



**NORTH STAWELL MINERALS**  
BETTER SCIENCE, BETTER EXPLORATION

# North Stawell Minerals.

Shallow gold under thin cover  
in the Stawell Corridor, western Victoria

Rendezvous Hotel, Melbourne

*We acknowledge the traditional owners of the land on which we meet, the Wurundjeri peoples, and pay our respects to elders past and present*

Victorian Gold Forum 20-21 February 2024

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## **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.

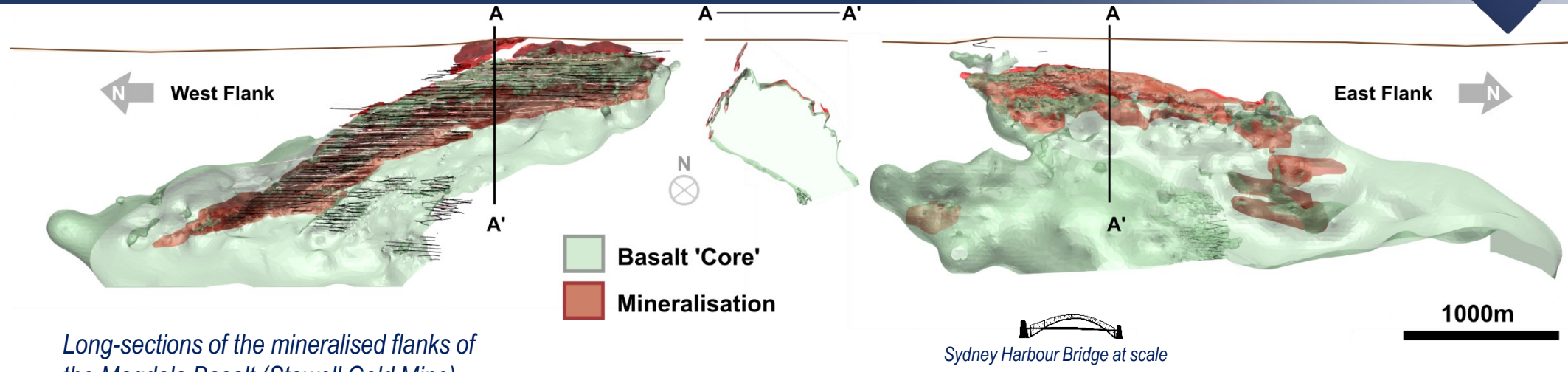
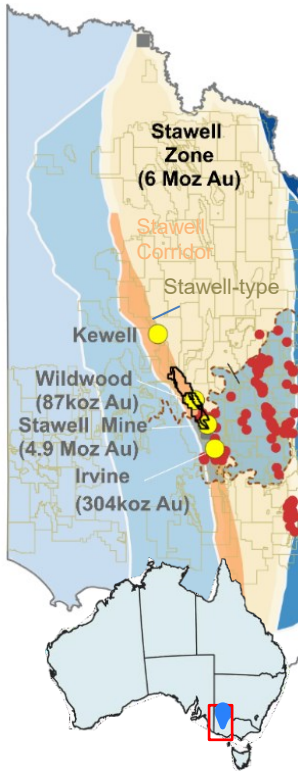
## **New Information and Previous Results**

For previously reported results, North Stawell Mineral is not aware of any new data or information that materially affects the information as originally disclosed. All results in the presentation are previously reported.

# INTRODUCTION - STAWELL GOLD MODEL<sup>17</sup>

Gold on the margins of a structurally pre-emplaced basalt.

Mineralisation type has moderate strike and plunge and is depth persistent.



Long-sections of the mineralised flanks of the Magdala Basalt (Stawell Gold Mine). Cross section A-A' is to scale and marked on long sections.

## Deposit model

Stawell-type Gold  
 Narrow Vein Gold (e.g. Ballarat, Bendigo)  
 Dome-related Gold (e.g. Homestake (US))

## Size Dimensions

50koz - 5Moz Au target (2-8g/t Au)  
 up to 3,500(l) x 1,000(w) x 1,600(d)

## Regional

**Stawell Corridor** – accretionary prism with pre-mineralisation structures. Proximal to major mineralising structures

## Mid-scale

Lodes on the **margins of basalt domes** as flanking mineralisation or discrete mineralisation in embayments and irregularities. Plunging lodes in the structural **pressure-shadow above the basalt.**

## Small-scale

Sulphide-facies volcanoclastics, or adjacent to reduced marine (chemical?) sediments. Late felsic dykes up structures. 3<sup>rd</sup> phase quartz veining.

## Geochemistry

Asp, Au +/- Po +/- Fe-carbonate and Fe-chlorite (50m), Pb and Ca metasomatism.

## Geophysics

**Margins of gravity +/- magnetic geophysical highs (basalts), high-curvature in 3D inversions. EM methods for reduced sediments or more significant sulphide horizons?**

<sup>17</sup> Refs: 2,9, 11, [AIG 2022 Vic Roundup](#).

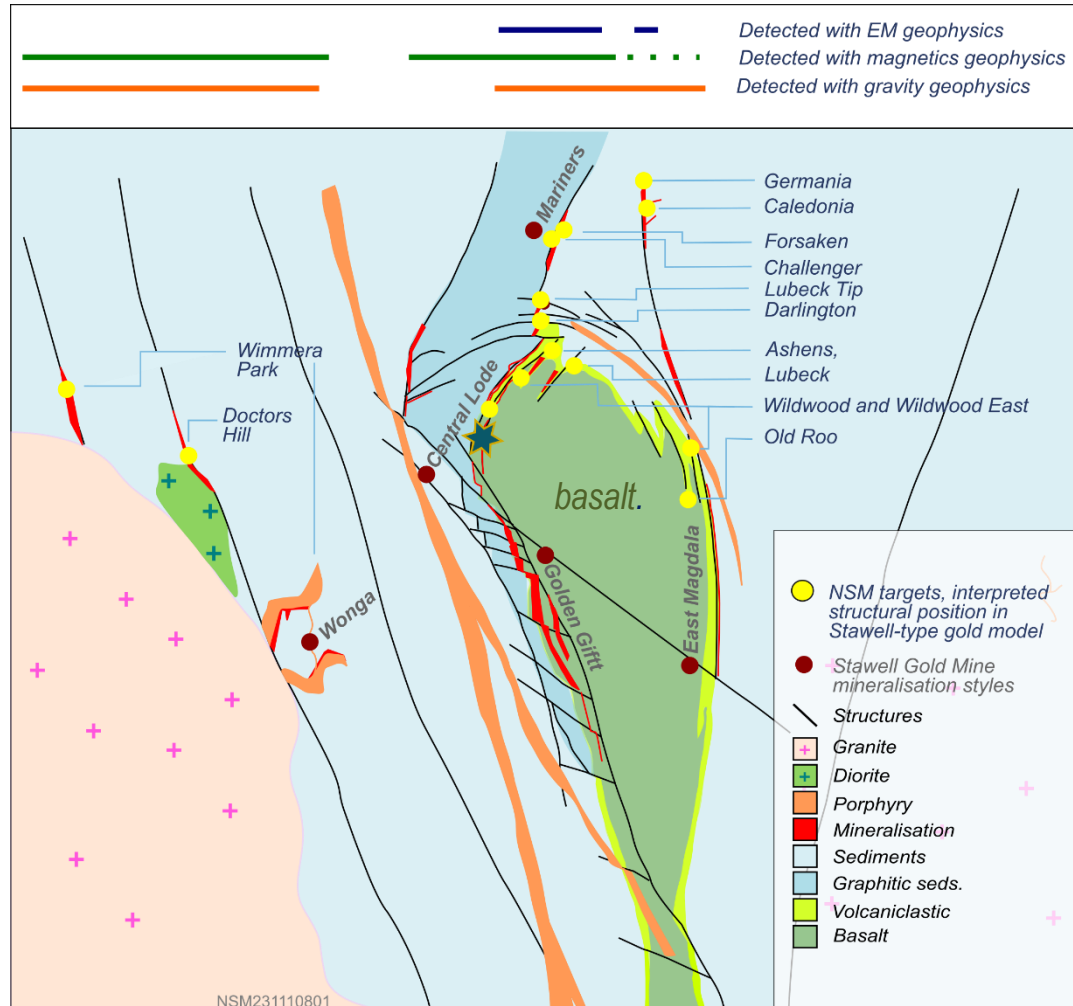
# PRIORITIES – MODEL-BASED INTERPRETATION

Careful application of the Stawell-gold model– and the application of geophysics – makes a significant positive impact on exploration.

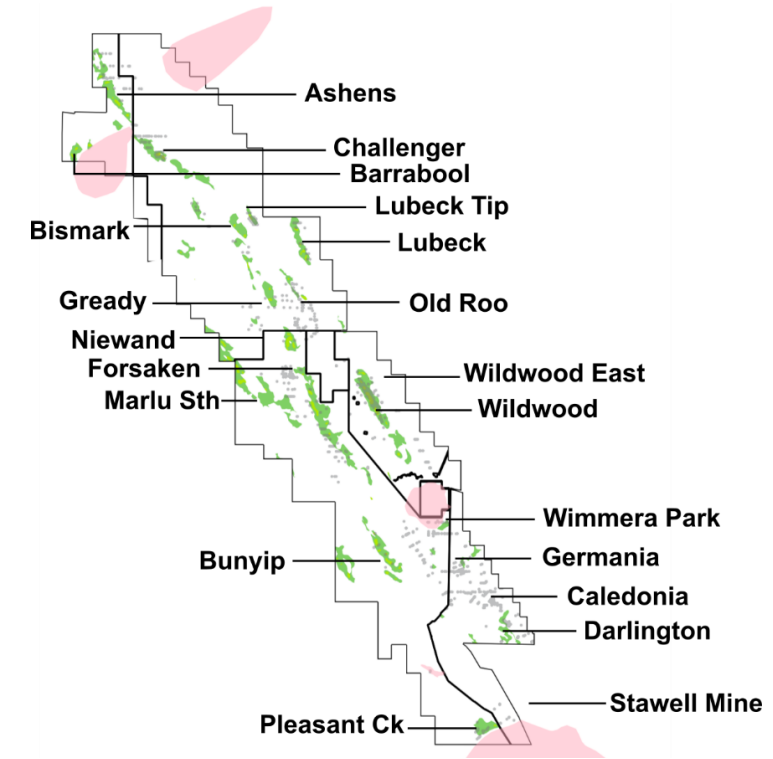


This cross section of Stawell highlights gold on the basalt margins and the splay(s) of mineralisation above the basalt.

Splay mineralisation may vector to deeper, larger gold systems wrapped around deeper basalts.



Key NSM Targets and their interpreted position within the Stawell Gold model<sup>23</sup>



NSM targets and interpreted controlling basalt footprints



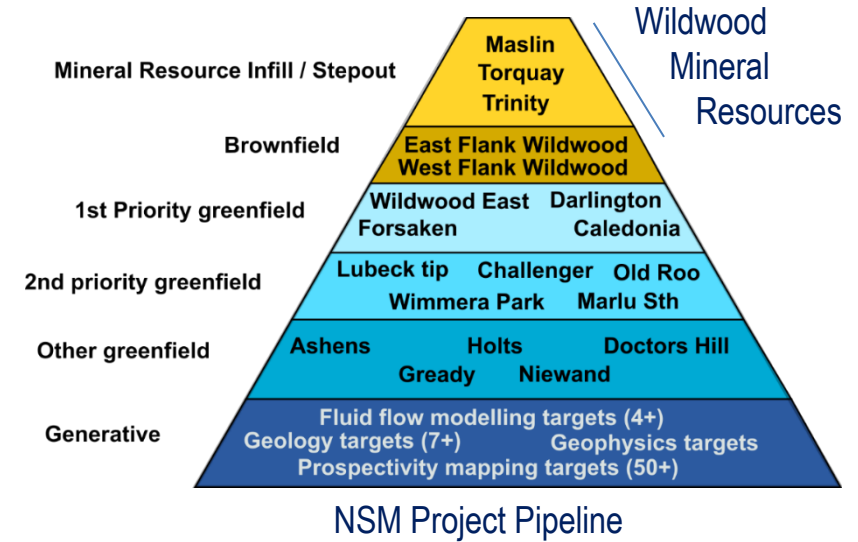
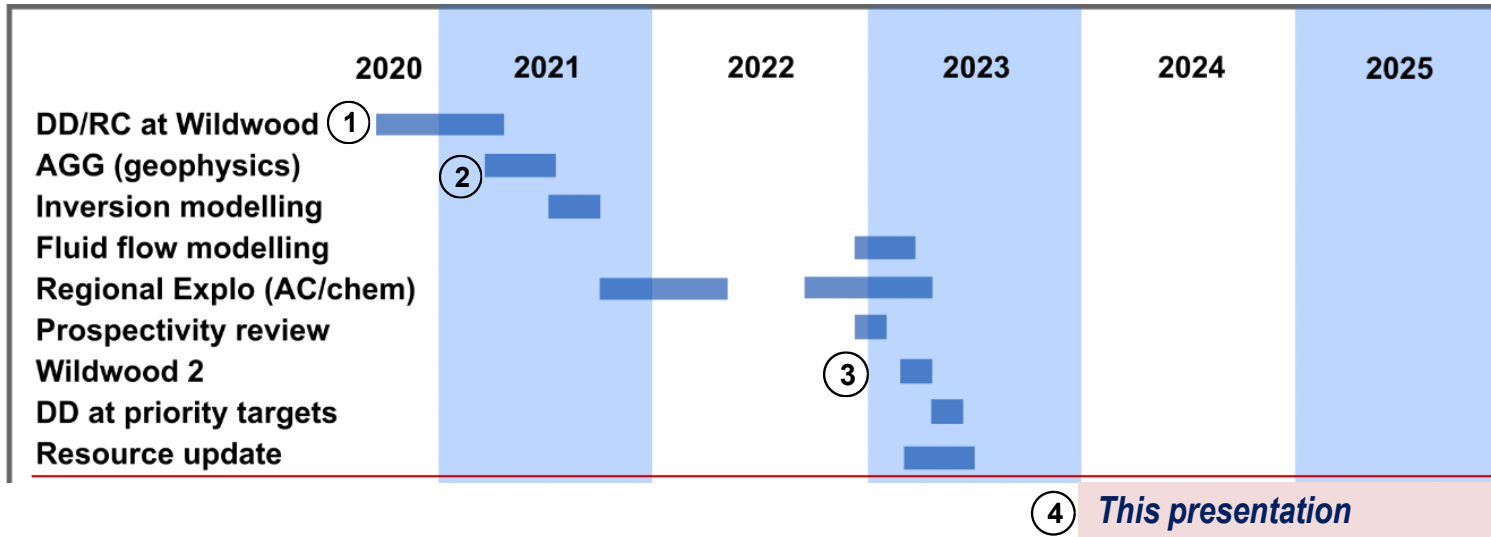
# WEATHERING THE CALM!

Despite exploration-wide capital challenges, NSM has positioned itself well, ready to advance key projects.

- ① Early challenges at NSM's flagship Wildwood forced a significant pivot for NSM's Exploration Strategy
- ② Focus on establishing regional prospectivity, and a total rebuild for a healthy project pipeline to absorb future risk – a 2 season geophysics and AC drilling campaign
- ③ At the end of 22-23 season, two key projects were executed – Diamond Drilling at fast-advancing regional projects and a Mineral Resource update at Wildwood.
- ④ Progress key projects – complicated by headwinds in the capital markets reshaping 23-24 programs.

- 5 Major regional geophysics/targeting programs
- 60km 60km drilling (42km AC on 20 targets, regional RC, DD)
- 2 New<sup>1</sup> gold-prospective basalts drilled.

- 87koz Au Update Mineral Resource at Wildwood (from 55koz)
- 5 Targets that warrant priority focussed exploration (Wildwood area, Darlington. Then Caledonia, Forsaken, Lubeck Tip)





# DRILLING – AIR CORE ANOMALISM

Anomalous intercepts are important results in air core – potentially indicating proximity to higher grade mineralisation

3,500m gold-anomalous trend – open to sth with another 3,500m potential,

Geophysics-only discovery under cover. Basalt intersected

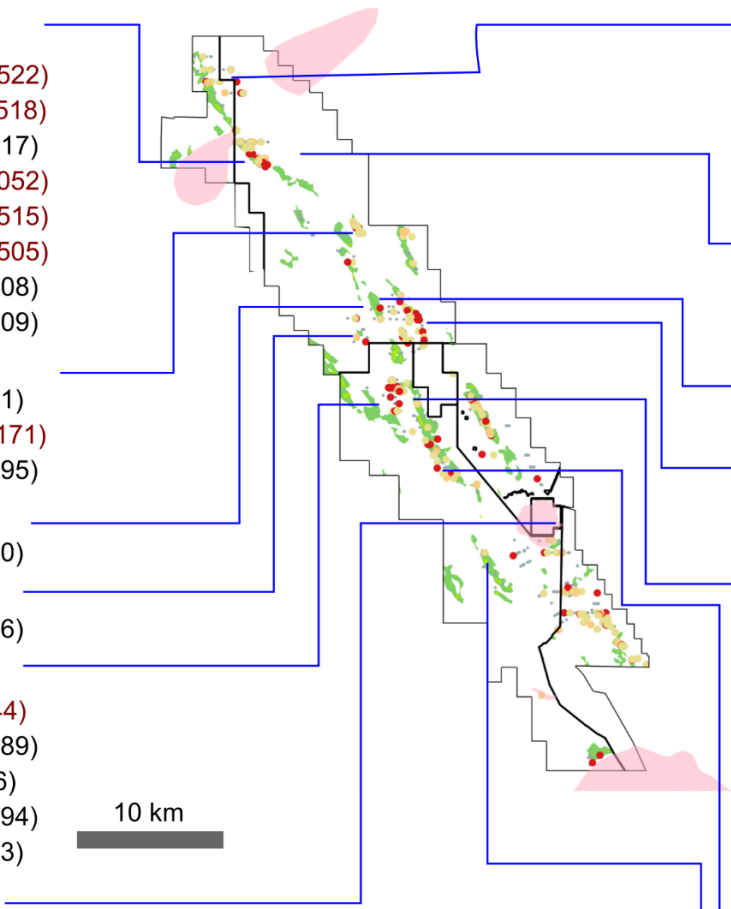
Drilled before CSIRO numerical modelling highlighted potential for a high priority 'dilation zone' at Gready.

