

# Sandstone Gold Project, Western Australia

# Sandstone Exploration Update Near Term Growth and Regional Exploration

# Multiple near-term targets identified as Alto focuses on growth and new discoveries. Preparations underway to commence the next phase of drilling.

# Highlights

**Alto Metals Ltd** (ASX: AME) (Alto, the Company) is pleased to provide an update on current exploration activities, including review and targeting over priority growth and regional targets, as the Company prepares the next phase of drilling.

## Near-term growth<sup>3,4,12</sup>

Bull Oak – single pit, scale potential

- Results from a recent 80m step-out drill program intersected multiple stacked lodes including 55m @ 1.5 g/t gold and 23m @ 1.1 g/t gold, extended mineralisation over 400m and remaining open.
- Targeting work has highlighted the **potential to define considerable additional open-pitable gold resources** at Bull Oak, by extending mineralisation both up and down dip, as well as along strike and at depth (Refer Figure 2)

Vanguard - extensional targets and Vanguard North 'look-a-like'

- Review highlights high-grade extensional targets outside the current resources, including 2m @ 20.8 g/t gold, 1m @ 23.7 g/t gold and 1m @ 22.0 g/t gold and remains open along the +2km long NW/SE corridor.
- Priority **500m long gold-in lag-anomaly** identified along trend from the high-grade Vanguard North deposit.

Indomitable – extensional targets

- Extensional targets along the main NW trend and a parallel trend where historical drilling, outside the current resource includes **15m @ 2.3 g/t gold** (TVR939) from 35m and **10m @ 3.0 g/t gold** from 50m (TVR905).
- Extensional targets identified at Cessna, where previous results included 16m @ 7.2 g/t gold from 65m

#### **Regional Exploration**

- Gravity survey planned over Hacks West area (immediately west of the mined Hacks reef +200koz @ 24 g/t gold), that hosts numerous old workings and historic shafts, **considered prospective for 'repeat' high-grade gold reefs**.
- First pass air-core drilling at Sandstone North has successfully defined anomalous shallow low-level gold mineralisation over ~500m trend which is coherent with the main north-south trending interpreted structure.

## Planned drilling and ongoing exploration

- Drill rigs being mobilised shortly to commence testing priority growth targets in the Alpha Domain, as regional field and exploration work continues to advance regional targets to be ready for first-pass drilling.
- Alto's exploration strategy remains focused on delivering value through near-term resource growth within the Alpha domain and high-impact regional exploration focused on new discoveries.

Alto Metals Limited Suite 9, 12-14 Thelma Street West Perth, Western Australia 6005 T: +61 8 9 381 2808

admin@altometals.com.au www.altometals.com.au ≫ in

@altometalsltd Altometalsltd

ASX: AME



Alto's Managing Director & CEO, Matthew Bowles said:

"We are pleased to provide an update on exploration activities at the Sandstone Gold Project, including our recent review and targeting work which has highlighted a number of near-term growth and regional targets.

The potential for extensions below the historic Bull Oak open-pit mine to host significant continuation of mineralisation represents an opportunity to considerably increase the scale of the deposit. The exploration team were highly encouraged by the results of the 80m step-out drilling, which extended mineralisation over 400m and remains open, and look forward to following this up shortly.

It is also exciting to see the extensional targets identified at Vanguard and Indomitable that have the potential to drive further near-term growth. The look-a-like target along the same NW tend that hosts the high-grade Vanguard North deposit is an exciting target and the extensional targets at Indomitable continue to highlight the camp-scale potential.

Our ongoing regional exploration and targeting work, outside of the Alpha Domain, is continuing to advance prospects through our project pipeline, with the systematic work over the Hacks West area progressing well as we look for a potential 'repeat' high-grade gold reefs.

With a growing, open-pit gold resource of 832,000oz gold @ 1.5g/t, constrained within A\$2,500/oz pit shells, at our Sandstone Gold Project, the Company remains focused on adding further ounces with extensional drilling and plans to mobilise rigs to drive further resource growth and also test a number of our high-priority regional targets.

