



North Stawell Minerals

June 2023 Quarterly Activities Report

31 July 2023

Company Details:

ASX: NSM

ACN: 633 461 453

www.northstawellminerals.com

Capital Structure

Shares: 120.127M

Performance rights: 1.18M

Share Price \$0.10*

Cash: \$2.0M*

Market Cap: \$12.0M*

* at 30 June 2023.

Project

North Stawell Gold Project



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Highlights:

- **Wildwood Diamond Drilling** has returned multiple, high grade gold intercepts down-plunge of the historic resources:
5.60m at 8.72g/t Au from 201.1m (NSD050)
10.05m at 3.88g/t Au from 247.85m (NSD049)
2.05m at 3.58g/t AU from 342.5m (NSD048)
 - **Wildwood Mineral Resource Updated to 87,000oz at 2.4 g/t Au (1g/t Au cut-off):** includes¹ higher grade, increased ounces, improved resource classification and improved exploration target options at depth.
¹ compared to 2019 Mineral Resource.
 - **Darlington Diamond Drilling – Mineralisation extended 125m down dip and 140m down plunge – and remains open.**
2.0m at 1.29g/t Au from 241m (NSD052)
1.5m at 4.24g/t Au from 140.5 (NSD053)
- An intersected basalt at depth “fits” a Stawell-gold model presenting new exploration targets.**
- **Forsaken air core drilling** extends the gold trend along basalt margin to 550m – open to south.
3m at 1.02g/t Au from 62m (NSAC0586),
3.0m at 1.98g/t from 51m (NSAC0595).



OVERVIEW

North Stawell Minerals Chief Executive Officer Russell Krause commented:

“NSM is targeting a repeat of the multi million-ounce gold deposit at Stawell. The model is based on mineralisation wrapping around a buttress of basalt, with additional splays of mineralisation above the basalts into the roof zone. The basalts respond to geophysics – allowing focussed exploration directly into dome margins or into the roof zone mineralisation through cover or at depth. As NSM’s ground is masked by a blanket of unmineralised sediments (termed cover) the potential for shallow repeats of Stawell is poorly tested.

NSM has rapidly matured several of its projects over the drilling season, validating the exploration strategy refocus on regional prospect test work. Caledonia, Darlington, Forsaken, Challenger and Lubeck Tip are targets with increasing focus and priority. A successful rethink of the Wildwood target and Mineral Resource has also been achieved, with an updated Mineral Resource delivered at the end of June. NSM has rebuilt a healthy project pipeline, with numerous prospects at various exploration stages, supported by good science, clear mineralisation models, and exploration best-practice that is demonstrated to deliver cost- and time-effectively results. We believe this – as well as a focus on mineral systems with a geophysical signature that can be observed through cover - is the right operational and exploration model in a large, cover dominated, greenfield tenement portfolio.

Exploration has advanced on multiple fronts, significantly strengthening the project pipeline and multiple Prospects. During the Quarter, NSM:

- Air core drilled the final 1,500m of a greater 16,500m air core program) focusing on Forsaken Prospect, and defining a 550m highly anomalous zone with a 250m core of gold grades greater than 1g/t Au.*
- Completed three diamond holes at Wildwood, down-plunge of the historic project focus area, transitioning the project from a near-surface focus to a depth-potential focus. The program successfully intersected gold where expected using the Stawell-gold model and has consolidated a 350m down-plunge ore shoot.*
- Reinterpreted and updated the Wildwood Mineral Resource to deliver a 59% increase in ounces as well as an increase in confidence in the Mineral Resource - 51% of the resources is re-classified as Indicated Mineral Resource.*
- Followed up on successful, early-season air core drilling at Darlington that constrained the geometry of mineralisation with two step-out diamond holes, increasing the target down-plunge and down-dip by 140m and 125m respectively.*
- Drilled a diamond hole beneath the Caledonia target to test depth extensions of mineralisation. Results are pending.*
- Completed a collaborative fluid flow modelling project with CSIRO that uses the structural history and ore geometry from Stawell to model the most likely sites of gold mineralisation on the margins of geophysics derived basalt shapes masked by a blanket of sediments – presenting multiple priority targets for future drilling.*
- Initiation of a potential collaborative project with several universities to focus on the Stawell-type mineral system and understanding the critical controls in metallogenesis.*

The vastly improved project pipeline – from new generative targets through a significantly improved Mineral Resource at Wildwood is validation of the NSM exploration strategy in cover-dominated tenements that maximises potential to find a shallow, multi million-ounce gold deposit similar to Stawell under a thin blanket of cover.”



CORPORATE ACTIVITIES

As most shareholders are aware, the gold exploration sector for listed ASX companies has been in a steady state of decline since May 2022. Unfortunately, your company has not been spared this negative sentiment. However, this situation does provide opportunities for acquisitions, farm-in agreements and asset purchases. NSM is constantly looking at corporate opportunities as they present. There are gold production assets, Mineral Resources and exploration assets currently under review. These opportunities will only be progressed if your Board believes they will substantially add to shareholder value and compliment NSMs existing asset portfolio.

EXPLORATION ACTIVITIES - OVERVIEW

Work done is summarised in Figure 1. All planned activities were completed or commenced. Early seasonal rain truncated the air core season by approximately three weeks.

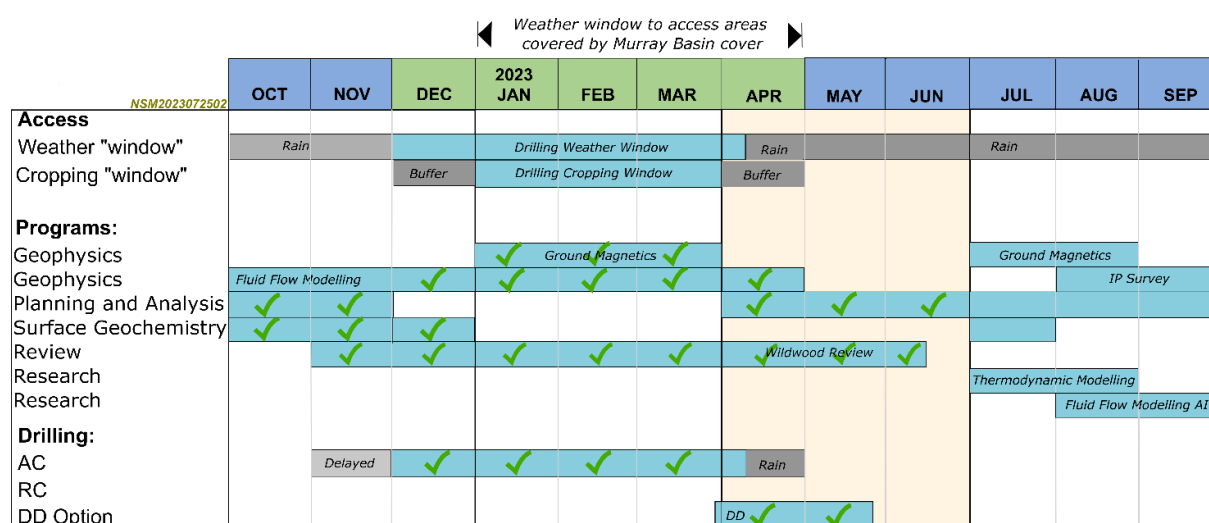


Figure 1 Completed work and exploration schedule, 2022-2023. Ticks indicate work is complete or on schedule.

Six diamond holes (for 1,691.8m) were drilled during the quarter (Figure 2, Table 2). Three holes were drilled into the Wildwood Deposit (Figure 2), in concert with the review of the historic Mineral Resource, and successfully targeting the down-plunge continuation of a plunging shoot. One diamond hole was drilled beneath the Caledonia prospect (Figure 2) to test anomalism from previous shallow drilling that has defined a 600m near-surface gold system under shallow cover. Two diamond holes were drilled at Darlington (Figure 1) to test the down-dip and down-plunge continuity of mineralisation. Significant results returned during the quarter are summarised in Figure 2, Table 2.

A re-estimation of the Mineral Resource at Wildwood ("Wildwood MRE (2023)") is complete (see ASX:NSM 29 June 2023 for full details):

Table 1 Wildwood Mineral Resource (2023)

	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)
Inferred	564,600	2.4	42,700
Indicated	590,300	2.4	44,600
Total	1,154,900	2.4	87,300

- All resource figures are reported in accordance with the JORC Code 2012 Edition

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- All figures are rounded to reflect the appropriate levels of confidence, with apparent differences potentially occurring due to rounding.
- Mineral Resources are reported at a 1.0 g/t Au cutoff grade.

The Wildwood Mineral Resource (2023) ("Wildwood MRE(2023)") incorporates all NSM drilling at Wildwood since 2020. The three drillholes reported in this document extend the resource down-plunge to the north, an important re-focus on the depth-continuity of the resource. The Wildwood MRE(2023) has returned increased ounces (+59%)², increased resource grades (+20%)² and improved resource confidence (51% of resource is classified as Indicated Mineral Resource) and highlighted the depth-continuity of Wildwood as a viable exploration target.

² Compared with the Wildwood Mineral Resource (2019) (ASX:NSM 22 Sept 2020)

An Exploration Target has been determined, adjacent to the Wildwood MRE (2023) (Table 5). NSM expects that additional brownfield targets are plausible, elsewhere on the Wildwood basalt dome or on other identified basalt structures. Figure 11 shows drilling and Wildwood MRE(2023) resource blocks superimposed on magnetics data, which highlights basalts. Some areas are well tested, other areas have considerable potential to host additional mineralisation.

Air core drilling was completed in early April, with 17 holes at Forsaken totalling 1,498m (Figure 2), completing a 16,000m regional program from drilled from December-April. Results are summarised in Figure 3 and Table 2, Table 3) and identify Forsaken as a target for next season.

Regional, high resolution geophysics data continues to effectively focus exploration. To further enhance this data, a fluid pathway study based on the geophysics data has been completed in collaboration with CSIRO, Australia's science agency, through the Kickstart grants program. The work further refines targeting using geophysics-defined geometry and the known controls at Stawell (a multi million-ounce gold mine 6km south of NSM's tenements) to identify areas most likely to have the same geological conditions to focus similar style mineralisation as identified at Stawell under shallow cover.

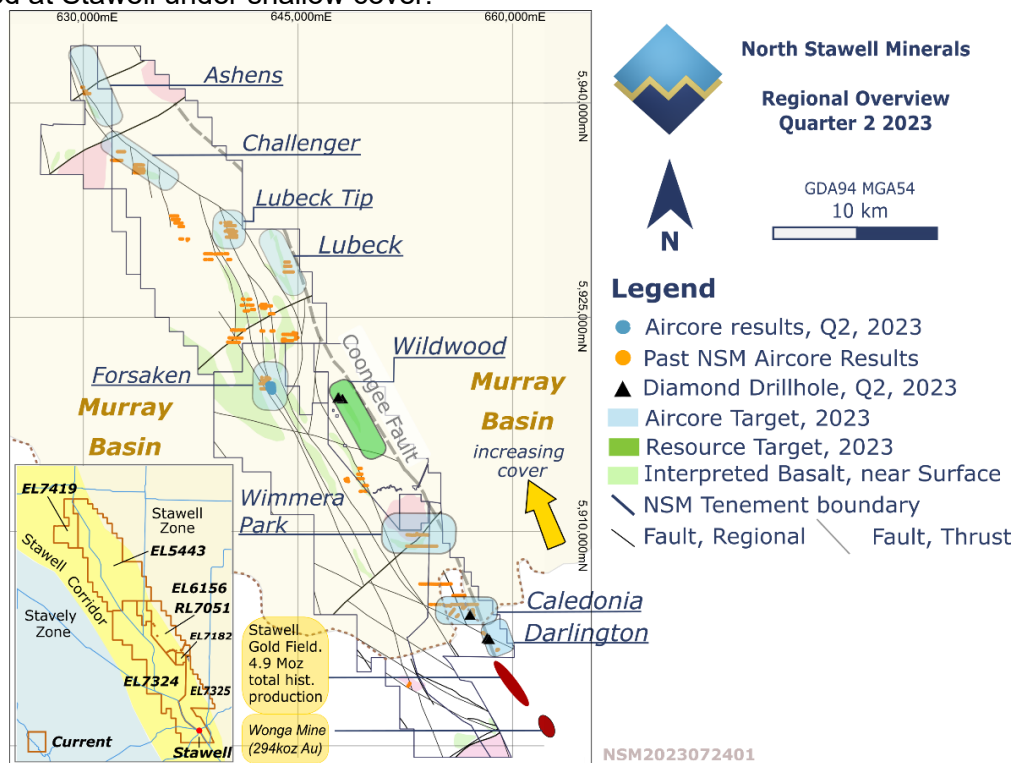


Figure 2 Overview of NSM tenements showing work done during the quarter and key prospects.

