## **North Stawell Minerals**

### **ASX Announcement**

19 Mar 2025

# Darlington: 120m step-out hole intersects zone with visible gold.

#### HIGHLIGHTS

- Diamond Drilling has intersected **visible gold (VG) at the Darlington Project** located in the Stawell Gold Corridor, Victoria, Australia.
- The mineralisation occurs in a siliceous stock-worked fault breccia, 107.5 110m downhole (84m below surface) in hole NSD057, 140m up-hole from the planned target<sup>4</sup>.
- NSD057 is planned to test the interpreted intersection of the projected plunge of the historic Darlington Mine with an interpreted basalt at depth<sup>2</sup> – the structural setting most likely to return Stawell-type gold mineralisation<sup>1</sup>. The VG intersect is outside the planned target.
- NSD057 is 200m southeast of the historic Darlington Mine shaft and 120m southeast of previously southern-most hole into the target, NSD053 (1.5m at 4.24g/t Au from 140m)<sup>2</sup>. The interpreted trend, if parallel to Darlington, is open for 850m along strike to the south.
- The VG intercept is approx. 70m west of the Darlington mineralised trend and does not appear to spatially correlate to known mineralisation potentially an offset or new zone.
- NSD057 is currently being logged prior to sampling. Full results will be announced following submission and return from the assay laboratory.

<sup>1</sup> <u>ASX:NSM 25 Nov 24</u>. <sup>2</sup> <u>ASX:NSM 26 Jul 23</u> <sup>3</sup> see Table 1 Section 1b <sup>4</sup> <u>ASX:NSM 5 Mar 25</u>

**Important:** This announcement addresses observed visible gold occurrences in NSD057 at Darlington. Visual observation is not a proxy for gold grade. A full discussion of NSD057 will be the subject of a future announcement when geological and assay data are finalised. Also note – there are outstanding assays from prior drilling at the Wildwood Prospect (<u>ASX:NSM 16 Jan 25</u>). The data from Wildwood will be reported when the remaining data is returned, compiled and interpreted.

#### ASX:NSM

North Stawell Minerals (<u>ASX:NSM</u>) is pleased to announce an update on its on-going diamond drill program. The North Stawell Project includes a 600km<sup>2</sup> contiguous package of ground that incorporates the gold-prospective corridor immediately north of Stawell Gold Mines' operation at Stawell. A thin blanket of unmineralised sediments preserves potential for large, near-surface repeats of the multimillion-ounce ore deposit at Stawell. Current focus is on two priority targets, Wildwood and Darlington, which both have potential to be repeats of the multi-million-ounce mineralisation at Stawell.

Executive Director Campbell Olsen said:

"It's highly encouraging to drill through a gold-mineralised structure on our way to the planned target. Visible gold is not as common in mineralisation around Stawell as it is elsewhere in Victoria. The intercept - a siliceous, stock-worked breccia - occurs in an unexpected position to the west of the historic Darlington Mine trend. However, the alteration and mineralisation appear to have geological similarities to the mine spoils at the historic mine, so an association between the two areas is possible. The significance of the intercept will only become clear when laboratory results are returned, but visible gold in this structure adds to the geological potential of the Darlington target, 6km north of the operating mine at Stawell."

The Darlington prospect lies in the highly gold-prospective corridor that runs from Stawell in the south, through Darlington, and is interpreted to continue to the north of Wildwood, 20 km to the north. Within the corridor, fault-disrupted blocks of basalt occur, and the margins of these basalts are the most likely areas to host a repeat (or repeats) of the multimillion-ounce mineralisation at Stawell (Figure 1). The southern section (from Stawell to Darlington) is termed the Browns Trend and includes semi-continuous (but faulted) basalt with demonstrated, associated, shallow gold mineralisation (Figure 1). The northernmost 2km of the Browns Trend is on NSM ground (EL007325 (Appendix 1)).

NSD057 (Table 1, Table 2, Figure 2) targets the western flank of non-outcropping basalt, first identified in NSD053 (<u>ASX:NSM 26 Jul 2023</u>). The hole tests the position where the vertical, south plunging Darlington mineralisation intersects the interpreted basalt. NSM will report on this when all required information (including logging and assays) is returned and interpreted.