#### **Growth strategy**

Alto's exploration strategy remains focused on delivering value through near-term resource growth within the Alpha domain and high-impact regional exploration focused on new discoveries.

This dual track strategy is focused on advancing existing resources and prospects within its project development pipeline while continuing to review and progress the multiple advanced regional prospects, as part of the Company's term overall strategy to support a stand-alone operation at the Sandstone Gold Project.



Research & Development

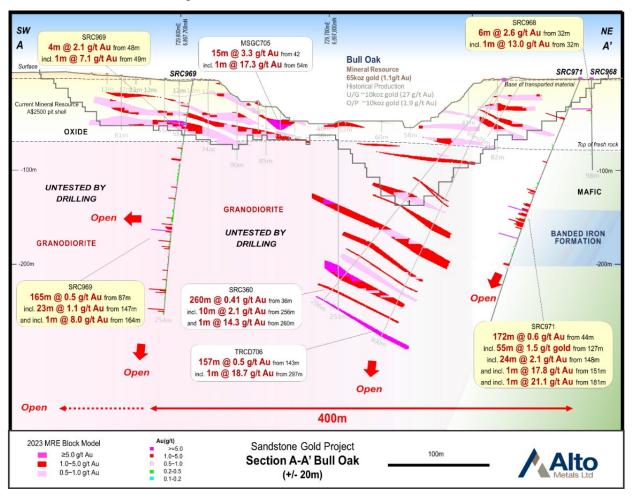
Figure 1: Growth and development pipeline for Sandstone Gold Project



# 1. Near-term shallow resource growth potential – Alpha Domain

# Bull Oak Gold Deposit: Successful drilling results highlight potential for significant growth <sup>2,3</sup>

Significant results from four deeper 80m step-out RC holes announced late last year, delivered thick gold intercepts. These results confirmed the continuity of the multiple stacked lodes within the granodiorite at Bull Oak extending **for at least 400m with mineralisation open to the south-west** toward the margin of the granodiorite which is yet to be defined by drilling. Importantly, the drilling has also demonstrated that gold mineralisation is **not constrained to the granodiorite** but also extends into the surrounding rocks.



**Figure 2**: Cross-section at Bull Oak looking north-west, showing two of the planned deeper drill holes to test the up and down dip extensions of the multiple stacked lodes below the historic pit.

Significant extensional results included:

• **55m @ 1.5 g/t gold** from 127m, incl.

24m @ 2.1 g/t gold from 148m, incl.

1m @ 17.8 g/t gold from 151m, and.

1m @ 21.1 g/t gold from 181m

## within an overall intercept of 172m @ 0.64 g/t gold from 44m (SRC971) - ended in mineralisation;

o **23m @ 1.1 g/t gold** from 147m, incl.

8m @ 2.1 g/t gold from 157m, incl.

1m @ 8.0 g/t gold from 164m

within an intercept of **165m** @ **0.5** g/t gold from 87m<sup>1</sup> (SRC969) - ended in mineralisation;

Refer to ASX release 23 October, 2023 for further details

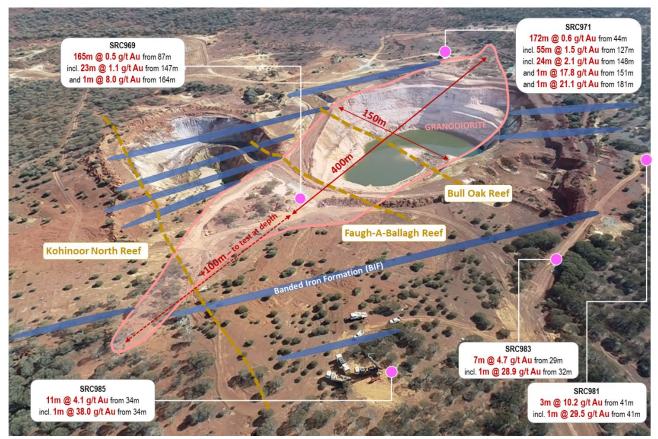


Recent shallow drilling (~50m depth) outside the granodiorite intersected high-grade extensions of the known Kohinoor North and Bull Oak reefs cross cutting the granodiorite, including **11m @ 4.1 g/t** from 34m, incl. **1m @ 38 g/t gold**, and **3m @ 10.2 g/t gold** from 41m, including **1m @ 29.5 g/t gold**, which are interpreted to have extended each reef a further ~100m along strike to the south-east. Refer ASX Announcement 20 November, 2023 and to Figure 3

Bull Oak historically produced ~10,600oz at 27 g/t gold between 1904- 1943 from small underground shafts targeting the high-grade reefs and a further ~10,000oz at 1.9 g/t gold from open-pit mining in 1997.