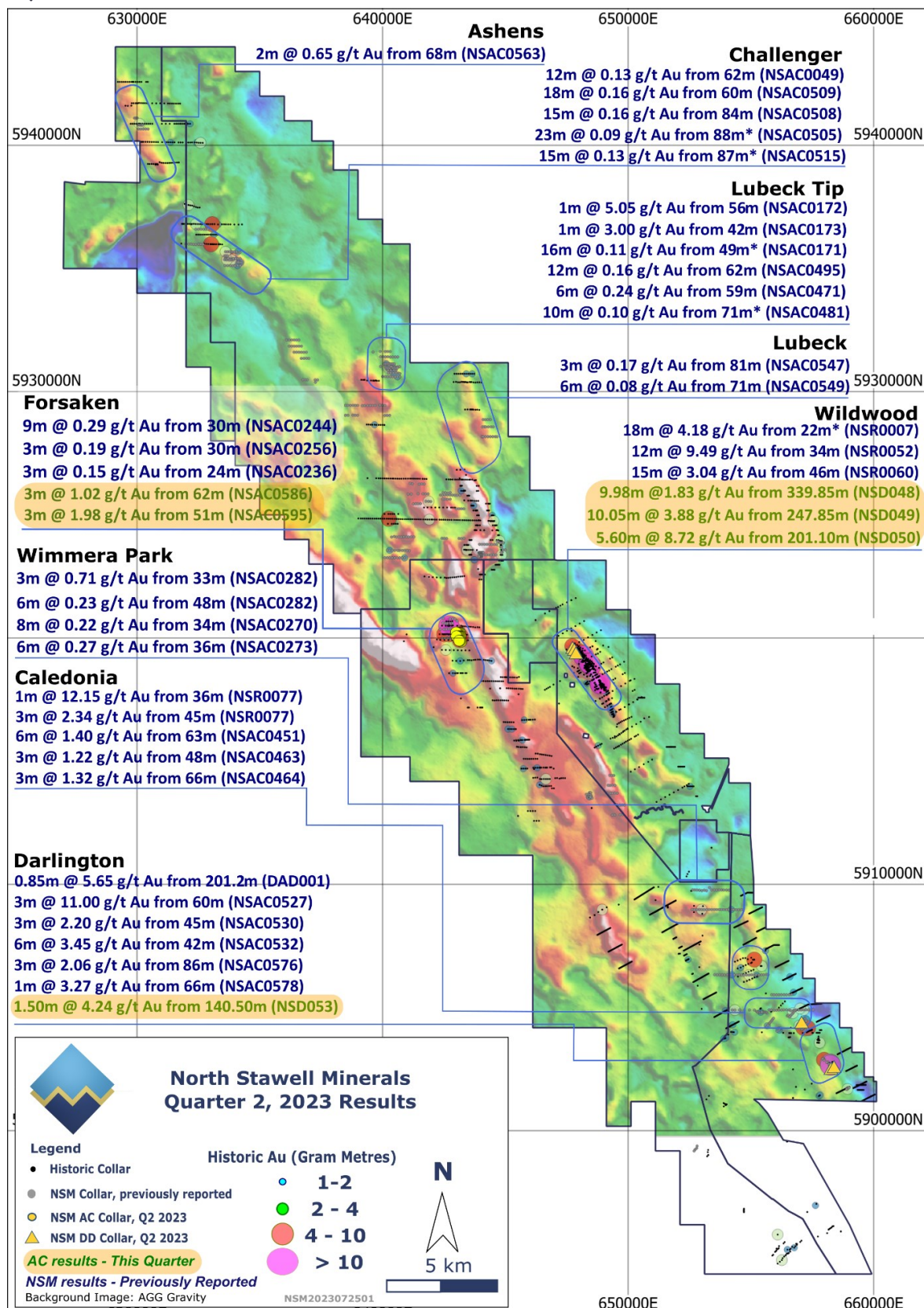


Figure 3 Summary of drilling results, including historic NSM results with AGG gravity as the background image. A full list of drilling results is found in Appendix 2.



Assays for air core and diamond drill holes that returned significant assays (1+ g/t Au) are summarized in Table 2. Highly encouraging anomalous results (<1g/t Au, >0.05 g/t Au) in air core drilling are summarized in Table 3.

Discussion of these results, the NSM exploration strategy and planning and geology to follow.

Table 2 Significant gold results AC/DD Drilling, April - June 2023.

Hole ID	Prospect	MGA54 Easting	MGA54 Northing	RL	Azi deg	Dip deg	Final Depth m	Results Significant (>1gt Au)
NSAC0586	Forsaken	643160	5920073	162	90	-60	101	3.00m @ 1.02 g/t Au from 62m
NSAC0595	Forsaken	643120	5919896	161.9	90	-60	94	3.00m @ 1.98 g/t Au from 51m
NSD048	Wildwood	647779	5919392	164.3	57.4	-60	357.7	9.98m at 1.83g/t Au from 339.85m
NSD049	Wildwood	647809	5919396	164.6	50.6	-59	302.5	1.65m@4.80 g/t Au from 243.35m 10.05m at 3.88g/t Au from 247.85m 5m at 1.74g/t Au from 278m 1m at 1.81g/t Au from 286m 2.5m at 2.77g/t Au from 292.5m
NSD050	Wildwood	647887	5919373	165	62	-62	245.5	5.60m at 8.72g/t Au from 201.1m 0.9m at 1.25g/t Au from 213.05m
NSD051	Caledonia	657051	5904212	223.5	39.8	-60	239.4	ANR
NSD052	Darlington	658213	5902562	215.8	31.4	-62	251.8	2.0m @ 1.29 g/t Au 241.0m
NSD053	Darlington	658328	5902516	213.1	30.3	-60	294.9	1.5m @ 4.24g/t Au 140.5m

* Hole ends in mineralisation. Significant intercepts have a weighted average grade <1.0 g/t Au and a weighted grade of >1g.m Au with no internal or external dilution. ANR – assays not returned. See Appendix 3 and Appendix 4 for details.

Table 3 Selected anomalous gold results, AC drilling, April -June 2023

Hole ID	Prospect	MGA54 Easting	MGA54 Northing	RL	Azi Deg	Dip Deg	Final Depth m	Results Anomalous (g/t Au)
NSAC0582	Forsaken	643053	5920227	162	90	-60	77	9.00m @ 0.08 g/t Au from 55.00m 3.00m @ 0.07 g/t Au from 73.00m
NSAC0583	Forsaken	643023	5920227	162	90	-60	71	9.00m @ 0.46 g/t Au from 50.00m 3.00m @ 0.05 g/t Au from 65.00m
NSAC0585	Forsaken	643188	5920068	162	90	-60	92	6.00m @ 0.17 g/t Au from 32.00m 3.00m @ 0.05 g/t Au from 65.00m
NSAC0586	Forsaken	643160	5920073	163	90	-60	101	3.00m @ 0.17 g/t Au from 35.00m 15.00m @ 0.42 g/t Au from 59.00m 3.00m @ 0.05 g/t Au from 95.00m
NSAC0587	Forsaken	643129	5920073	163	90	-60	83	9.00m @ 0.13 g/t Au from 71.00m
NSAC0588	Forsaken	643100	5920074	162	90	-60	101	3.00m @ 0.05 g/t Au from 49.00m 3.00m @ 0.10 g/t Au from 55.00m
NSAC0589	Forsaken	643072	5920071	162	90	-60	98	18.00m @ 0.12 g/t Au from 36.00m 3.00m @ 0.05 g/t Au from 63.00m 3.00m @ 0.06 g/t Au from 72.00m 9.00m @ 0.06 g/t Au from 81.00m



Hole ID	Prospect	MGA54 Easting	MGA54 Northing	RL	Azi Deg	Dip Deg	Final Depth m	Results Anomalous (g/t Au)
NSAC0590	Forsaken	643039	5920073	162	90	-60	83	3.00m @ 0.05 g/t Au from 36.00m 3.00m @ 0.07 g/t Au from 69.00m
NSAC0591	Forsaken	643010	5920075	161	90	-60	80	3.00m @ 0.05 g/t Au from 33.00m
NSAC0592	Forsaken	643204	5919859	162	90	-60	98	6.00m @ 0.10 g/t Au from 48.00m 3.00m @ 0.28 g/t Au from 60.00m 3.00m @ 0.05 g/t Au from 84.00m
NSAC0593	Forsaken	643182	5919900	162	90	-60	98	6.00m @ 0.22 g/t Au from 58.00m 3.00m @ 0.05 g/t Au from 70.00m 6.00m @ 0.06 g/t Au from 85.00m 4.00m @ 0.08 g/t Au from 94.00m*
NSAC0594	Forsaken	643150	5919896	162	90	-60	89	3.00m @ 0.10 g/t Au from 41.00m 15.00m @ 0.23 g/t Au from 56.00m
NSAC0595	Forsaken	643120	5919896	162	90	-60	94	3.00m @ 0.08 g/t Au from 57.00m

* Hole ends in mineralisation. Anomalous intercepts have a weighted average grade <0.05g/t Au and >1g/t Au over minimum 1m with no internal or external dilution. All anomalous intercepts are included as Appendix 3. Anomalous Intercepts overlapping significant intercepts are excluded.

For anomalous results, broad intercepts, or intercepts that form linear trends along interpreted geological structures, or end in anomalous mineralisation are priority targets for follow up infill drilling, as they are interpreted to indicate nearby bedrock gold mineralisation.

EXPLORATION ACTIVITIES - DISCUSSION

Strategy

NSM's target is repeats of the multi million-ounce mineralisation at Stawell. Stawell-type mineralisation is different to most of Victoria, with gold mineralisation occurring on the margins of basalt domes. The basalt association with mineralisation is important to explore through cover – the basalts can be seen in geophysics.

NSM has spear-headed its regional work with air core drilling targeting interpreted basalts in regional high-resolution geophysics. Air core has proven extremely effective drilling through the Murray Basin and test potential for shallow repeats of Stawell-type mineralisation.

Regional programs have rapidly rebuilt a robust mineralisation pipeline, evidenced by increasing grades, focus on increased depths and better understood geometries of mineralisation. An initial 20 prioritised targets with Stawell-like characteristics were initially prioritised and drilling has prioritised 5 priority targets – Darlington, Caledonia, Wildwood, Challenger and Forsaken. A robust group of 2nd priority targets are identified and will be advanced as priority 1 targets are assessed.

NSMs discovery pathway has remains consistent and proved effective:

- Identify areas in high-resolution geophysics or historic data with similarities to Stawell.
- Phase 1 drilling – vertical air core drilling on approximately 300m line-spacing over the margins of geophysics anomalies to establish anomalous gold or indicator chemistry or geology and sufficient geometry to potentially host significant mineralisation.
- Phase 2 drilling – angled air core to locate and confirm significant gold (1+g/t Au) and sufficient drilling to establish orientation and (if possible) dip and plunge of targets.



- Phase 3 drilling – deeper diamond drilling to follow mineralisation down-dip and down-plunge.
- Resource drilling – required work to deliver a Mineral Resource.
- Dynamically cycle between drill phases to ensure a robust project pipeline and systematic advance of key prospects.

Forsaken Prospect

The Forsaken Prospect is approximately 40km north of Stawell (Figure 2). Drilling at the Forsaken Prospect (Figure 4) represents the final 1,548m of a 16,000m regional drill program completed in the 22-23 drilling season. The program targeted a 9km long interpreted basalt that is only evident in high resolution gravity data flown for NSM (ASX: NSM 8 June 2021). The northern end of the basalt is interpreted to be folded into a major regional fault (the Pleasant Creek Fault), a highly encouraging structural geometry for gold mineralisation.

Drilling (NSM Phase 2) infilled previous drilling around a highly encouraging, 70m trend defined by GLA204 (10m at 1.34 g/t Au)¹ and NSAC0244 (1m at 1.24 g/t Au)². New drilling⁽³⁾ returned:

- **3m @ 1.02 g/t Au from 62m (NSAC0586)**
- **3m @ 1.98 g/t Au from 51m (NSAC0595)**

These results extend the surface expression of >1g/t Au to 250m within a 550m zone of anomalous gold grades (<1g/t Au and >0.05g/t Au) and strengthens the interpretation that the east margin of the basalt focusses mineralisation. An important result was to extend mineralisation to the south of historic drilling interpreted as the limit of mineralisation and re-establishing potential along the basalt margin which is open 850m to the south.

Anomalous results from the program⁽³⁾ define the likely N-S target geometry and include:

- 9.00m @ 0.46 g/t Au from 50.00m (NSAC0583)
- 15.00m @ 0.23 g/t Au from 56.00m (NSAC0594)
- 18.00m @ 0.12 g/t Au from 36.00m (NSAC0589)
- 6.00m @ 0.22 g/t Au from 58.00m (NSAC0593)
- 9.00m @ 0.13 g/t Au from 71.00m (NSAC0587)
- 6.00m @ 0.17 g/t Au from 32.00m (NSAC0585)
- 3.00m @ 0.28 g/t Au from 60.00m (NSAC0592)
- 4.00m @ 0.08 g/t Au from 94.00m* (NSAC0593)

The spatially continuous, thick anomalous intercepts and end-of-hole intercepts are strong indicators that the mineralised trend continues.

Historic drilling and a previous NSM Phase 1 programs⁽²⁾ demonstrate that gold anomalism extends into the west limb of the fold structure, as well as in the fold hinge, where another gold trend (with approximately 1,000m strike) includes:

- 2m @ 3.45 g/t Au from 23m (GLA184)¹
- 2m @ 3.08 g/t Au from 23m (GLA172)¹

The Forsaken Prospect – particularly the east limb includes encouraging gold results, prospective structural architecture and a potential for a Stawell-type basalt association with mineralisation that make Forsaken a priority target for the 23-24 drilling season.

¹ Historic data (see JORC Table 1.1(a))

² ASX:NSM 22 June 2022

³ ASX:NSM 30 May 2023

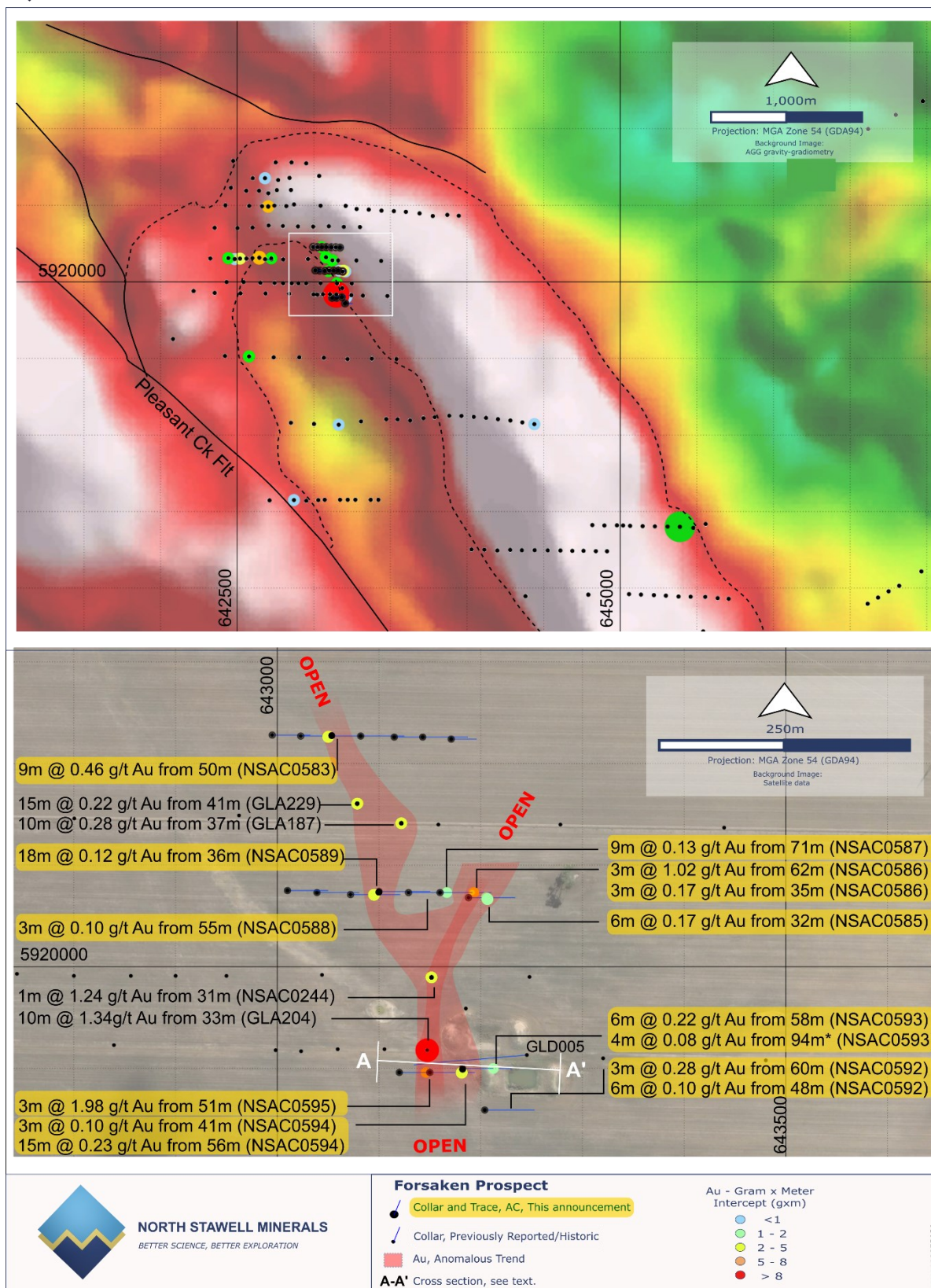


Figure 4 Forsaken Phase 2 air core drilling.

