North Stawell Minerals



29 April 2025

CSIRO Research Project Refines Exploration Targeting

HIGHLIGHTS

- A Kick-Start project with CSIRO, Australia's National Science Agency, has centered on the possible pathways for gold-bearing mineralisation throughout NSM's tenement portfolio.
- The work concentrated on a "3D plumbing system" beneath the Stawell Corridor identifying which parts of faults may have focused gold-bearing fluids during the gold-mineralisation events.
- This study combined with existing high-resolution data, target review and surface exploration continues to refine NSM's minerals system approach to determine regional and local prospectivity.
- Drilling to the west of Darlington has tested one of the modelling targets, where fault dilation (this announcement) and fluid-flow on an interpreted basalt margin both indicate favourable structural sites for gold mineralisation on an interpreted basalt 6km north of Stawell. Results will be released upon completion. (ASX:NSM 5 Mar 25).

North Stawell Minerals (ASX:NSM) is pleased to announce on-going research supporting in-house exploration at its Stawell Corridor Project, Victoria, Australia. This second Kick-Start project (<u>ASX:NSM 14 May 24</u>) in collaboration with the Mineral Resources team at CSIRO, Australia's National Science Agency, has expanded understanding of the deep structures under the Stawell Corridor necessary to transport gold mineralisation. The research (Schaubs, Berni, and Poulet

(**2025**); CSIRO Report EP2025-0314) integrates with other datasets at NSM to assist in cost-effective exploration for Stawell-type gold mineralisation.

Executive Director Campbell Olsen said:

"NSM has a strong track record of applying geophysics and remote methods to its exploration targeting and planning. In 2021, NSM completed a high-resolution airborne geophysics program revealing prospective rocks beneath a blanket of Murray Basin sediments, highlighting new potential basalt targets, some of which have been drilled and confirmed as gold-mineralised.

We have also developed pre-drilling methodologies to cost-effectively search for Stawell-type mineralisation. The method combines geophysical modelling and numerical modelling to determine the sub-surface geology most likely to focus gold mineralisation (based on their orientation, slope, shape and structural history and similarity to Stawell)(<u>ASX:NSM 7 Nov 22</u>, <u>31 Jul 23</u>). The modelling work was necessary to refine targets, as geophysics indicates up to 60km strike length of basalts to explore for areas hosting Stawell-like gold mineralisation in NSM's tenements.

Now, we've added another layer of data to assess basalt prospectivity for Stawell-type mineralisation. In a second collaborative project with CSIRO, we've modelled the fault architecture on the NSM tenements to determine which faults are most likely to channel deep-sourced, gold-bearing fluids towards identified basalts, increasing potential for mineralisation. There is a significant correlation between existing geo-data and the modelled data, as well as some exciting new, or upgraded targets.

In our most recent drill campaign, we've targeted one of the highest priority areas where there is coincident modelled fault dilation (this announcement) and modelled fluid-flow around the interpreted basalt above the fault (<u>ASX:NSM 7 Nov 22</u>). Details and results will be reported when available. The target, immediately west of Darlington, has been described in prior announcements (<u>ASX:NSM 5 Mar 25</u>)."

NSM's Stawell Corridor Project includes 504 km² of highly prospective ground immediately north and along strike of the Stawell Gold Mine, operated by Stawell Gold Mines (historic and modern production totaling 5.3 Moz Au (reference). 6km north of the mine, the prospective corridor disappears under a thin blanket of unmineralised Murray Basin sediments (termed "cover"). The cover introduces additional exploration challenges but also preserves the potential for very shallow repeats of the multimillion-ounce deposit at Stawell.

An advantage for NSM's exploration for Stawell-type gold through cover in Victoria is that unique to Stawell in Victoria, large slabs of basalt are faulted into the geology prior to the gold mineralisation event. These basalts can be detected and mapped in 3D through cover, and at depth using geophysics. Historic research at the Stawell Gold Mine (Miller et al 2003, Wilson et al 2020 and <u>ASX:NSM 25 Nov 24</u>) demonstrates that gold mineralisation warps and wraps around the basalts creating localised areas of dilation where gold ores are focused.