The current Mineral Resource Estimate for the Bull Oak Gold Deposit is 1.9Mt at 1.1 g/t Au for 65,000oz gold.

This work has highlighted there is considerable potential to define additional open-pitable gold resources at Bull Oak by extending mineralisation, both up and down dip of known mineralisation, as well as along strike and at depth as shown in Figures 2 and 3.



**Figure 3**: Oblique drone image over the open-pit Bull Oak Mine, highlighting selected significant intercepts from the current program, outside the resource.

#### Planned exploration – Bull Oak

Planning is currently being finalised for follow up RC drilling to commence in the coming weeks to test theses extensional targets within the granodiorite and lateral extensions of the shallow high-grade reefs. Review and near-mine targeting, to evaluate the camp scale potential, within the Bull Oak (Hancocks) area is ongoing.



# Vanguard: Potential for further shallow high-grade resource growth along trend <sup>10,11,13</sup>

The Vanguard Camp mineral resource estimate is currently 2.3Mt at 2.0 g/t gold for 150,000oz, reported at a 0.5 g/t gold cut-off, constrained within an A\$2,500 pit shell. Drilling has clearly defined mineralisation at the Vanguard and Vanguard North trends, with both significantly extended along strike and down dip. **Overall mineralisation of both of these trends is now defined over 2,000m and remains open**.

Regionally, the Vanguard Camp is located within a 20 kilometre north-west/south-east trending corridor which also hosts the Indomitable and Havilah deposits.

An updated review of surface sampling carried out over the Vanguard area in the 1980s by previous explorers (with sampling material comprising 2mm to 6mm lag swept from the surface which was assayed for gold) has been completed.

The sampling shows a strong response over the main Vanguard deposit, extending to the northwest. The Vanguard North deposit is also evident however the response is more subdued potentially due to deeper alluvial material overlying the deposit. At Vanguard North the peak gold-in-lag values occur where the quartz reef hosting the mineralisation is closest to the surface.

The sampling also **defined a coherent gold-in-lag anomaly up to 500m long**, along strike from the high-grade Vanguard North deposit (see Figure 4). Previous explorers carried out RAB drilling over the peak of this lag anomaly, which Alto considers to be ineffective due to the shallow drilling depth.

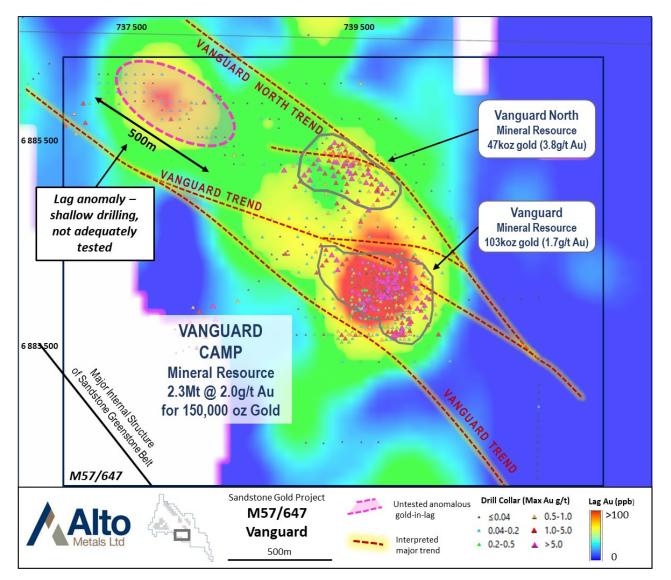


Figure 4: Plan view of Vanguard Camp showing the gold-in lag anomaly defined over 500m, along the main NW/SW trend which hosts the current mineral resource.