The Forsaken air core drilling program has been an exciting success for the exploration program. The gold grades and extents of mineralisation are highly encouraging and NSM continue to drill-test Forsaken next season.

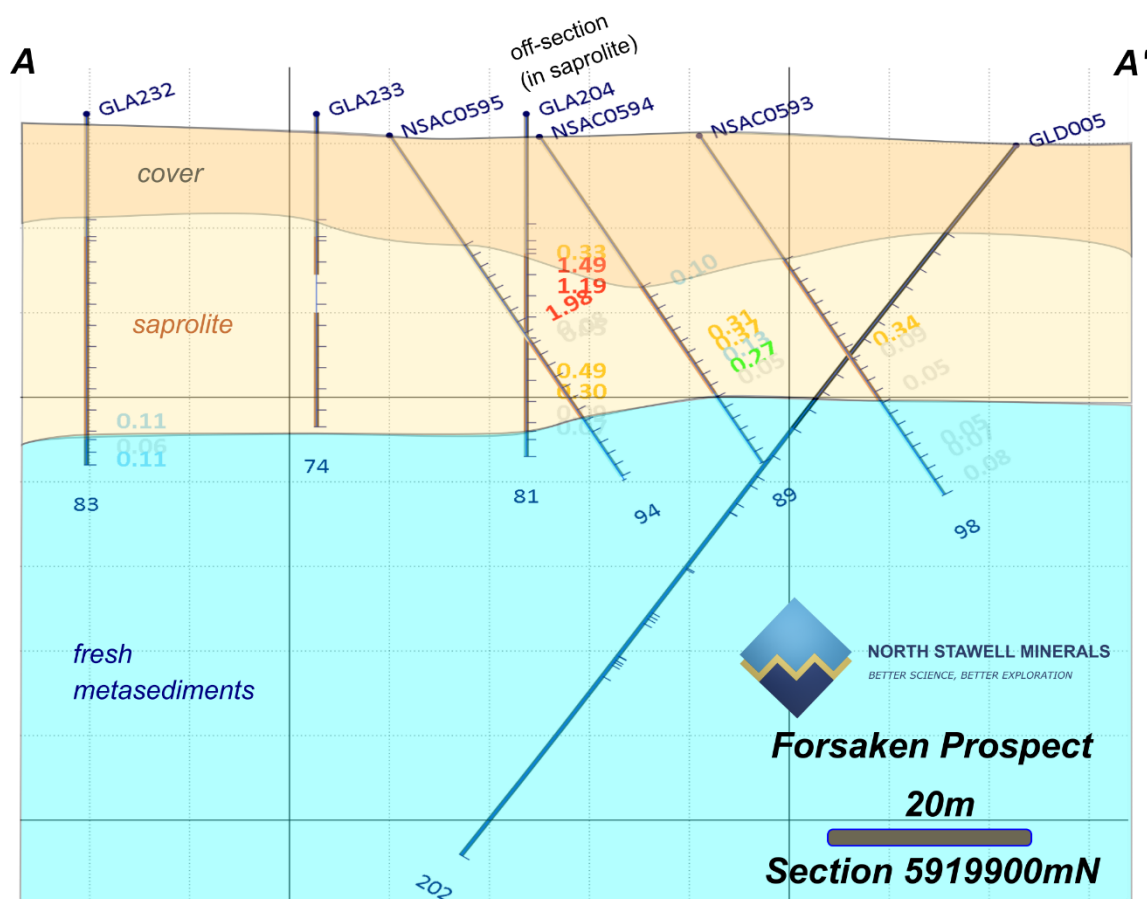


Figure 5 Cross section, Forsaken (5,919,900mN).

Wildwood Drilling

NSM has successfully returned to Wildwood (Figure 1), drilling three diamond holes for 905.7m into northern extents of the target (Figure 6). All holes returned significant gold mineralisation. Holes were completed on two infill sections and represent an important change in focus from targeting the broad east and west limbs of Wildwood to focusing on the sediment-basalt contact along the north-plunging basalt.

Wildwood is 25km north of the multi million-ounce mine at Stawell - the flagship deposit in the corridor. Wildwood does not outcrop and is the earliest geophysics-driven exploration success through cover north of Stawell, found when high resolution magnetics were flown by the government in the 2000's.

The geology and mineralisation at Wildwood have significant similarities to the mineralisation at Stawell. The most significant feature is the strong association between gold mineralisation and the margin of a structure-resisting basalt that cores the gold mineralisation. Deep embayments in the basalt (termed Waterloos at Stawell) are a key structural trap for controlled gold mineralisation and a similar structure was targeted in the Wildwood diamond drilling program.

Best results ⁽⁴⁾ include:

- 5.60m at 8.72g/t Au from 201.1m (NSD050)**
- 10.05m at 3.88g/t Au from 247.85m (NSD049)**
- 9.98m at 1.83g/t Au from 339.85m (NSD048)**



A full list of results is included in Table 2 and Figure 6. Mineralisation occurs in strongly silicified, sulphide-rich (pyrrhotite, pyrite, arsenopyrite) basalt-margin sediments that are cut by late quartz veining. Sericite-carbonate alteration is pervasive. Minor visible gold is observed.

Drill targeting for the program has returned to the “crest” of the basalt core and focussed on strongly developed Waterloo embayment structures. Targeting and drilling was completed in conjunction with an on-going review of the geology and resource at Wildwood, which was completed during the Quarter (see Wildwood Mineral Resource update, below) and refined the geology and targets. The drilling results from the program ⁽⁴⁾ were used in the re-interpretation and re-estimation of the Mineral Resource. Extending the focus to depth is in-line with NSMs exploration strategy to identify shallow mineralisation and follow the system to depth for potential upgrades to mineralisation tenor.

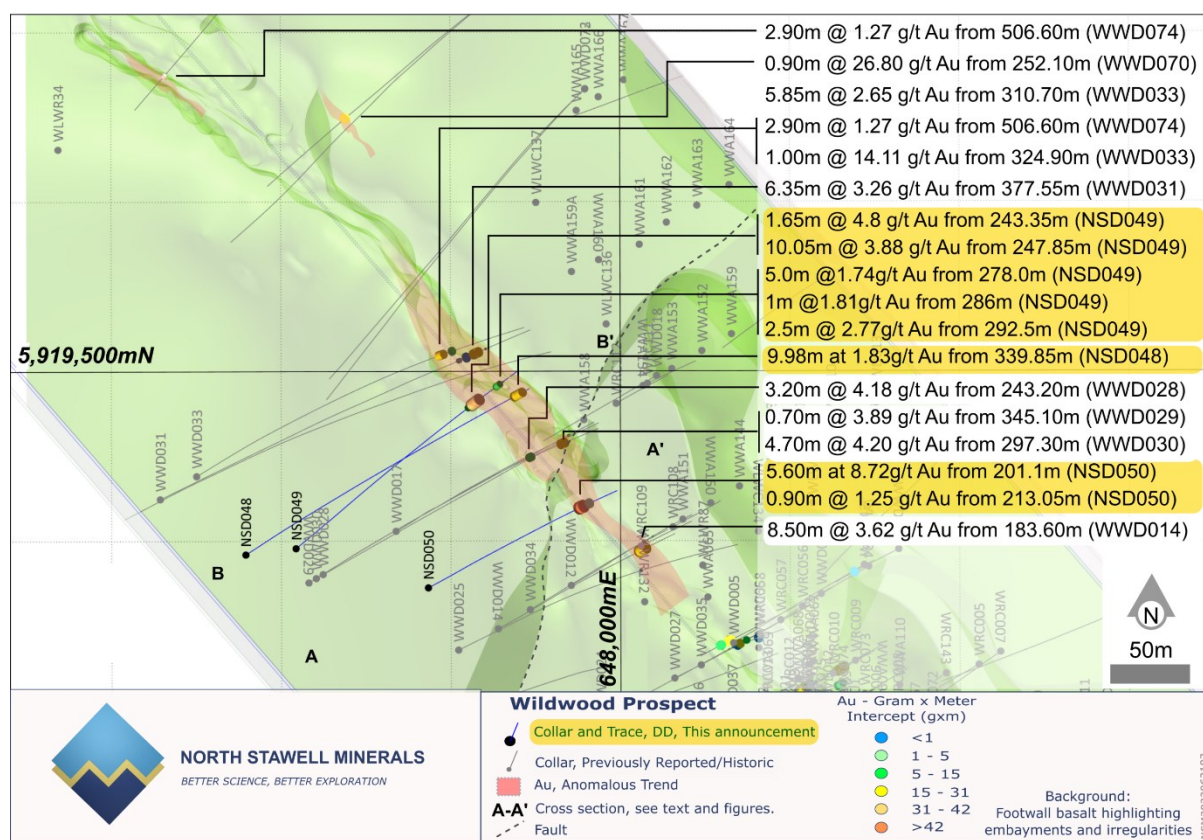
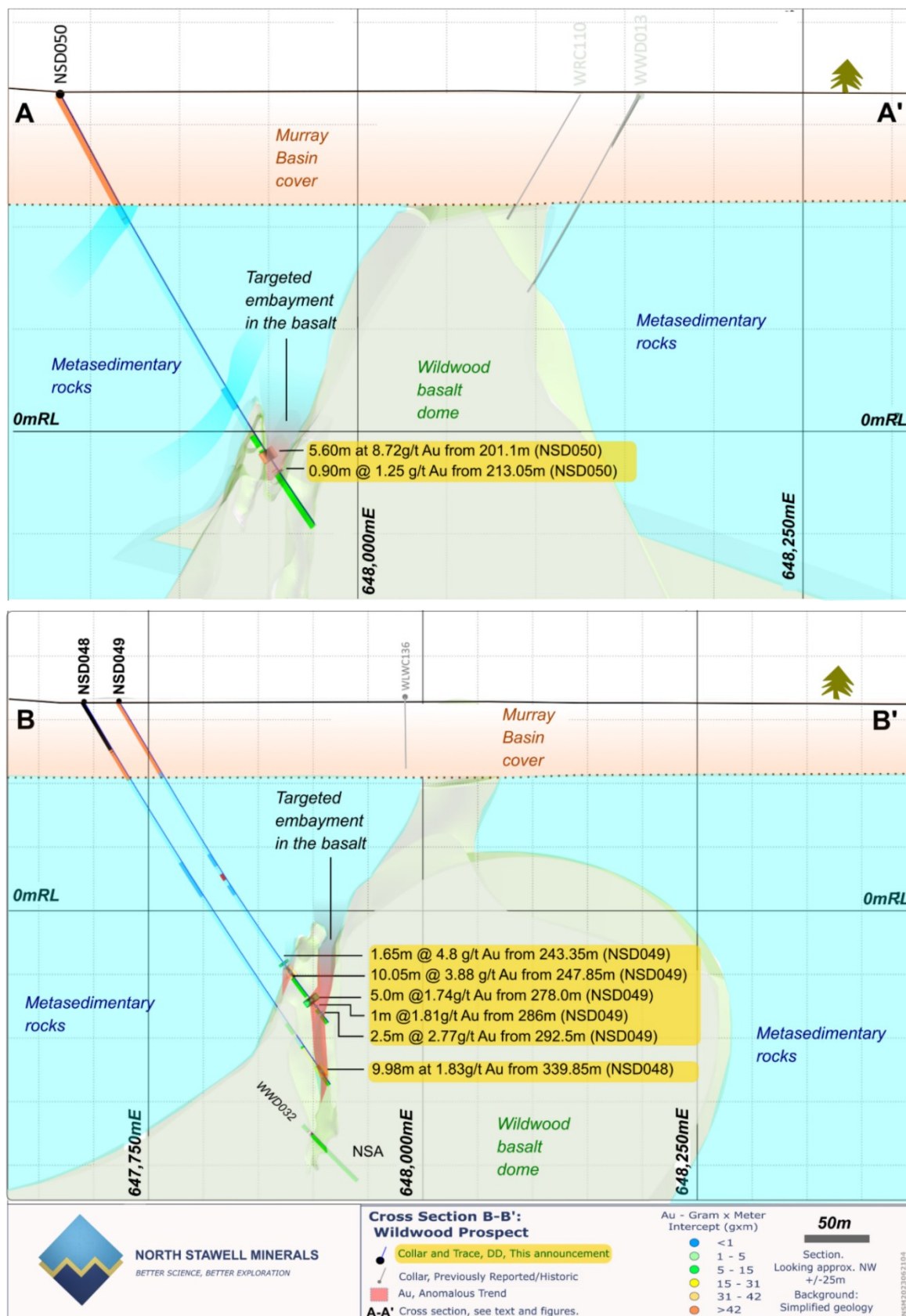


Figure 6 Diamond drilling, Wildwood.

The successful drilling at Wildwood compliments NSMs regional program successes at Caledonia, Forsaken, Challenger and Darlington (see ASX: NSM 1 June 2023, 9 May 2023, 28 April 2023, 28 Mar 2023, 16 Feb 2023), and presents an increasingly robust mineralisation pipeline for future work and as a priority area to build additional resources under cover a blanket of thin unmineralised cover.

⁴ ASX:NSM 23 June 2023





Darlington Prospect

Two diamond holes were completed for 546.7m at Darlington, 6km northeast of Stawell (Figure 1). Drilling focused on the down-dip and down-plunge extents of the historic Darlington Mine (2,347oz Au at 18.8 g/t Au)(Figure 1, Figure 8) as well as recent anomalous air core drilling ⁽⁶⁾.