NSM drilling and expanded the 1+g/t trend to 400m (open). Exciting hybrid structural position on the northern, folded end of a 9km basalt (interpreted at depth)

Strong anomalism as a possible Wonga – IRC analogy

## NSM Results - AC only

- Challenger**<sup>28</sup>
- 10.00m @ 0.17 g/t Au from 82.00m\* (NSAC0522)
  - 3.00m @ 0.57 g/t Au from 110.00m\* (NSAC0518)
  - 15.00m @ 0.12 g/t Au from 73.00m (NSAC0517)
  - 13.00m @ 0.14 g/t Au from 78.00m\* (NSAC0052)
  - 15.00m @ 0.13 g/t Au from 87.00m\* (NSAC0515)
  - 23.00m @ 0.09 g/t Au from 88.00m\* (NSAC0505)
  - 15.00m @ 0.16 g/t Au from 84.00m (NSAC0508)
  - 18.00m @ 0.16 g/t Au from 60.00m (NSAC0509)
- Lubeck Tip**<sup>12</sup>
- 6.00m @ 0.24 g/t Au from 59.00m (NSAC0471)
  - 16.00m @ 0.11 g/t Au from 49.00m\* (NSAC0171)
  - 12.00m @ 0.16 g/t Au from 62.00m (NSAC0495)
- Gready**<sup>29</sup>
- 6.00m @ 0.41 g/t Au from 37.00m (NSAC0150)
- Niewand**<sup>30</sup>
- 6.00m @ 0.30 g/t Au from 50.00m (NSAC0186)
- Forsaken**<sup>11</sup>
- 7.00m @ 0.20g/t Au from 32.00m\* (NSAC0244)
  - 18.00m @ 0.12 g/t Au from 36.00m (NSAC0589)
  - 9.00m @ 0.26g/t Au from 65.00m (NSAC0586)
  - 15.00m @ 0.23 g/t Au from 56.00m (NSAC0594)
  - 9.00m @ 0.46 g/t Au from 50.00m (NSAC0583)
- Wimmera Park**<sup>27</sup>
- 6.00m @ 0.23 g/t Au from 48.00m (NSAC0311)
  - 4.00m @ 0.41 g/t Au from 32.00m (NSAC0282)
  - 12.00m @ 0.17 g/t Au from 30.00m (NSAC0318)
  - 6.00m @ 0.35 g/t Au from 33.00m (NSAC0270)



- AC Collar - NSA
- 0.5-1 gxm
- 1-1.5gxm
- 1.5+ gxm
- Interpreted basalt
- Intrusive
- NSM tenement boundary
- 1@ Ends in mineralisation

## Historic Results - AC only

- Ashens**
- 5.00m @ 0.47 g/t Au from 100.00m (ASA094)
  - 10.00m @ 0.24 g/t Au from 62.00m (ASA163)
  - 20.00m @ 0.13 g/t Au from 70.00m (ASA184)
  - 30.00m @ 0.09 g/t Au from 94.00m (ASA032)
  - 5.00m @ 0.75g/t Au from 60.00m (ASA184)
- Challenger**
- 26.00m @ 0.09 g/t Au from 64.00m\* (BAC003)
  - 30.00m @ 0.15 g/t Au from 56.00m (ASA064)
  - 23.00m @ 0.21 g/t Au from 70.00m\* (ASA088)
- Gready**
- 20.00m @ 0.18 g/t Au from 47.00m (WLA025)
- Old Roo**
- 7.00m @ 0.35 g/t Au from 41.00m\* (WLA261)
  - 5.00m @ 0.50 g/t Au from 40.00m (WLA154)
- Forsaken**
- 20.00m @ 0.12 g/t Au from 47.00m\* (GLA223)
  - 10.00m @ 0.28 g/t Au from 37.00m (GLA187)
  - 19.00m @ 0.17 g/t Au from 53.00m\* (GLA208)
  - 15.00m @ 0.22 g/t Au from 41.00m (GLA229)
  - 10.00m @ 0.45 g/t Au from 49.00m\* (GLA228)
  - 15.00m @ 0.33/t Au from 25.00m (GLA172)
  - 17.00m @ 0.29 g/t Au from 58.00m (GLA204)
  - 56.00m @ 0.10 g/t Au from 15.00m\* (GLA224)
  - 40.00m @ 0.24 g/t Au from 18.00m\* (GLA190)
- Forsaken Sth**
- 5.00m @ 0.62 g/t Au from 39.00m (GLA075)
- Bunyip**
- 23.00m @ 0.12 g/t Au from 93.00m\* (GLOR14)

<sup>11</sup> Refs 2,9,15,28,38 <sup>12</sup> Refs 8,9,14,19,21,3. <sup>27</sup> Refs 25,29. <sup>28</sup> Refs 9,16,43,44. <sup>29</sup> Refs 39,41. <sup>30</sup> Refs 29. <sup>31</sup> Ref 66



# DRILLING – SIGNIFICANT HITS

## Multiple significant intercepts advance several targets: 42km AC, 6km RC, 11km DD following up on geophysics and historic drilling.

Geophysics-only discovery under cover. Basalt intersected

First +1g/t intercept in mature target. New targets from fluid flow modelling

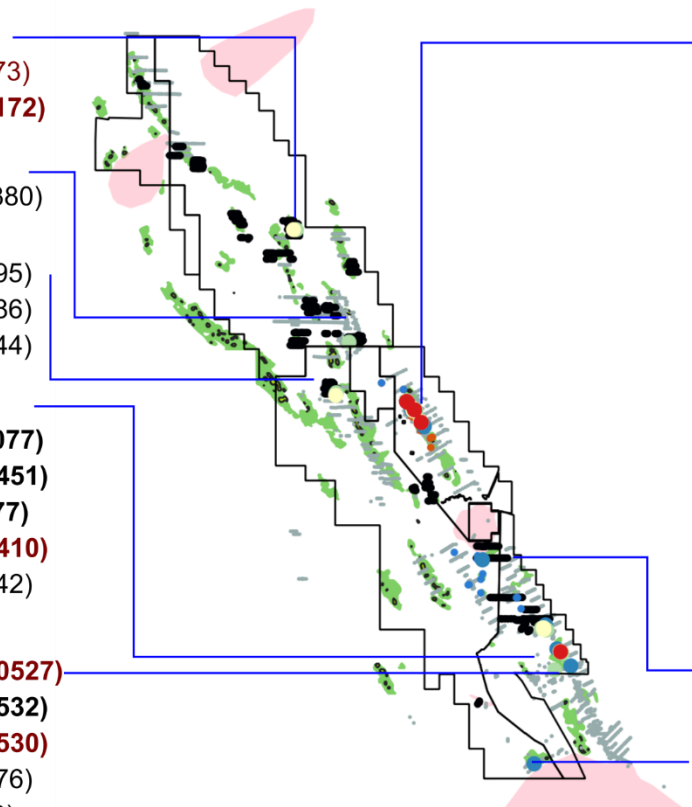
Expanded eastern min to 400m - open. Reinterpreted structure for improved targeting.

New discovery under shallow cover. Now 600m at 1+g/t. open

Determined orientation of mineralisation under the mine and extended down-plunge and down-dip. Intersected possible controlling basalt at depth – a significant result for Stawell-type gold

Wildwood- drilled down-plunge, extending mineralisation. Re-interpreted and re-estimated Mineral Resource: 87koz Au at 2.4g/t Au. (ASX:NSM 29 June, 2023). Open down-plunge.

- Lubeck Tip <sup>12</sup>
  - 1.00m @ 3.00 g/t Au from 42.00m (NSAC0173)
  - 1.00m @ 5.05 g/t Au from 56.00m (NSAC0172)
- Old Roo <sup>24</sup>
  - 2.00m @ 1.48 g/t Au from 25.00m\* (NSAC0380)
- Forsaken
  - 3.00m @ 1.98 g/t Au from 51.00m (NSAC0595)
  - 3.00m @ 1.02 g/t Au from 62.00m (NSAC0586)
  - 1.00m @ 1.24 g/t Au from 31.00m (NSAC0244)
- Caledonia <sup>10</sup>
  - 1.00m @ 12.15 g/t Au from 36.00m (NSR0077)
  - 6.00m @ 1.40 g/t Au from 63.00m (NSAC0451)
  - 3.00m @ 2.34 g/t Au from 45.00m (NSR0077)
  - 4.00m @ 2.08 g/t Au from 98.00m (NSAC0410)
  - 3.00m @ 1.61 g/t Au from 75.00m (NSAC0442)
- Darlington <sup>8</sup>
  - 4.00m @ 10.77 g/t Au from 60.00m (NSAC0527)
  - 6.00m @ 3.45 g/t Au from 42.00m (NSAC0532)
  - 3.00m @ 3.04 g/t Au from 45.00m (NSAC0530)
  - 3.00m @ 2.06 g/t Au from 86.00m (NSAC0576)
  - 1.50m @ 4.24 g/t Au from 140.50m (NSD053)
  - 1.00m @ 3.96 g/t Au from 137.00m (NSR0086)



- Wildwood <sup>25</sup>
  - 12.00m @ 9.49 g/t Au from 34.00m (NSR0052)
  - 16.00m @ 4.56 g/t Au from 22.00m (NSR0007)
  - 5.60m @ 8.73 g/t Au from 201.10m (NSD050)
  - 15.00m @ 3.04 g/t Au from 46.00m (NSR0060)
  - 10.05m @ 3.88g/t Au from 247.85m (NSD049)
  - 5.00m @ 7.50 g/t Au from 15.00m (NSR0051)
  - 7.00m @ 5.30 g/t Au from 250.90m (NSD049)
  - 3.00m @ 4.71 g/t Au from 36.00m (NSR0055)
  - 5.00m @ 2.58 g/t Au from 96.00m\* (NSR0061)
  - 2.00m @ 4.35 g/t Au from 12.00m (NSR0030)
  - 4.00m @ 1.93 g/t Au from 56.00m\* (NSR0029)
  - 2.05m @ 3.73 g/t Au from 342.50m (NSD048)
  - 1.65m @ 4.80 g/t Au from 243.35m (NSD049)
  - 5.00m @ 1.74 g/t Au from 278.00m (NSD049)
  - 3.00m @ 2.19 g/t Au from 47.00m (NSR0013)
  - 2.50m @ 2.77 g/t Au from 292.50m (NSD049)
- Wimmera Park <sup>26</sup>
  - 1.00m @ 1.17 g/t Au from 93.00m (NSR0063)
- Pleasant Ck <sup>27</sup>
  - 1.00m @ 1.41 g/t Au from 112.00m (NSR0087)
  - 1.00m @ 1.35 g/t Au from 168.00m (NSR0087)

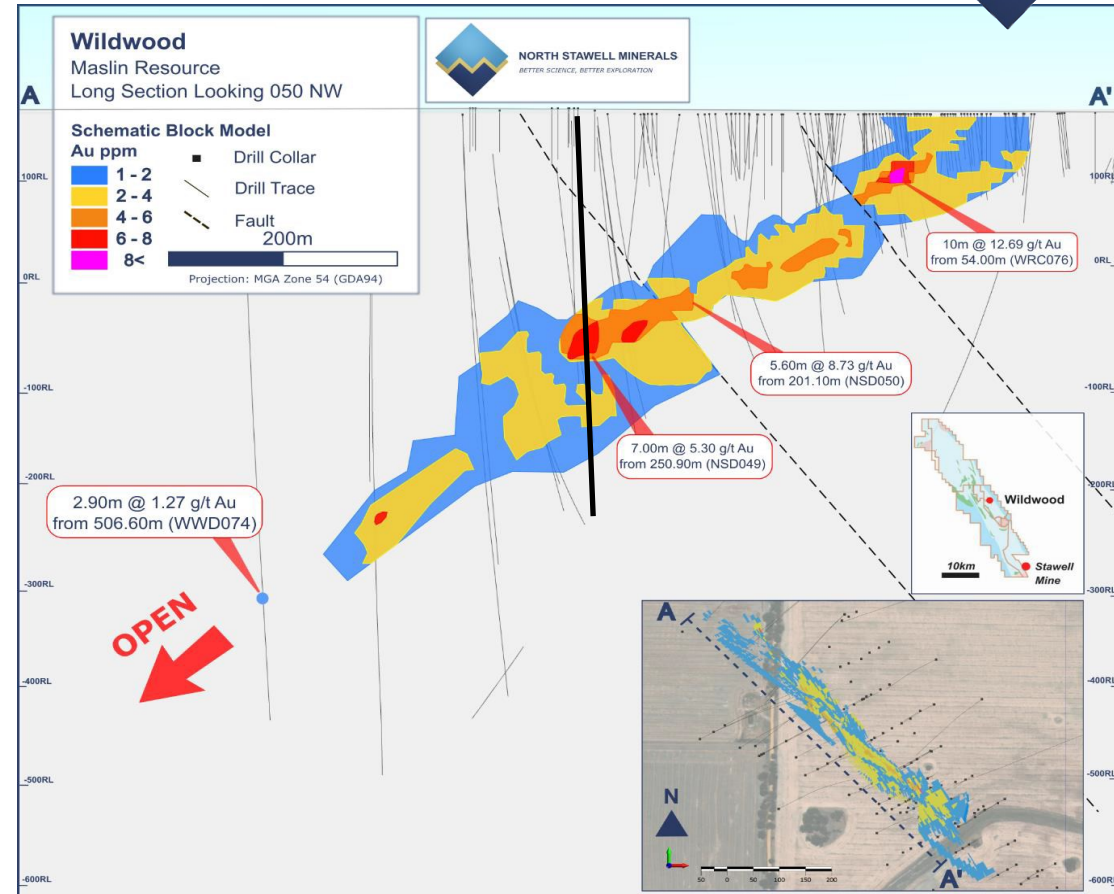
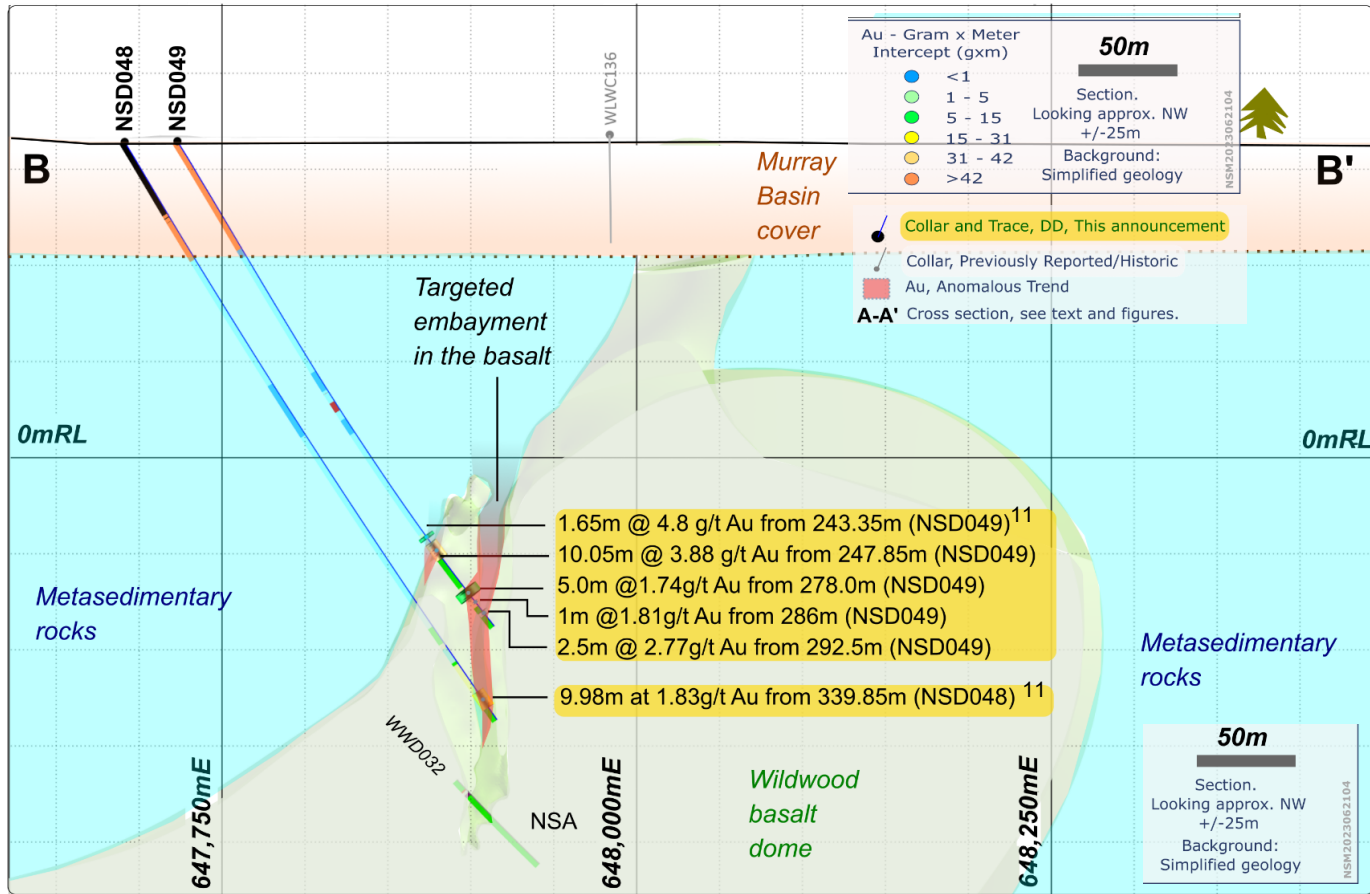
Wimmera Park – Looks like Wonga (IRG?). 300m wide anomalous Au-As corridor – open.

