical drill holes.
	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.	Bank Porphyry Prospect  No details are available for the historical drill holes.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Bank Porphyry Prospect  No details are available for the historical drill holes.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Bank Prospect  No details are available for the historical drill holes.
	The total length and percentage of the relevant intersections logged.	Bank Porphyry Prospect  No details are available for the historical drill holes.



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	If core, whether cut or sawn	Bank Porphyry Prospect
	and whether quarter, half or all core taken.	No details are available for the historical drill holes.
	If non-core, whether riffled,	Bank Porphyry Prospect
	tube sampled, rotary split, etc and whether sampled wet or dry.	No details are available for the historical drill holes.
	For all sample types, the	Bank Porphyry Prospect
	nature, quality and appropriateness of the sample preparation technique.	No details are available for the historical drill holes.
	Quality control procedures	Bank Porphyry Prospect
	adopted for all sub-sampling stages to maximise representivity of samples.	No details are available for the historical drill holes.
	Measures taken to ensure	Bank Porphyry Prospect
	that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	No details are available for the historical drill holes.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Bank Porphyry Prospect
		No details are available for the historical drill holes.
Quality of	The nature, quality and	The Bank Breccia Prospect
assay data and laboratory tests	appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The sieved -80 mesh soil samples and rock chip samples were analysed for gold by Method Au-TL43 and for a range of multi-elements by Method ME-MS61 at Australian Laboratory Services ("ALS") in Townsville, Queensland.
		No sample preparation was required for the soil samples by the laboratory. The rock chip samples required comminution and pulversisation at 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 by aqua regia digest offers very low detection limits, making it an attractive option for soil sampling surveys. Aqua regia effectively dissolves both



Criteria	JORC Code explanation	Commentary
		native gold as well as gold bound in sulphide ore minerals and various oxide minerals.
		Aqua Regia is a partial digestion method and will not digest silicate minerals present in the sample.
		The samples were analysed by multielement MS Analysis - Method ME-MS61. 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.
		Bank Porphyry Prospect
		No details are available for the historical drill holes.
		Historical Stream Sediment Sampling
		BHP Exploration -2mm stream sediment samples were analysed for Au by active cyanide solvent extraction, carbon rod finish. This is a partial extraction technique.
		The -80# stream sediment samples were analysed for a range of base-metal, indicator and rare-earth elements including Ag, As, Cu, Fe, Mn, Mo, Pb, Zn, P, Cd, V and Zr using aqua-regia/ perchloric digestion and ICPOES determination with Th, Ce, Dy, Er, Eu, Gd, Ho, La, Nd, Pr, Sm, Tb, Tm and Yb analysed using aquaregia/perchloric/hydrofluoric digestion and ICPOES determination.
		Historical Rock-chip Sampling
		BHP Exploration's rock chip samples were analysed using an aqua-regia digestion and AAS determination for Au (0.001), Cu (0.5), Pb (0.5), Zn (0.5), Ag (0.1), As (5), Mo (1), Bi (1) and Sb (2) – ppm detection limit in brackets.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	N/A
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	The Bank Breccia Prospect  The analytical laboratory provide their own routine quality controls within their own practices. The results from their internal validations were provided to Stavely Minerals.  Bank Prospect  No details are available for the historical drill holes.



Criteria	JORC Code explanation	Commentary
		Historical Stream Sediment Sampling
		No quality control is available for the BHP Exploration stream sediment sampling programme assay data.
		Historical Rock-chip Sampling
		No quality control is available for the BHP Exploration rock-chip sampling programme assay data.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	NA
	The use of twinned holes.	Bank Porphyry Prospect
		No holes twinned.
	Documentation of primary	The Bank Breccia Prospect
	data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data was collected for soil sample and rock chip samples using a paper sample sheet. The sampling data was subsequently entered into an excel spreadsheet. The information was then sent to a database consultant for validation and compilation into a SQL database.
		Bank Porphyry Prospect
		No details are available for the historical drill holes.
	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	The Bank Breccia Prospect
data points	surveys used to locate drill holes (collar and down-hole	NA
	surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Bank Porphyry Prospect
		No details are available for the historical drill holes.
	Specification of the grid	The Bank Breccia Prospect
	system used.	The grid system used by Stavely Minerals is GDA94, zone 54. Locations in previous exploration by BHP were in AMG84.
		Bank Porphyry Prospect
		No details are available for the historical drill holes.
	Quality and adequacy of topographic control.	The Bank Breccia Prospect
		The RL was recorded for each soil sample location from the GPS. Accuracy of the GPS is considered to be within 5m.
		Bank Porphyry Prospect
		No details are available for the historical drill holes.
Data spacing	Data spacing for reporting of Exploration Results.	The drill hole spacing is project specific.
and distribution		The Bank Breccia Prospect
		The soil spacing is shown in the figures in the text. Nominally 100m x 100m.
	Whether the data spacing and distribution is sufficient to	N/A





Criteria	JORC Code explanation	Commentary
	establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	
	Whether sample compositing has been applied.	The Bank Breccia Prospect
	паѕ вееп аррпец.	No sample compositing has been applied.
		Bank Porphyry Prospect
		No details are available for the historical drill holes.
Orientation of	Whether the orientation of	The Bank Breccia Prospect
data in relation to geological structure	sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The soil sampling grid was not orientated (100m by 100m sampling) and is considered to have achieved unbiased sampling.
Structure		Bank Porphyry Prospect
		No details are available for the historical drill holes.
	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 and reported if material.	Bank Porphyry Prospect  There is insufficient drilling data to date to demonstrate continuity of mineralised domains and determine if any orientation sampling bias can be identified in the data.
Sample security	The measures taken to ensure sample security.	No available data to assess security for the historical drilling, stream sediment or rock-chip sampling.
		The Bank Breccia Prospect
		The brown paper geochem sample bags containing the sieved soil samples were packaged in a sealed cardboard box for hand delivery to ALS in Townsville, Queensland.
		The rock chip samples in numbered calico sample bags in a poly-weave bag were delivered by hand to ALS in Townsville, Queensland. Approximately 10 calico sample bags per poly-weave bag.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of the data management system has been carried out.