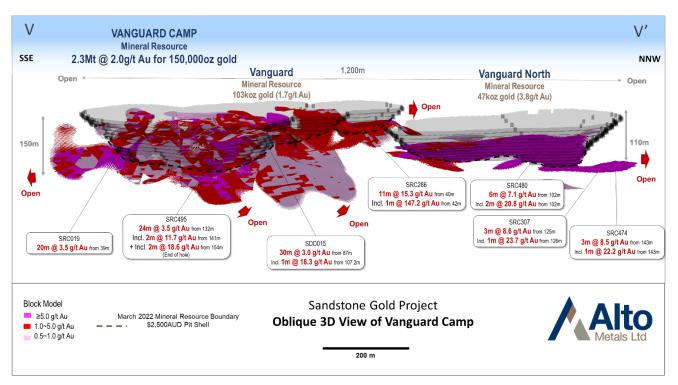


Figure 5: Oblique 3D view of Vanguard Camp resource block models (0.5 g/t cut-off) constrained within a A\$2,500/oz optimised pit shell.

Previous results from Vanguard include:

- o 11m @ 15.3 g/t gold from 40m, incl. 1m @ 147.2 g/t gold from 42m; (SRC286)
- o **30m @ 1.9 g/t gold** from 131m, incl. **3m @ 8.9 g/t gold** from 153m; (SRC272)
- o 8m @ 2.0 g/t gold from 144m, incl. 1m @ 5.1 g/t gold from 145m; (SRC270)
- o **7m @ 2.5 g/t gold** from 89m, incl. **1m @ 14.7 g/t gold** from 95m; (SRC326)
- o **12m @ 1.2 g/t gold** from 204m, incl. **5m @ 2.2 g/t gold** from 208m; (SRC325)

Previous results from Vanguard North include:

- o **2m @ 20.8 g/t gold** from 102m (SRC480)
- o 5m @ 6.5 g/t gold from 67m, incl. 1m @ 27.3 g/t gold from 69m (SRC469) outside MRE
- o 3m @ 8.6 g/t gold from 125m, incl. 1m @ 23.7 g/t gold from 126m (SRC307) outside MRE
- o 3m @ 8.5 g/t gold from 143m, incl. 1m @ 22.2 g/t gold from 143m (SRC474) outside MRE

Figure 5 shows the Mineral Resources at Vanguard Camp, constrained within the optimised pit shells and the additional mineralisation that remains open, outside the current pit shells.

Planned exploration - Vanguard North

A targeted soil sampling program is planned to commence shortly to verify the location of the lag anomaly and then test with a targeted RC drilling program.



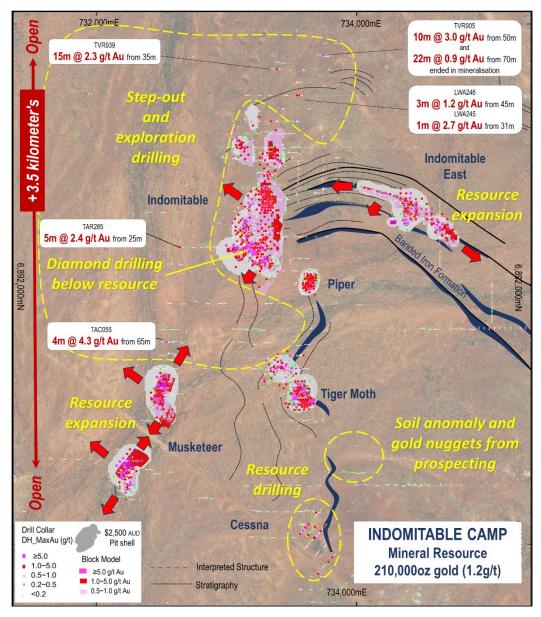
## Indomitable – extensional targets of a growing oxide footprint <sup>4,5,6,7,8</sup>

The Indomitable Camp is hosted within the +20km NW/SE Indomitable/Vanguard/Havilah gold corridor that forms part of the priority Alpha Domain target area. The Mineral Resource Estimate for Indomitable Camp is **5.4Mt at 1.2 g/t gold for 210,000oz,** reported at a 0.5 g/t gold cut-off, constrained within an A\$2,500 pit shell.