The Darlington Prospect is at the southern end of the Darlington-Germania trend (Figure 8) where there is no Murray Basin cover. The mineralisation occurs in the same orientation as mineralisation at Caledonia, compounding the interpretation that en-echelon NW-trending mineralisation occurs within the NNW-trending system. The Darlington-Germania fairway includes 4 historic mines; Germania (1,676 oz Au at 12.1g/t Au), Bonnee Dundee (1,117oz Au at 20.9 g/t Au), Darlington (2,347oz Au at 18.8 g/t Au) and Caledonia (unknown production).

Results returned during the quarter ⁽⁵⁾ and previously reported NSM results ⁽⁶⁾ include:

- **2m at 1.29 g/t Au from 241.0m (NSD052))** ⁵
- **1.5m at 4.24 g/t Au from 140.5m (NSD053))** ⁵
- 3m at 11.0 g/t Au from 60m (NSAC0527) ⁶
 - Includes 1m at 17.7 g/t Au from 62m
- 6m at 3.45 g/t Au from 42m (NSAC0532) ⁶
- 3m at 2.20 g/t Au from 45m (NSAC0530) ⁶

The deeper drilling at Darlington (NSM Phase 3) follows up on successful NSM Phase 2 air core program that demonstrated dip and an interpreted plunge of the gold system. The drillholes both intersected mineralisation – a 125m down-dip step-out (NSD052) and 140m down-plunge step-out (NSD052). The mineralisation remains open in both directions. Drilling indicates potential at least 100m vertical extent of mineralisation with an interpreted shallow plunge to the south-southeast (Figure 9). Historic results strongly suggest the potential for higher grade shoots within the mineralised plane (approximately 360m x 160m).

100m beneath mineralisation, in NSD053, 40m of massive to weakly foliated, weakly to moderately altered and weakly gold-mineralised basalt is intersected (Figure 10). The non-foliated basalt core indicates that late, gold-bearing structures have not penetrated the basalt, which therefore forms a buttress to structures developed during the gold event – an important control on mineralisation at Stawell, and a possible control on identified mineralisation at Darlington. At Stawell, gold-bearing structures that envelop the basalt buttresses locally propagate into the metasediments above the basalt. These systems at Stawell propagate at least 300m into the host lithologies and are termed the Mariners Lode – predominantly occurring in the structural pressure shadow above the basalt (Figure 14).

The potential for the basalt intersected in NSD053 playing a role in the structural architecture controlling Darlington will be tested with further drilling to determine if a Stawell-type model can effectively target mineralisation. The geophysics will be re-interpreted to accommodate new controls (i.e., definite depth to target) and the geometry re-evaluated.

⁵ ASX:NSM 26 July 2023

⁶ ASX:NSM 28 March 2023

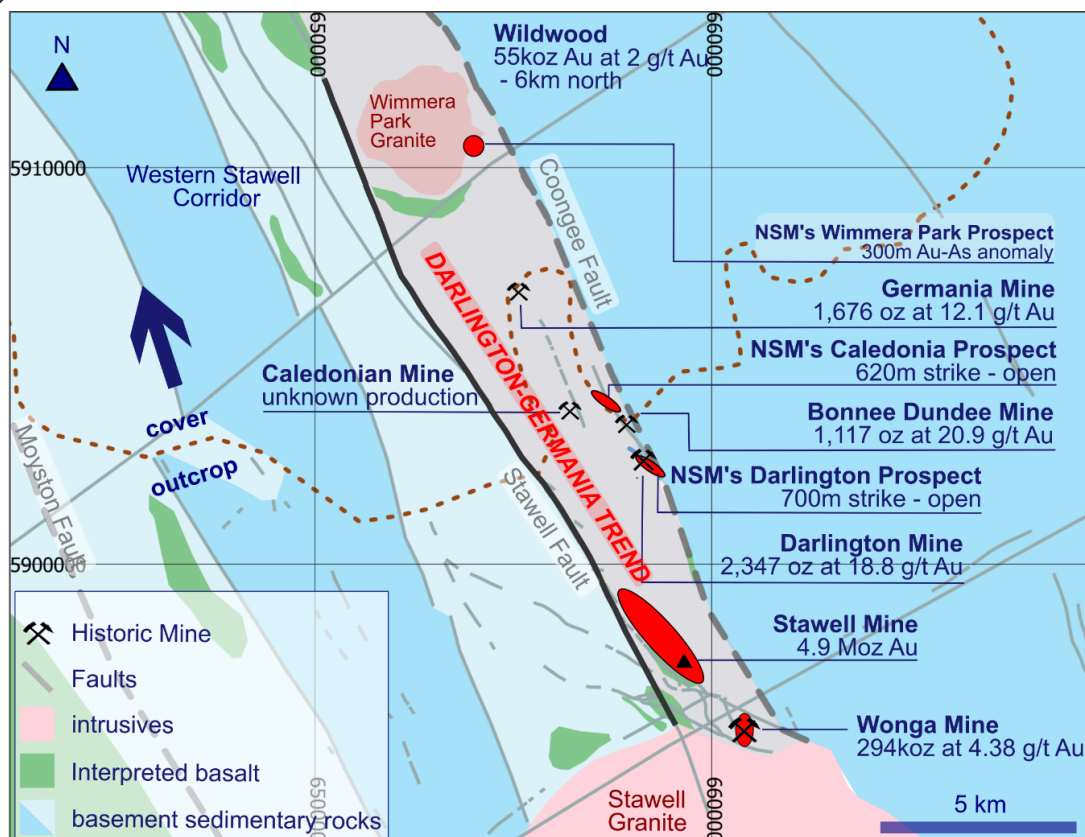


Figure 8 The Darlington-Germania trend showing projects and historic mines, Stawell Mine and Wonga.

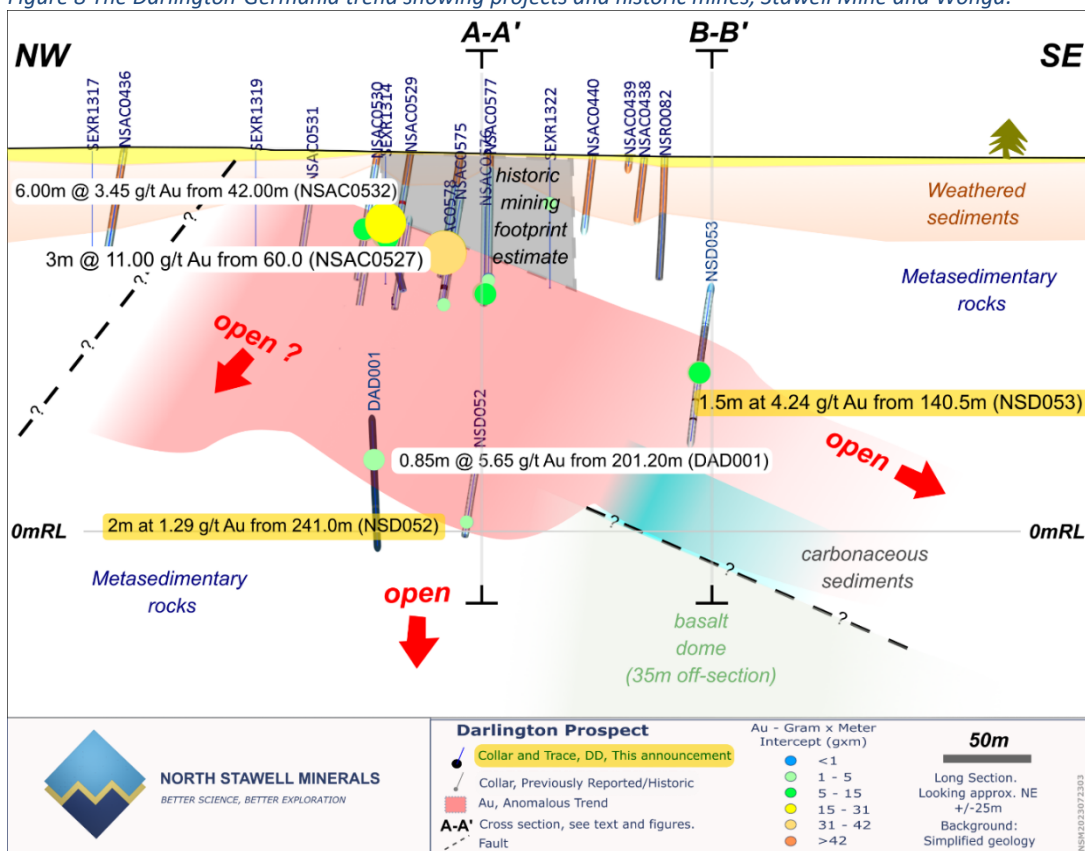


Figure 9 Long section of the Darlington Prospect. A south-plunging mineralisation envelope is open in all directions.

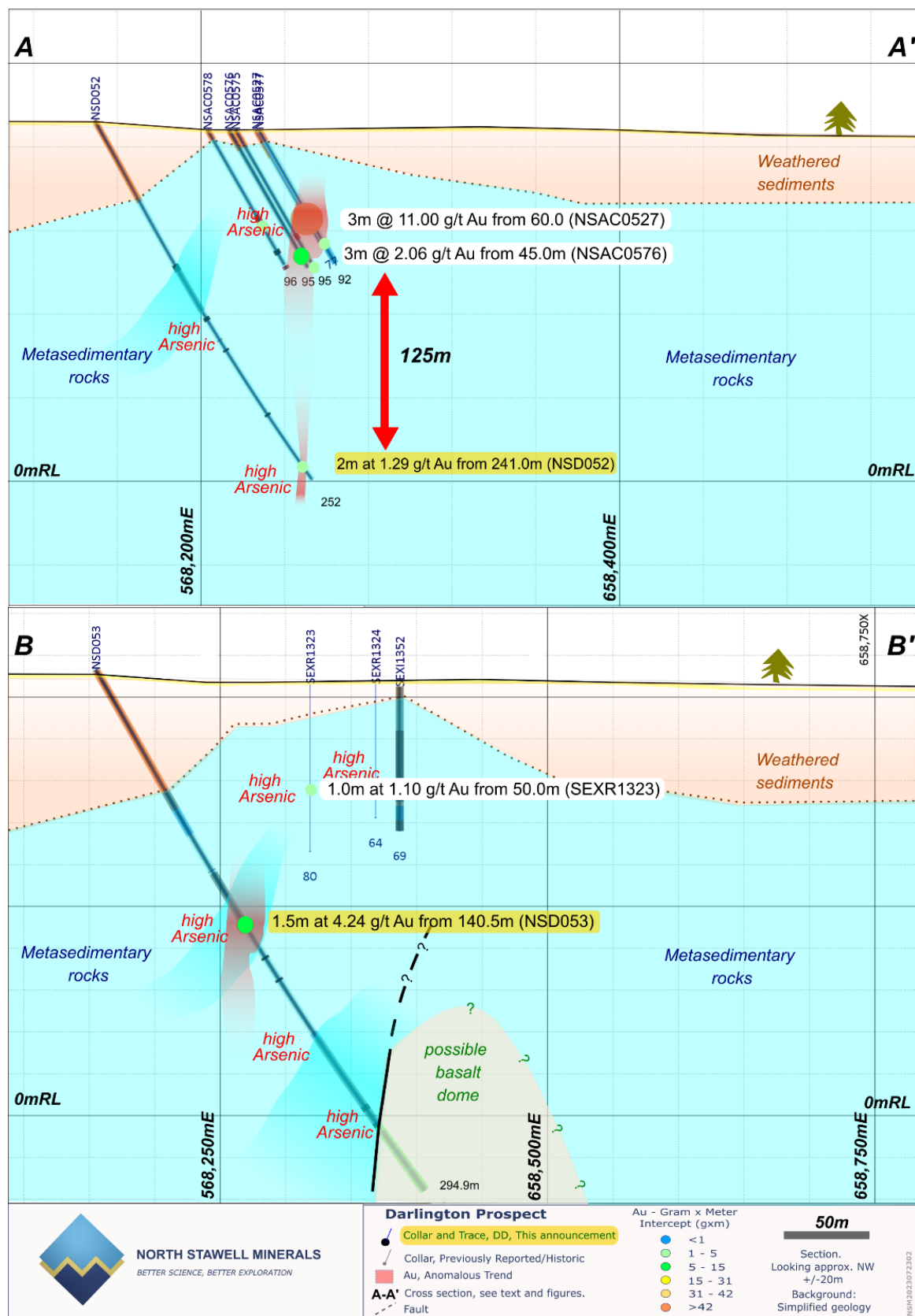


Figure 10 Cross sections at Darlington showing gold intercepts and intersected basalt. Refer to Figure 9 for section lines.



Caledonia Prospect

The Caledonia Prospect occurs 550m NNW along trend from the historic Bonnee Dundee Mine (1,117oz Au at 20.9 g/t Au) (Figure 8) and has had no exploration prior to soils programs in 2021. NSM Phase 1 and Phase 2 air core exploration at Caledonia has rapidly advanced the prospect from a soil anomaly over thin (5m) cover of Murray Basin sediments to a 620m trend of drill-defined 1g/t + mineralisation. Phase 2 Drilling has established the geometry of the target as a pair of sub-vertical mineralised shoots striking northwest. During the Quarter, a diamond hole, NSD051 was completed at Caledonia for 239.4m. (NSM Phase 3 drilling).

A full discussion of Caledonia diamond drilling will be released for NSD051 when results are returned.

The drill hole targets the down-dip extension of the main interpreted ore shoot, 90m beneath air core results. Selected previously reported NSM Phase 1 and Phase 2 drilling results include:

- 1.00m @ 12.15 g/t Au from 36.00m (NSR0077)⁸
- 3.00m @ 2.34 g/t Au from 45.00m (NSR0077)⁸
- 6.00m at 1.40 g/t Au from 63.00m (NSAC0451)⁷
- 3.00m @ 1.61 g/t Au from 75.00m (NSAC0442)⁸
- 3.00m at 1.32 g/t Au from 66.00m (NSAC0464)⁷
- 3.00m at 1.22 g/t Au from 48.00m (NSAC0463)⁷
- 1.00m @ 4.31 g/t Au from 0.00m (NSAC0410)⁸

⁷ ASX:NSM 16 February 2023

⁸ ASX:NSM 13 September 2022

Wildwood Mineral Resource update.

Greenberger & Son Pty Ltd completed a resource model update of the Wildwood Deposit for North Stawell Minerals. The Wildwood Mineral Resource Estimate (2023) ("Wildwood MRE (2023)") is available for review (see ASX:NSM 29 June 2023).

The Wildwood Deposit is located 25 km to the north of the Stawell Gold Mine, in North Stawell Minerals Retention Licence RL007051 (Figure 1). The deposit occurs in the northern extension continuation of the eastern Stawell Corridor, the same fault-bounded gold-prospective corridor that hosts the Stawell Mine, Wonga Mine, and NSM's Caledonia and Darlington Prospects.