- Historic drilling
- Aircore (NSM)
- RC (NSM)
- Diamond (NSM)
- Interpreted basalt
- Intrusive
- NSM tenement boundary
- 1@ Good reconnaissance ihit

<sup>8</sup> Refs 2,8,11,14 <sup>10</sup> Refs 2,8,9,20,24,32. <sup>12</sup> Refs 8,9,14,19,21,3. <sup>24</sup> Refs 30,39, 42. <sup>25</sup> Refs 2,8,12,13,14,55,56,57,59,60,62,64. <sup>26</sup> Refs 34,35. <sup>27</sup> Refs 25,29.

# DRILLING – WILDWOOD

Three Diamond holes were completed at Wildwood in 2023, targeting the north-plunging Maslin Mineral Resource prior to a planned resource update.



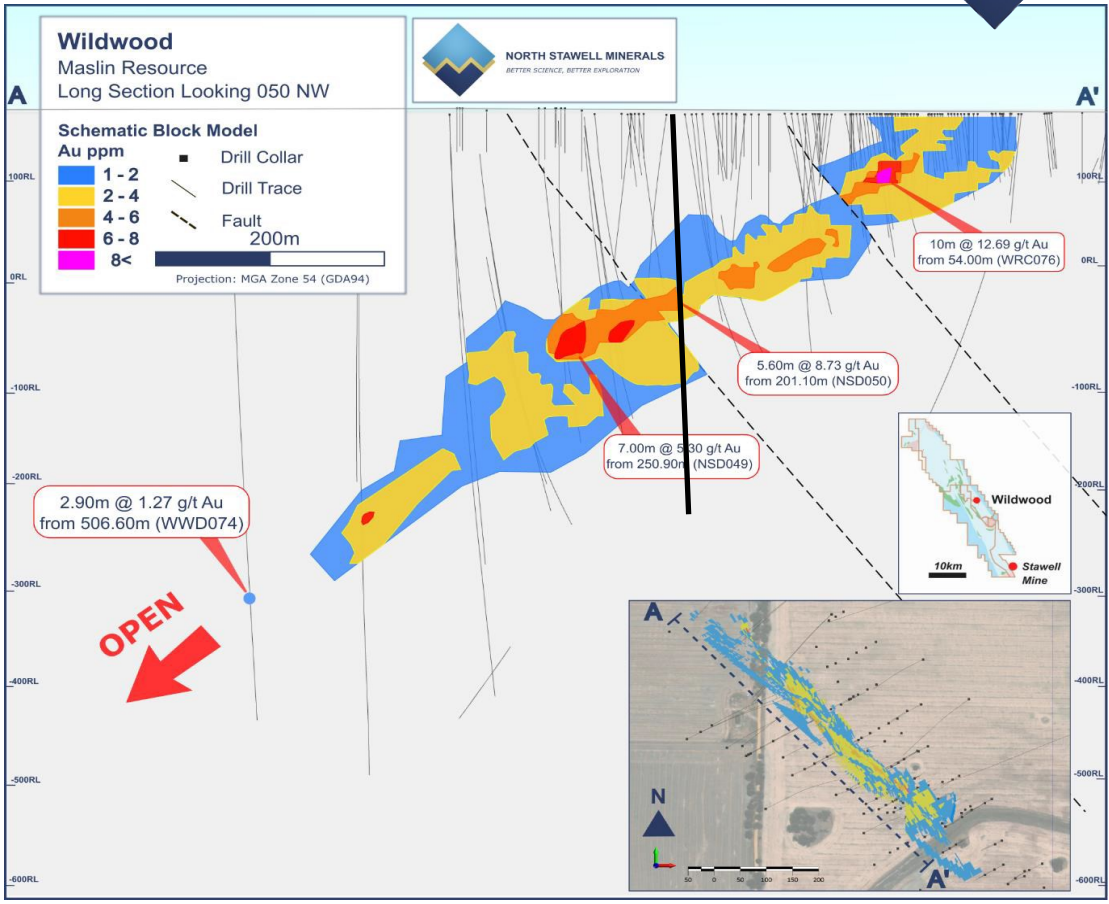
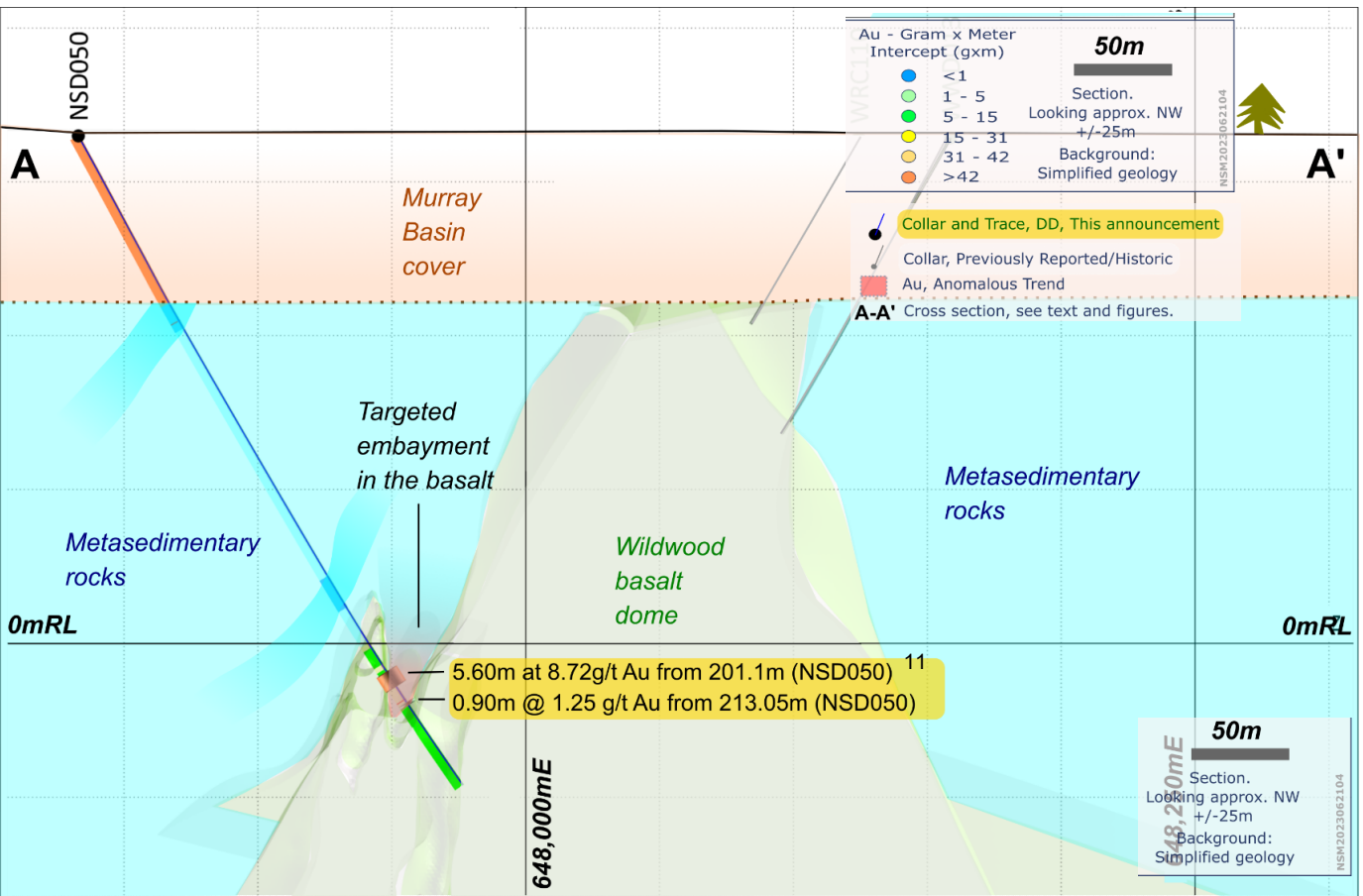
Drilling targeted a gap in the drilling following re-interpretation. Mineralisation occurred principally in an embayment in the basalt core (called a “waterloo”). Mineralisation was also intersected on the basalt flank – an encouraging intercept for larger volume mineralisation styles.

<sup>11</sup> Refs 8, 13



# DRILLING – WILDWOOD

Three Diamond holes were completed at Wildwood in 2023, targeting the north-plunging Maslin Mineral Resource prior to a planned resource update.



<sup>11</sup>Refs 8, 13

# RESOURCES<sup>1</sup>

## 87,300 oz Au Mineral Resource update. Shallow-tested and open in several directions.



The modest Mineral Resource at Wildwood benefits from re-interpretation and re-estimation and structural interpretation.

	Indicated			Inferred			Exploration		
	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)	Tonnes (t)	Grade (g/t Au)	Ounces (oz Au)
Maslin	328,100	2.3	24,600	361,900	2.2	25,500	308,000	1.4	14,000
Clontarf	140,400	2.3	10,500	90,100	1.9	5,400	4,700	1.2	700
Trinity	121,800	2.4	9,500	112,600	3.3	11,800	9,600	1.6	500
<b>TOTAL</b>	<b>590,300</b>	<b>2.4</b>	<b>44,600</b>	<b>564,600</b>	<b>2.4</b>	<b>42,700</b>	<b>322,300</b>	<b>1.4</b>	<b>14,700</b>

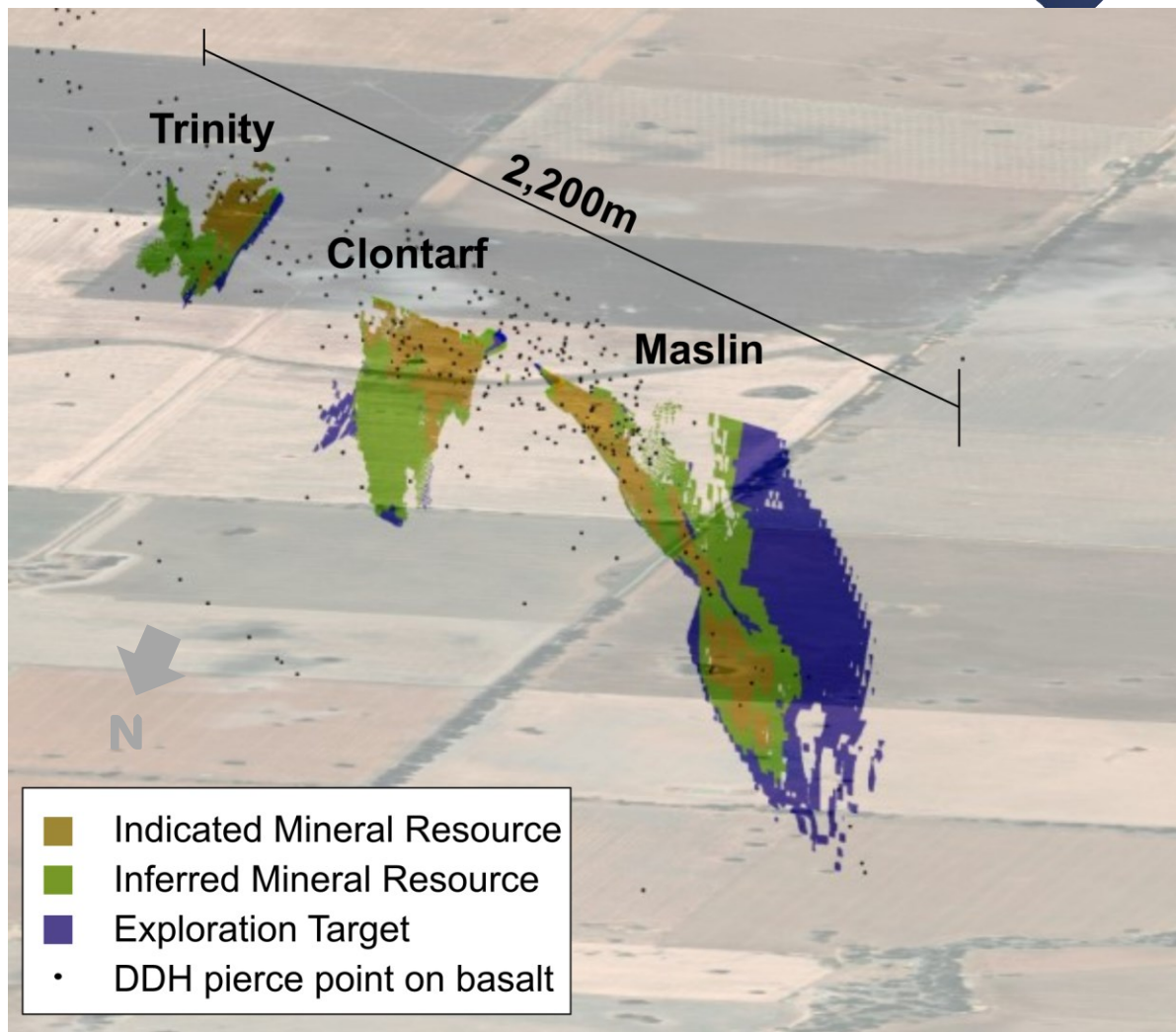
(ASX:NSM 29 June 23) Reported in accordance with 2012 JORC. 1g/t Au cut-off.

- increased ounces<sup>1</sup> (87.3koz Au (+59%))
- increased gold grade<sup>1</sup> (2.4g/t Au (+20%))
- improved confidence<sup>1</sup> (44,600oz Au (**51% of resource**) is classified as Indicated Mineral Resource).

Mineralisation is Qtz-Asp-Pyr-Py-carbonate-chlorite assemblage on the margin of the Wildwood Basalt – **identical** to the mineralisation at Stawell, 25km to the south.

Mineralisation is largely restricted to waterloos (embayments in the basalt) restricting volume. Determining the controls that migrate mineralisation to **larger volume flank mineralisation** is a next step for Wildwood's prospectivity.

A 14,000 oz Au Exploration Target<sup>1</sup> is also identified. Exploration Targets will not necessarily convert to Mineral Resource with additional drilling.



Wildwood Mineral Resource - name and classification

<sup>1</sup> Refs: 9,12,13.

# DARLINGTON

## 2 diamond holes extend good AC results 120m down-dip and 140m down-plunge. An altered and weakly mineralised basalt intersected at depth!



The historic Darlington Mine produced 2,347oz Au at 18 g/t and occurs in the same structural corridor as Stawell, 6km south. NSM exploration interprets Darlington as „splay-type“ mineralisation. The basalt may be the main target.