Mineralisation at the Indomitable Camp is currently defined over 3.5km strike length and remains open in all directions.

Drilling to date has defined a large oxide footprint at Indomitable, with deeper drilling intersecting gold mineralisation in fresh rock. Results continue to highlight the significance of the interpreted structural controls of both the steeply-dipping structures and shallow, westerly dipping thrust faults. Higher grade mineralisation is typically observed where these shallow, multiple stacked thrust faults intersect the steeply-dipping structures, as observed in SRC663 (44m @ 2.0 g/t gold from 59m, ASX release 14 July, 2022). The Company believes the extent of shallow oxide mineralisation at Indomitable Camp, is an indication of a potentially much larger gold system at depth.

Following a review of the drilling results from extensional drilling at Indomitable from late last year, further structural interpretation and a review of historical drilling, Alto has identified a number of key areas for further drilling and exploration to drive potential resource growth, outlined in Figure 6 below.



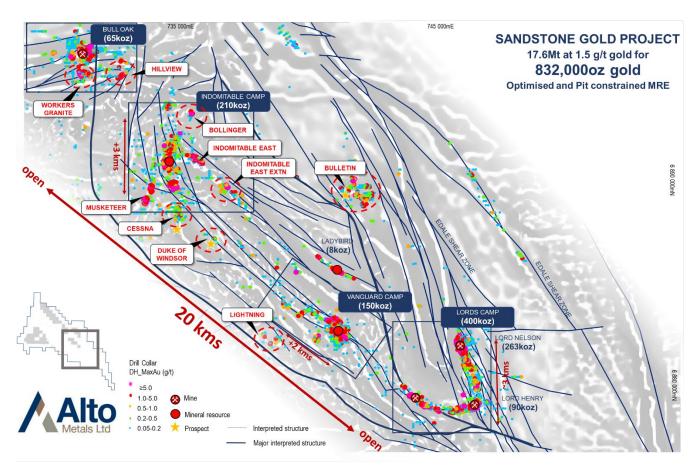
**Figure 6**: Plan view of Indomitable Camp showing the near-term growth targets along the main, highlighted from the review of previous and historical drilling.



## Planned exploration - Indomitable

Planning is underway for an initial 10,000-12,000m step-out air-core drilling program to test the shallow extensions of known mineralisation in preparation to follow up with deeper RC drilling. A planned diamond drilling program is also being evaluated to test the higher-grade structures in the fresh rock at depth. Detailed review of previous IP and gravity geophysical survey is currently being undertaken, to assist with further interpretation and targeting.

1.	Indomitable	Extensional drilling along the main NW trending structure where historical wide-spaced drilling results, outside the current resource, include:
		15m @ 2.3g/t gold from 35m and
		10m @ 3.0 g/t gold from 50m and
		22m @ 0.9g/t gold from 70m (ending in mineralisation).
		Refer to Table 5.
		Along with step out drilling to the west and proposed DD drilling at depth below the current MRE, which remains relatively untested.
2.	Musketeer	Extensional drilling to the north, along an interpreted parallel trend and step-out drilling down- dip to the west, along with resource expansion drilling
3.	Indomitable East	Resource/Extensional drilling along the high-grade BIF unit, where mineralisation remains open along strike to the west and south-east, and down-dip to the south-west.
4.	Cessna	Extensional drilling is planned to follow up on the previously released results including <b>16m @</b> <b>7.2 g/t gold</b> from 65m along with anomalous gold-in soils and surface gold recovered by local prospectors in the area (ASX 13 March 2023, 18 May 2023).



**Figure 7:** Location of total current mineral resources for Sandstone Gold Project within the Company's priority Alpha domain target area.



# 2. Regional Exploration

Based on the success of the Company's systematic approach to exploration within the Alpha Domain, Alto is continuing to review the multiple other early greenfield and advanced brownfield regional targets sit within the ~740km<sup>2</sup> Sandstone Gold Project, where it sees the potential for further growth and potential new discoveries.