NSD057 has intersected off-target mineralisation from 107.5 -110m downhole, including several occurrences of **visible gold (VG)** between 108.3-109m downhole (84m vertical) (Figure 2). The preliminary logging is summarised in Table 2. Located approximately 70m west of the historic Darlington Mine trend, the relationship between the new intercept and the Darlington trend is not yet clear (Figure 2). The closest drilling is 120m to the northwest (NSD053) which has no mineralisation in the same structural position. The structural position is also untested for 850m to the south of NSD057.

The off-target mineralisation is a multi-phase, siliceous, fault breccia sediment comprising hydrothermal quartz flooding and stockwork quartz veining, local laminar textures, weakly developed local stylolitic partitions and moderately (locally strongly) developed disseminated and veined arsenopyrite and pyrite. Visible gold occurs in quartz as disseminated, rare blebs to 1-3mm (Figure 3, Figure 4, Figure 5)

#### Cautionary note - visual estimates

NSM stresses and advises that the observations described in this release are visual, qualitative observations of mineralisation, and these cannot be used as an approximation or substitution to laboratory analytical results. Also see JORC Table 1 Section 1a and Section 2 (appendices) for additional, important information in relation to visual estimates. The information is from preliminary geological logging and discussion is based on down-hole observations – not true widths. Laboratory analysis will be undertaken following the completion of drilling, logging and sampling. The quantitative results will be released when complete, likely in April 2025.

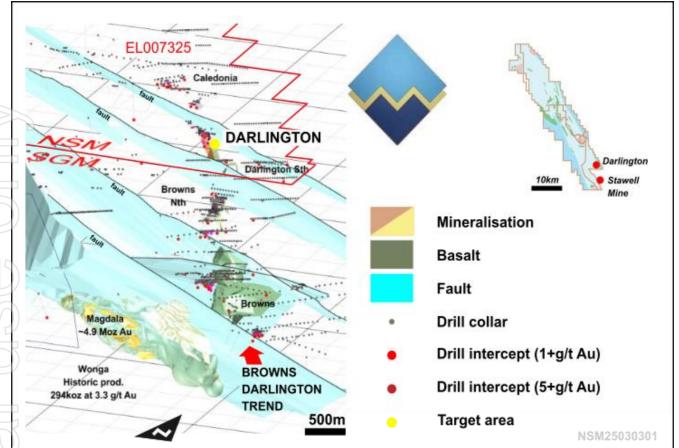


Figure 1 Regional geology, Darlington. Ortho-image looking down to the NNW along the Browns Trend.

#### Table 1 NSD057 - reported in this release (coordinates GDA94 MGA54)

$\sim$	Hole ID	Easting (MGA54)	Northing (MGA54)	RL (ASL)	Azi (true)	Dip (degrees)	Planned Depth (m)	Target depth (m)
1	NSD057	658,250	5,902,321	217	042	-55	305	210-280