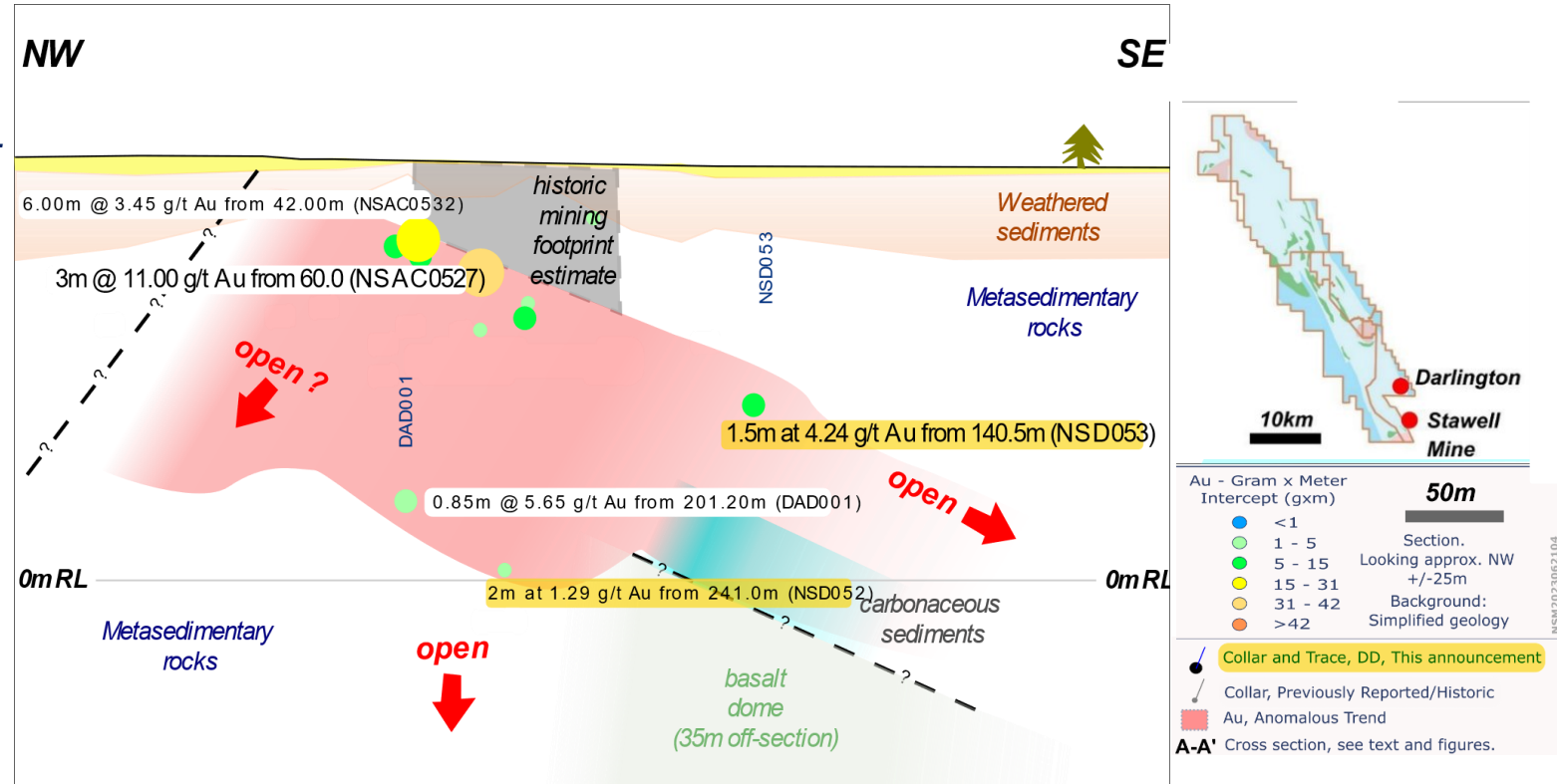
Air core programs identified the expected trend and plunge of Darlington mineralisation. Air core results include:

- 3.00m @ 11.00 g/t Au from 60.00m (NSAC0527) <sup>8</sup>
- 6.00m @ 3.45 g/t Au from 42.00m (NSAC0532) <sup>8</sup>
- 3.00m @ 3.04 g/t Au from 45.00m (NSAC0530) <sup>8</sup>
- 3.00m @ 2.83 g/t Au from 42.00m (SEXR1314) <sup>31</sup>
- 3.00m @ 2.06 g/t Au from 86.00m (NSAC0576) <sup>8</sup>

Following resolution of plunge – in April 23 - two diamond holes tested Darlington dimensions.

- 1.50m @ 4.24 g/t Au from 140.50m (NSD053) <sup>8</sup>
- 2.00m @ 1.29 g/t Au from 241.00m (NSD052) <sup>8</sup>

A basalt intersected in the footwall of the southern hole (NSD053) has significant implications for potential at Darlington – perfectly matching the Stawell-type gold model (6km south)



The maiden intercept of an altered, weakly mineralised basalt under the Darlington target mineralisation is an exceptional exploration result that conforms

# CORPORATE OVERVIEW

A highly experienced and proven leadership team with strong exploration and mining experience – solely focussed on gold in western Victoria.



## Board and Management



**Jerry Ellis** *Non-Executive Chairman*  
30 years at BHP (2 years as Chairman), ANZ Bank director for 10 years. Prior board positions at Newcrest Mining, Aurora Gold, and the American Mining Congress.



**Russell Krause** *Chief Executive Officer*  
30 years in corporate advisory (resources sector). Director & management positions in multiple resource companies.



**Graham Brown** *Non-Executive Director*  
40 years mining and exploration experience. 100 technical assignments in over 25 countries. Previously Group Head - Geosciences & Exploration – Anglo American.



**Toni Griffith<sup>1</sup>** *Chief Financial Officer*  
35 years experience in mining executive roles focusing on financial management, business leadership, corporate strategy, governance and compliance



**Campbell Olsen** *Non-Executive Director*  
20 years in private equity and operational management in resources. CEO and Director of Arete Capital Partners and CEO Stawell Gold Mine.



**Bill Reid** *Head of Exploration*  
25 years in mineral exploration management and operations in gold and base metals and regional metal systems.



**Alistair Waddell** *Non-Executive Director*  
25 years in diverse mineral exploration, development and capital markets. Founder and ex-CEO of GoldQuest Mining Corp.

**Single-commodity and single-jurisdiction project with experienced board and management with substantial Victorian experience.**

# ASX:NSM

A Victoria-focussed explorer with a highly experienced team.

Strong exploration, development and mining experience in Victoria and globally.



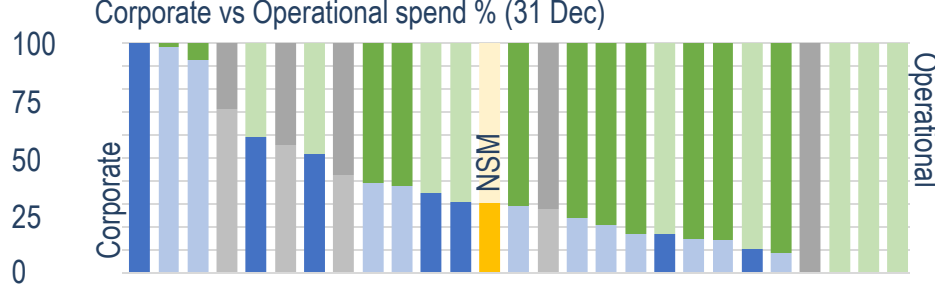
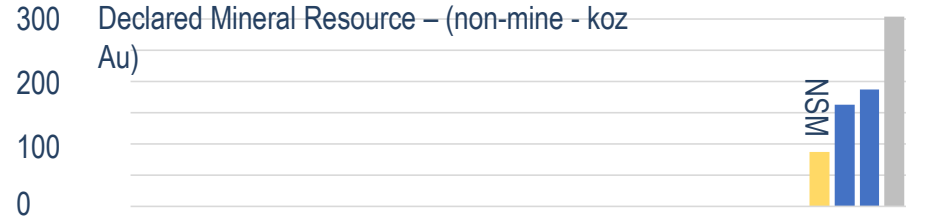
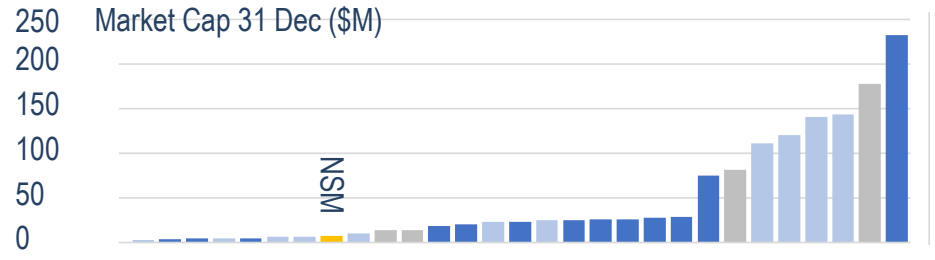
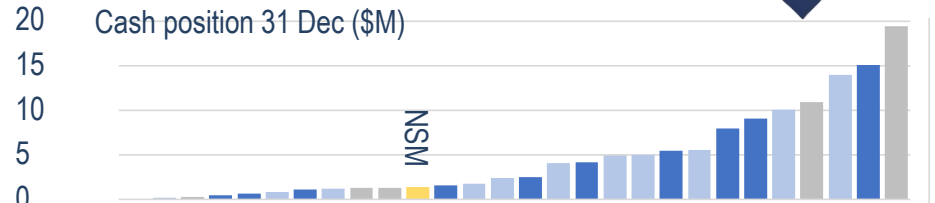
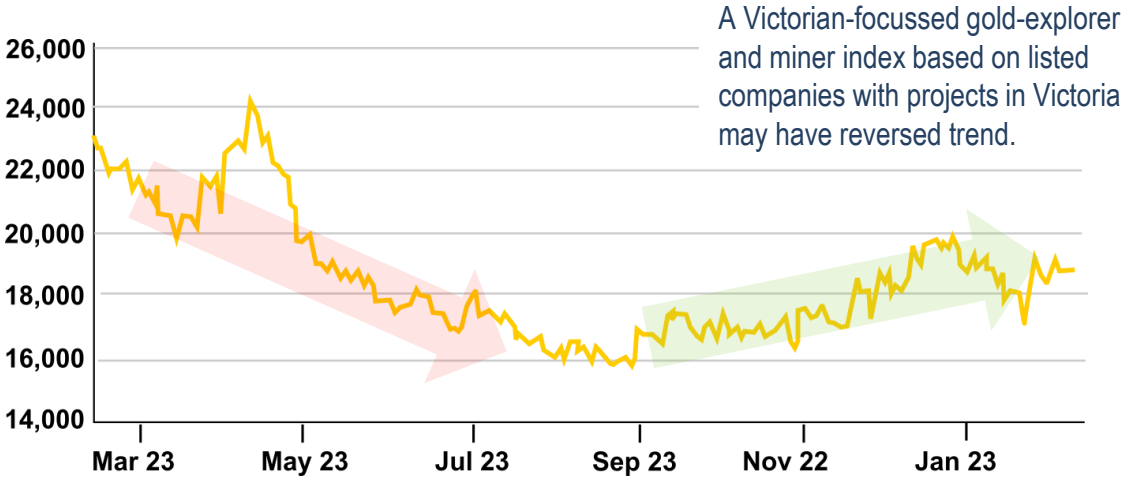
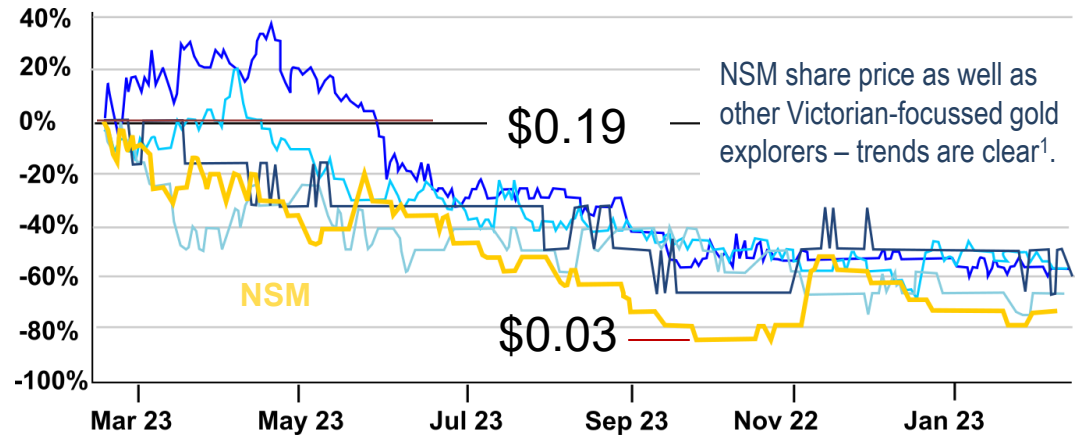
**140m**  
Shares on Issue

**\$0.048**  
Share price  
(Feb 14, '23)

**\$1.34m**  
Cash in bank  
(Dec 31, '23)

**\$6.71m**  
Market Cap  
(Feb 14, '23)

**73%**  
Top 20 investors  
(Dec 31 '23)



Graphs based on December 23 Quarterly Reporting by ASX listed companies with projects in Victoria: Gold explorer Not active in Vic Non-gold projects NSM



# WHY VICTORIA'S STAWELL ZONE?

## Great ground, preserving shallow, exploration potential.

## 504km<sup>2</sup> contiguous ground immediately north of Stawell Gold Mine<sup>12</sup>

### Elephant country – multi million-ounce potential.

- Stawell (approx. 4.9Moz Au mined).
- 4<sup>th</sup> biggest gold field in Victoria's prolific gold province.
- 80+Moz Au historic production in Victoria

### Shallow, preserved gold potential under thin cover.

- Geology obscured by masking sediments (called 'cover') only 6km north of the Stawell Mine.
- A GSV study estimates up to 32 Moz Au remain undiscovered in northern Victoria<sup>13</sup>.

### The right geology for geophysical targeting through cover.

- The Stawell Corridor is different – with large slabs of basalt with gold on the margins.
- The basalts can be detected through cover (and at depth) – vectoring exploration.

### Supportive, regional communities.

- 200km from Melbourne, with strong support from our regional Victorian communities.
- 78% land access agreements achieved.

### Invested, nearby processing plant and TSF.

- Stawell Gold Mines (SGM) has capacity and interest in future processing opportunities.
- "Gold Camp" opportunities to accelerate potential development

### The right history (for all the wrong reasons).

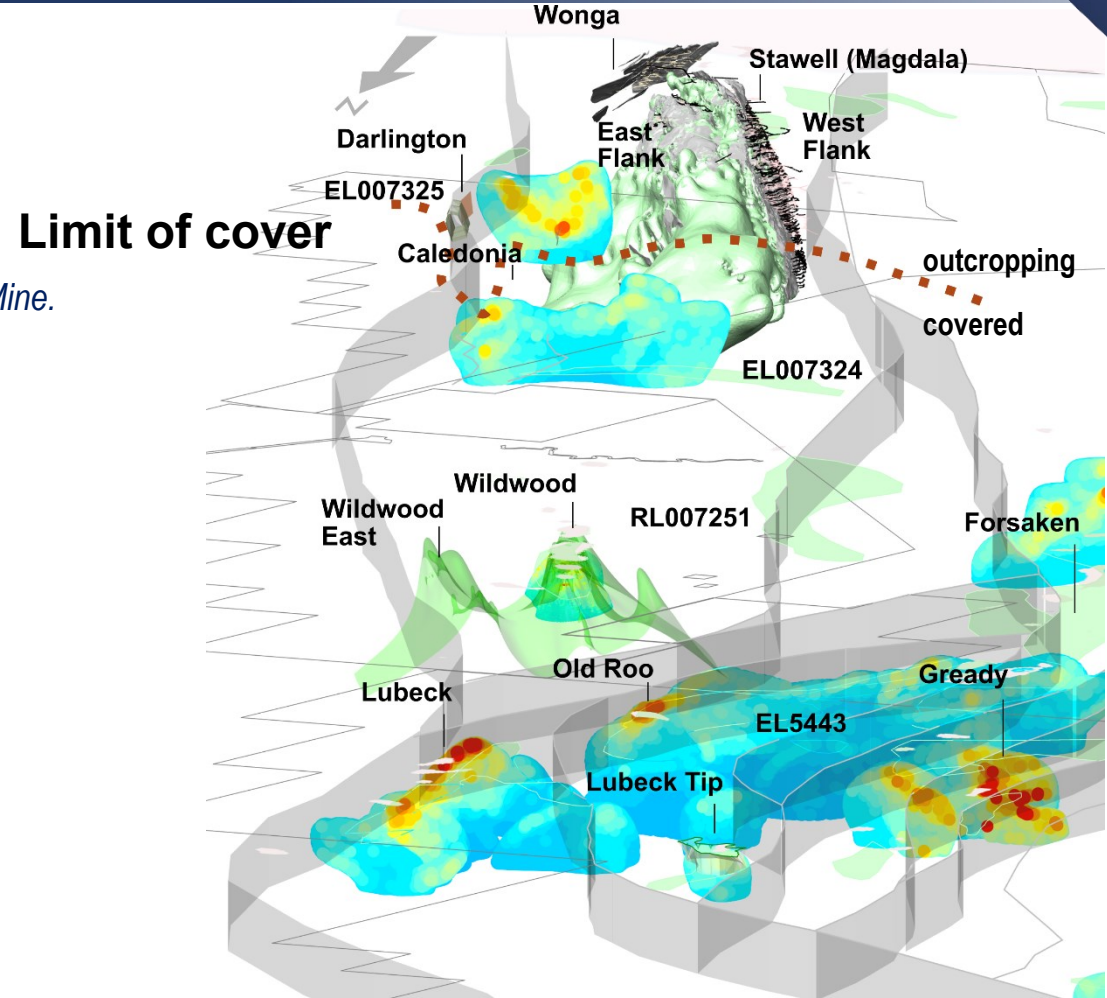
- Never a 'focussed' project, opportunity has been preserved

### Reportable mineralisation.

- 1 of 3 declared exploration-only Mineral Resources in Victoria.<sup>14</sup>

### Other mineral opportunities.

- A major mineral sands (HMS-REE)<sup>15</sup> province overlaps the tenements. Emerging intrusive-related gold (IRG)<sup>16</sup> Besshi-type VHMS<sup>17</sup>?

