



STACPOOLE GOLD ZONE EXTENSION CONFIRMED

Mantle Mining Corporation Limited (ASX: MNM) ('Mantle' or 'the Company') provides the following update on its strategy to develop the high grade Morning Star and Rose of Denmark gold mines in eastern Victoria.

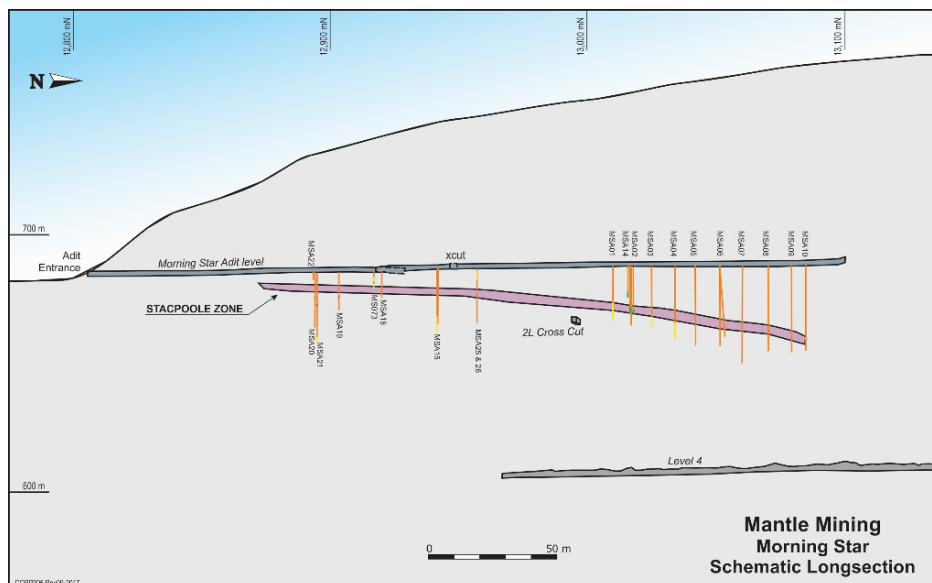
Highlights

- The Stacpoole zone has been drilled in 15 locations, with a total of 26 diamond drill holes
- This drilling confirms a southern extension of the Stacpoole zone towards the adit entrance
- Gold mineralization throughout
- Work commences on re-commissioning the Morning Star shaft, winder and the design of access routes to commence trial mining at the Stacpoole zone
- Work has commenced to update the approved Work Plan to incorporate the inclusion of a conventional decline option.

Stacpoole Drill Program – Phase 1 and Phase 2

A total of 592 metres was drilled at 15 locations, with 26 holes. The southern extension drilling confirms that the Stacpoole zone does extend further south than previously modelled. The Stacpoole zone sits immediately below the historically rich Age of Progress zone, approximately 5m below the Morning Star adit floor.

Figure 1 Long Section showing the Stacpoole zone in relation to the adit and 2 level



A strike distance of approximately 200 metres of the Stacpoole zone has now been drilled, which represents the southern half of the Stacpoole zone and the most accessible area, either by shaft or by conventional decline.

As noted in previous ASX releases, the aim of this drill program was to determine the position and degree of potential development of the Stacpoole zone, in order to guide further underground sampling and/or trial mining. Trial mining is required to provide a more accurate indication of gold grades, since drilling alone is known to significantly underestimate gold grades at Morning Star historically. As an example of this, the documented average grades from production on the Burns zone at Morning Star were more than ten times higher than the grades encountered in drilling. In this context, the consistent presence of gold found in the recent drill hole assays as set out in Table 1 provides encouragement to continue development. Of significance is the broad zone of mineralisation shown to exist between the Age of Progress zone and the Stacpoole zone below it. Extensive alteration, fine anastomosing quartz and quartz carbonate veins and heavy weathering has developed a broad zone of mineralisation at the junction of the two zones. The 13 g/t gold assay obtained in MSA024 over a length of 1.4 metres indicates the potential to achieve higher grades from trial mining and supports the Company's plan to undertake further development.

Recommissioning of the Winder at the Morning Star Gold Mine

Work has now commenced on re-commissioning the winder and shaft, neither of which were fully maintained to statutory standards since 2012, a period prior to Mantle's ownership. A team of specialists has been engaged to assist with testing and validation of the safe operating systems and required assessments prior to manriding. This will provide unhindered access for ventilation control to the underground mine. Full winder and shaft operation is also integral in the placement of the tailings waste rock underground, generated after gold ore processing utilising the on-site gravity recovery Gekko processing plant.