#### Table 2 Preliminary geological logging, NSD057.

Ho	le ID		sting GA54)	Northin (MGA5	<u> </u>	RL (ASL)	Azi (true	e)	Dip (degrees)		nned oth (m)	Targe (m)	et deptl
NS	D057	658	,250	5,902,3	321	217	042		-55	305	5 210-280		280
DTabl		<i>minary</i> ; From	geological To	<i>logging, N</i> Interval	SD057.								/isible
Hol	e (I	m)	(m)	(m) *	Geology			Alter	ation		Sulphides**	(	Gold?
NSE	0057	99.00	104.00	5.00	Carbona	ceous Pelite		Silica	a wk Carbonate	wk	Po tr		
NSE	0057 1	.04.00	106.00	2.00	Carbona	iceous Pelite		Silica wk		Po tr			
NSE	0057 1	06.00	107.30	1.30	Pelite / S	ilicified Pelite		Silica	a wk Sericite wk		Po tr, Py tr		
NSE	0057 1	07.30	107.50	0.20	Fault zoi	ne / Silicified Pel	lite	Silica	a wk Sericite wk		Po tr, Py tr		
NSE	0057 1	.07.50	108.20	0.70	Silicified	Pelite / Fault zo	one	Silica	a wk Sericite wk		Ap tr,Po tr, Py	tr	
NSE	0057 1	08.20	108.30	0.10	Fault zoi	ne / Quartz		Silica	a md		Ap tr,Po tr, Py	tr	
NSE	0057 1	108.30	109.00	0.70	Quartz /	Fault zone		Silica	a md		Ap tr,Po md, P md		/G x4, 1 3mm
NSE	0057 1	09.00	110.00	1.00	Fault zone / Silicified Pelite		Silica md			Ap tr,Po tr, Py	tr		
NS	0057 1	10.00	114.70	4.70			Silica	a wk Sericite wk		Po tr			
NOL													
_	0057 1	14.70	114.90	0.20	Fault zoi	ne / Silicified Pe	lite	Silica	a wk Sericite wk		Po tr		

\*Down hole interval, true widths ~ 70-80% of down hole widths for NSD057.

\*\*Visual estimates. Ap = arsenopyrite, Py = pyrite, Po = pyrrhotite, tr=trace wk=weak, md=moderate.

#### ASX:NSM

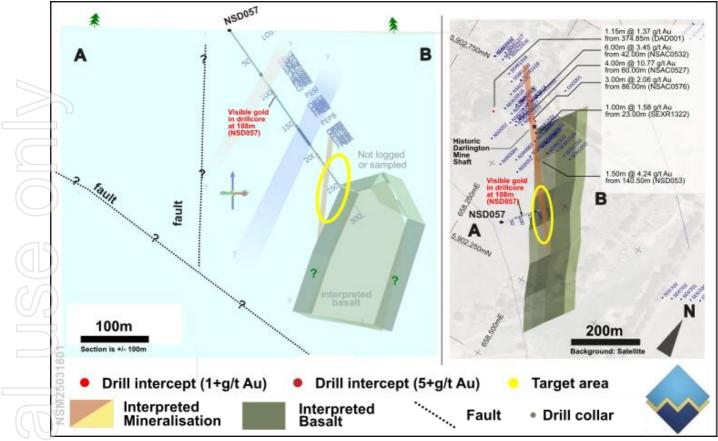


Figure 2 The Darlington Prospect - plan and section. A new zone with visible gold has been intersected west of the planned target. A-B marks the position of the cross section on the plan. A release detailing the entire hole will follow logging, assay, assay return and geological interpretation of results.



Figure 3 NDS057 – approx. 108.0m – gold (circled). A multiple-phase hydrothermal siliceous breccia includes multiple blebs of visible gold. scale bar in cm's.



Figure 4 NSD057 - approx. 108.2m – stock-worked, silicified brecciated, arsenopyrite-altered sample. The scale in cm.



Figure 5 NSD057 - approx. 108.4m - gold (circled) in hydrothermal breccia. silica-carbonate flooded and moderate arsenopyrite. Scale in cm.

The Company advised the commencement of drilling at the Darlington target in March 2024 (<u>ASX:NSM</u> <u>5 Mar 25</u>), following the completion of a program at Wildwood (<u>ASX:NSM 16 Jan 25</u>). Assay results and drilling discussion will be released for each target when results have been received for each area.

For further details on the project and targets, refer to the most recent investor update (<u>ASX:NSM 25</u> <u>Nov 24</u>) and announcements (<u>ASX:NSM 26 Nov 24</u>)) or contacts below. This announcement has been approved for release by the Board of Directors of North Stawell Minerals Ltd.