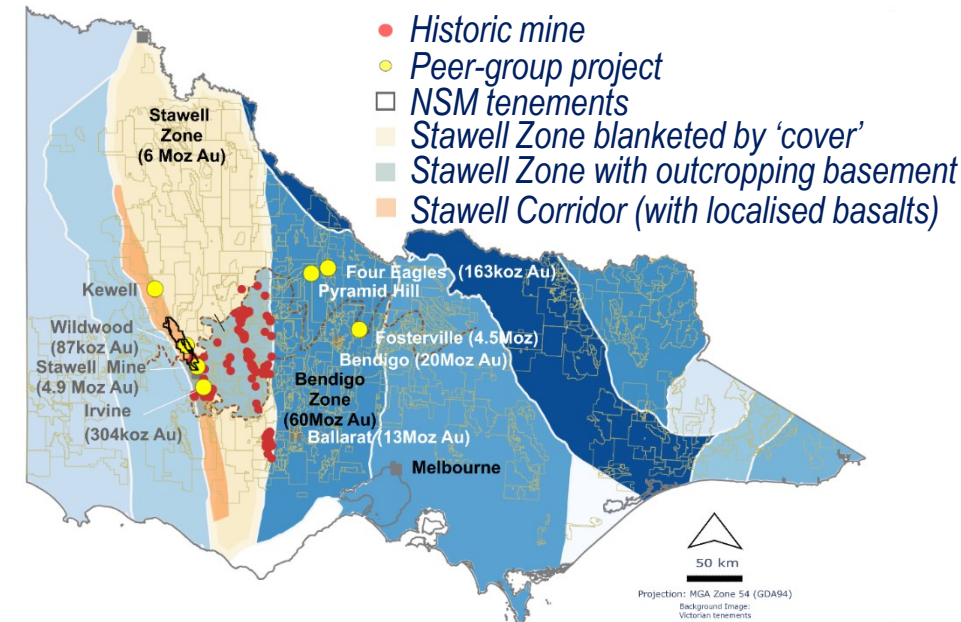
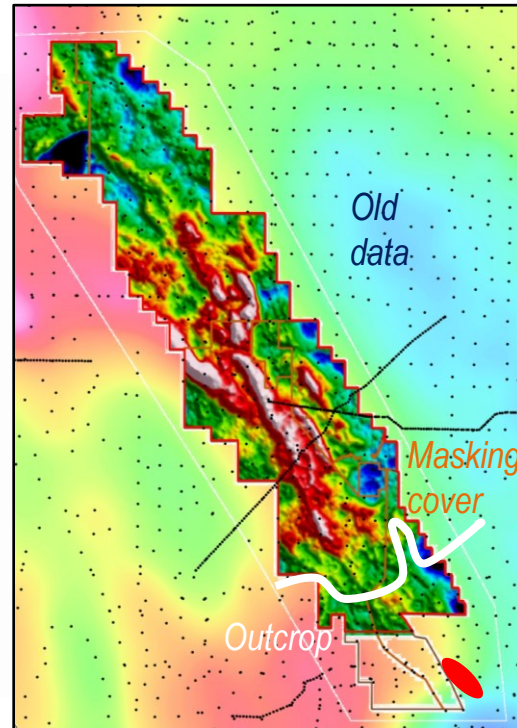
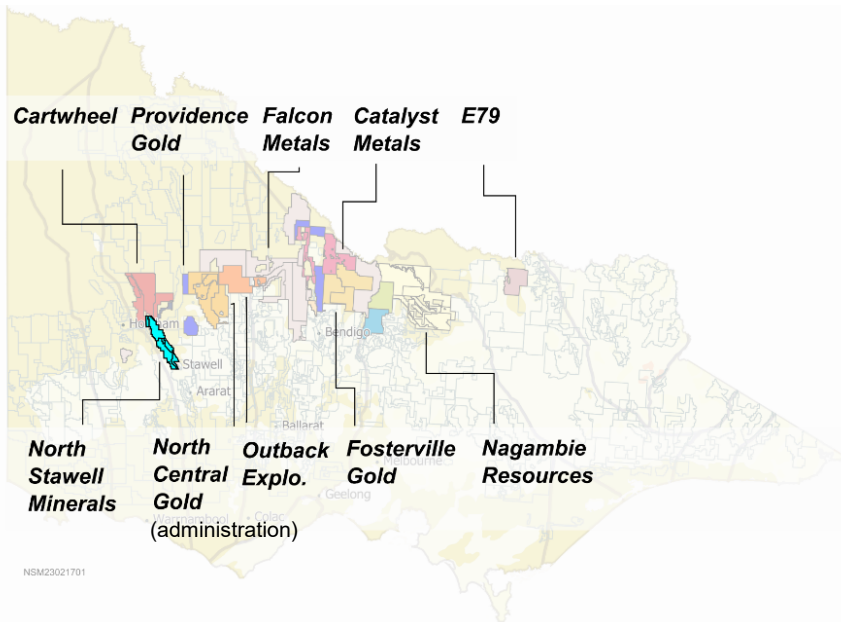


Looking south along the Stawell Corridor – image shows major structures, identified basalts, select targets and selected numerical modelling results.

<sup>13</sup>Lisitsin et al 2009. Gold Undercover Report 13. <sup>14</sup> See also ASX:NSM and ASX:CYL.. <sup>15</sup> See ASX:ATR. <sup>16</sup> See ASX:BAT <sup>12</sup> Appendix 2. <sup>17</sup> See ASX:SVY

# COVER

85% of NSM's tenements have a masking layer of thin, unmineralised sediments. This "cover" has potential for very shallow, large gold deposits just beneath it.



Tenements<sup>19</sup> that lie on the boundary of the Murray Basin where cover is <100m. The shallow cover includes additional challenges to test through – but has the potential to mask shallow, large gold deposits.

NSM-acquired high resolution AGG (gravity) data has been a cornerstone investment for exploring through cover. Improved data resolution is clear<sup>18</sup>.

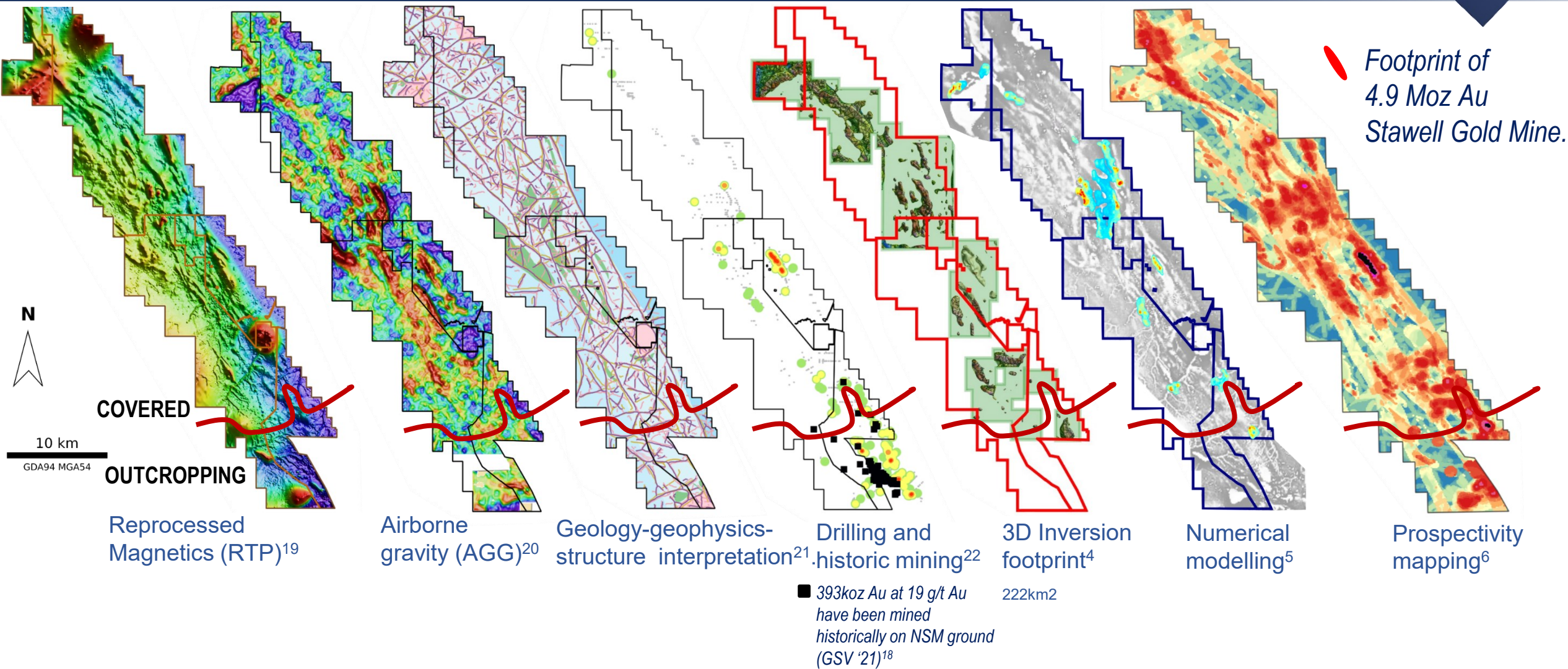
Historic prospecting has a formidable discovery record in Victoria – but the blanket of un-mineralised sediments (cover) were a total barrier to discovery – preserving shallow mineralisation.

Gravity data identifies the contrast between the basalts (with potential for gold-mineralisation) and the surrounding rocks.

<sup>18</sup>See [AIG 2022, conference proceedings](#). <sup>19</sup> see [Resources Victoria - GeoVic](#)

# REGIONAL DATA – THE RIGHT TOOLS FOR THE TASK

Working with a best-available dataset (including geo-knowledge) to effectively test and rank Stawell-like targets under cover.



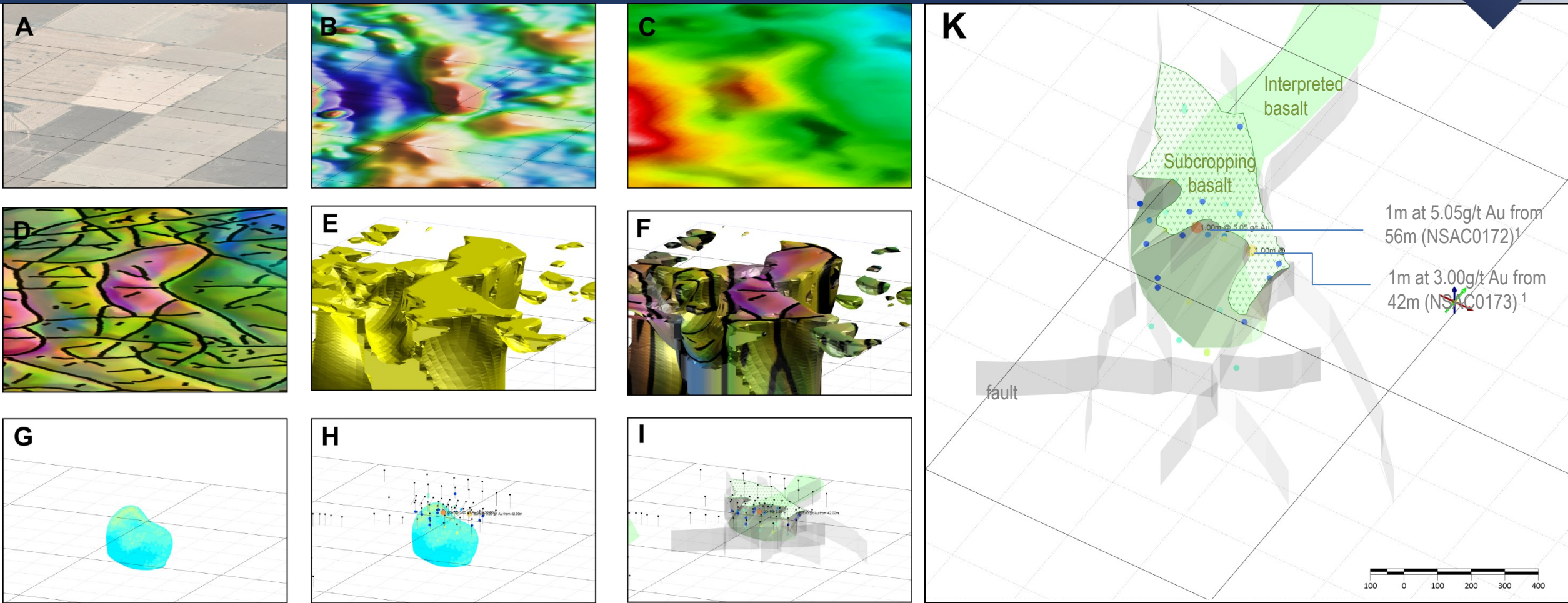
<sup>4</sup> Refs 47 <sup>5</sup> Refs 2,8,10,21,27. <sup>6</sup> Refs 2,25. <sup>18</sup> Refs [GSV](#),47. <sup>19</sup> Refs 47: <sup>20</sup> Refs 37,47,54,58 <sup>21</sup> Refs 47. <sup>22</sup> Refs 47,55,66.





# REGIONAL DATA - VECTORING

## A step-through of targeting at Lubeck Tip. Approximate geometries and structures constrain targeting and drill programs.

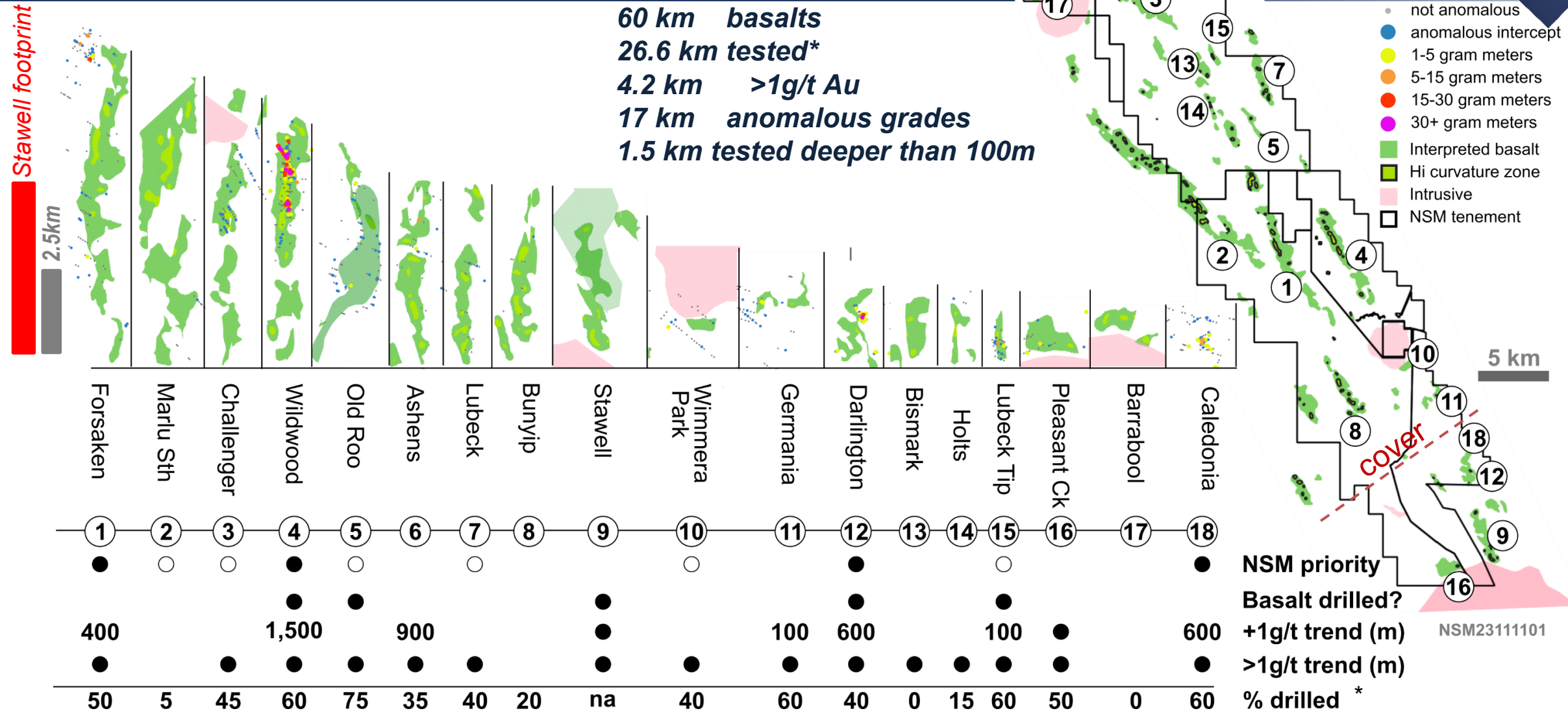


A – 25m cover. B – reprocessed RTP TMI (magnetics) – Fathom<sup>19</sup>. C – AGG Gravity (Xcalibur Multiphysics)<sup>20</sup>. D – Structure and edge detection composite (Fathom Geophysics)<sup>21</sup>. E – 3D inversion model (Nordic Geosciences)<sup>4</sup>. F – structure draped onto inversions. G – CSIRO numerical modelling<sup>5</sup>. H – Drilling over target<sup>1</sup>. I – Geological-geophysics-drilling interpretation. K – Interpretation showing south-plunging embayment in basalt. 16 AC holes for 1<sup>st</sup> 1+ g/t Au intercept.