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

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	EPM26041 was granted to Ukalunda Pty Ltd on the 24 <sup>th</sup> May 2016. Ukalunda Pty Ltd is a wholly owned subsidiary of Stavely Minerals Limited. EPM26041 is located 10km south west of Ravenswood in north Queensland. The Mingela-Ravenswood-Burdekin Dam road passes down the eastern boundary of the tenement. The Burdekin River parallels the southern boundary of EPM26041.  The Podosky's prospect is located on excised mining lease ML 10315 which is held by Kitchener Mining NL, which is owned by Haoma Mining NL.  EPM26041 is subject to the Birriah People Native Title Grant.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	EPM26041 was granted on the 24 <sup>th</sup> May 2016 and is due to expire on the 23 <sup>rd</sup> May 2021.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	There has been almost continuous exploration activity in the Ravenswood area including the area of EPM26041, since the mid-1960's. Initially activities were focused on Cu_Mo exploration and then from the early 1980's for Au. Exploration companies active in the area included North Broken Hill, New Consolidated Goldfields, Norranda, Planet, Kennecott, Geopeko, ESSO, Newmont, Poseidon Exploration, Placer Exploration, BHP Minerals, Aurora and more recently Carpentaria.
		Historical exploration activities have been mainly regional in nature with multiple drainage surveys including – 80# stream sediment and BLEG sampling programmes.
		Four prospects within EPM26041 have had detailed follow-up exploration — Boori, The Bank, Keane's and Gargarin. Some shallow drilling has been done and results indicate narrow zones of sub-economic mineralisation e.g. Keane's prospect returned multiple zones of <20cm width at +0.5%Mo with the widest intersection in hole R3 of 15m at 0.26% Mo.
		At the Podosky's prospect exploration was conducted by Haoma Mining NL in 2003 and 2004. RC drilling was conducted as well as a review of an earlier IP geophysical survey. In 2003 Haoma completed a resource model on the Podosky's prospect and estimated 50,903t at 4.95 g/t gold.
		Apart from a regional soil sampling and rock chipping survey conducted by Carpenteria Gold no other detailed exploration has been undertaken at The Bank Breccia prospect.
Geology	Deposit type, geological setting and style of mineralisation.	The dominant rock types within EPM26041 are typically I- type calcic hornblende-biotite granodiorite to tonalite of the Ravenswood Batholith of Middle Silurian to Middle Devonian age. A major structure, the Mosgardies Shear



Criteria	JORC Code explanation	Commentary
		Zone, cuts east-west through the Ravenswood Batholith adjacent to three gold centres. The shear zone is up to 2.5km wide. The main reef at Ravenswood, the "Buck Reef", is contained within the Mosgardies Shear Zone.
		The Bank Breccia pipe is considered to be analogous with the Mt Wright Gold Mine (~1Moz) and the Welcome breccia pipe (210koz).
		The Mt Wright breccia complex comprises granite, polymict and rhyolite breccias, as well as rhyolite and tuffsite intrusives, and is approximately 350m in diameter, and at least 1200m deep. The complex is positioned near the contact between the Ordovician Millaroo Granite and Glenell Granodiorite of the Ravenswood Batholith. The main rhyolite body/spine (which hosts the bulk of the mineralisation) is texturally complex, but generally evolves from massive at depth and/or in the core of the spine, to flow banded, and (auto) brecciated variations with decreasing depth and/or proximity to the margins. Most of the gold occurs with marcasite, pyrite and minor pyrrhotite mineralisation as breccia and vug fill, veins and disseminations. This broadly grades into carbonate-sphalerite-galena-chalcopyrite mineralisation, and decreasing gold, towards the surface and also laterally away from the rhyolite.
		The Welcome deposit is hosted within the Ordovician Mingela Granodiorite of the Ravenswood batholith, with numerous NNE trending micro-granodiorite (porphyry) to diorite dykes, also of an Ordovician age in the area. The breccia is a well-defined pipe, approximately 20m by 50m across and dips steeply at between 75° and 85° to the NE. Clasts are predominantly granodiorite, with minor microgranodiorite, andesite and rarely rhyolite. A vein array extends up to 30m beyond the edge of the breccia and includes proximal quartz-carbonate-sulphide shear and sheeted (tension) veins and distal chlorite-carbonate shear veins. Gold mineralisation is hosted within both the breccia and in the adjacent vein array, and is associated with quartz-carbonate-pyrite-sphalerite +/- chalcopyrite-galena.
Drill hole	A summary of all information	Bank Porphyry Prospect
Information	material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	No details are available for the historical drill holes.
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL         (Reduced Level –         elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	



Criteria	JORC Code explanation	Commentary
	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 available material drill hole information has been excluded.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	Bank Porphyry Prospect  No details are available for the historical drill holes.
	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.	N/A
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results.  If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Bank Porphyry Prospect  There is insufficient drilling data to date to demonstrate continuity of mineralised domains and determine the relationship between mineralisation widths and intercept lengths.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Bank Porphyry Prospect  No details are available for the historical drill holes.
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.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable,	Anomalous thresholds are shown in figures in body of text.





Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All relevant exploration data is shown on figures and discussed in the text.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The Bank Breccia  Diamond drilling to test The Bank Breccia is planned. To date no drilling has been conducted at The Bank Breccia prospect. Soil sampling, rock chipping and prospect scale mapping will be used to target the drilling.