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#### **Competent Person's Statement**

The information that relates to North Stawell Minerals Exploration Targets, Exploration Results and Mineral Resources is based on information compiled by Mr. Bill Reid, a Competent Person who is a Member of The Australian Institute of Geoscientists (AIG) and Head of Exploration of North Stawell Minerals. Mr. Reid 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' (2012 JORC Code). Mr. Reid consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### Forward-Looking Statements

This announcement contains "forward-looking statements" within the meaning of securities laws of applicable jurisdictions. Forward-looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "believe", "continue", "objectives", "outlook", "guidance" or other similar words, and include statements regarding certain plans, strategies and objectives of management and expected financial performance. These forward-looking statements involve known and unknown risks, uncertainties and other factors, many of which are outside the control of NSM and any of its officers, employees, agents or associates. Actual results, performance or achievements may vary materially from any projections and forward-looking statements and the assumptions on which those statements are based. Exploration potential is uncertain if further exploration will result in the determination of a Mineral Resource, and it is uncertain if further exploration will result in the determination of a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and NSM assumes no obligation to update such information.

#### About North Stawell Minerals Limited:

North Stawell Minerals Limited (ASX:NSM) is an Australian-based gold exploration company, solely focused on discovering large scale gold deposits in the highly prospective Stawell Mineralised Corridor in Victoria.

The Company is exploring prospective tenements located along-strike of and to the immediate north of the Stawell Gold Mine which has produced more than five million ounces of gold. NSM's granted tenure has a total land area of 504 km<sup>2</sup>. NSM believes there is potential for the discovery of large gold mineralised systems under cover, using Stawell Gold Mine's Magdala orebody as an exploration model to test the 51km length of tenements - northerly strike extension of the under-explored Stawell Mineralised Corridor.

#### Stawell-type mineralisation - the Magdala orebody at Stawell

The multimillion-ounce Magdala orebody (or Stawell Mine) is owned and operated by Stawell Gold Mines (SGM) and makes an excellent model for exploration. The style of mineralisation is termed Orogenic Gold and has many similarities to other Victorian gold deposits (e.g. Bendigo, Ballarat, Fosterville) where the mineralisation exploits structures that are developing as the host rocks are compressed, folded and faulted. The mine is 3.5km long, approx. 400m wide and mined to depths of around 1,600m. The mineralisation is centred on a large buttress of doubly plunging basaltic rock (the Magdala "Dome"). Ore shoots are on – or proximal to – the margins of the basalt, occurring where the structures that control the mineralisation bend and warp around the basalt. The mine is still operational.

#### Exploring for Stawell-type mineralisation through cover

The Stawell Gold Mine was found in the 1850s where gold occurred close to the surface and was not obscured by a blanket of sedimentary cover. Over 80% of NSM's tenements are masked by sediments, but the underlying rocks and structures are similar to Stawell. Multiple repeats of basaltic "domes" are interpreted throughout the NSM tenements and elsewhere along the Stawell Corridor. The basalt domes - intrinsically associated with Stawell-type mineralisation – can be detected with geophysics and identified through the blanket of cover. New geophysical processing and acquisition by the Company is leveraging off the geophysics response to find "domes" as a pathway to finding the next, multimillion-ounce, shallow gold deposit north of Stawell

#### Other mineralisation potential

Multiple shears, thrusts, faults and folds occur through the NSM tenements. These also have the potential to host Orogenic Gold systems without basalt domes (more typical of Ballarat and Bendigo). However, they are more challenging targets through the covering sediments as they lack the geophysical signature of the "domes" found in Stawell-type mineralisation. Intrusion related gold (IRG) and thermal aureole gold (TAG) type deposits are possible as late granites intrude the folded rocks with potential to remobilise and upgrade existing mineralisation or be mineralised themselves. Volcanogenic-Hosted Massive Sulphides also occur in the Stawell Corridor. At surface, within the cover sediments, Heavy Minerals Sands are known to occur at impressive volumes.

#### Appendix 1: NSM Tenement Summary

Tenement	Status	Number	Area (km2)	Graticules <sup>1</sup>	Initial NSM holding	Earn-in potential
Wildwood	Granted	RL007051	50	50	51%	90%
Barrabool	Renewal	EL5443	182	194	51%	90%
Glenorchy	Granted	EL006156	10	18	100%	n/a
West Barrabool Wimmera Park	Granted	EL007419	37	40	100%	n/a
Granite	Granted	EL007182	4.5	9	100%	n/a
Deep Lead	Granted	EL007324	167	209	51%	90%
Germania	Granted	EL007325	54	82	51%	90%
Total granted			504.5	602		

<sup>1</sup> Exploration Licence areas in Victoria are recorded as graticular sections (or graticules). Graticules are a regular 1km by 1km grid throughout the state. The graticular sections recorded for an exploration licence are the count of each full graticule and each part graticule. If the tenement shape is irregular, the actual area (km<sup>2</sup>) is less than the graticular area.