Photo 1 Morning Star Headframe



Photo 2 Morning Star Winder



Preparation for Trial Mining of the Stacpoole Zone

The Company is currently reviewing design plans for cost effective trial mining followed by efficient longer term mine development, involving access via the main shaft as well as a decline. To that end, work has commenced to update the approved Work Plan with the inclusion of a conventional decline option.

CEO Tom de Vries says *"We are now confident of having identified the location of the Stacpoole zone and are planning to take full advantage of the excellent gravity processing plant and other infrastructure that is in place on the Morning Star site to commence cost effective trial mining. This trial mining of the Stacpoole zone will be critical to enable the Company to properly understand and validate the mine grades expected to be achieved."*

Figure 2 3D view of Morning Star Mine, looking west and showing the position of Stacpoole zone from Surface to 2 Level - the area of highest gold ounces per vertical metre in the mine

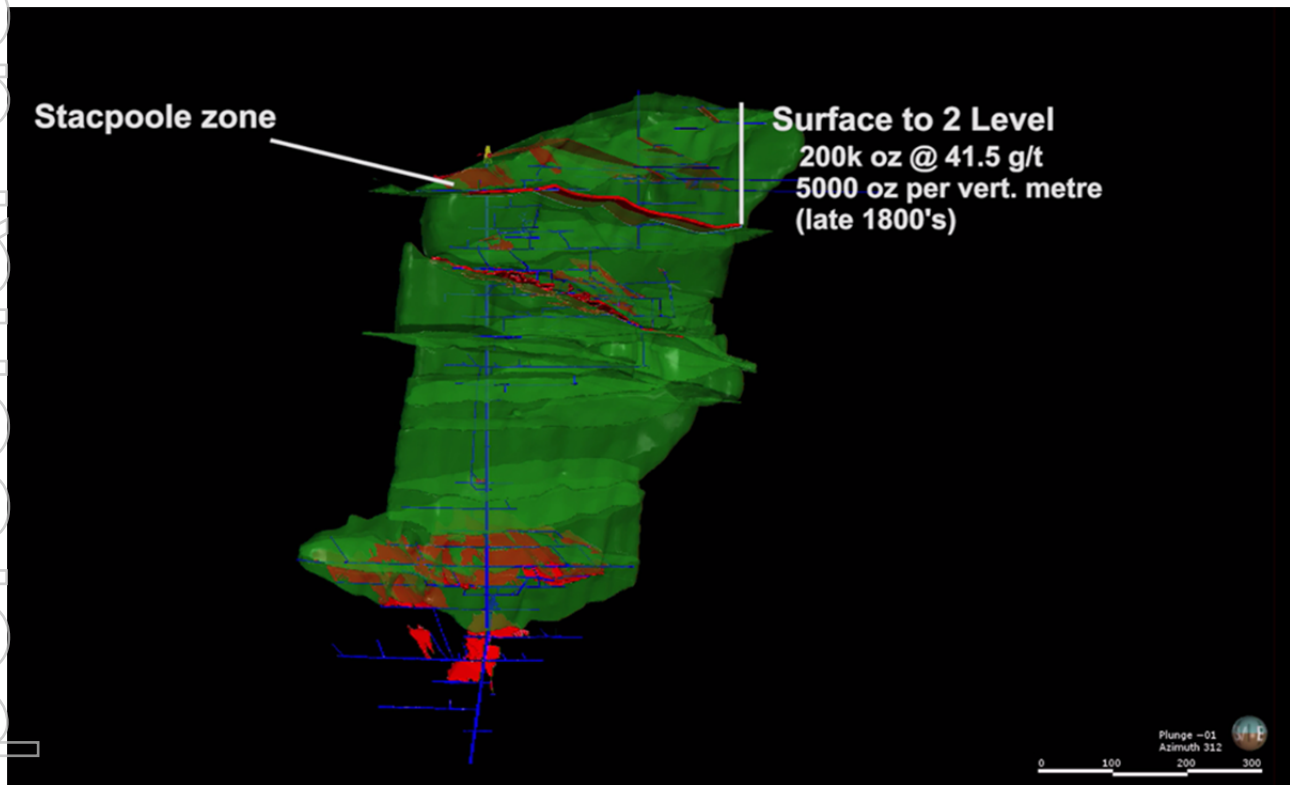


Table 1 Drill Interval and Assay of Morning Star Adit Drilling

Hole ID	From	To	Interval	Au g/t	Core Loss
MSA 01	5.65	5.75	0.1	0.99	
MSA 01	12.7	12.8	0.1	0.08	
MSA 01	13.8	13.9	0.1	0.22	
MSA 02	4.7	4.9	0.2	1.67	
MSA 02	11.2	11.3	0.1	0.08	
MSA 03	0.83	0.93	0.1	1.54	
MSA 03	19.25	19.4	0.15	0.47	
MSA 03	19.7	19.8	0.1	0.32	
MSA 04	21.4	21.9	0.5	1.27	
MSA 05	11.03	11.13	0.1	2.18	
MSA 05	23.55	23.77	0.22	1.78	
MSA 05	24.05	24.7	0.65	1.31	
Including	24.05	24.35	0.3	2.16	
MSA 06	14	14.1	0.1	1.17	
MSA 06	21.9	22.25	0.35	2.06	
MSA 06	24.55	25.7	1.15	1.87	
Including	24.85	25.25	0.4	2.40	
MSA 07	14.95	15.25	0.3	0.39	
MSA 07	25.35	26.15	0.8	0.43	
MSA 08	14.1	14.4	0.3	1.65	
MSA 08	24.35	24.45	0.1	0.16	
MSA 08	25.1	26.9	1.8	0.82	
Including	25.2	25.75	0.55	2.11	
MSA 08	28.15	28.5	0.35	0.87	
MSA 09	22.4	24.9	2.5	1.46	
Including	22.4	23.1	0.7	2.21	
MSA 09	26.4	27	0.6	1.41	
MSA 09	27.1	28.2	1.1	0.74	
MSA 010	15.8	17.2	1.4	1.37	