The Wildwood mineralisation has similar structural controls, geology and mineralogy as the mineralisation at Stawell, and is classified as a Stawell-type mineral system (in-house). Key characteristics are a thick basalt core to mineralisation with mineralisation occurring along the basalt margins in association with a sulphide facies chemical sediment and outboard carbonaceous metasedimentary rocks. Mineralisation is "upgraded" where irregularities in faults or the basalt surface complicate geometries and create dilation zones. The deposit does not outcrop – masked by 15-25m of unmineralised Murray Basin sediments.

The update includes a complete re-interpretation of the geology, structure and geological domaining of Wildwood, as well as comprehensive data review, including the review and incorporation of historic QAQC data into the modern datasets. Overall, the available QAQC observed shows good levels of control, consistency, and accuracy of data. The methods of collection, quality assurance procedures and processes were and deemed appropriate.



The Wildwood Deposit comprises three discrete areas of mineralisation; Maslin, Clontarf and Trinity, all modelled separately and independently (Figure 11). One historic deposit area that contributed to the 2019 Mineral Resource⁽⁹⁾ has been deprecated. The Wildwood MRE (2023) comprises:

Table 4 Wildwood MRE (2023)

	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)
Inferred	564,600	2.4	42,700
Indicated	590,300	2.4	44,600
Total	1,154,900	2.4	87,300

¹ ASX:NSM 29 June 2023.

Notes:

- All resource figures are reported in accordance with the JORC Code 2012 Edition
- All figures are rounded to reflect the appropriate levels of confidence, with apparent differences potentially occurring due to rounding.
- Mineral Resources are reported at a 1.0 g/t Au cutoff grade.

The Company's Mineral resource estimates are reported in accordance with the guidelines of the 2012 Edition of the Australasian code for reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).

The increase in ounces and classification levels over the reported 2019 Resource reflects the increase attention and definition of the lithology model and mineralisation controls of the deposit. Additional 2023 drilling also added significant extension and grade to the down plunge extension of the Maslin Deposit. Classification confidence was increased due to the data review and inclusion of historical QAQC data into modern reporting. The QAQC review added significant confidence to the accuracy and appropriateness of the historical data.

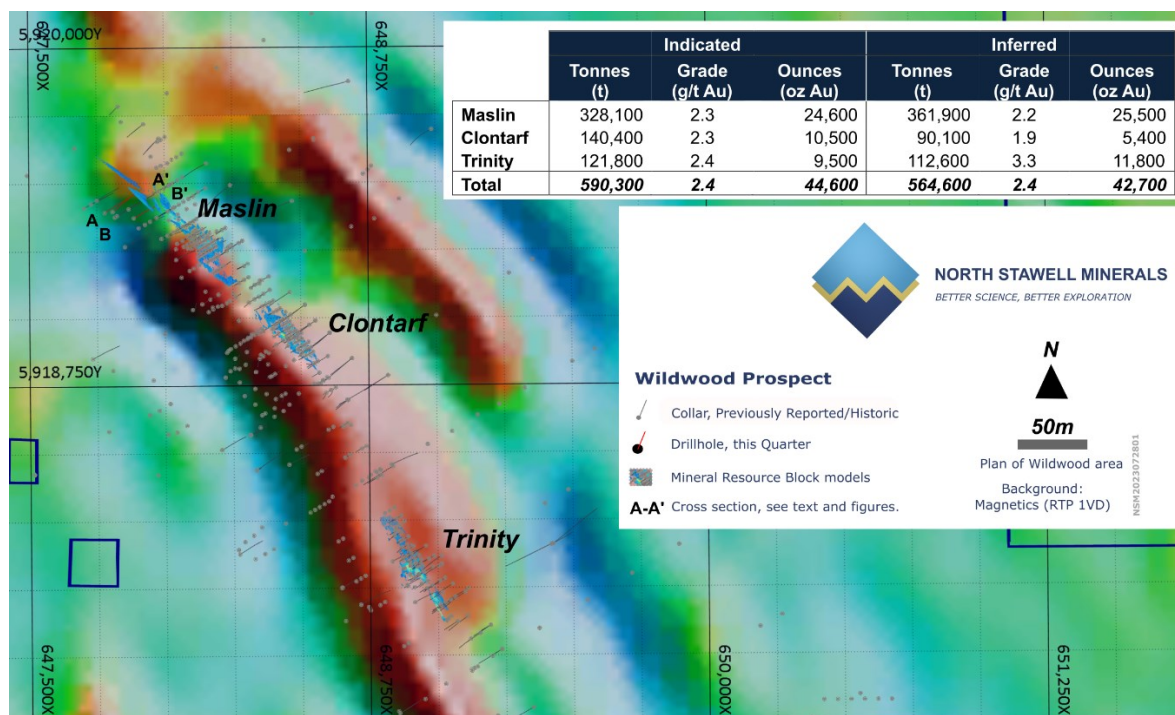


Figure 11 Wildwood MRE (2023) deposits and drilling superimposed on 1VD RTP magnetics data, which highlights the possible extent of basalts with potential for adjacent mineralisation. Sections A-A' and B-B' are presented as Figure 6.



An Exploration Target has been determined, adjacent to the Wildwood MRE (2023) (Table 5). NSM expects that additional brownfield targets are plausible, elsewhere on the Wildwood basalt dome or on other identified basalt structures. Figure 11 shows drilling and Wildwood MRE(2023) resource blocks superimposed on the magnetics data. Red areas are interpreted basalts. Some areas are well tested, other areas have considerable potential to host additional mineralisation.

Table 5 Wildwood Exploration Target

	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)
Exploration Target	258,000 - 386,000	1.1 - 1.7	9,100 – 21,000

Exploration targets are conceptual in nature and there is no guarantee that additional work will deliver a Mineral Resource.

⁹ ASX:NSM 22 September 2020.

Geophysics

The Stawell-type gold mineralisation is effectively controlled by cores of non-foliated (structurally buttressed) basalt, and, locally, sulphide-rich chemical sediments on the contact of the basalt and bounding sediments. Both the basalts and the chemical sediments properties that are expected to respond to geophysical techniques.

Down-Hole Electromagnetic (DHEM) was attempted on NSM049 (302.5m) (Figure 6, Figure 7) by Khumsop Geophysics on 10 May 2023 with the survey was recorded with a single turn using the Zonge transmitter. The objective was to identify any response from the basalt contact associated with matrix Pyrrhotite (Po) mineralisation intersected by the diamond drillhole further to the north where there is less drilling density and late structures cutting the target are interpreted.

An obstruction at 255m impacted the survey. No conductor to the north was identified in the compromised data, although the response of a regionally extensive formational conductor was successfully modelled. Re-attempting the survey will wait until access is possible.

Numerical modelling of fluid pathways for targeting.

In collaboration with CSIRO, Australia's national science agency, NSM has completed a numerical modelling project through CSIRO's kickstart grant program ⁽¹¹⁾ that utilises 3D inversions of high-resolution gravity data ⁽¹²⁾ and recognised structural events recorded in studies at the Stawell gold Mine (Winterbottom 2017) to determine the likely dilation zones around the interpreted basalt domes proactively prior to drilling (i.e., proactive (pre-drilling) targeting of interpreted basalts). The technique has been applied successfully at Wildwood historically (Schaubs 2006), however the work relied on drill intercepts of the basalt to determine the basalt shape informing the numerical models.

NSM has flown AGG gravity-gradiometry throughout the covered areas of its tenement portfolio ⁽¹⁰⁾ and completed 3D inversions over 222km² ⁽¹²⁾ (Figure 12a). Tests at the Wildwood dome has show encouraging correlation between modelled results and drilling results (Figure 12b). The data is being used to assist and inform drill planning for the 23-24 field season.

¹⁰ ASX:NSM 23 June 2021

¹¹ ASX:NSM 7 November 2022

¹² ASX:NSM 29 October 2021

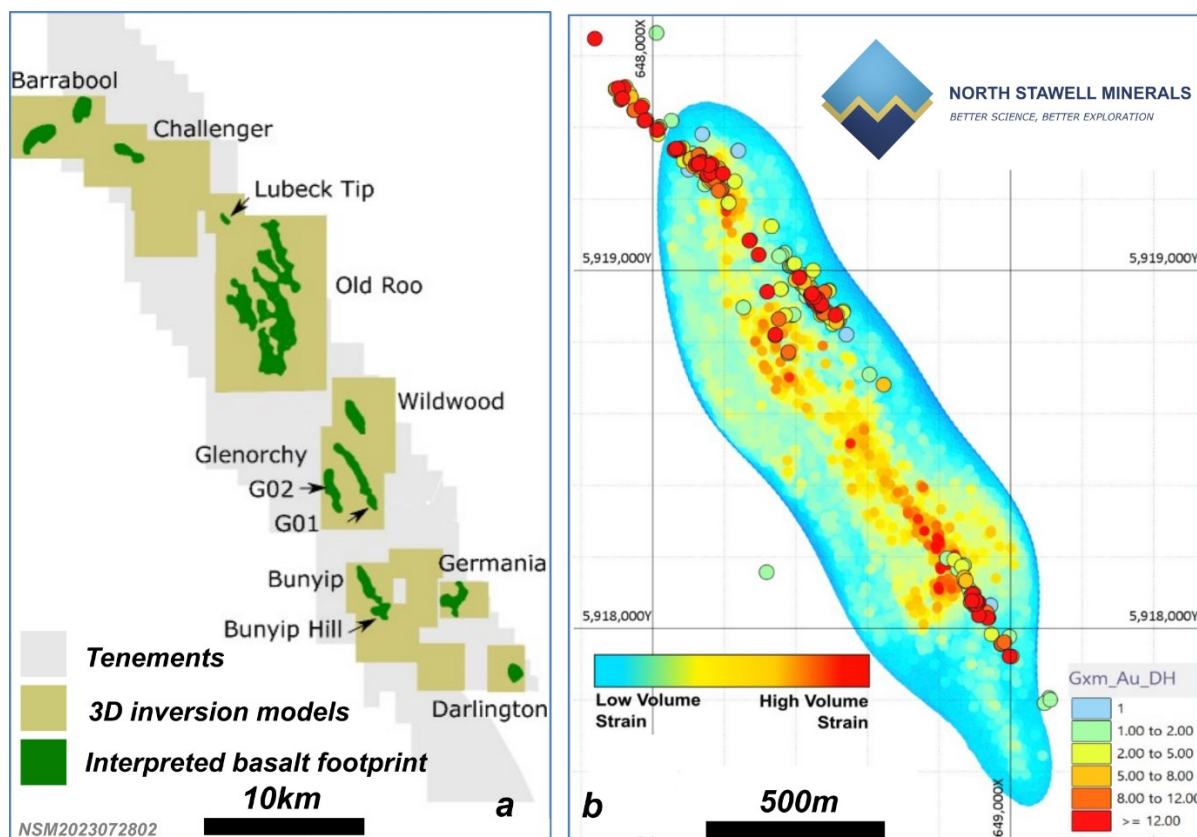


Figure 12 3D inversion modelling and numerical modelling of AAG gravity-gradiometry data. (a) NSM has acquired high-resolution data over tenements and acquired inversion models over 222km² – identifying possible basalts. (b) Areas of high-volume strain at the Wildwood Prospect with superimposed drillhole intercepts present encouraging correlation between numerical modelling on the (simplified) basalt model and field data.

Metallogenesis Studies

NSM geologists are discussing the possibility to initiate collaboration with several geoscience researchers to commence work to better understand the metallogenic controls on Stawell-type mineralisation to identify the key geochemical, thermodynamic, structural and geological controls on mineralisation and, ultimately, determine if additional vectors to mineralisation can be resolved to assist exploration through cover.

Machine Learning Project

High density potential field data (gravity and magnetics) ⁽¹³⁾, gridded inversion modelling ⁽¹⁴⁾ regional geological interpretation ⁽¹⁴⁾, defensible relative prospectivity mapping ⁽¹⁵⁾ and numerical modelling as well as a growing regional geological database presents an opportunity to investigate the possible role of machine learning in the exploration planning process. Vanguard discussions with subject matter experts are encouraging and a geologist with strong data science background employed to fulfill internal requirements. Data validation and cleaning has commenced, with capacity over the drilling off-season and a focus on generating exploration targets for future consideration.

¹³ ASX:NSM 23 June 2021

¹⁴ ASX:NSM 29 October 2021

¹⁵ ASX:NSM 31 January 2023



Previously reported data and information

For previously reported results included in the discussion of this drill program, North Stawell Minerals is not aware of any new data or information that materially affects the information as originally disclosed.

PLANNED ACTIVITIES – Looking Forward

Drilling

Phase 2 Infill drilling will continue – Air core access was ‘rained out’ in early April 2023. Next season (from Oct 23) will address unfinished programs at Forsaken and Old Roo. Good results at Darlington and Caledonia may require additional air core drilling in support of deeper programs. Challenger will be drilled along strike to identify further primary mineralisation.

This work will:

- Thoroughly test gold-anomalous trends in areas that match the Stawell-gold model.
- harvest sufficient information on the orientation and extent of mineralisation to allow planning for deeper follow up of the targets.

Phase 1 Reconnaissance Drilling will continue. Rig(s) have additional priority targets that can be tested to continue to maintain a robust exploration pipeline. This includes the Wimmera Park Prospect and selected targets from prospectivity mapping that will be added to drill schedules as part of continued campaign review of targets. Any key target areas returned from the completed numerical modelling exercise will be reviewed for first pass (Phase 1) drilling.

This work will:

- Efficiently test generative targets for gold, geochemistry and geology that indicates a mineral system occurs.
- Results will be reviewed and ranked and cued for follow up Phase 2 Infill drill programs.

Phase 3 Depth Drilling – Deeper testing of significant results down-dip and down-plunge at Darlington and Wildwood.

(Conditional on successful Phase 2 drilling) Opportunities at Old Roo and Challenger may require deeper drilling in the 23-24 drilling season. The Mantis 200 AC rig (used in the 22-23 season) is exceptionally capable of completing early Phase 3 programs.

This work will:

- Conduct sequential step-outs with increasing depth to determine plunge and continuation of priority targets and advance targets towards resource drilling.

Resource Drilling

There are available targets at Wildwood to expand on the Wildwood MRE (2023) and to test the identified Exploration Target. The renewed focus on depth-continuity of mineralisation presents additional targets, conditional on the tenor of mineralisation supporting the expenditure to test at depth.

This work will:

- Systematically expand the Wildwood resource down-plunge and under existing mineralisation and potentially identify structural-geological conditions where larger mineralisation domains occur.



Logistics – NSM has booked required rigs and support trucks for drill-cutting management. NSM has not discounted mobilizing additional rigs to “catch up” on time lost to weather and delayed harvests. Sourcing an appropriate rig and ensuring the exploration teams have capacity to effectively run a second rig at the forefront of this opportunity.