Important considerations for exploration include which parts of the basalt margin are most likely to focus mineralisation and which of the basalts are most likely to interact with gold-bearing fluids?

Answering the first consideration required the acquisition of high-resolution gravity data to map the basalts (ASX:NSM 24 Mar 21, ASX:NSM 8 Jun 21, ASX:NSM 29 Oct 21); modelling of the approximate 3D basalt shapes (termed Inversion Modelling) (ASX:NSM 29 Oct 21); and numerical modelling (ASX:NSM 7 Nov 22) of the 3D basalt shape (ASX:NSM 29 Oct 21) based on the structural evolution of the deposit at Stawell (Miller et al 2003, Wilson et al 2020 and ASX:NSM 25 Nov 24). The previously completed numerical modelling work, also completed in collaboration with CSIRO (ASX:NSM 7 Nov 22, Schaubs 2023), calculated many of the factors that determine where gold mineralisation is most likely to be focused based on historic research in the Stawell Zone (Schaubs et al 2011) and the 3D modelling results. Modelled parameters included permeability, porosity, shear failure, shear strain, tensile failure and volume strain (Schaubs 2023).

But the gold-bearing fluid must reach the basalt first – the second consideration is addressed below.

The gold event in Western Victoria occurred around 440-420 Ma and coincided with the structural shortening and thickening of ocean basalts with overlying oceanic sediments (Cayley and Taylor 2021). As the rocks shortened and thickened (think of the bonnet of a car in a crash), a series of faults were developed to accommodate crustal shortening (Figure 1). Heating and pressurising of the deeper rocks sweated out fluids (and gold) which migrated upwards (by exploiting dilated fault structures). Research at Stawell (Wilson et al 2020, Miller et al 2006) demonstrates that the compression directions during the gold event are east-west and NNW-SSE The orientation of the faults during the gold event determines whether they are pushed shut (compressed) or pulled open (dilated) during the gold event – the gold-bearing fluids preferentially channel through the dilated faults, increasing the likelihood of depositing gold mineralisation.

To determine the capacity of faults to channel deep-sourced mineralised fluids to the target basalts, NSM collaborated with CSIRO through the Kickstart grants program (<u>about</u>, <u>ASX:NSM 14 May 24</u>). They applied regional to local scale data modelling, fault slip tendency calculations, fluid flow numerical models along with structural, architectural, and lithological criteria to rank the regional basalt prospects for gold mineralisation. The work incorporated company and pre-competitive data. The work is an important information source to expand NSM's minerals system approach to determine regional and local prospectivity (McCuaig et al 2010, Hronsky and Groves 2008, Groves et al 2020) considering all criteria required to generate, transport, concentrate and deposit mineralisation.

Note: The CSIRO fault modelling is a measure of the likelihood of areas to be channeling mineralised fluids during the mineralisation event, and the results are relative. The results are not, and should not be interpreted as, an indication of mineralisation, and targets require additional work (drilling, etc.) to confirm the results derived from modelling.