MSA 010	19.55	21.75	2.2	1.85	
MSA 010	21.9	22.3	0.4	1.14	
MSA 010	27.26	29.05	1.79	1.14	
MSA 011	16.4	16.8	0.4	1.62	
MSA 012	15	16.8	1.8	1.53	
MSA 013	9.2	9.7	0.5	0.20	
MSA 013	15	16.8	1.8	1.47	
MSA 014	1.00	5.00	4	1.15	
MSA 015	3.8	4.8	1	0.37	
MSA 015	5.8	7	1.2	1.65	
MSA 016A	0.2	5.53	5.33	1.11	
Including	3	4	1	1.95	
MSA 017	0	8	8	3.56	
Including	2	6.4	4.4	5.53	3.25
MSA 018	4.5	8.6	4.1	0.41	

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Table 3 Drill Interval and Assay of Morning Star Drilling Cont.

Hole ID	From	To	Interval	Au g/t	Core Loss
MSA 019	9	11	2	0.67	
MSA 020	7	10.2	3.2	1.24	
Including	8	9	1	1.95	
MSA 021	0.7	4	3.3	0.95	
MSA 021	9	20	11	0.49	
Including	14	15	1	1.19	
MSA 022	11	15	4	1.31	
Including	12	13	1	2.02	
MSA 023	1.2	2.25	1.05	1.77	
MSA 023	8	15.25	7.25	1.10	4.05
Including	8	10	2	1.68	1
MSA 024	0.5	5.1	4.6	4.04	
Including	4	5.1	1.1	13.45	
MSA 025	0.60	5.40	4.8	0.28	
MSA 026	1.00	2.00	1	0.86	

Table 2 Drill Hole location, Dip, Depth and azimuth

Hole ID	Azimuth (Grid)	Dip Degrees	Depth (meters)	R.L (Grid)	East (Grid)	North (Grid)
MSA 01	0	-90	20.15	687.6	8133	13010
MSA 02	0	-90	12.55	687.7	8125.4	13017.7
MSA 03	0	-90	23.55	687.7	8123	13025
MSA 04	0	-90	28.15	687.7	8122	13034
MSA 05	0	-90	30.7	687.7	8120	13042
MSA 06	0	-90	31.05	687.8	8116.4	13051.6
MSA 07	0	-90	37.6	687.7	8114.5	13060.2
MSA 08	0	-90	33.05	687.9	8110.5	13070.3
MSA 09	0	-90	33.7	687.9	8105.9	13079.5
MSA 10	0	-90	33.1	688.2	8101	13085
MSA 11	0	-90	18.85	687.7	8125	13017.8
MSA 12	270	-60	26.45	687.7	8125	13016.9
MSA 13	90	-60	21.05	687.7	8126	13016.6
MSA 14	90	-45	17.4	687.7	8127	13015.8
MSA 15	0	-90	24.5	687.7	8118	12943
MSA 16a	0	-55	25.6	687.7	8118	12943
MSA 17	0	48	13.9	687.7	8118	12945
MSA 18	0	-90	10	687.7	8115	12930
MSA 19	0	-90	15.2	687.7	8103	12903
MSA 20	0	-90	21.4	687.7	8097	12895
MSA 21	90	-45	32.7	687.7	8097	12895
MSA 22	270	-45	19.2	687.7	8100	12894
MSA 23	270	45	15.25	687.7	8120	12954
MSA 24	0	-90	12.28	687.7	8120	12954
MSA 25	90	-60	5.4	687.7	8120	12954
MSA 26	270	-45	30	687.7	8120	12954