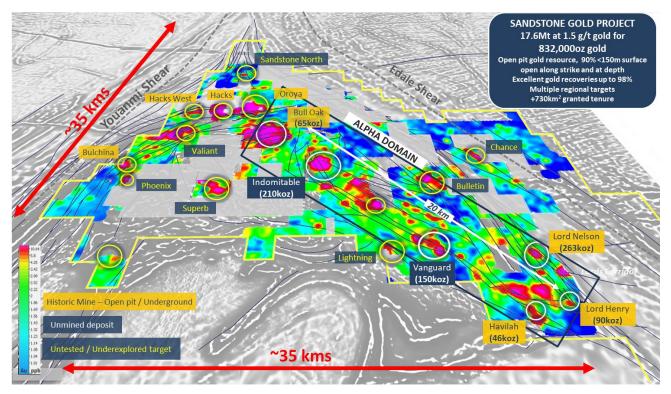


Figure 8. Multiple regional targets within the Sandstone Gold Project.



#### Hacks West – targeting Oroya and Hacks style repeats <sup>9</sup>

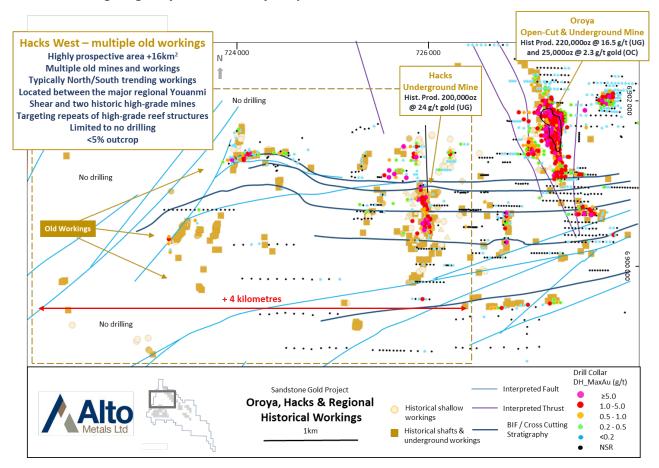


Figure 9. Oroya, Hacks and Hacks West Regional Target Area.

Hacks West is a +16km<sup>2</sup> target area immediately west of the Hacks reef. The target area hosts numerous old workings and historic shafts, which predominantly are north-south striking, yet surprisingly has had limited modern exploration in terms of surface geochemistry and drilling.

Neither the north-south striking Oroya or Hacks Reefs have an observable signature in the magnetic data in terms of offset of magnetic sediment/BIF horizons. However, the western half of the target area has more obvious stratigraphic disruption in terms of demagnetisation and offsets as per the interpreted structures shown in Figure 9. There is also potential for important E-W to ENE-striking structures to host gold mineralization.

The Hacks West target area is considered prospective for additional 'repeat' high-grade gold reefs, which may link to the regional Youanmi shear corridor. (See the conceptual target schematic in Figure 10)

#### Planned exploration – Hacks

Detailed structural interpretation and field work is continuing over the Hacks west area, including geochemical sampling work. Additional geophysical work is currently being assessed, including detailed ground gravity, to assist with improving the quality of the dataset and further assist in targeting for drill testing.

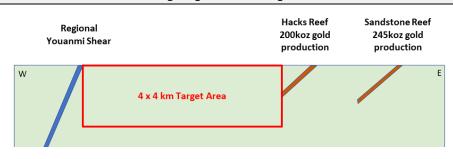


Figure 10. Hacks West conceptual targeting schematic.



## Sandstone North – high-grade structural target <sup>1</sup>

First pass air-core (AC) drilling at the Sandstone North gold-in soils target has been completed, with a total of 94 holes and 3,223 metres drilled to an average depth of approx. 34m.

The AC drilling, designed to test a shallow gold target defined from a recent soil sampling program, has successfully defined anomalous shallow low-level gold mineralisation over ~500m which is coherent with the main north-south trending interpreted structure. The drilling is 1.5 kilometres along strike to the north of the historical high-grade drill intercepts highlighting that the structure remains mineralised. Refer to Table 4 for results.