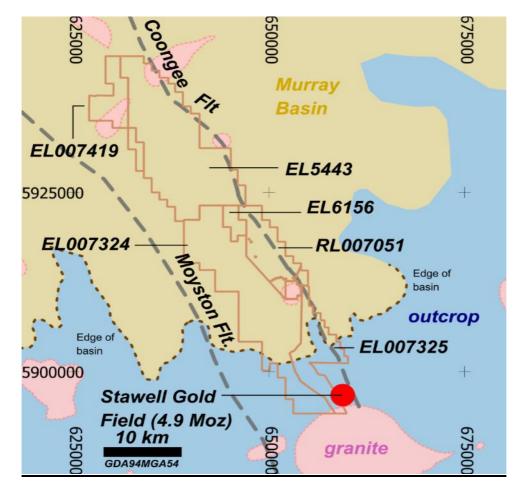


Figure 6 North Stawell Minerals - Tenements

Section 1a Sampling Techniques and Data - Visual estimates (this release) Section 1b Sampling Techniques and Data – Historic Data Section 2 Reporting of Results - Visual estimates (this release)

#### Section 1a. Sampling Techniques and Data - Visual estimates.

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

Criteria	JORC Code explanation	Commentary
Criteria Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such</li> </ul>	Diamond drilling returned NQ2 (47.6mm) core. No downhole tools have been employed, except for single shot surveys and re-survey by multi-shot on completion of drilling. Core recoveries, geology, structures and mineralisation are recorded when the drill core is properly logged (following a first pass logging process as the hole is drilled, mainly focused on geological breaks and any observed mineralisation. Sample intervals will principally be decided on variations in geology, alteration and mineralisation to ensure sampling correlates to observed geology. Multiple samples are taken across broader units, with peripheral samples honoring the geological unit breaks.
,0	as where there is coarse gold that has inherent sampling problems.	NSD is yet to be sampled. Certified reference material (CRM's – standards) and blanks will be inserted in the sample sequence for Quality assurance and control.
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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.).</li> </ul>	NSD057 was drilled with NQ core (47.6mm internal diameter) from 70m. Recoveries have been good (>95%) except across late puggy faults – all data is recorded. Each run of core is oriented to record the bottom of the vertical axis of the core. The uppermost, strongly weathered section of the hole (0-70m) was drilled with PCD.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	NSD057 is preliminary logged only. All diamond core will be logged capturing details of any core loss, if present, and recorded in the database. All drill depths are checked against the depth provided on the core blocks at the end of each rod and compared to actual core returned.
$\bigcirc$		No correlation between grade and recoveries is identified – NSD057 has not been sampled.
	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	First pass logging to monitor the drilling progress is focussed predominantly on geological and qualitative aspects of the core – lithology, contacts, alteration, mineralisation and structure. Quantitative capture (where appropriate (e.g. structure) of drill core is captured during final logging. Final geological logging of samples follows Company and industry common practice. Qualitative logging of samples included (but was not limited to); lithology, mineralogy, alteration, veining and weathering.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including</li> </ul>	Half core will be sampled from NQ2 diameter drill core.