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Competent Persons Statement:

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by John Cahill Bsc Geol MAIG. John Cahill is a member of the Australian Institute of Geoscientists (AIG) and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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". John Cahill 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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Appendix One

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple. 	<ul style="list-style-type: none"> The Morning Star deposit has been sampled by a mixture of diamond drill holes and underground face sampling. Detailed analysis has been carried out regarding the disparity between drilled gold grades and those associated with bulk sampling and production data, the later which are generally significantly higher than overlapping drill results Full drill core has been submitted for analysis. the drill core is LTK 40 in size Sample intervals are approximately 1 metre as the mineralisation consists of multiple narrow veins within a diorite host. Face samples were taken with hammer and chisel. Vein material generally breaks away easily from the diorite host rock. The underestimation of gold grades in drilling in comparison to face sampling data and production data at Morning Star has been well documented (eg Goodz et al, 2008 – "Resource Estimation and Grade Assignment – A Comparison Between Historical Production and Current Maxwell Mining Validation Case Study at Morning Star Gold Mine, Woods Point")
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> The Morning Star deposit has been an operating mine since the late 1800's. Drilling was carried out by Starwest Drilling utilizing a Kempe air operated drill producing LTK 40 sized drillcore. As most holes were ~20metre in length, hole surveys were not carried out Core orientations were not measured.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> The core is marked up and measured by geologists. Core recovered (CR) is compared with the metres drilled (MD, recorded by the drillers in their 'run sheets') and a 'core recovery' percentage is calculated; $CR/MD \times 100 = \% \text{ recovered}$. For the face sampling it is difficult to accurately measure recovery, but it is estimated that >90% of the sample is recovered.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative 	<ul style="list-style-type: none"> Logs exist for all of the drillholes on the property. The long history of Mining and Exploration on the property has led to multiple sets of log codes, and the company is currently standardizing this information The logging describes the dominant and minor rocktypes, colour, mineralisation, oxidation, alteration, vein type, core recovery, basic structure (hardness has not been logged). Some geotechnical logging has taken place, though in most

Criteria	JORC Code explanation	Commentary
	<p>or quantitative in nature. Core (or costean, channel, etc) photography.</p> <ul style="list-style-type: none"> The total length and percentage of the relevant intersections logged. 	<p>cases the existence of extensive underground development has meant that geotechnical work has been more focused on underground exposures.</p> <ul style="list-style-type: none"> Core is photographed after markup and before sampling.
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. 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. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> Full core has been sampled Core samples were assayed at the Gekko laboratory located in Ballarat, and at Onsite labs in Bendigo Total pulverization before subsampling for assay is carried out at the lab
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<p>A standard sample (including blanks) is randomly inserted for approximately every 20 samples that are submitted.</p> <ul style="list-style-type: none"> Analyses at Onsite labs were by 1.5 Kg BLEG (chip samples), and analyses at Gekko labs were by 50g fire assay (drill core). Both techniques are considered appropriate for this style of deposit
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	<ul style="list-style-type: none"> Higher sample values are subjected to re-assay All reported data was subjected to validation and verification prior to release Submitted standard are tabled and compared to stated value Data from logging and assay has been entered into Micromine for modelling and geological analysis.

Criteria	JORC Code explanation	Commentary
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> All holes were located by direct measurement from underground survey points. The coordinates used are a local mine grid, rotated 48 degrees counterclockwise from true north The topography control is of a high standard
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Drilling has been carried out from underground drill cuddies. Reported drill holes are spaced at between 10 - 20 metres depending on suitability at each intended location for drill deployment. At several locations, angled holes were undertaken to locate the geological contacts Larger reefs are relatively continuous over large distances, though smaller reefs can be more discontinuous The traditional approach in mining at Morning Star has been to use drilling to establish the width and position of mineralised structures, and to place more emphasis on underground sampling for establishment of gold grade Sample compositing has not been applied
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> The drilling has been targeted to intersect mineralized veins at a steep angle, although some oblique holes have been drilled due to the locations of available drill sites. However, this has been taken into account in such a way as to eliminate sampling bias. No significant sample bias based on drill hole orientation is noted The Stacpoole structure is a relatively flat zone and vertical drill holes have given a good drill intersection angle.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The chain of custody for samples was managed by Morning Star Gold NL, with an established set of procedures designed to maintain sample security
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No independent review has been undertaken of the announced drill results