ASX:NSM

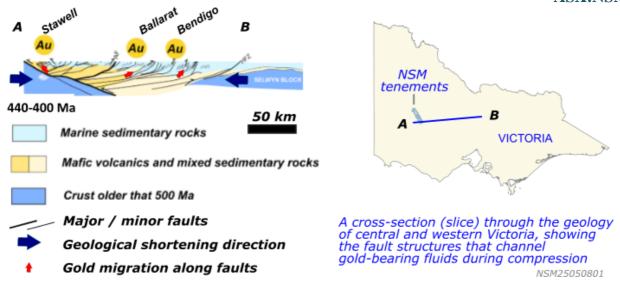


Figure 1 Cross section through western and central Victoria showing faults

The modelling indicates the Coongee Fault (Figure 2) is the most likely fault to be a conduit for mineralisation, agreeing with historical geological observation that the far eastern part of the Stawell Corridor is most prospective. However, within the length of the Coongee Fault, three sub-regions are highlighted (Figure 3). These include Darlington-Caledonia, Lubeck/Lubeck Tip, and Crams (in the far north of the NSM tenements (and not currently a priority target). At Darlington, Lubeck and Lubeck Tip, NSM also has 3D inversion modelling and numerical modelling of fluid flow to review in conjunction with the new fault dilation data.



Figure 2 Stawell Corridor and features mentioned in text

Results for fault dilation at NSM's Wildwood – and along much of the Coongee fault are also high but are lesser to the prospects listed above. Other faults throughout the NSM tenement portfolio are also modelled, with additional faults modelled for their likelihood to focus gold-bearing fluids (Figure 3).

ASX:NSM

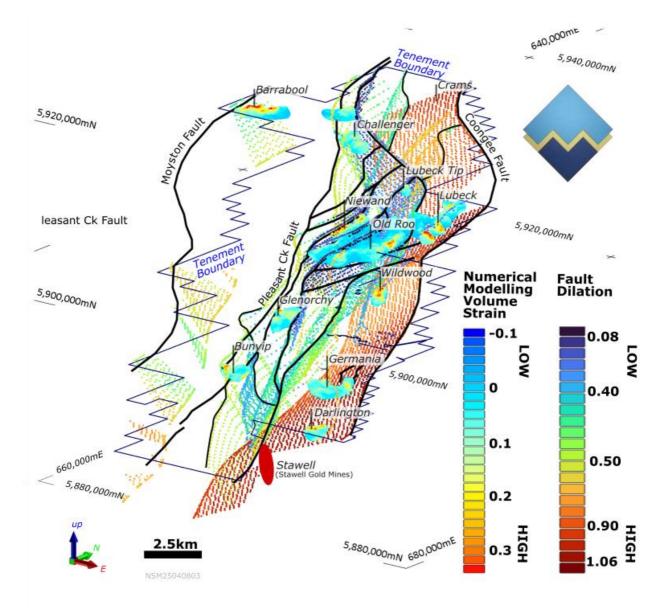


Figure 3 Fault dilation modelling and basalt fluid-flow modelling. Orthographic view - looking down to the northwest.

A summary table of prioritisation of interpreted basalts based on fault dilation modelling, numerical modelling of fluid flow around of predicted basalt shapes, and geological controls are presented below (Table 1, Figure 4). NSM continues to review this data as potential guidance for future exploration.

NB. Numerical modelling of structural controls on mineralisation is conceptual in nature and serves as a possible guide to refine exploration targeting. It does not replace confirmatory exploration (drilling, etc.) and is not a proxy for quantitative gold results.

Table 1 Prospectivity summary: multiple criteria (EX0 – Extensive drilling. EX4 no prior drilling)

	Exploration Level	First or	der fault	:	Slip tende	ency of fault	s	Bas	alt orier	itation	Vol s	train	Carbonace	us rocks	Ranking
	20101	Moyston	Coongee	<0.3	0.3-0.45	0.45-0.65	0.65		Λ	L	>0.01	>0.02	Contacting	present	
		0.75	1	0.5	0.75	0.75	1	1	0.75	0.5	0.1	0.1	1	0.75	4.2
Wildwood	EX0		1		().75			1		0.1	0.1	1		4.0
Darlington	EX1		1			1			0.75		0.1	0.1	1		4.0
Forsaken	EX1		1		(0.75			1		-	-	1		3.8
Germania	EX1		1			1			0.5		0.1	0.1	1		3.7
Old Roo	EX1		1			0.5			1		0.1	0.1	1		3.7
Pleasant Creek	EX1		1		(0.75			0.5		-	-	0		2.3
Ashens	EX2		1		(0.75			1		-	-	1		3.8
Challenger	EX2		1		(0.75			1		0.1	0.1	0.75		3.7
Lubeck	EX3		1		(0.75			1		0.1	0.1	1		4.0
Glenorchy	EX3		1		(0.75			1		0.1	0	1		3.9
Lubeck Tip	EX3		1		(0.75			1		0.1	0	1		3.9
Buyinp	EX3		1		(0.75			1		0.1	0.1	0.75		3.7
Wimmera Park	EX3		1		(0.75			0.75		-	-	1		3.5
Bismark	EX4		1		(0.75			0.75		-	-	1		3.5
Holts	EX4		1		(0.75			0.75		-	-	1		3.5
Marlu South	EX4		0.75		(0.75			0.75		-	-	1		3.3
Barrabol	EX4		0.75		(0.75			0.5		0.1	0.1	0.75		3.0