	•	for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	adequacy and consistency. These included (but were not limited to), daily workplace inspections of sampling equipment and practices.
			Blanks and certified reference materials will be submitted with the samples to the laboratory as part of the quality control procedures.
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. 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 (e.g.	This announcement only includes visual estimates. No new assays are reported.
	•	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	)
Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes.	This announcement only includes visual estimates. No new assays are reported.
	٠	Documentation of primary data, data entry	
	٠	procedures, data verification, data storage	
	٠	(physical and electronic) protocols.	
	٠	Discuss any adjustment to assay data.	
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. Specification of the grid system used.	The drill collar has been determined with an Emlid kinematic GPS.
	•	Quality and adequacy of topographic control.	Topographic control is derived from 30m interpolated SRTM, DTM derives from a 2021 AGG survey and, when complete, an Emlid KGPS (+/-<0.1m)
Data spacing and distribution	•	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	Data spacing is appropriate for early-stage exploration. Data spacing and distribution is not sufficient to allow the estimation of mineral resources.
	•	procedure(s) and classifications applied. Whether sample compositing has been applied.	Data application does not include informing mineral resources and sample compositing is not yet required.
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	NSD057 is oriented perpendicular to the interpreted target structure, parallel to the regional trend.
 	•	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.	The orientation of structural events is based on the observed structures at the Stawell Gold Mine and may preclude unknown mineralising structural orientations. Significant rotation of controlling structures distal to Stawell cannot be discounted (but is not considered likely from trend of orientations observed in regional potential field data.
ク ユーーー			The mineralisation described in this report is new, and its actual orientation is yet to be determined. NSM cannot confirm that its assumptions are correct, but the orientation used accommodates most known mineralisation trends.
Sample security	•	The measures taken to ensure sample security.	The drill core is transported to the fenced and security-managed Stawell Gold Mines core facility at the end of each shift from the field. Samples are transported to Gekko Labs by NSM staff.
Audits or reviews	•	The results of any audits or reviews of sampling	No formal audits or reviews have been conducted other than to confirm the accurate identification of visible gold. This has been confirmed by a Boolean check with a portable XRF, confirming the presence of gold.

#### Section 1b Sampling Techniques and Data - Historic Drilling

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g., 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems.</li> </ul>	Historic results are from previous exploration conducted by past explorers including Rio Tinto Exploration, WMC Resources, Leviathan Corporation, Highlake Resources, Planet Resources and Stawell Gold Mines.
Drilling techniques	• Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., 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).	A variety of techniques have been used in historic drilling and includes regional lines of RAB or Air core drilling (357 of 732 historic holes) over identified structures or geophysical anomalies. Follow up historic RC drilling (233 holes) under AC anomalies occu is sound practice. Pattern drilled RC at Wildwood is likewise an industry standard for resource drilling. Forty-eight historic diamond holes (8,228m) were completed – mainly focused on near Mine targe in the south and in the Wildwood Project area (RL007501).
		Standard Industry techniques have been used for historic drilling where documented.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	For historic data, if available, drilling data recoveries (e.g., weights f historic AC/RC drilling and recoveries for historic diamond drilling are recorded. No tests for bias are identified as yet for historic results.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Geological logging of historic holes, where reviewed, follows indust widespread practice. Qualitative logging includes lithology, mineralogy, alteration, veining and weathering and (for core) structures. All historic logging is quantitative, based on visual field estimates.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Standard industry practices are expected to be in place. However, QAQC data is incomplete in the historic data. It is considered that appropriate analytical methods have been used by historic explorers. Historic core sampling is typically sawn half-core. Historic RC and AC samples are typically riffle split or spear sampled. Information is not always complete. Historic sampling is typically dry.

Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.</li> </ul>	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage</li> <li>(Physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Historic intercepts have not been verified by the Company. The data from WMC, Leviathan and Stawell Gold Mines has been verified as part of entering data into geological databases.</li> <li>No adjustments to assay data have been made.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Locations for historic collars have been captured in WGS84, AGD 66 and GDA94 projected coordinates or in local grids. All data is reprojected as GDA94 MGA54.</li> <li>Historic drill collars have been determined with multiple techniques, ranging from survey pick-up through differential GPS.</li> <li>Topographic data is based on generational topographic maps and/or survey pick-up. Topographic control, for regional exploration, has not been validated.</li> <li>Future use of data will verify recorded elevations against high- resolution topographic data acquired by NSM.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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</li> <li>procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Historically, variable drill hole spacings are used to test targets and are determined from geochemical, geophysical and geological data.</li> <li>Historic regional and geochemical drilling (AC) is drilled on strike perpendicular fences, with approx. 100m hole spacings and 100-400m line spacing.</li> <li>Historic RC sampling is generally specifically targeted to follow up AC results. Minor RC fences are drilled, on 30-200m spacing.</li> <li>Historic diamond drilling is located to follow up on specific prior results or targets.</li> <li>Historic data in the footprint of the NSM tenements were designed and executed as regional exploration (except at Wildwood, RL007051). The historic drilling data has not been reviewed for its appropriateness to inform Mineral Resource Classification. Wildwood is outside the discussion required for this announcement.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	The historic drill orientation is perpendicular to the regional geology and known mineralised trends previously identified from earlier drilling.
Sample security	The measures taken to ensure sample security.	Sample security has not been reviewed for the historical data.