<sup>1</sup> Refs 29,31, 37, 40 <sup>4</sup> Refs 47 <sup>5</sup> Refs 2,8,10,21,27. <sup>6</sup> Refs 2,25. <sup>18</sup> Refs [GSV](#),47. <sup>19</sup> Refs 47: <sup>20</sup> Refs 37,47,54,58 <sup>21</sup> Refs 47.

# TARGET SUMMARY <sup>67</sup>

## Huge potential to include shallow, Stawell-type mineralisation under thin cover

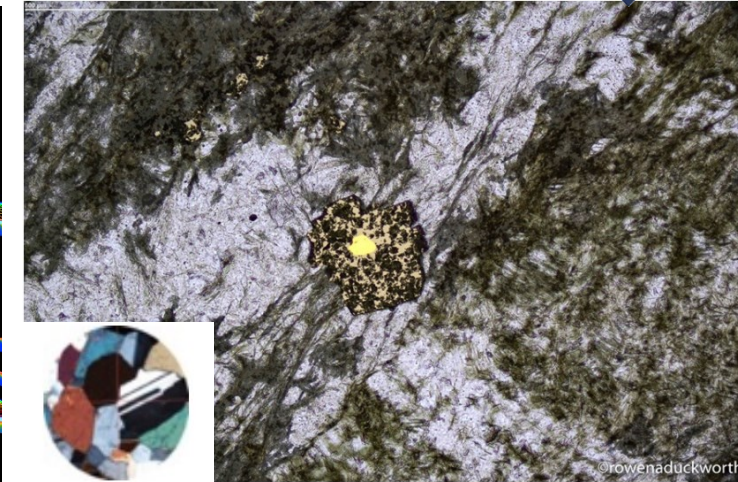
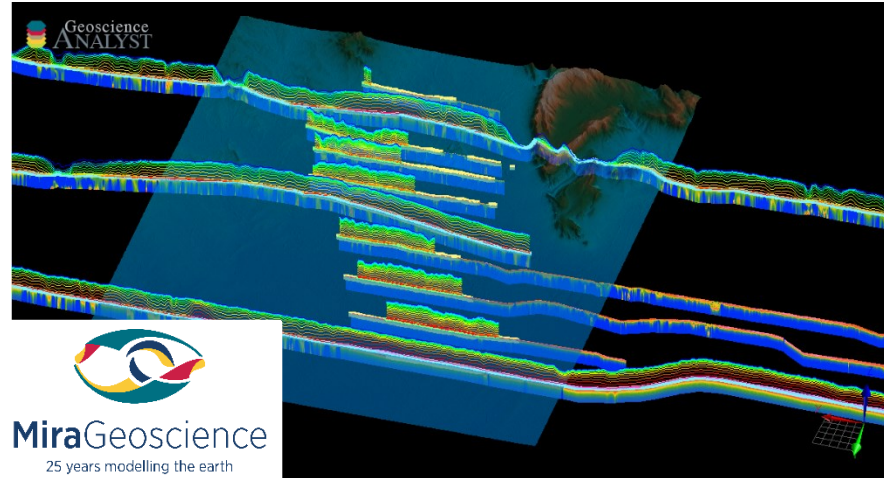
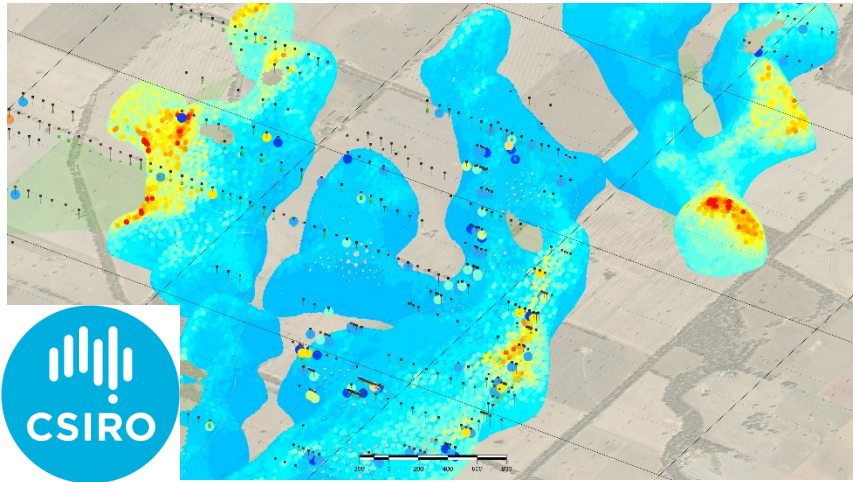


(\*based on 300m line spacing). <sup>67</sup> Ref 67

# MORE VECTORING

Geophysics and research programs are hugely cost-effective

NSM continues to focus on science that refines targeting and builds knowledge



*On-going discussion to follow up further on the results of numerical modelling (CSIRO) to enhance our understanding of the geometries of geology under cover in the NSM tenements.*

*Pre-drill modelling of dilation has strong upside for effective exploration.<sup>5</sup>*

*Regional AEM (flown by GA and GSV) has not delivered conclusive results for basement geology. However, mapping the basement-cover contact may work – paleo-topographic highs have been used as vectors on other Victorian projects.<sup>6</sup>*

*Extensive petrology on Wildwood holes NSD051-NSD053 is completed (Mintex Petrological Solutions, 2023). An honours project to follow up on results and expand the understanding of the metal system commences 2024 (Federation University).<sup>6</sup>*

<sup>5</sup>Refs 2,8,10,21,27, 82. <sup>6</sup>Refs 82.

# WILDWOOD PLANNING<sup>1</sup>

## Revised targeting at Wildwood presents opportunity for basalt-flank hosted mineralisation – more likely to form large-volume slabs of dilation/mineralisation



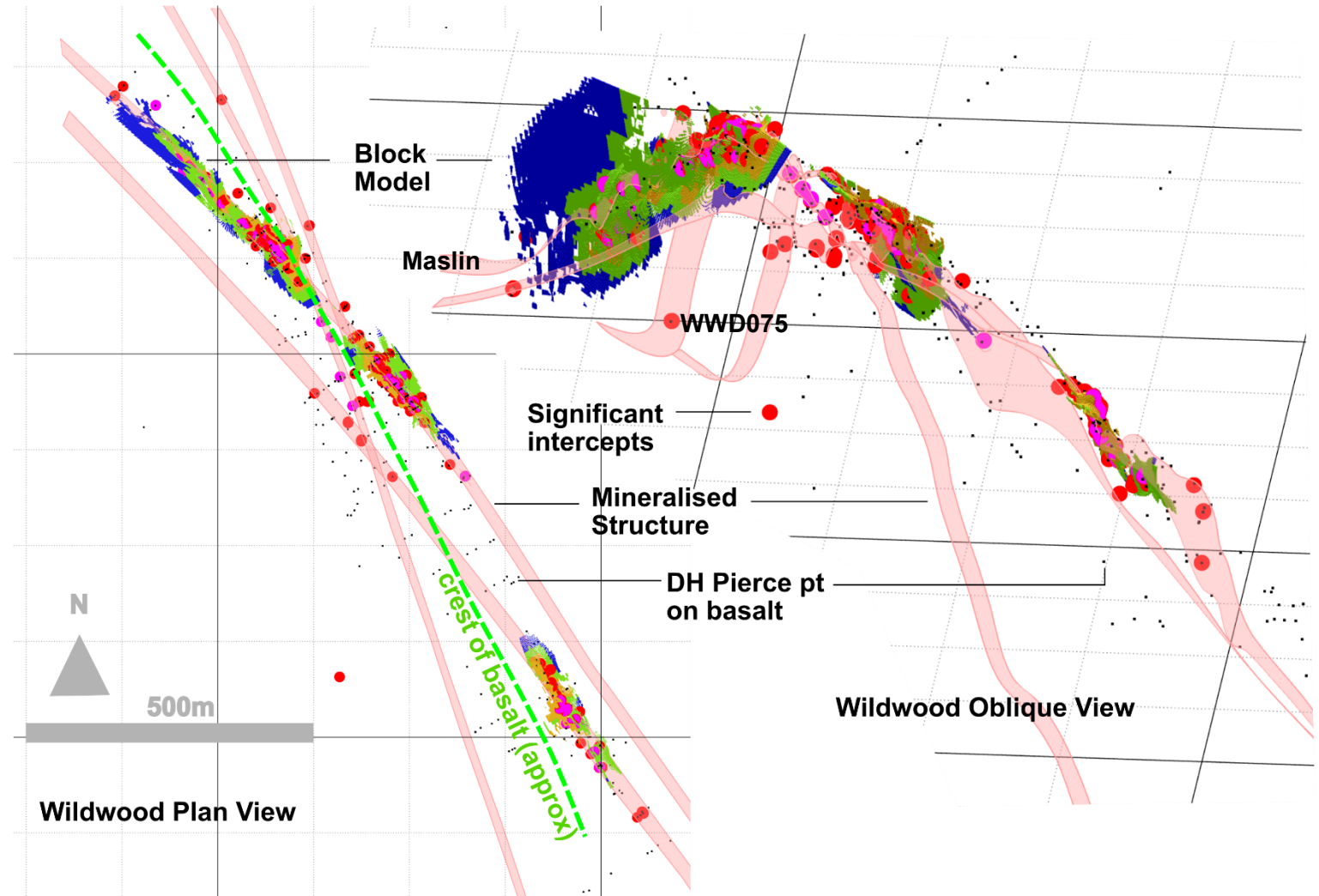
*Controlling structures are near-vertical and sub-parallel to the basalt crest, reversing plunge.*

*Priority target is where structure-basalt intersection is most likely to dilate the flank of the basalt and generate volume.*

*Historically, the focus of drilling at Wildwood has been to determine extents of shallow mineralisation. Most of the deeper basalt is untested.*

*Continuity of mineralisation to depth is demonstrated at:*

- *West Flank - Maslin – mineralisation is open at 475m (grades don't justify deeper holes as yet)*
- *East Flank - WWD075 – 0.90m at 1.48 g/t Au at 540m vertical.*



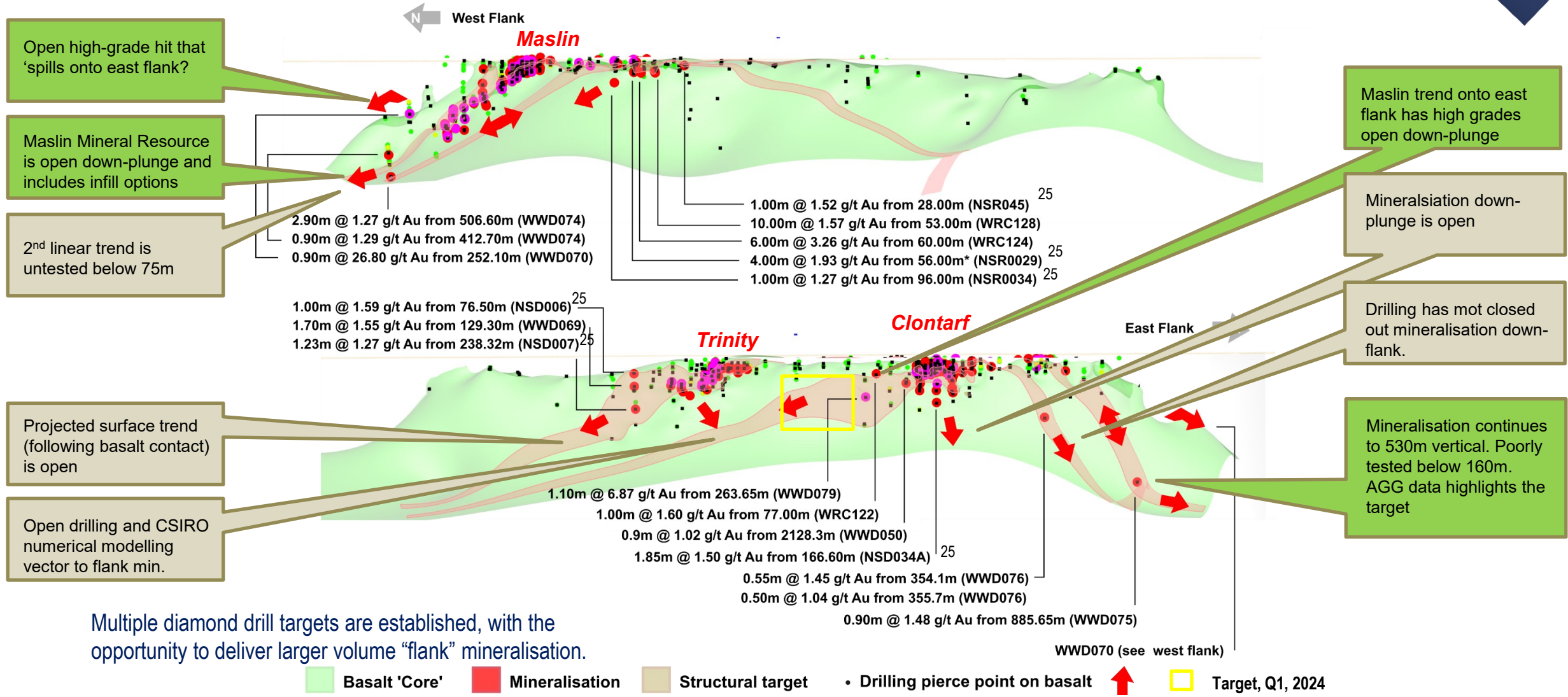
<sup>1</sup> Refs: 2, 8, 9, 12, 14, 82.



# DRILLING TARGETS - WILDWOOD.

Multiple interpreted structures and open drill results are identified.

Multiple in-fill and brownfield opportunities.

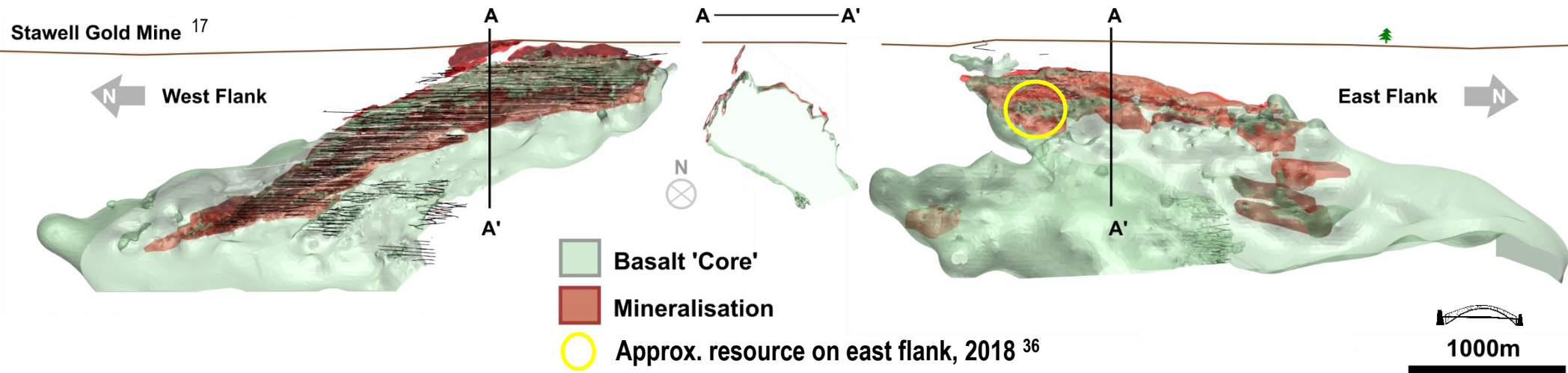


<sup>25</sup> Refs 2,8,12,13,14,55,56,57,59,60,62,64

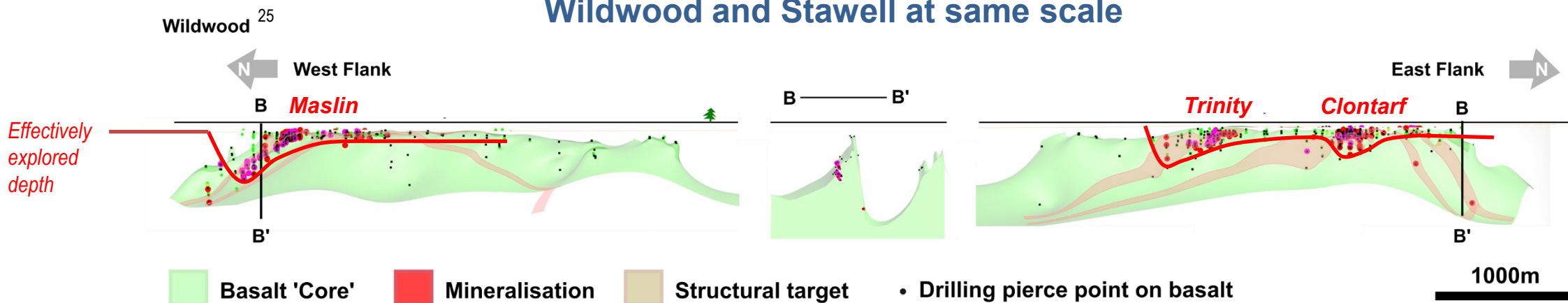
# MAGDALA MINE C.F WILDWOOD TARGET

Geology is the same. Structure and dimensions are similar.