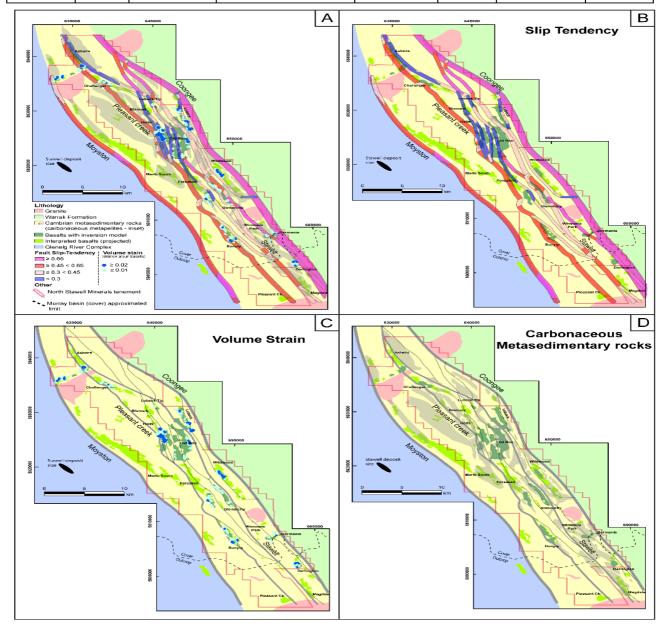


Figure 4 Prospectivity assessment, NSM tenements

ASX:NSM

NSM has drilled one of the interpreted high-volume strain (dilation) zones from CSIRO modelling at Darlington as part of the recently completed drill program. The work on the drill core is not completed. Details and results will be announced when the hole is logged, interpreted and assays are submitted and returned. Prior discussion (and planned work) is already announced (<u>ASX:NSM 5 Mar 25</u>) (Figure 5). A positive result would significantly increase confidence that the CSIRO research will contribute to cost, time and targeting-effectiveness for exploration within the North Stawell tenements to find a potential repeat of the impressive mineralisation at Stawell.

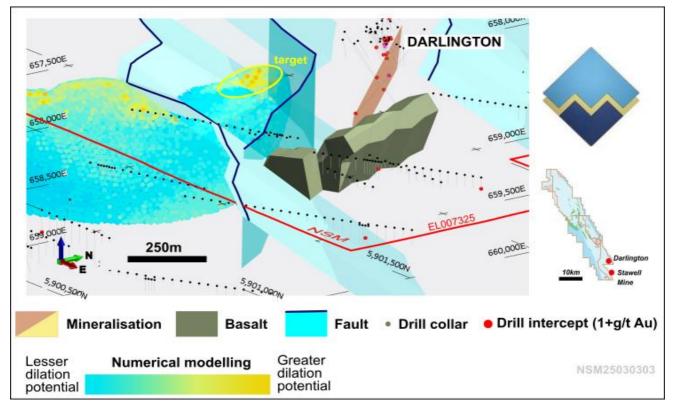


Figure 5 Geophysical target west of Darlington with coincident modelled fault dilation and modelled basalt-margin fluid-flow potential.