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure	• Type, reference name/number, location and ownership including agreements or material issues with third	Current tenements are summarised in Appendix 1 of the announcement. Historic tenements are identified from the Victoriar
status	parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites,	Government Geovic online spatial resource.
	<ul><li>wilderness or national park and environmental settings.</li><li>The security of the tenure held at the time of reporting</li></ul>	EL007325 is in the 4 <sup>thd</sup> year of its first 5-year grant. The Victorian regulations and Act allow for 2 more 5-year grants over the ground
	along with any known impediments to obtaining a licence to operate in the area.	The project area occurs on freehold land. Minor Crown Land (>3% and Restricted Crown Land (>1%) is identified. All areas are accessible and appropriate land access requests and agreements are place. A significant area of special Crown Reserve ("Iron Boxwoo occurs 250m west of the Darlington target and trend. This does not impact exploration – the mineralisation trend is parallel to the boundary.
		The Victorian Governments' Geovic spatial online resource does n identify any material cultural, environmental or historic occurrence
		The western section of EL007325 is overlain by Crown Reserve la parcels (Box Ironbark conservation areas). No access to this area is required for any of the proposed drilling.
		EL007325 is held by Stawell Gold Mines (SGM). North Stawell Minerals has an earn-in agreement with SGM. Initial Interest is 51 Up to 90% earn-in can be achieved on meeting agreement condition
		Tenement security is high, established in accordance with the Victorian Mineral Resources Act (MRSDA) and Regulations (MR(SD)(MI)R 2019).
		Victorian Exploration licences are granted for a 5-year initial term with an option to renew for another 5 years. Compulsory relinquishments are as follows; end of year 2 - 25%: end of year 4 35%: end of year 7 - 20%: end of year 9 - 10%. A final 5-year rene (total 15 years) is possible by the Regulations.
Exploration done by other parties `	• Acknowledgment and appraisal of exploration by other parties.	The Tenure area has been explored in several campaigns since the 1970's, principally by companies related to Stawell Gold Mines an its predecessors (initially WMC Resources in the 1970's, Leviatha Resources and then subsequent owners).
		Rio Tinto Exploration, Planet Exploration, Highlake Resources an Iluka Resources have also held parts of the tenement historically.
		Public data available on exploration programmes has been downloaded from the Victorian State Governments' GeoVic webs and sometimes describes exploration strategy, which is consistent exploring for gold mineralisation under shallow cover into structur targets generated from available geochemistry and geophysics.
		Although NSM has reviewed and assessed the exploration data, it only limited knowledge of the targeting and planning process and, therefore, has had to make assumptions based on the available historical data generated by these companies. However, the methodology appears robust.
		Work by Iluka was for Heavy Minerals exploration and is not mat to gold exploration.
		Most programs include regional lines of RAB or AC drilling (13 o holes for 2927m) around the immediate environs of the historic Darlington Mine
		A single historic diamond hole is drilled into Darlington (DADD0 209.57m), located below the historic mine shaft. The hole was dril to the west
		In prior programs NSM has drilled 22 AC holes for 4659m betwee 2022 and 2023. In 2023, 2 diamond holes were drilled into the