Geophysics

Numerical modelling (AI)– The numerical modelling work, a collaboration with CSIRO, has been finalized in the June quarter, 2023. The work identified potential high-prospectivity fluid pathways around the margins of known and interpreted basalt domes (these core the Stawell-type mineral system). Moving forward, different data sets will be incorporated with the fluid flow data and with the assistance of machine learning will hope to provide further drill targets.

This work will:

- Provided significant focus within larger target areas to refine drill programs to the areas most likely to have been a mineralisation pathway.

Downhole EM Review of the Wildwood system indicates that the open mineralisation to the north has a strong correlation with semi-massive pyrrhotite. Downhole EM was used on a Wildwood hole with mixed results due to the limited depth penetration down hole due to a blockage. It is planned to go back to the same hole and attempt to get to the bottom of the hole.

This work will:

- Trace mineralization across a late fault that truncates the north plunging mineralisation.
- Identify highly sulphidic regions on the margins of the basalt that may correlate to increased mineralisation.

Ground Magnetism and/or IP surveys – Ground magnetism trials at Lubeck Tip and Caledonia have returned higher resolution datasets and better-defined structures. The work has been stalled by lack of access to equipment, but weather and cropping restrictions notwithstanding, the program will be restarted to test other Prospects. No IP surveys have been completed but the mineralisation at Caledonia may respond well to the technique.

This work will:

- Identify discrete geophysical anomalies that may be associated with magnetite or pyrrhotite associated with Stawell-type mineralisation, or resistivity-conductivity couples associated with disseminated sulphides in highly silicified mineralisation systems.
- Both techniques help effectively target drilling



NORTH STAWELL MINERALS LTD
ACN 633 461 453
ABN 84 633 461 453

References

GeoVic, **2021**. Web data portal. Department of Jobs, Precincts and Regions, Victoria, Australia. <https://earthresources.vic.gov.au/geology-exploration/maps-reports-data/geovic>

Schaubs, P. M., Rawling, T. J., Dugdale, L. J. and Wilson, C. J. L. **2006**. Factors controlling the location of gold mineralisation around basalt domes in the Stawell corridor: insights from coupled 3D deformation – fluid-flow numerical models, Australian Journal of Earth Sciences, 53:5, 841-862.

Winterbottom, J. and Holland, I. **2017**. Report on the Mineral Resources and Reserves of the Stawell Gold Mine in the state of Victoria, Australia. Technical Report. Kirkland Lake Gold.



Finance and Use of Funds (4th Quarter ending 30 June 2023)

Pursuant to ASX Listing Rule 5.3.4, the Company advises the proposed use of Funds as per Section 4.7 of the Prospectus to actual use of funds as follows:

<u>Funding Allocation</u>	<u>Prospectus</u>	<u>FY21</u>	<u>FY22</u>	<u>Sep 23 Qtr</u>	<u>Dec 23 Qtr</u>	<u>Mar 23 Qtr</u>	<u>Jun 23 Qtr</u>	<u>Actual to date</u>	<u>Variance</u>
Cost of IPO, Listing	2,128,000	2,200,400	-	-	-	-	-	2,200,400	72,400
Exploration (2 years)	13,949,000	4,605,000	3,405,200	384,129	623,497	1,176,934	751,330	10,946,090	-3,002,910
Capital Equipment	631,000	366,300	103,864	-26,120	-21,819	-18,587	-11,506	392,132	-238,868
Working Capital & Operating Expenses	3,292,000	1,049,956	1,599,612	527,776	179,028	196,422	927,433	4,480,227	1,188,227
Total	20,000,000	8,221,656	5,108,676	\$ 885,784	\$ 780,706	\$ 1,354,769	\$ 1,667,257	\$18,018,849	-1,981,151

Cash at the end of the Quarter was \$1.8m. As per ASX Listing Rule 5.3.5 a Company is required to provide a description and explanation of any related party payments made during the quarter. \$63,150 in total, relating to Director fee payments (inclusive of superannuation) was paid. \$1,531.53 (inclusive of superannuation) was paid to a casual employee who is related to the Head of Exploration.

North Stawell Minerals
167 Leviathan Road
Stawell Victoria 3380



NORTH STAWELL MINERALS
LTD ACN 633 461 453
ABN 84 633 461 453

This Announcement is authorised for release by Russell Krause, Chief Executive Officer of North Stawell Minerals Ltd

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Visit us on Twitter: <https://twitter.com/NorthStawell>

About North Stawell Minerals Limited:

North Stawell Minerals Limited (ASX: NSM) is an Australian-based gold exploration company 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 Field which has produced in excess of five million ounces of gold. NSM's granted tenure has a total land area of approximately 500 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 51km of northerly strike extension of the underexplored Stawell Mineralised Corridor.

Competent persons Statement

The information that relates to 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 the 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 a Mineral Resource. Readers are cautioned not to place undue reliance on forward-looking statements and NSM assumes no obligation to update such information.

North Stawell Minerals
167 Leviathan Road
Stawell Victoria 3380



Appendix 1: NSM Tenement Summary

Tenement	Status	Number	Area (km ²)	Graticules ¹	Initial NSM holding	Earn-in potential
Wildwood	Granted	RL007051	50	50	51%	90%
Barrabool	Granted	EL5443	182	194	51%	90%
Glenorchy	Granted	EL006156	10	18	100%	n/a
West Barrabool	Granted	EL007419	37	40	100%	n/a
Wimmera Park 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.

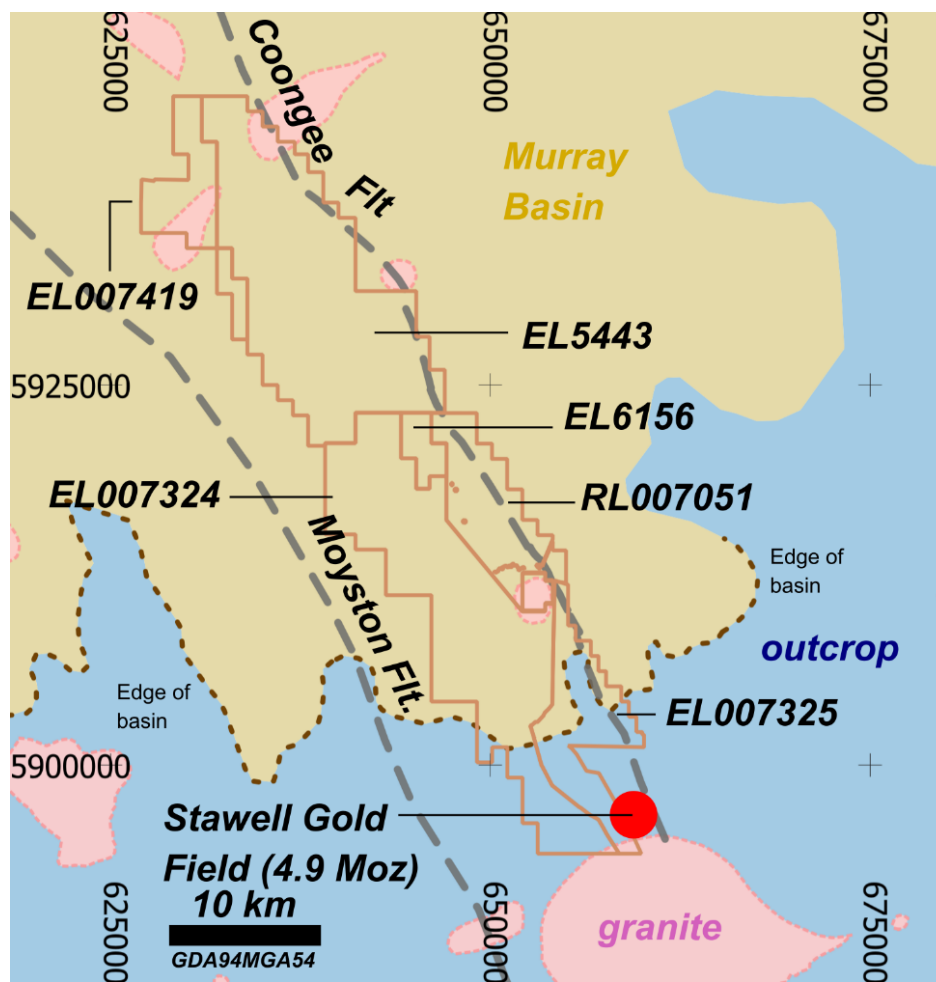


Figure 13 North Stawell Minerals - Tenements



Appendix 2: NSM Target Model and Exploration Strategy

Exploration Target

NSM is exploring for a deposit similar to the mineralisation at Stawell – a deposit with a footprint that is 3.5km long, approx. 400m wide and has been mined to depths of around 1,600m. The Stawell Gold Field has produced 4.9Moz (Winterbottom 2017) and is centred on a resistant buttress of basalt that has not been affected by folding. Ore shoots are on – or proximal to – the margins of the basalt, occurring where the structures that control the mineralisation bend, wrap and dilate around resistive basalt.

The Stawell-type mineralisation model is an attractive to NSM exploration as the basalt core to mineralisation can be identified under cover using geophysics. Drilling in the quarter has been able to routinely locate and test the contact between the basalts and bounding sediments. Greatest gold-prospectivity occur where the basalts that are shallow, but not unroofed, and where the mineralised structures around and above the basalt are preserved (Figure 14). Prospects where sediment-hosted mineralisation has been intersected (i.e., above the basalt) have model-based potential to be followed to depth, in an ore system equivalent to Mariners - Central Lode – Golden Gift at Stawell (2+ Moz Au).

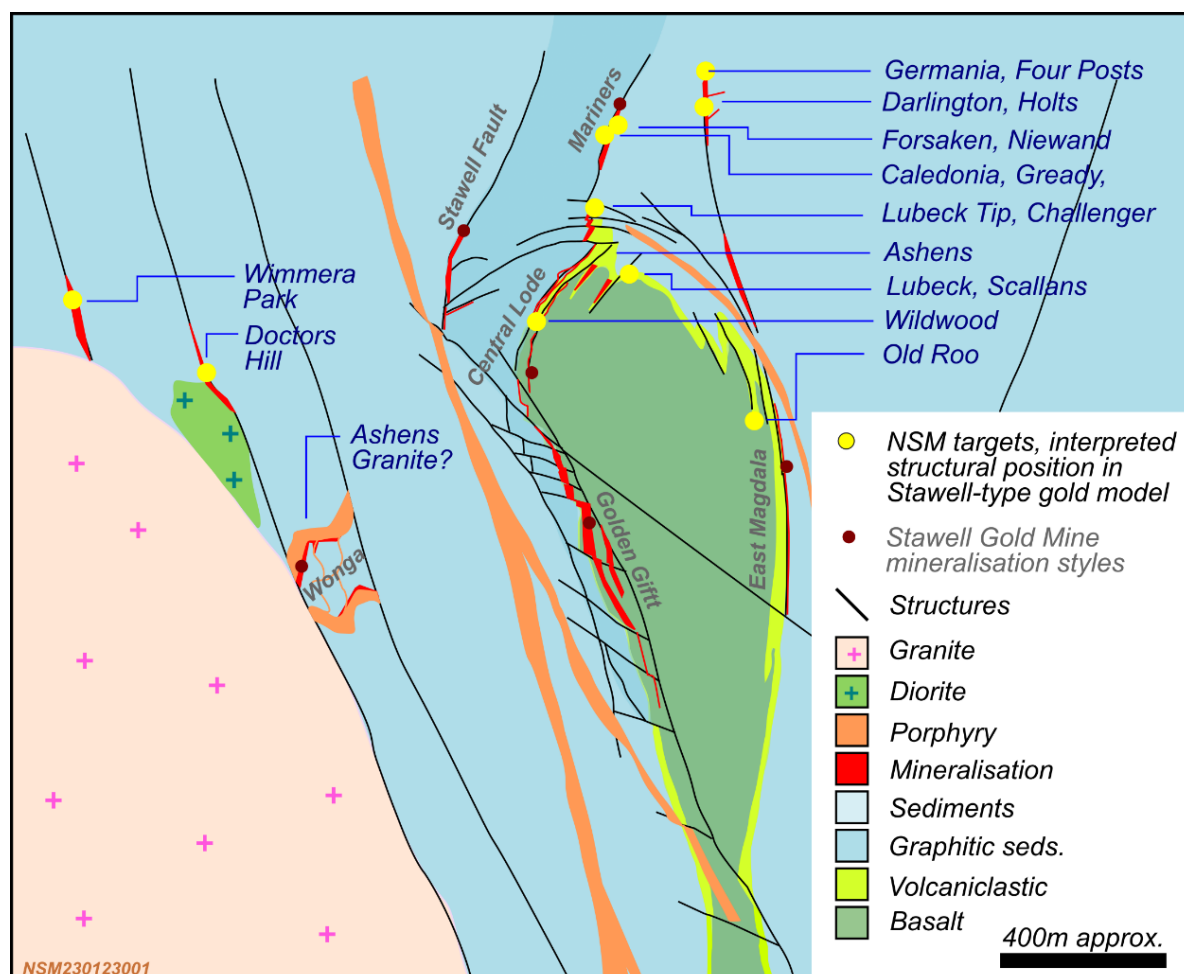


Figure 14 Stylised mineralisation model for the Stawell Gold Mine, with relative (interpreted) position of NMS Prospects within the model architecture. Many of the targets occur in the "Roof Zone" of the basalt buttresses, a region demonstrated at Stawell to include mineralisation that propagate from the basalt into the bounding sediments.



Exploration Strategy

NSM's exploration strategy is to exploit the geophysics-responsive basalt units that form the core to Stawell-type mineralisation and to efficiently vector towards multi million-ounce potential under a thin blanket of unmineralised Murray Basin sediments (termed "cover").

Exploring through cover in Victoria includes exploration challenges. Generally, the sedimentary rocks and structures that host mineralisation, and the mineralisation itself, has poorly contrasting geophysical signatures, making a key exploration tool in covered terrains – regional geophysics – substantially less effective. In addition, the nature of veining and the sometimes-chaotic gold distribution that is typical of Victorian gold deposits can substantially increase the required drilling to test and understand covered mineralisation. Subsequently, typical Victorian gold deposits are challenging exploration targets under cover.

NSM's Advantage

North Stawell Minerals has a significant exploration advantage to explore through cover. The rocks comprising the Stawell Corridor include wedges of basaltic rock that is faulted into the sediments along some structures. The basalts play a critical role in focusing mineralisation. Basalts are not typically found in Victorian Gold deposits, and they present some clear exploration upside. The basalts:

- have different geophysical properties and can be detected with magnetics and/or gravity.
- may form structural buttresses that bend and warp the later gold-bearing faults, creating conditions that focus the emplacement of mineralisation on the basalt margins.
- Increase NSMs capacity to identify and map controlling structures (faults and folds) from the geophysics and better understand the geological architecture and gold potential.