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	<ul style="list-style-type: none"> 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 security of the tenure held at the time of reporting along with any known impediments 	<ul style="list-style-type: none"> The Morning Star mine is located wholly within MIN5009. MIN5009 is 100% held by Morning Star Gold NL, in turn held 95% by Mantle There is a 1% Gross Sales Royalty for the first 5 years from first production The assets were acquired from receivers in 2015, under a deal involving stages cash payments of \$3.75m, of which \$2m is still pending The Morning Star mine is located approximately 90km southeast of Mansfield in Eastern Victoria, near the town of Woods Point.

Criteria	JORC Code explanation	Commentary
	<i>to obtaining a licence to operate in the area.</i>	<ul style="list-style-type: none"> The Rose of Denmark lies wholly within MIN5299 and is 49% held in JV with Shandong Tianye
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The Morning Star Gold mine has been intermittently active since 1861, with a large number of owners and operators. The mine was operated by Gold Mines of Australia between 1930 and 1960, and then briefly operated by Morning Star Gold Mines NL until 1963. Production up to that point has been variably estimated to be between 630,000 and 830,000 oz Au at grades from 25-30 g/t Au. Mount Conqueror acquired the asset in 1993 and carried out exploration development under that name and then subsequently under the name of Morning Star Gold. The company went into suspension in June 2012 and receivership in 2014 There are historical workings of unknown age with open stopes and inclined shafts and drives in and around the mineralised quartz veins. The workings do not exceed a depth of ~20m.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The project area lies within the Woods Point – Walhalla Synclinorium structural domain of the Melbourne zone, a northwest-trending belt of tightly folded Early Devonian Walhalla Group sandy turbidites. The domain is bounded by the Enoch's Point and Howe's Creek Faults, both possible detachment-related splay structures that may have controlled the intrusion of the Woods Point Dyke Swarm and provided the conduits for gold-bearing hydrothermal fluids. The local structural zone is referred to as the Ross Creek Faults Zone (RCFZ) Most gold mineralisation in the Woods Point to Gaffney's Creek corridor occurs as structurally-controlled quartz ladder vein systems hosted by dioritic dyke bulges. Morning Star is the classic example of this mineralisation style.
Drill hole information	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> 	<ul style="list-style-type: none"> Refer to tables 1 and 3
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>Where aggregate intercepts incorporate short lengths of high grade results and longer</i> 	<ul style="list-style-type: none"> In all previous ASX releases the assays are given 'un-cut' unless otherwise stated & weighted averaging of results is used: in which the average grade is the sum of the products of length and grade for each sample in the interval, divided by the total length of the interval. A nominal cutoff of 1g/t is used for identification of potentially significant intercepts for reporting purposes. Most of the reported intercepts are shown in sufficient detail,

Criteria	JORC Code explanation	Commentary
	<p><i>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.</i></p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<p>including gold maxima and subintervals, to allow the reader to make an assessment of the balance of high and low grades in the intercept.</p> <ul style="list-style-type: none"> Metal equivalents are not used.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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. 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'). 	<ul style="list-style-type: none"> Mineralised structures at Morning Star are variable in orientation, and therefore drill orientations have been adjusted from place to place in order to allow intersection angles as close as possible to true widths. Exploration results have been reported as an interval with 'from' and 'to' stated in tables of significant economic intercepts. Tables clearly indicate that true widths will generally be narrower than those reported. An estimate of true width can be made based on the known strike of mineralised quartz veins or quartz breccias, although it should be noted that these features are not absolutely planar and anastomosing does occur, with variable strike and dip.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See Tables 2 and 4 and figures 1 to 6
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Every drillhole completed on the property has been reported, regardless of whether it has returned high or low grades. Higher grade drillholes are reported with significant detail, while lower grade drillholes generally have fewer reported intercepts. Holes with no economically significant intercepts are reported as such in each release of results, with the label "No Significant Intercept".
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Results of an ongoing structural reappraisal of the mine are presented in some of the diagrams in this release
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	<ul style="list-style-type: none"> Further exploration drilling from surface and underground is planned, along with face sampling in order to gain confidence regarding grades

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	

Section 3 Estimation and Reporting of Mineral Resources

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

Section 3 does not pertain to this report.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Section 4 does not pertain to this report.

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