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Skladzien, P.B. & Cayley, R.A., **2023**. Central-Western Victoria Regional Fault Data Package, Version 1.0. Geological Survey of Victoria Technical Record 2023/3. Department of Energy, Environment and Climate Action, 20 pp.

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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 conceptual in nature. There has been insufficient exploration to define a Mineral Resource, and it is uncertain if further exploration will result in the determination of 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 in excess of five million ounces of gold. NSM's granted tenure has a total land area of 504 km². 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 centered 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.

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Appendix 1: NSM Tenement Summary

Tenement	Status	Number	Area (km2)	Graticules ¹	Initial NSM holding	Earn-in potential
Wildwood	Granted	RL007051	50	50	51%	90%
Barrabool	Granted	EL5443	182	194	51%	90%
Glenorchy West	Granted	EL006156	10	18	100%	n/a
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

¹ 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 is the count of each full graticule and each part graticule. If the tenement shape is irregular, the actual area (km²) is less than the graticular area.

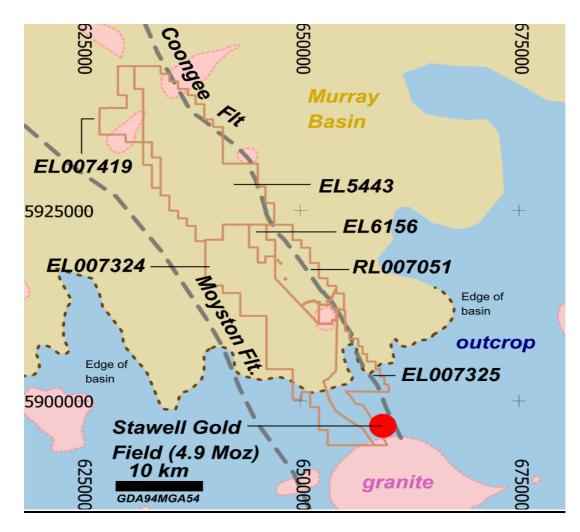


Figure 6 NSM tenements

JORC Table 1

Section 1a Sampling Techniques and Data - Fault Modelling

Section 1b Sampling Techniques and Data - Drilling

Section 2a Reporting of Exploration Results – Modelling

Section 2b Reporting of Exploration Results – Drilling

Section 1 Sampling Techniques and Data - Fault Modelling

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. 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 (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. 	The data is digital, occurring as a CSV point cloud draped onto the interpreted shapes of identified major faults. Point spacing is approximately 200- 400 m, both horizontally and vertically. A total of 16,598 data points are generated in the footprint of the NSM tenements (See appendix 1). Data points are based on interpreted fault geometries. These 3D shapes are reliant on geophysical interpretation of faults and extrapolation of known fault orientations. Interpretations are derived in-house (e.g. upward continued potential field data (worming), edge- detection and structural detection processing, and from pre-competitive date (e.g. Skladzien & Cayley 2023 – see references).
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.). 	drilling.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure the 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. 	
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level o detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. 	Not applicable to this research f

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	•	The total length and percentage of the relevant intersections logged.	
Sub-sampling techniques and sample preparation	•	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.	Not applicable to this research
	•	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 analyincludeding instrument make and model, reading times, calibrations factors applied and their derivation, etc. 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. The verification of significant intersections by either	Not applicable to this research
sampling and assaying	• • • • • • • •	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. 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. Quality and adequacy of topographic control.	MGA54). Accuracy near-surface is expected to be high relative to the intended use of the data for modelling, with increasing chances for inaccurate data at depth as uncertainties increase. Accuracy – particularly RL's of data points are dependent on fault interpretation, which will include inaccuracies. However, for the scale of the project and application of data, these errors are expected to be permissible (within error). Fault geometries and modelling, which dictate data points in 3D have been modelled or mapped over several campaigns by internal and external groups (SGM, NSM, Nordic, Fathom, GSV geophysics, GSV 1:100k mapping) Surface control is excellent, both as 30m interpolated SRTM data and high-resolution DEM
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	captured as part of a AGG survey flown in 2021. Point spacing is approximately 200-400 m, both horizontally and vertically – draped onto the modelled fault geometries.