Appendix 3: Air Core (AC) summary, June Quarter, 2022.

Hole ID	Prospect	MGA54 Easting	MGA54 Northing	RL	Azi deg	Dip deg	Final Depth m	Results anomalous (<1 g/t Au) significant (>1 g/t Au)
NSAC0579	Forsaken	643143.00	5920226.00	162	90	-60		NSA
NSAC0580	Forsaken	643115.00	5920226.00	162	90	-60		NSA
NSAC0581	Forsaken	643082.00	5920227.00	162	90.00	-60	86	3.00m @ 0.06 g/t Au from 65
NSAC0582	Forsaken	643053.00	5920227.00	162	90.00	-60	77	9.00m @ 0.08 g/t Au from 55
	Forsaken	643053.00	5920227.00	162	90.00	-60	77	3.00m @ 0.07 g/t Au from 73
NSAC0583	Forsaken	643023.00	5920227.00	162	90.00	-60	71	9.00m @ 0.46 g/t Au from 50
	Forsaken	643023.00	5920227.00	162	90.00	-60	71	3.00m @ 0.05 g/t Au from 65
NSAC0584	Forsaken	642995.00	5920228.00	161	90.00	-60	75	NSA
NSAC0585	Forsaken	643188.00	5920068.00	161	90.00	-60	92	6.00m @ 0.17 g/t Au from 32
	Forsaken	643188.00	5920068.00	161	90.00	-60	92	3.00m @ 0.05 g/t Au from 65
NSAC0586	Forsaken	643160.00	5920073.00	162	90.00	-60	101	3.00m @ 0.17 g/t Au from 35
	Forsaken	643160.00	5920073.00	162	90.00	-60	101	15.00m @ 0.42 g/t Au from 59
	Forsaken	643160.00	5920073.00	162	90.00	-60	101	3.00m @ 0.05 g/t Au from 95
	Forsaken	643160.00	5920073.00	162	90.00	-60	101	3.00m @ 1.02 g/t Au from 62
NSAC0587	Forsaken	643129.00	5920073.00	162	90.00	-60	83	9.00m @ 0.13 g/t Au from 71
NSAC0588	Forsaken	643100.00	5920074.00	162	90.00	-60	101	3.00m @ 0.05 g/t Au from 49
	Forsaken	643100.00	5920074.00	162	90.00	-60	101	3.00m @ 0.10 g/t Au from 55
NSAC0589	Forsaken	643072.00	5920071.00	162	90.00	-60	98	18.00m @ 0.12 g/t Au from 36
	Forsaken	643072.00	5920071.00	162	90.00	-60	98	6.00m @ 0.08 g/t Au from 60
	Forsaken	643072.00	5920071.00	162	90.00	-60	98	3.00m @ 0.06 g/t Au from 72
	Forsaken	643072.00	5920071.00	162	90.00	-60	98	9.00m @ 0.06 g/t Au from 81
NSAC0590	Forsaken	643039.00	5920073.00	162	90.00	-60	83	3.00m @ 0.05 g/t Au from 36
	Forsaken	643039.00	5920073.00	162	90.00	-60	83	3.00m @ 0.07 g/t Au from 69
NSAC0591	Forsaken	643010.00	5920075.00	162	90.00	-60	80	3.00m @ 0.05 g/t Au from 33
NSAC0592	Forsaken	643204.00	5919859.00	162	90.00	-60	98	6.00m @ 0.10 g/t Au from 48
	Forsaken	643204.00	5919859.00	162	90.00	-60	98	3.00m @ 0.28 g/t Au from 60
	Forsaken	643204.00	5919859.00	162	90.00	-60	98	3.00m @ 0.05 g/t Au from 84
NSAC0593	Forsaken	643182.00	5919900.00	162	90.00	-60	98	6.00m @ 0.22 g/t Au from 58
	Forsaken	643182.00	5919900.00	162	90.00	-60	98	3.00m @ 0.05 g/t Au from 70
	Forsaken	643182.00	5919900.00	162	90.00	-60	98	6.00m @ 0.06 g/t Au from 85
	Forsaken	643182.00	5919900.00	162	90.00	-60	98	4.00m @ 0.08 g/t Au from 94
NSAC0594	Forsaken	643150.00	5919896.00	162	90.00	-60	89	3.00m @ 0.10 g/t Au from 41
	Forsaken	643150.00	5919896.00	162	90.00	-60	89	15.00m @ 0.23 g/t Au from 56
NSAC0595	Forsaken	643120.00	5919896.00	162	90.00	-60	94	3.00m @ 0.08 g/t Au from 57
	Forsaken	643120.00	5919896.00	162	90	-60	94	3.00m @ 1.98 g/t Au from 51

NSA – no significant assay (DD) or no significant or anomalous assay (AC)

anr – assays not returned.

^ Anomalous result includes significant (>1g/t Au) interval(s)

* End-of-hole mineralisation



Appendix 4: Diamond Drilling (DD) summary, June Quarter, 2022.

Hole ID	Prospect	MGA54 Easting	MGA54 Northing	RL	Azi deg	Dip deg	Final Depth m	Results significant (>1 g/t Au)
NSD048	Wildwood	647779	5919392	164.3	57.4	-60	357.7	9.98m at 1.83g/t Au from 339.85m
NSD049	Wildwood	647808.66	5919395.87	164.6	50.58	-58.81	302.5	1.65m @ 4.80 g/t Au from 243.35
NSD049	Wildwood	647808.66	5919395.87	164.6	50.58	-58.81	302.5	10.05m @ 3.88 g/t Au from 247.85
NSD050	Wildwood	647886.63	5919372.61	165.0	62.04	-61.92	245.5	5.60m @ 8.73 g/t Au from 201.1
NSD051	Caledonia	657050.66	5904211.972	223.0	39.84	-59.82	239.4	anr
NSD052	Darlington	658212.89	5902562.27	215.8	31.39	-61.7	251.8	2.0m @ 1.29 g/t Au from 241
NSD053	Darlington	658327.73	5902515.73	213.1	30.27	-59.8	294.9	1.5m @ 4.24g/t AU from 140.5

NSA – no significant assay (DD)

anr – assays not returned.

* End-of-hole mineralisation



JORC Table 1

Section 1 Sampling Techniques and Data

Section 1 is divided into 3 sections by topic:

- a. Air Core Drilling
- b. Diamond Drilling
- c. Historic Drilling

Section 2 Reporting of Exploration Results

Section 3 Estimation and Reporting of Mineral Resources

Section 1 Sampling Techniques and Data – a. Air Core Drilling

(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 down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. - Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. - Aspects of the determination of mineralisation that are Material to the Public Report. - In cases where 'industry standard' work has been done this would be relatively simple (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.	Sampling is conducted by collecting rock chips via air core drilling. Dry samples will be split with a 1/8th riffle splitter. Wet sample comprise grabs. Each meter sampled is kept and stored for respites and or follow up analysis. For wet samples 2-3kg of sample is grabbed every 3m composite. The sample is dried, crushed and pulverised at a certified lab (Gekko Ballarat) and assayed with a 50g charge. For each metre of bedrock sample, a geochemistry bag full of sample is taken to be dried for later pXRF analysis. QAQC samples were inserted into the sample stream approximately every 10th sample, including matrix matched standards (Oreas) and blanks consisting of barren quarry basalt. Repeats are inserted (at least 1/hole and collected by cone and quartering the sample in the field. Sample intervals were 3m composites with minor variation at end-of-hole (<=3m). 1m samples taken in most prospective holes adjacent to prospective holes.
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 is performed by a Mantis 100 Truck mounted rig with 3m NQ rods. Phase 1 (reconnaissance) holes are vertical. Phase 2 (infill/step out) holes are angled at 60 degrees.
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	It is reported that when intercepting significant groundwater, the sample recovery decreased by up to 20%. Each meter is weighed in the field. Drillers are advised if sample return is deteriorating and requires improvement. Downhole sample contamination was reported on 25% of holes and, rarely, 10% of the total sample was



	<i>recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	contamination. Most of the material is weathered bedrock/saprock and minor fresh rock. Almost all samples are wet beneath the water table and some of the fine fractions are likely to be lost to overflow from the cyclone. End of hole refusal 'core' was recovered on >75% of all holes drilled.
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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	Each hole was logged quantitatively into a customized Excel spreadsheet with inbuilt validation scripts. All end of hole core were collected and XRF data was collected. The regional, vanguard AC drilling is unlikely to be used to support mineral resource determination.
Sub-sampling Techniques and sample preparation	- Core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary it, etc. and whether sampled wet or dry. - For all sample types, the nature, quality, and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field plicate/second-half sampling. - Whether sample sizes are appropriate to the grain e of the material being sampled.	Sampling protocol was based on observations in the logging and assigned by the rig geologist. The standard sample interval was 3m composites. Resplits to 1m are submitted for any composite over 0.17g/t Au. All bedrock (target) samples are wet. Samples are kept and 'farmed' for follow up if required. Field duplicates were inserted into the sample stream every ~20th sample. Duplicates were preferentially undertaken on meters that appear to be more likely to contain anomalous Au. Certified reference material (CRM) is inserted into the sample stream on every ~20th sample. CRM was inserted in between meters that appear to be more likely to contain anomalous Au. A blank was inserted into the sample stream after an interpreted anomalous zone or every ~30 samples.
Quality of assay Data and laboratory tests	- The nature, quality and appropriateness of the assaying and laboratory procedures used. - 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,	Every sample usually varied between 1.5 and 3kg. Samples were processed at Gecko Assay Laboratory are dried, crushed and pulverised (<75um), analysed with Fire Assay for gold with an ICP acid digest for 10 elements (Ag, As, Bi, Cd, Cu, Mo, Pb, Sb, W, Zn). Internal laboratory QAQC checks are reported by the laboratory and a review of the QAQC reports suggests that the laboratory is performing within acceptable limits.



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. • Documentation of primary data, data entry • procedures, data verification, data storage • (Physical and electronic) protocols. • Discuss any adjustment to assay data.	The data has been verified by North Stawell Minerals Competent Person Data entry is via standardized Company excel templates, using pre-set logging codes, with built in validation checks. Data is presently being transferred to a third- party geodatabase; further internal validations before export products are generated. Data is further validated visually in GIS and 3D software by North Stawell Minerals Personnel.
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.	The collar coordinates were collected with a handheld GPS with an accuracy of 1.8m. The coordinates are input into the logging spreadsheet and are viewed in GIS software for validation. The coordinates were collected in GDA94 / MGA zone 54. All collars are levelled to the DEM which was collected by AGG geophysics to a 1m accuracy.
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 • procedure(s) and classifications applied. • Whether sample compositing has been applied.	Data spacing is typically 100m on drilling lines and ~300m between fences. Data is not considered applicable to be included for Resource/Reserve estimation. Sample Compositing has not been applied to this drilling
Orientation of data in relation to geological structure	• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • 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.	Drilling was designed as first pass regional exploration to collect basement geochemistry data thorough alluvial cover and hence vertical drilling is appropriate. Angled holes (all Phase 2 Infill Drilling) have azimuths perpendicular to the regional trend. No material sample bias is expected or observed.



Sample security	The measures taken to ensure sample security.	Samples were returned to the site each day and stored inside a secure, fenced area. Samples were loaded into labelled polyweave bags and secured with plastic wrap on pallets prior to transportation. The chain of custody is managed by internal staff and transport contractors. Drill samples are stored on site and transported by a licensed reputable transport company to ALS Laboratories or Gekko Assay Laboratories. Sample receipts are issued. At the laboratory samples are stored in a secured yard before being processed and tracked through preparation and analysis. Sample information other than the company name and the sample ID are not provided to the laboratories.
Audits or reviews	The results of any audits or reviews of sampling	There has been no external audit of the Company's sampling techniques or data.

Section 1 Sampling Techniques and Data – b. Diamond Drilling

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i>	The diamond drill core samples were selected on geological intervals varying from 0.3m to 1.3m in length. All drill core was routinely cut in half (usually on the right of the marked orientation line) with a diamond saw and selected intervals submitted for analysis. Sample representivity was ensured by a combination of Company procedures regarding quality control (QC) and quality assurance/ Testing (QA). Certified standards and blanks were routinely inserted into assay batches.
Drilling techniques	<i>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.).</i>	Pre-collars were drilled to solid bedrock followed by diamond coring with HQ and NQ2. All drill core was orientated with a core orientation tool every core barrel run. At the Core farm, core was continuously oriented during logging.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	All diamond core was logged capturing any core



	- Measures taken to maximise sample recovery and ensure representative nature of the samples. - Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	loss, if present, and recorded in the database. All drill depths are checked against the depth provided on the core blocks and rod counts are routinely carried out by the driller.
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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	Geological logging of samples followed Company and industry common practice. Qualitative logging of samples included (but was not limited to); lithology, mineralogy, alteration, veining and weathering. All logging is quantitative, based on visual field estimates. Detailed diamond core logging, with digital capture, was conducted for 100% of the core.
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. - Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling. - Whether sample sizes are appropriate to the grain size of the material being sampled.	Detailed diamond core logging, with digital capture, was conducted for 100% of the core. Half core was sampled from NQ and HQ diameter drill core. Company procedures were 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 are 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.	Analysis for gold is undertaken at Gekko Laboratories (GAL) by 2-3kg Leach well Bottle Roll with a 27 element ICP finish to a lower detection limit of 0.01ppm Au using ALS technique Au-AA26. A 50g Fire assay is conducted on the Leachwell tail to determine residual gold. A review of certified reference material and sample blanks inserted by the Company indicate no significant analytical bias or preparation errors in the reported analyses. Internal laboratory QAQC checks are reported by the laboratory and a review of the QAQC reports suggests the laboratory is performing within acceptable limits.
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	The data has been verified by North Stawell Minerals Competent Person. Data entry is via standardized Company excel templates, using pre-set logging codes, with built in validation checks.