#### Section 2 Reporting of Exploration Results – Visual estimates (this release)

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		In the far south of tenement EL007324 and EL007325, exploration is typically testing for fault-repeats of the Stawell-type mineralisation, centred on magnetic anomalies. Basalt 'dome' analogies were identified with minor associated gold mineralisation.
Geology	• Deposit type, geological setting and style of mineralisation.	The project areas are considered prospective for the discovery of gold deposits of similar character to those in the nearby Stawell Gold Mine, particularly the 5Moz Magdala gold deposit located over the Magdala basalt dome. The Stawell Goldfield has produced approximately 5.3 million ounces of gold from hard rock and alluvial sources. More than 2.6 million ounces of gold have been produced since 1980 across more than 3 decades of continuous operation.
		Orogenic Gold occurrences are possible away from the basalt domes and, until 2023, no basalt associated with the mineralisation was identified. Once recognised, the Darlington target has been explored against a "Mariners" model. Mariners is an historically mined splay in the roof of the Magdala Mine which, at depth, connects with the basalt-related, Stawell-type gold system.
		The geological setting is a tectonised accretionary prism on the forearc of the Delamerian-aged Stavely Arc active plate margin. A later (Benambran-aged) gold mineralising event exploits the pre-existing geology and structure.
		Elements of the subducting tholeiitic basaltic ocean crust are incorporated into the accretionary pile and are important preparatory structures in the architecture of Stawell-type gold deposits.
		Mineralisation is a Benambran-aged hydrothermal (orogenic gold) overprinting event – penecontemporaneous with other major mineralisation events in western and central Victoria (e.g., Ballarat, Bendigo, Fosterville).
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level–elevation</li> </ul> </li> </ul>	The report includes no new drilling assay results. Historic results are summarised as assays extracted from a historic, managed, validated database solution (Datashed), and associated procedures for QAQC.
	<ul> <li>elevation or RL (Reduced Level–elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> </ul>	Historic easting and northings are captured as WGS84, AGD66 and GDA94 coordinates. All are transformed to GDA94MGA54S for the collar tables. Original coordinates are preserved in the database.
		Drill collar elevation is defined as height above sea level in metres (RL). Historic RLs are validated against 30m interpolated SRTM. Deeper drill holes were drilled at an angle deemed appropriate to test the local structure and stratigraphy and is tabulated. Regional
	this is the case.	reconnaissance AC and RAB holes are typically vertical. Hole length of each drill hole is the distance from the surface to the end of hole, as measured along the drill trace.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.	Available drill hole data is summarised in the body of this report.
	• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should	Historical intercepts are calculated as weighted average gold grades (weighted in sample interval). Up to 2m of internal dilution is permitted (>1g/t Au). No external dilution is applied.
	<ul><li>be stated and some typical examples of such aggregations should be shown in detail.</li><li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li></ul>	If appropriate, sub-intervals of higher grade (approx. ten times total intercept) are broken out with a prefix "includes"
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul>	The geometry of the Darlington mineralisation is effectively vertical. Angled drill holes are designed to intersect this target with a perpendicular azimuth and ~60 degree vertical intersect angle and can be anticipated to return downhole widths 20-30% more than true widths.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should	Refer to the body of the announcement.

	include but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	NDS057 is displayed in context with surrounding drillholes. Historic results are from along the length of the Darlington trend and represenvariable grades that are representative of the assay results. Locally, high grade and/or important results are highlighted as they represent key results in the projects history and frequently contribute to the decision for further work
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.	Refer to the body of the announcement.
Further work	• The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).	Discussion on further work will be possible when the current drillho is clogged and quantitative assays returned for the laboratory.
	• Diagrams clearly highlighting the areas of possible	A second planned diamond hole is currently drilling.
	extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The shallow position of the intercept in NSD057 and the thick weathered saprolite is likely best suited to air drilling. A program to assess the new mineralisation trend will be designed during the next Quarter. The shallow position and the silicification of the intercept suggest IP surveying may be appropriate to delineate a trend.
		Hi resolution, multi-element geochemistry, appropriate to be sampled and returned assays will also be considered.
		The location of the Darlington target may be amenable to winter