	•	grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	
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.	Data is gridded across all interpreted fault structures. Structures are roughly perpendicular to the major structural events being assessed in the study and are not expected to (or be capable of) introduce bias to the numerical modelling.
	•	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.	
Sample security	•	The measures taken to ensure sample security.	Not applicable to this research
Audits or reviews	٠	The results of any audits or reviews of sampling	Not applicable to this research.

Section 1b Sampling Techniques and Data - Drilling

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. 	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.
	 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 tha are Material to the Public Report. 	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 t breaks and any observed mineralisation.
	 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 problem 	Multiple samples are taken across broader units, with peripheral samples honoring the geological unit
		Results for the drillhole discussed in text (NSD058) is yet is yet to be returned. Certified reference material (CRM's – standards) and blanks will be inserted in the sample sequence for Quality assurance and control.
Drilling techniques	 Drill type (e.g. core, reverse circulation, open- hol hammer, rotary air blast, auger, Bangka, sonic, et 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.). 	 c) diameter) from 70m. Recoveries have been good (>95%) except across late puggy faults – all data is
Drill sample recovery	 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 	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.

	have occurred due to preferential loss/gain of fine/coarse material.	No correlation between grade and recoveries is to be determined pending asssays
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. 	First pass logging to monitor the drilling progress is
	 Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	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	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary 	No results for NSD058 has been conducted at the time of release.
	 split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	When NSD058 is logged and sampled (late-Mar 2025) detailed diamond core logging, with digital capture, will be conducted for 100% of the core.
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 	Half core will be sampled from NQ2 diameter drill core.
	 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. 	Company procedures will be followed to ensure sub- sampling 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. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	This announcement includes no discussion of the drillhole. It is discussed in ASX:NSM 5 Mar 25 as a target. No new assays are reported.
Verification of sampling and assaying	 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. Discuss any adjustment to assay data. 	 This announcement only includes hole target information. No new assays are reported.
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. 	The grid system used is (Projection: MGA54, Horizontal datum: GDA94, Vertical datum: EGM96 geoid)
	 Specification of the grid system used. Quality and adequacy of topographic control. 	Hole ID NSD058 Darlington (west) Easting 658251 Northing 5902312 RL 217.09 Azimuth 241 Dip -55

			Assays : none
			The drill collar has been determined with an Emlid kinematic GPS.
			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	Data spacing is appropriate for early-stage exploration.
	•	grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Data spacing and distribution will not sufficient to allow the estimation of mineral resources.
	•		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	NSD058 is oriented perpendicular to the interpreted target structure, parallel to the regional trend.
		deposit type.	The orientation of structural events is based on the observed structures at the Stawell Gold Mine and
	•	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.	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.
			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 2a Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	The research occurs across all NSM held and operated tenements. Current tenements are summarised in Appendix 1 - Table 1 of the announcement. Historic tenements are identified from the Victorian Government Geovic online spatial resource. JV arrangements on RL007051, EL007324 and EL007325 are summarised in Appendix 1.
		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 second renewal (years 11-15) is at departmental discretion.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	
		Inversion modelling of AGG data. ~The inversions were computed by Nordic Geoscience Pty. Ltd. ~The aim and scope of the inversion was to produce 3D magnetic susceptibility and density models for selected areas, in order to identify preferential sites for gold mineralisation and occurrences, and in order to assess thickness of cover. ~ The AGG and TMI inversions were carried out using Geoscience Analyst Pro (version 3.3) from Mira Geoscience. ~For the AGG inversions data was provided from

the 2021 FALCON North Stawell survey. ~For the TMI inversions data was provided from three airborne TMI surveys: 2412_Stawell, Glenorchy, and 2526_Rowell

Fault geometries

Fault geometries were determined using multiple sources, primarily derived from potential field data (particularly government magnetics (2001) and AGG gravity (2021). Derivative interpretation and fault derivations are multi-authored, including Hronsky (2021), Fathom geophysics (2021), Nordic geosciences (2021/2022) and the GSV (Skladzien and Cayley 2023).