	• <i>(Physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i>	Data is stored in a third-party geodatabase (datashed) and managed by an external DBA (EarthSQL); further internal validations before export products are generated. Data is further validated visually in GIS and 3D software by North Stawell Minerals Personnel.
Location of data points	• <i>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.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i>	All maps and locations are in MGA Grid (GDA94 zone 54). All drill collars were initially measured by hand-held GPS with an accuracy of +3 metres. A Trimble DGPS or Kinematic DGPS was used for more accurate collar pick-up to an accuracy of +0.2m. An initial topographic control is achieved via use of DEM acquired during Airborne gravity acquisition. Final elevation is by Trimble DGPS or Kinematic GPS. Gyro down-hole surveys were taken every 30m on the way down to verify correct orientation and dip then multi- shots taken every 6m on the way out of the drill hole at hole completion.
Data spacing and distribution	• <i>Data spacing for reporting of Exploration Results.</i> • <i>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</i> • <i>procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i>	Drill hole spacing in these vanguard holes is bespoke, targeting geology cf. fences. Collars and targets are determined from geochemical, geophysical and geological data. Drilling reported in this program are step-out drillholes and may contribute to future mineral resource or ore reserves. Refer to sampling techniques, above for sample compositing
Orientation of data in relation to geological structure	• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>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.</i>	Prior exploration has returned a defensible orientation of the potential mineralisation. The exact location of mineralisation, in relation to lithological and structural boundaries, is relatively well understood in the main, although additional intercepts that depart from the geological model can occur. The drill orientation is attempting to drill perpendicular to the geology and mineralised trends previously identified from earlier drilling. Due to the early stage of exploration it is unknown if the drill orientation has introduced any sampling bias. This will become more apparent as further drilling is completed.
Sample security	• <i>The measures taken to ensure sample security.</i>	The chain of custody is managed by internal staff and transport contractors. Drill samples are stored on site and transported by a licensed reputable transport company to Gekko Assay Laboratories. Sample receipts are issued. At the laboratory samples are stored in a secured yard before being processed and tracked through preparation



		and analysis.
		Sample information other than the company name and the sample ID are not provided to the laboratories.
Audits or reviews	The results of any audits or reviews of sampling	An external review of data is underway, as part of data due diligence for a Mineral Resource update.

Section 1 Sampling Techniques and Data – c. Historic Drilling

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

Criteria	JORC Code explanation	Commentary
	- 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. - 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	Historic results (only depicted on Figures) 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 occur 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 targets in the south and in the Wildwood Project area (RL007501). Standard Industry techniques have been used for historic drilling where documented.
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 have occurred due to preferential loss/gain of fine/coarse material.	For historic data, if available, drilling data recoveries (e.g., weights for historic AC/RC drilling and recoveries for historic diamond drilling are recorded. No tests for bias are identified yet for historic results.



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. - Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. - The total length and percentage of the relevant intersections logged.	Geological logging of historic holes, where reviewed, follows industry common 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	- Core, whether cut or sawn and whether quarter, half or all core taken. - If non-core, whether riffled, tube sampled, rotary it, etc. and whether sampled wet or dry. - For all sample types, the nature, quality, and appropriateness of the sample preparation technique. - Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. - Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field plicate/second-half sampling. - Whether sample sizes are appropriate to the grain e of the material being sampled.	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	- The nature, quality and appropriateness of the assaying and laboratory procedures used. - 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.	Historic assays include gold +/- arsenic and base metals. Assays are generally aqua regia or fire assay. Detection limits and techniques are appropriate for historic results.



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.	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. No adjustments to assay data have been made.
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.	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. Historic drill collars have been determined with several techniques, ranging from survey pick-up through differential GPS. Topographic data is based on generational topographic maps and/or survey pick-up. Topographic control, for regional exploration, has not been validated. Future use of data will verify recorded elevations against high-resolution topographic data acquired by NSM.
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. - procedure(s) and classifications applied. - Whether sample compositing has been applied.	Historically, variable drill hole spacings are used to test targets and are determined from geochemical, geophysical, and geological data. Historic regional and geochemical drilling (AC) is drilled on strike perpendicular fences, with approx. 100m hole spacings and 100-400m line spacing Historic RC sampling is generally specifically targeted to follow up AC results. Minor RC fences are drilled, on 30-200m spacing. Historic diamond drilling is located to follow up on specific prior results or targets. Historic data in the footprint of the tenement EL007324 were designed and executed as regional exploration. The historic drilling data has not been reviewed for its appropriateness to inform Mineral Resource Classification.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> - 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 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.
Audits or reviews	The results of any audits or reviews of sampling	There has not been internal or external audit or review of historic assays identified.

Section 2 Reporting of Exploration Results - Drilling

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<i>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.</i> <i>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.</i>	Current tenements are summarised in Appendix 1 - Table 1 of the announcement. Historic tenements are identified from the Victorian Government Geovic online spatial resource. All granted tenements are current and in good standing. The project area occurs on freehold land. Minor Crown Land (>3%) and Restricted Crown Land (>1%) is identified. All areas are accessible if appropriate land access requests and agreements are in place. The Victorian Governments Geovic spatial online resource does not identify any material cultural, environmental, or historic occurrences. The southern end of EL007324 encompasses parts of the Stawell Township. These areas are complicated by dense, urban freehold land parcels, and challenges gaining access may occur if attempted. EL007324 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).
Exploration done by other parties	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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, 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.

Most programs include regional lines of RAB or AC drilling (577 of 650 holes) over identifiable magnetic highs. Follow up RC drilling (58 holes) under AC anomalies occur is sound practice. Eleven diamond holes (2419m) are completed – mainly focused on near Mine targets in the south.

Work has identified large, low grade gold anomalism along major interpreted structures (magnetics) and represents a technical success.

In the far south of tenement EL007324 and EL007325, exploration is typically testing for fault-repeats of the Stawell-type mineralisation, cantered on magnetic anomalies. Basalt 'dome' analogies were identified with minor associated mineralization.

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 million ounces of gold from hard rock and alluvial sources. 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 Stawell 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, Fosterville).

Drill hole Information

- *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
 - *easting and northing of the drill hole collar*
 - *elevation or 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*
 - *hole length.*

Details of all air core drilling is summarised in Appendix 2 of this report.

Sections and plans with summaries of assay are included in the body of the document for all drilling completed.

Summary tables of drillhole data are included.

Pathfinder elements determined by ICP for Gekko samples are not reported – these are vectors to



	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.	mineralisation. Where discussed in the text, laboratory analyses for these elements are described in qualitative terms.
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. - 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. - The assumptions used for any reporting of metal equivalent values should be clearly stated.	Only results with anomalous gold values (>0.05ppm) have been reported. No metal equivalents have been reported. No metal equivalent reporting is used or applied. For significant results (<1g/t Au) No external dilution is used. Internal dilution up to 2m so long as the average grade remains significant. For anomalous results (1 g/t Au>assay>0.05 g/t Au) no internal or external dilution is used. "including" results will be stated where the included result is an order of magnitude greater than the larger intercept.
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 lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	AC drillholes in this program were angled. Intercept lengths are down-hole length. Orientations of mineralisation are not known but are expected to be sub-vertical to moderately dipping.
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.	Diagrams are included in this report, including locations, plans and sections and areas mentioned in the 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.	All drill holes have been surveyed by hand-held GPS, which is considered an appropriate degree of accuracy for regional exploration air core drilling. For the exploration results, only significant and anomalous exploration results are reported and described.
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.	Geophysical data is described in the text. Details of the processing methodology are available in Table 1 of the September 2021 Quarterly report and in Table 1, part B: Geophysical inversions.
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). - Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further campaigns of drilling will be based on the completion of the current air core programme, followed by evaluation of the data. For better results, infill drilling is expected to delineate trends. Other drill rigs (RC or DD as appropriate) will execute any deeper follow up work.



Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	- Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. - Data validation procedures used.	- Extensive review of all data has been completed. - Over 20% of assays, surveys and all collar information were checked against original data sets. Geological Logging was reviewed against the extensive collection of Core photos and reviewed where significant changes in the geological interpretation were identified. - During this process, no material issues were identified. - Database is hosted in a secure datashed database managed by external company who validate and complete all importing and exporting of data.
Site visits	- Comment on any site visits undertaken by the Competent Person and the outcome of those visits. - If no site visits have been undertaken indicate why this is the case.	- Several site visits where conducted, where the competent person visited site. - Geological discussions, Resource Estimation discussions and Diamond Drill core review was conducted during the data revie process. - The site visits allowed significant understanding of both the Wildwood deposit and Stawell Gold Mine estimation parameters to be understood and implemented.
Geological interpretation	- Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. - Nature of the data used and of any assumptions made. - The effect, if any, of alternative interpretations on Mineral Resource estimation. - The use of geology in guiding and controlling Mineral Resource estimation. - The factors affecting continuity both of grade and geology.	- The confidence level of the wildwood geological interpretation is considered high, the control on mineralization, lithology types and deformation history are well understood by the Site team who have access to a long history of exploration and mining at the Stawell Gold Mine. - The data used for the interpretation is considered high quality after significant data review conducted. - Any changes in interpretation will have negligible effect on the volume or consistency of mineralization. Positioning changes may affect locations if interpretation of waterloo locations is changed. - Geology is heavily used in guiding the mineral resource estimation. The interpreted contact of the basalt is the major controlling structure of on mineralization, and as such the contact



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		is used in control the interpreted domain boundaries.
Dimensions	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	- Approximate Wildwood Basalt dimensions 2,500m Length 325m Width 750m Modelled Height - Model Extents (Length x Width x Height) - Maslin 1,160m x 460m x 700m - Clontarf 1,230m x 415m x 550m - Trinity 910m x 480m x 570m
Estimation and modelling techniques	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model</i>	- The Mineral Resource estimate was created using a combination of Ordinary Kriging and Inverse Distance estimation methods, with the estimation constrained within wireframes generated in Leapfrog. Domain wireframes were defined from Diamond and RC drilling and guided by the geological model created in Leapfrog. - The Grade estimate is based on 1.0m downhole composites, chosen because it represents the dominant sample interval length. 2019 review saw Detailed statistical and geological investigations completed including KNA analysis conducted in Snowden Supervisor in various locations on the domains to determine the optimum block size, minimum and maximum samples per search and search distance. The results of this study remain appropriate and have been incorporated in this model update. - High grade top cuts have been applied to two domains, to limit the influence of high-grade data. - No by-products or deleterious elements have been modelled or are relevant to the mine/economics or planning of extraction of the deposit. - Models have been rotated to 330 degrees from grid north, to best line up the long axis of blocks to the strike of



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	<i>data to drill hole data, and use of reconciliation data if available.</i>	mineralization. - A parent block size of 5 m (X) x 10 m (Y) x 10 m (Z) with a sub-block size of 1.0 m (X) x 2.0 m (Y) x 2.0 m (Z). The parent block size has been selected based on the average drill spacing and also by kriging neighbourhood analysis (KNA completed in 2019) to select a block with the best overall kriging efficiency, slope of regression and minimal negative kriging weights. - For all mineralized zones, the wireframes have been used as hard boundaries for the interpolation of gold grades. This is to ensure only gold grades within each wireframe have been used to estimate the block inside the same wireframe. - The mineralised zones have been interpreted in 3D using nominal 0.5 g/t gold cut-off grade to define the boundary between mineralised and un-mineralised material. Although some intercepts below 0.5 g/t gold have been included for continuity purposes. - Leapfrog Implicit Vein modelling was used to create the mineralized domains, with the interpreted basalt contact used as a reference surface to guide the implicit modelling. - The composite gold data for all domains displays a positively skewed distribution as expected with this style of deposit. The composites for each mineralised domain have been analysed to identify any extreme values which could have an adverse effect on the grade estimation. Any extreme values identified have been applied top-cut based on log probability and log histogram plots to the value 22g/t Au.
Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	- The Mineral Resource tonnage is reported using a dry bulk density and therefore represents dry tonnage excluding moisture content.
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The cut-off grade of 1.0g/t for the stated Mineral Resource estimate is determined from assumed mining, trucking and processing costs associated with the nearby Stawell Gold Mine plant and mining knowledge.



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Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	- Mining factors were assumed to be low cost, selective surface mining practices, and potential selective underground mining techniques. <table><tr><td>Mining Factors</td></tr><tr><td>Mining recovery (%)</td></tr><tr><td>Mining Dilution (%)</td></tr><tr><td>Gold Price (AUD/ounce)</td></tr><tr><td>Processing Recovery (%)</td></tr><tr><td>Transport Costs (\$/km)</td></tr><tr><td>Transport Distance</td></tr><tr><td>Royalties (revenue)</td></tr><tr><td>Processing Costs (per tonne)</td></tr><tr><td>Mining Cost (per tonne)</td></tr><tr><td>GradeControl and G&A (per tonne)</td></tr><tr><td>Cut off Grade (gold g/t)</td></tr></table> - Mining and Processing costs were provided by the North Stawell Team and are defined from actual and assumed experience.	Mining Factors	Mining recovery (%)	Mining Dilution (%)	Gold Price (AUD/ounce)	Processing Recovery (%)	Transport Costs (\$/km)	Transport Distance	Royalties (revenue)	Processing Costs (per tonne)	Mining Cost (per tonne)	GradeControl and G&A (per tonne)	Cut off Grade (gold g/t)
Mining Factors														
Mining recovery (%)														
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Mining Cost (per tonne)														
GradeControl and G&A (per tonne)														
Cut off Grade (gold g/t)														
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	- Metallurgical test work was competed on Wildwood drill core and reported in the 2019 resource statement. The test work did not highlight any material issues. - Processing and Recovery of the mineral resource was assumed to be in line with the Stawell Gold Mine recovery and cost.												
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	It has been assumed that current or similar operational approaches, protocols and facilities applied to environmental factors at Stawell Gold Mine to continue for the duration of mine life.												
Bulk density	Whether assumed or determined. If	The bulk density measurements have												



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	<i>assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	been routinely taken across the ore zones using the water immersion method. - Weathering profile was modelled from geological logging with assigned densities values summarized below. - Oxide - 2.1 - Transitional - 2.4 - Fresh - 2.8 - Ore - 3.0 • - Density measurements indicate an increase in density of mineralized material, which is in line with expectation given the silicification of the ore material as well as the significant sulphide material present. - The Density values are in line with those used at the Stawell Gold Mine which reconcile with production figures closely.
Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (i.e., relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The classification criteria used is as follows: - Measured - Not used. - Indicated - Drill Spacing less than 25m x 25m. - Drill angle of intersection better than 45 degrees - Ordinary Kriging estimation method employed. - Inferred - Drill Spacing between 25mx 25m and 50m x 50m. - Inverse Distance estimation method employed. - Unclassified - All other blocks • - The Resource has been classified based on quality of the data collected, the density of data, the confidence of the geological and mineralization model, resource estimate, and the - The application of these approaches is adequate to establish confidence. • - The results of the mineral resource estimation and classification accurately reflect the Competent Persons view of the deposit.



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<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	NA
<i>Discussion of relative accuracy/ confidence</i>	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i> <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	- The Competent Person is of the opinion that the current block estimates provide a good estimate of tonnes and grades on a global scale, which is appropriate given the classification of most of the Mineral Resources as either Indicated or Inferred. - The use of sectional validation plots comparing the estimated grades with the input composites by Easting, Northing and RL. - The Competent Person considers that additional drilling or work on the Wildwood prospect will not significantly affect the potential economic extraction of the deposit