Stawell has 50x historic gold. Wildwood is open and shallow-tested.



## Wildwood and Stawell at same scale



The mature understanding of the mineralisation at Stawell inform exploration at Wildwood. Wildwood, although presently a modest resource, has a comparable basalt system, and significant potential for mineralisation to occur on untested areas of the basalt structure.

<sup>17</sup> Refs: 2,9, 11, [AIG 2022 Vic Roundup](#) <sup>25</sup> Refs 2,8,12,13,14,55,56,57,59,60,62,64. <sup>36</sup> <https://ballaratgeology.wordpress.com/ballarat-gold-mine/>

# DRILL PLANNING - DARLINGTON

Darlington includes highly encouraging sediment hosted gold mineralisation. Determining how (and where) it links to the basalt at depth is a compelling target.



The planned hole at Darlington has two tasks:

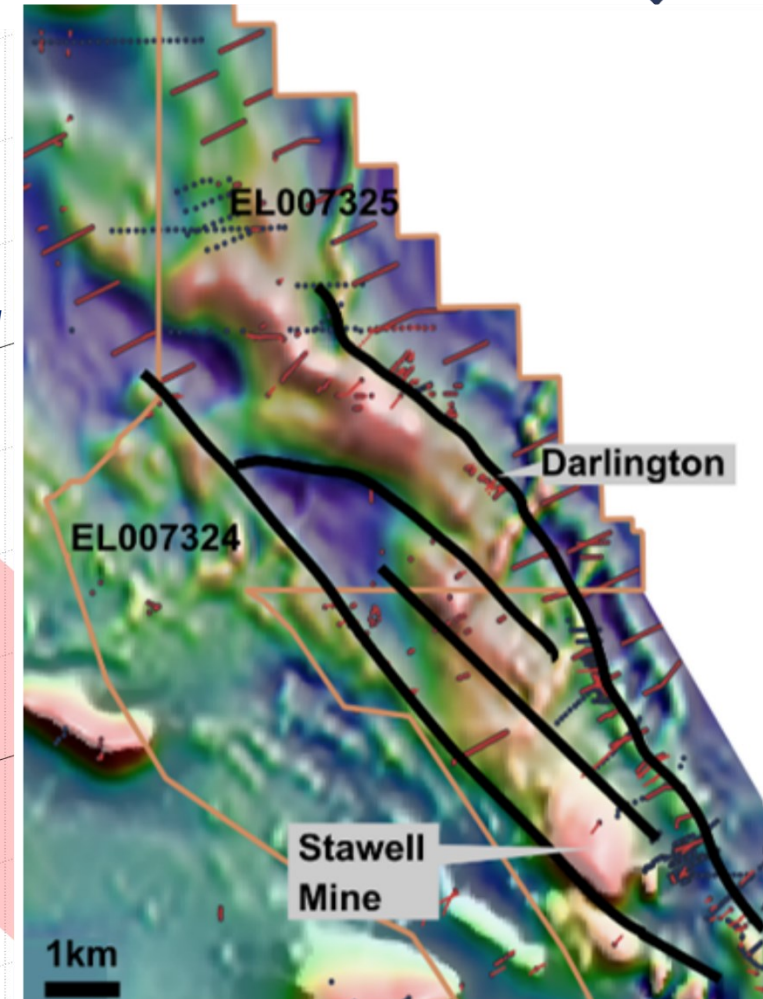
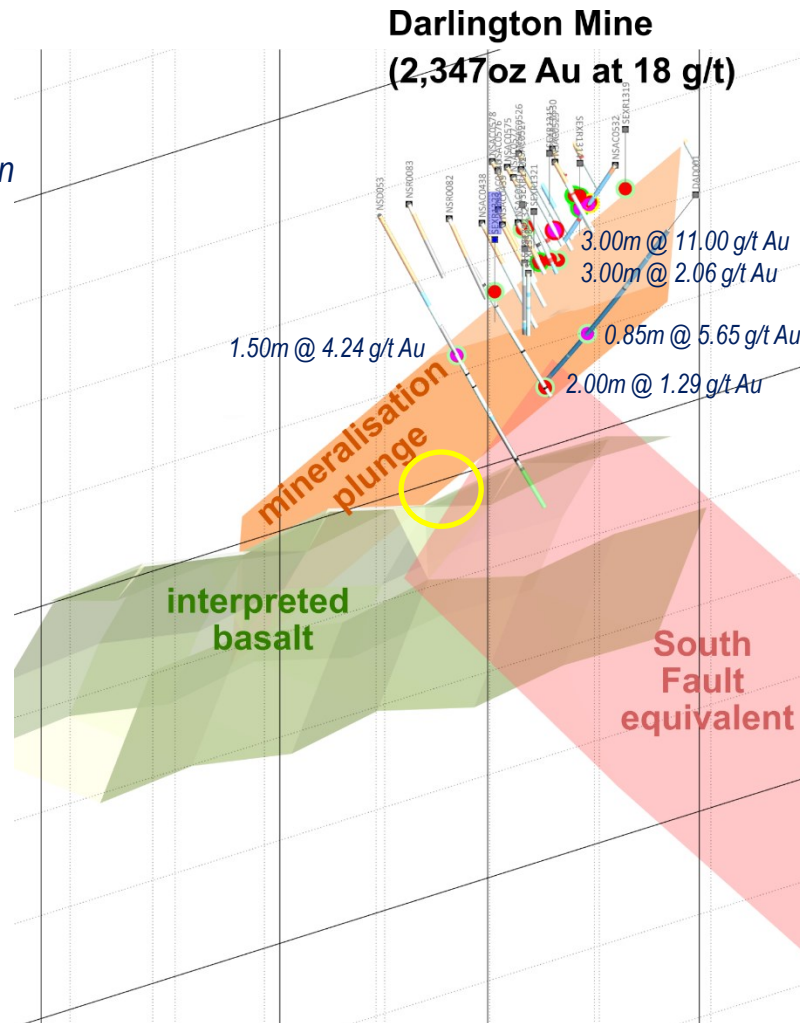
- Test for ~80m down-plunge step-out on prior result.
- Achieve a second intercept on the new basalt to improve vectoring of intersect between the basalt and the mineralisation trend. (Currently (with only one intercept) the basalt trend is approximated from geophysics)

Deeper drilling results at Darlington include:

- 3.00m @ 11.00 g/t Au from 60.00m (NSAC0527)
- 3.00m @ 2.06 g/t Au from 86.00m (NSAC0576)
- 0.85m @ 5.65 g/t Au from 201.20m (DAD001)
- 1.50m @ 4.24 g/t Au from 140.50m (NSD053)
- 2.00m @ 1.29 g/t Au from 241.00m (NSD052)



Model for Darlington →



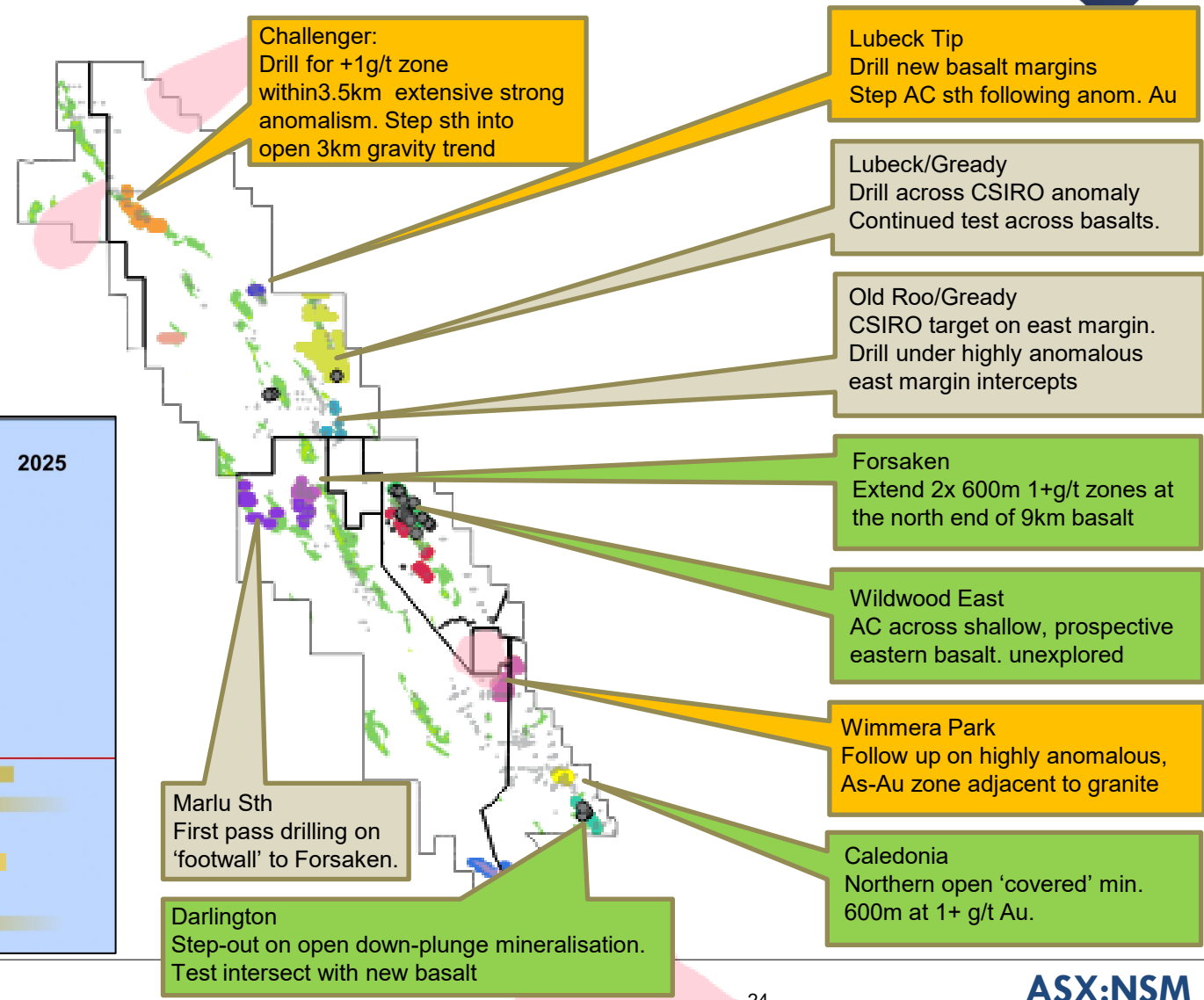
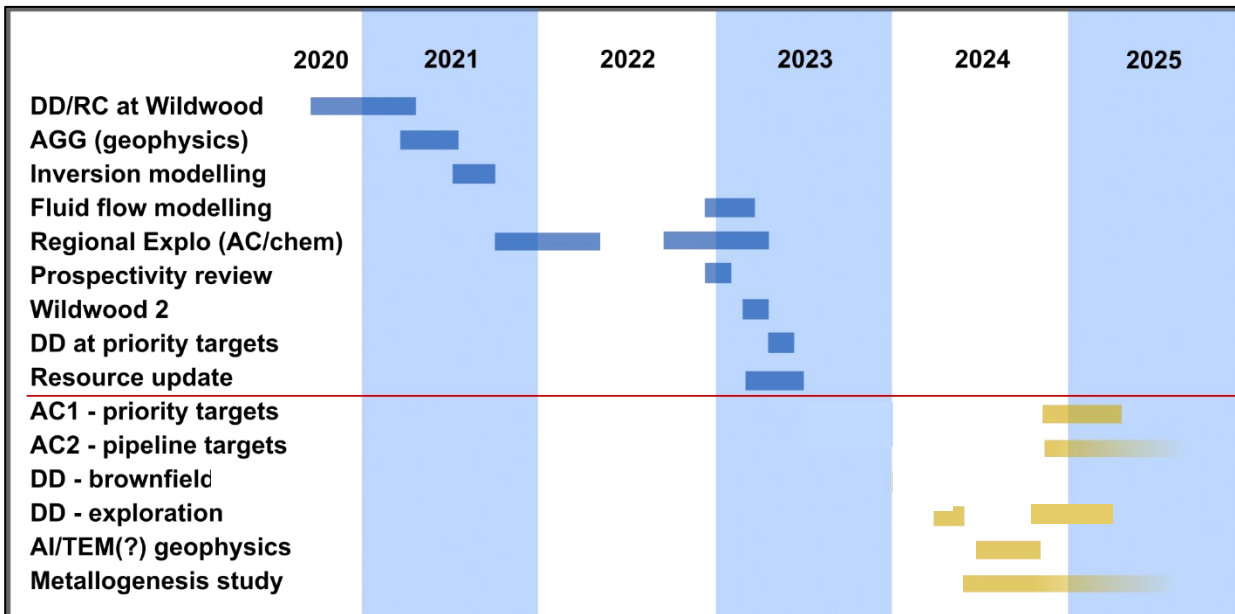


# FUTURE PROGRAMS.

Initial focus on realising priority targets – then pipeline projects

Secondary focus on additional targeting programs – geophysics and research.

- 4,500m of diamond targeting complete.
- 42,000m of AC planning complete (14,000m priority 1)
- Drill Wildwood and Darlington step-out and brownfield targets.
- AC drilling to advance pipeline opportunities and test shallow gold potential
- Target fluid modelling results
- Continued review of geophysics
- Get the science right:
  - *Metallogenic studies (in collaboration with uni's) to further increase understanding of the ore-systems and further value-add drilling.*
  - *Machine learning trained on expansive datasets.*

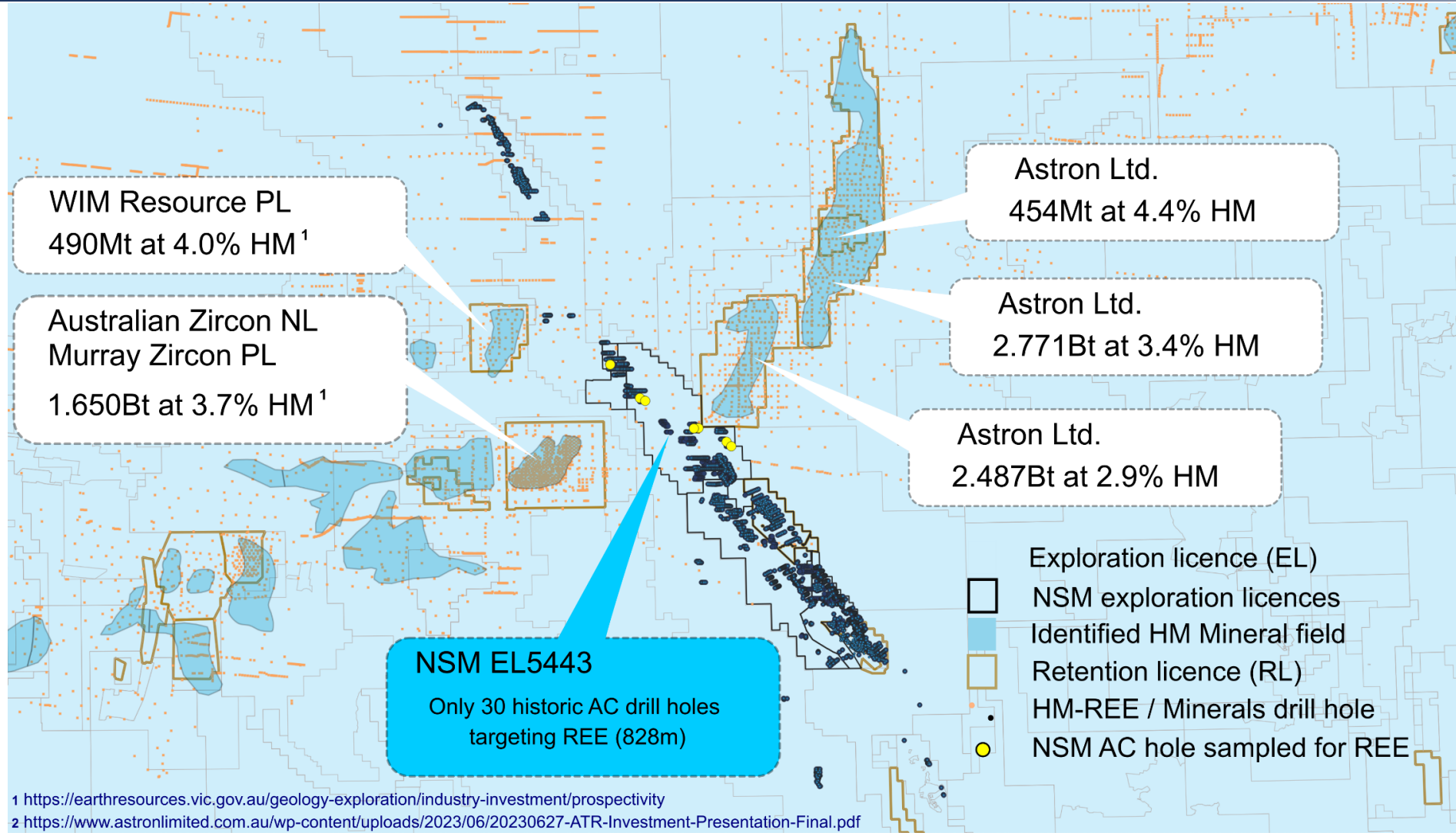






# CRITICAL OPPORTUNITY.

Approximately 7.5B tonnes of Heavy Mineral (REE) sands are defined around NSM. The belt is very poorly tested through NSM's gold-focussed tenements<sup>33</sup>.