Other data (non-geophysics).

The North Stawell Minerals tenements have been explored in several campaigns since the 1980's by Stawell Gold Mines (initially WMC Resources and then SGM's subsequent owners). There is public data available on exploration programmes and NSM has much of this data in electronic and paperbased formats.

Public data available on exploration programs has been downloaded from the Victorian State Governments' GeoVic website and sometimes describes exploration strategy, which is consistent with exploring for gold mineralisation under shallow cover into structural targets generated from available geochemistry and geophysics.

Although NSM has reviewed and assessed the exploration data, it has only limited knowledge of the targeting and planning process and, therefore, has had to make assumptions based on the available historical data generated by historic companies. However, the methodology appears robust.

Rio Tinto Exploration, Plante Exploration, Highlake Resources and 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 website and sometimes describes exploration strategy, which is consistent with exploring for gold mineralisation under shallow cover into structural targets generated from available geochemistry and geophysics.

Although NSM has reviewed and assessed the exploration data, it has only limited knowledge of the targeting and planning process and, as a consequence, 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 material to gold exploration.

		Historic and modern work includes: 142,000m AC (2,422 holes) 34,358m RC (449 holes) 47,261m DD (211 holes) 10,003 geochem samples 504km ² high-res Magnetics 504km ² high-res Gravity (AGG) 211km ² Inversion modelling
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 5.3Moz Magdala gold deposit located over the Magdala basalt dome. More than 2.3 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.
		Wonga-style mineralisation is possible, interpreted as Intrusive-Related Gold, and may be either an upgrade on prior (orogenic mineralisation) or a fresh mineralisation event.
		The geological setting is a tectonised accretionary prism on the forearc of the Delamerian-aged Stavely Arc active plate margin.
		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).
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all	Reported results are summarised as assays are
	Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level–elevation elevation of RL (not collar) of the drill hole	Drill collar elevation is defined as height above sea level in metres (RL).
	above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length.	Drill holes were drilled at an angle deemed appropriate to the local structure and stratigraphy and is tabulated in Table 2 of this release.
	 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. 	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 	No drilling results reported in this announcement. Historic results
	 stated. 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 	Intercept summaries (composites), where presented, are determined from the historic assays using the same criteria as NSM summarised data.

	• The assumptions used for any reporting of metal dilution.	to 2m of internal dilution and no external
	equivalent values should be clearly stated. No top c	cuts are applied.
	reported	al 1 g/t Au or greater lower cut-off is d as being potentially significant in the of this report.
	No meta	al equivalent reporting is used or applied.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the Not rele 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 (e.g., down hole length, true width not known'). 	
Diagrams	Appropriate maps and sections (with scales) and Diagram tabulations of intercepts should be included for any annound significant discovery being reported These should report, i include but not be limited to a plan view of drill hole orthogra collar locations and appropriate sectional views. follow d	ncluding locations, plans and sections and aphic images with enough information to iscussion in the text and the methodologies mine fault slip and dilation (CSIRO Report
Balanced reporting		results are presented in the announcement nderlying research report (CSIRO Report 0314).
Other substantive exploration data	should be reported including (but not limited to): and disc geological observations; geophysical survey The physical results; geochemical survey results; bulk samples – dilation size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical adequat	ant exploration data is shown in diagrams ussed in text. sics and methodology to determine slip and of faults is described in detail in the ing report (CSIRO Report EP2025-0314) and ely in this announcement to understand oration value of the work.
Further work	 tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlight the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	earch presents some interesting tives on the role of regional/local scale the possible channelling of auriferous basalts for potential ore system ment. ential re-prioritisation of some areas is ed in the text. Tabulated results based on tivity assessment are tabulated in the text.
	model/n targets i Mar 25). complet submitte models a	s drilled one of the inversion numerical model/fault dilation coincident n its 2025 diamond program (ASX:NSM 5 . Logging and sampling of the hole are not red and will be announced when the data is ed and returned. This work will test the and targeting and will help constrain the sical parameters for interpretation.

Section 2a Reporting of Exploration Results – Modelling

Criteria	JORC Code explanation	Commentary
Criteria 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,	Commentary Current tenements are summarised in Appendix 1 of the announcement. Historic tenements are identified from the Victorian Government Geovic online spatial resource. EL007325 is in the 4 ^{thd} year of its first 5-year grant. The Victorian regulations and Act allow for 2 more 5-year grants over the ground. 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 in place. A significant area of special Crown Reserve ("Iron Boxwood") 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 not identify any material cultural, environmental or historic occurrences. The western section of EL007325 is overlain by Crown Reserve land 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 conditions. 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 9 - 25%: end of year 4 - 35%: end of year 7 - 20%: end of year 9 -
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 and its predecessors (initially WMC Resources in the 1970's, Leviathan Resources and then subsequent owners).
		Rio Tinto Exploration, Planet Exploration, Highlake Resources and 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 website and sometimes describes exploration strategy, which is consistent with exploring for gold mineralisation under shallow cover into structural targets generated from available geochemistry and geophysics.
		Although NSM has reviewed and assessed the exploration data, it has only limited knowledge of the targeting and planning process and, therefore, has had to make assumptions based on the available historical data generated North Stawell Minerals Ltd

		by these companies. However, the methodology appears robust.
		Work by Iluka was for Heavy Minerals exploration and is not material to gold exploration.
		Most programs include regional lines of RAB or AC drilling (13 of 14 holes for 2927m) around the immediate environs of the historic Darlington Mine
		A single historic diamond hole is drilled into Darlington (DADD001 – 209.57m), located below the historic mine shaft. The hole was drilled to the west
		In prior programs NSM has drilled 22 AC holes for 4659m between 2022 and 2023. In 2023, 2 diamond holes were drilled into the southern trend, and total 428.8m.
		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	 A summary of all information material to the understanding of the exploration results including a tabulation of the following 	The report includes no new drilling assay or logging results – but mentions a hole that has been drilled (NSD058).
	information for all Material drill holes: o easting and northing of the drill hole collar	Historic results are summarised as assays extracted from a historic, managed, validated database solution (Datashed), and associated procedures for QAQC.
	 elevation of RL (Reduced Level- elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth 	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.

	•	 hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	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 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	Available drill hole data is summarised in the body of this report. The report includes no new drilling assay or logging results -
		Material and should be stated.	but mentions a hole that has been drilled (NSD058).
	•	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.	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.
	•	The assumptions used for any reporting of metal equivalent values should be clearly stated.	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	•	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	The geometry of the target mineralisation is unknown – it's the first hole in the area. The assumption is that structures will be parallel to the regional fabric.
		lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	
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.	The report includes no new drilling assay or logging results - but mentions a hole that has been drilled (NSD058). Refer to text.
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.	NDS058 is not displayed. Information will be updated on announcement of drilling results. Historic results are from along the length of the Darlington trend and represent variable 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.

• (e.g., 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 nature and scale of planned further work Discussion of further work will be dependent on results (to be returned) - but mentions a hole that has been drilled (NSD058).

A second planned diamond hole is currently drilling.

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, appropriately designed and targeting chemical "fingerprints" from yet to be sampled and returned assays will also be considered.

The location of the Darlington target may be amenable to winter drilling, particularly if the current dry conditions continue.