<sup>33</sup> Refs 2,8.

# **SUMMARY**

## **Gold potential under shallow Murray Basin cover in the Stawell Zone, Victoria.**

- *NSM has a robust mineralisation pipeline from generative through resource targets built up with historic data and a focused 2-year regional program – an excellent foundation for exploration.*
- *The Stawell-type mineralisation has potential to occur throughout the Stawell Corridor, has shallow, multi-million ounce potential and has geology that can be detected with geophysics through cover – significantly focussing exploration.*
- *Wildwood (87,300oz Au) includes significant potential for larger volume flank mineralisation to occur at depth – potentially nucleated off identified structures. Darlington has the right geology and structures and position to be a northern extension of the Magdala Basalt (hosting Stawell)*
- *60km of basalts are identified and are only ~50% tested for Stawell-type (and size) potential. Forsaken, Challenger and Lubeck Tip are stand-out exploration opportunities for regional exploration focus.*
- *Commitment to geophysics and research gives NSM a valuable advantage for exploration through shallow cover in western Victoria.*
- *Industry wide capital raising headwinds require amended programs.*

Approved by Russell Krause, CEO of North Stawell Minerals Ltd. [russell.krause@northstawellminerals.com](mailto:russell.krause@northstawellminerals.com) - 03 5358 9210

# APPENDIX 1

NSM release to ASX relating to this presentation.

1 of 5.



<b>Ref #</b>	<b>Date</b>	<b>Time</b>	<b>Report title</b>	<b>Doc size</b>
1	31-Oct	11.31am	Quarterly Cashflow Report	<a href="#">Link</a> 179KB
2	31-Oct	10.21am	Quarterly Activities Report	<a href="#">Link</a> 3697KB
3	20-Oct	4.27pm	Notice of Annual General Meeting/Proxy Form	<a href="#">Link</a> 1339KB
4	18-Oct	10.28am	Appendix 4G and Corporate Governance Statement	<a href="#">Link</a> 463KB
5	18-Oct	10.24am	Annual Report to Shareholders	<a href="#">Link</a> 4009KB
6	27-Sep	4.56pm	Change of Company Secretary	<a href="#">Link</a> 330KB
7	27-Sep	4.52pm	FY23 Audited Financial Report	<a href="#">Link</a> 2059KB
8	29-Aug	3.39pm	Australian Gold Conference 2023 Presentation	<a href="#">Link</a> 4360KB
9	31-Jul	10.00am	Quarterly Activities Report	<a href="#">Link</a> 6690KB
10	31-Jul	9.57am	Quarterly Cashflow Report	<a href="#">Link</a> 231KB
11	26-Jul	8.32am	Mineralisation extended at Darlington. Basalt intersected	<a href="#">Link</a> 3131KB
12	29-Jun	10.23am	Wildwood Mineral Resource Update lifts grade	<a href="#">Link</a> 6058KB
13	23-Jun	8.54am	Wildwood revisited-visible gold and high-grade gold results	<a href="#">Link</a> 18036KB
14	21-Jun	10.02am	Technical Update June 2023 – OREAS Vic Round Up Conference	<a href="#">Link</a> 5166KB
15	1-Jun	10.54am	Forsaken Prospect extends gold trend along basalt margin	<a href="#">Link</a> 2573KB
16	9-May	9.54am	Update on air core success at Challenger Prospect	<a href="#">Link</a> 1574KB
17	28-Apr	9.47am	Research & Development tax incentive granted	<a href="#">Link</a> 238KB

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## NSM release to ASX relating to this presentation.

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<b>Ref #</b>	<b>Date</b>	<b>Time</b>	<b>Report title</b>	<b>Doc size</b>
18	28-Apr	9.45am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 4340KB
19	28-Apr	9.44am	<i>Quarterly Cashflow Report</i>	<a href="#">Link</a> 246KB
20	28-Mar	10.25am	<i>High grade, plunging shoot at Darlington</i>	<a href="#">Link</a> 2019KB
21	23-Mar	1.12pm	<i>Technical Update</i>	<a href="#">Link</a> 15744KB
22	15-Mar	3.12pm	<i>Half Yearly Report &amp; Accounts</i>	<a href="#">Link</a> 992KB
23	23-Feb-23	10:59am	<i>Victoria Gold Mining &amp; Exploration Forum Presentation</i>	<a href="#">Link</a> 7966KB
24	16-Feb-23	10:05am	<i>Successful exploration doubles Caledonia Prospect gold-trend</i>	<a href="#">Link</a> 1344KB
25	31-Jan-23	9:50am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 7341KB
26	15-Nov-22	7:10pm	<i>2022 Annual General Meeting - CEO's Presentation</i>	<a href="#">Link</a> 5060KB
27	7-Nov-22	10:04am	<i>CSIRO Kick-Start Initiative to refine targets regionally</i>	<a href="#">Link</a> 1021KB
28	2-Nov-22	10:52am	<i>Updated Investor Presentation</i>	<a href="#">Link</a> 10561KB
29	31-Oct-22	9:21am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 10007KB
30	13-Oct-22	9:22am	<i>Phase 2 AC Drilling lifts grades at Old Roo target</i>	<a href="#">Link</a> 1279KB
31	6-Oct-22	1:08pm	<i>High-Grade Gold Revealed at Lubeck Tip Prospect</i>	<a href="#">Link</a> 1334KB
32	13-Sep-22	9:37am	<i>Caledonia 12.5 g/t high grade gold hit</i>	<a href="#">Link</a> 2337KB
33	12-Aug-22	9:48am	<i>NSM technical presentation - Ballarat 12 August 2022</i>	<a href="#">Link</a> 10730KB
34	29-Jul-22	8:36am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 6463KB

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<b>Ref #</b>	<b>Date</b>	<b>Time</b>	<b>Report title</b>	<b>Doc size</b>
35	20-Jul-22	9:20am	<i>Drilling Reveals 300m Wide Au-As Zone on Granite Margin</i>	<a href="#">Link</a> 1780KB
36	6-Jul-22	9:41am	<i>Holts Prospect extends gold mineralisation trend to 1,000m</i>	<a href="#">Link</a> 1130KB
37	23-Jun-22	9:34am	<i>GSV Victoria Minerals Round Up Presentation</i>	<a href="#">Link</a> 4644KB
38	22-Jun-22	9:11am	<i>Gold mineralisation intersected at Forsaken Prospect</i>	<a href="#">Link</a> 1248KB
39	29-Apr-22	11:42am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 4276KB
40	27-Apr-22	9:38am	<i>AC drilling identifies large gold anomaly at Lubeck Tip</i>	<a href="#">Link</a> 845KB
41	20-Apr-22	9:57am	<i>Glenorchy East &amp; Greedy Prospects return Gold anomalies</i>	<a href="#">Link</a> 886KB
42	5-Apr-22	9:59am	<i>Encouraging Aircore results at Old Roo Prospect</i>	<a href="#">Link</a> 2054KB
43	31-Jan-22	11:57am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 2632KB
44	25-Jan-22	10:12am	<i>Gellatlys aircore drilling almost doubles gold trend</i>	<a href="#">Link</a> 1677KB
45	23-Dec-21	3:57pm	<i>Aircore Drilling confirms exploration Concept</i>	<a href="#">Link</a> 2487KB
46	15-Nov-21	9:14am	<i>Highly prospective and significant Germania licence granted</i>	<a href="#">Link</a> 4378KB
47	29-Oct-21	9:55am	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 2731KB
48	7-Oct-21	8:44am	<i>AC drilling commences at Radio Prospect</i>	<a href="#">Link</a> 1647KB
49	14-Sep-21	8:39am	<i>Reconnaissance aircore drilling to test priority targets</i>	<a href="#">Link</a> 638KB
50	10-Aug-21	8:56am	<i>'Deep Lead' Exploration License grant enhances NSM portfolio</i>	<a href="#">Link</a> 8805KB
51	30-Jul-21	4:03pm	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 11382KB

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## NSM release to ASX relating to this presentation.

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<b>Ref #</b>	<b>Date</b>	<b>Time</b>	<b>Report title</b>	<b>Doc size</b>
52	1-Jul-21	9:03am	Field sampling underway to further define drill targets	<a href="#">Link</a> 2905KB
53	16-Jun-21	8:42am	NSM Granted two new tenements	<a href="#">Link</a> 974KB
54	8-Jun-21	9:16am	Airborne gravity survey completed over NSM's tenure	<a href="#">Link</a> 8893KB
55	11-May-21	9:12am	Cutting Edge Series Presentation	<a href="#">Link</a> 6840KB
56	30-Apr-21	9:03am	Quarterly Activities Report	<a href="#">Link</a> 4392KB
57	13-Apr-21	9:09am	High grade gold results continue at Wildwood Prospect	<a href="#">Link</a> 1419KB
58	24-Mar-21	9:22am	Major Regional Airborne Gravity Survey of NSM's Tenements	<a href="#">Link</a> 772KB
59	17-Mar-21	9:37am	Drilling Update	<a href="#">Link</a> 1630KB
60	22-Feb-21	9:19am	Shallow, High Grade Gold discovered at Wildwood Prospect	<a href="#">Link</a> 1095KB
61	29-Jan-21	4:19pm	Quarterly Activities Report & Appendix 5B	<a href="#">Link</a> 1497KB
62	20-Jan-21	8:44am	NSM Drilling Update	<a href="#">Link</a> 2532KB
63	2-Dec-20	11:21am	Drilling Commences at Wildwood Prospect	<a href="#">Link</a> 935KB
64	29-Oct-20	6:12pm	Quarterly Activities Report & Appendix 5B	<a href="#">Link</a> 2904KB
65	22-Oct-20	9:13am	Exploration Update	<a href="#">Link</a> 2621KB
66	22-Sep-20	2:04pm	Prospectus	<a href="#">Link</a> 20276KB

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## NSM release to ASX relating to this presentation.

5 of 5.

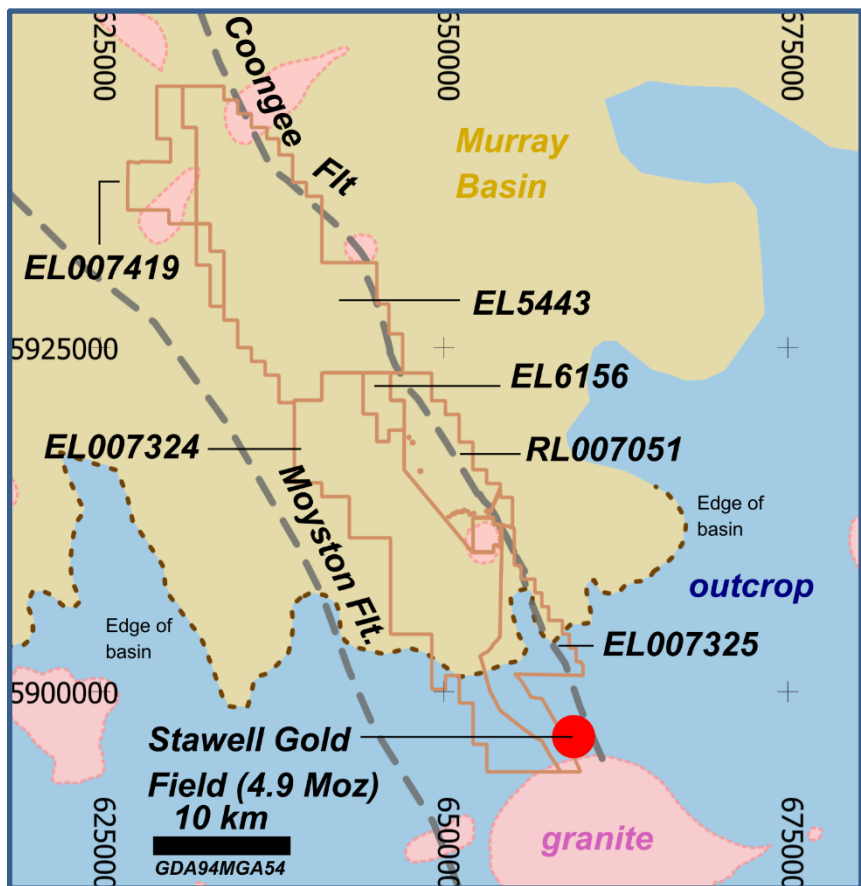


<b>Ref #</b>	<b>Date</b>	<b>Time</b>	<b>Report title</b>	<b>Doc size</b>
67	15-Nov-23	9:17am	<i>Investor Presentation - Noosa Mining Conference 2023</i>	<a href="#">Link</a> 9364KB
68	20-Nov-23	8:58am	<i>AGM Presentation</i>	<a href="#">Link</a> 6009KB
69	20-Nov-23	4:11pm	<i>Results of Meeting</i>	<a href="#">Link</a> 486KB
70	30-Nov-23	9:52am	<i>Appointment of CFO</i>	<a href="#">Link</a> 276KB
71	1-Dec-23	10:02am	<i>North Stawell Minerals \$2m Entitlement Offer</i>	<a href="#">Link</a> 296KB
72	1-Dec-23	10:31am	<i>Cleansing notice under section 708AA of the Corporations Act</i>	<a href="#">Link</a> 151KB
73	1-Dec-23	12:45pm	<i>Non-Renounceable Rights Issue Amended Timetable</i>	<a href="#">Link</a> 314KB
74	5-Dec-23	12:10pm	<i>Investor Presentation</i>	<a href="#">Link</a> 4312KB
75	8-Dec-23	9:34am	<i>Entitlement Offer Opening and Dispatch of Offer Documents</i>	<a href="#">Link</a> 1984KB
76	1-Dec-23	12:47pm	<i>Proposed issue of securities - NSM</i>	<a href="#">Link</a> 29KB
77	28-Dec-23	9:31am	<i>Results of Entitlement Offer and Notification of Shortfall</i>	<a href="#">Link</a> 289KB
78	28-Dec-23	9:32am	<i>Application for quotation of securities - NSM</i>	<a href="#">Link</a> 24KB
79	2-Jan-24	9:40am	<i>Change of Director's Interest Notice - Jerry Ellis</i>	<a href="#">Link</a> 222KB
80	17-Jan-24	10:18am	<i>Research &amp; Development Tax Incentive Granted</i>	<a href="#">Link</a> 254KB
81	25-Jan-24	5:01pm	<i>Quarterly Cash Flow Report</i>	<a href="#">Link</a> 726KB
82	25-Jan-24	5:03pm	<i>Quarterly Activities Report</i>	<a href="#">Link</a> 3227KB



# APPENDIX 2: NSM TENEMENT POSITION

NSM holds an exciting tenement position - 60km's strike under thin cover with shallow, poorly tested, multi million-ounce gold potential



Historic prospecting has a formidable discovery record in Victoria – but the blanket of un-mineralised sediments (cover) were a total barrier to discovery.

Tenement Name	Status	Number	Area (km <sup>2</sup> )	Initial NSM holding	Earn-in potential
Wildwood	Granted	RL007051	50	51%	90%
Barrabool	Granted	EL5443	182	51%	90%
Glenorchy	Granted	EL006156	10	100%	n/a
West Barrabool	Granted	EL007419	37	100%	n/a
Wimmera Park Granite	Granted	EL007182	4.5	100%	n/a
Deep Lead	Granted	EL007324	167	51%	90%
Germania	Granted	EL007325	54	51%	90%
<b>Total granted</b>	<b>100%</b>		<b>504.5</b>	<b>km<sup>2</sup></b>	

NSM has consolidated:

- 504km<sup>2</sup> (60km strike) of the most prospective Stawell Zone geology
- 85% with a (thin) blanket of cover (preserving potential)
- immediately along strike from the 4.9 Moz Au Stawell Gold Mine