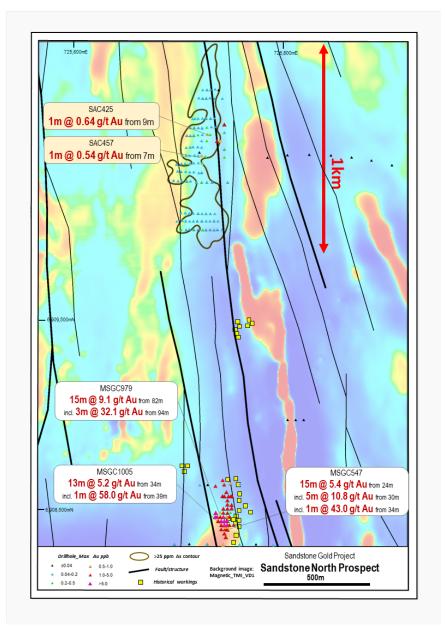


Figure 11. Sandstone North, plan view showing AC drilling.

Planned exploration – Sandstone North

Further interpretation and assessment of these results, in conjunction with the results of the historical drilling to the south, to determine follow up exploration work.



For further information regarding Alto and its 100% owned Sandstone Gold Project, please visit the ASX platform (ASX: AME) or the Company's website at <u>www.altometals.com.au.</u>

This announcement has been authorised by the Managing Director of Alto Metals Limited on behalf of the Board.

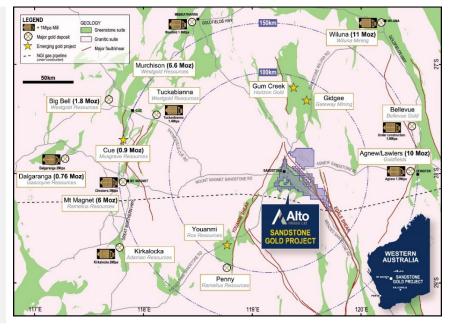
#### **Matthew Bowles**

Managing Director & CEO +61 8 9381 2808

#### **About Alto Metals**

Alto Metals Ltd (ASX: AME) is an advanced gold explorer that owns the Sandstone Gold Project (100%) located in the East Murchison of Western Australia.

The Sandstone Gold Project covers ~740km<sup>2</sup> of the Sandstone Greenstone Belt and currently has an optimised, open-pit constrained mineral resource estimate of 832,000oz gold at 1.5g/t, capturing over 80% of the unconstrained total MRE of 1.05Moz. Importantly the mineral resources are shallow with over 90% within 150m from surface Alto is currently focused on growing these resources through continued exploration success and new discoveries.





#### Forward-Looking Statements

This release may include forward-looking statements. Forward-looking statements may generally be identified by the use of forward-looking verbs such as expects, anticipates, believes, plans, projects, intends, estimates, envisages, potential, possible, strategy, goals, objectives, or variations thereof or stating that certain actions, events or results may, could, would, might or will be taken, occur or be achieved, or the negative of any of these terms and similar expressions. which are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of Alto Metals Limited. Actual values, results or events may be materially different to those expressed or implied in this release. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements. Any forward-looking statements in this release speak only at the date of issue. Subject to any continuing obligations under applicable law and the ASX Listing Rules, Alto Metals Limited does not undertake any obligation to update or revise any information or any of the forward-looking statements in this release or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

#### **Competent Persons Statement**

The information in this Report that relates to current and historical Exploration Results is based on information compiled by Mr Michael Kammermann, who is an employee and shareholder of Alto Metals Ltd, and he is also entitled to participate in Alto's Employee Incentive Scheme. Mr Kammermann is a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Kammermann consents to the inclusion in the report of the matters based on the information in the context in which it appears.



#### **Exploration Results**

The references in this announcement to Exploration Results for the Sandstone Gold Project were reported in accordance with Listing Rule 5.7 in the announcements titled:

- 1. Infill Soils Define Gold Targets at Sandstone North, 25 March 2024
- 2. Multiple high-grade gold results up to 38 g/t gold at Bull Oak, 20 November 2023
- 3. Alto intersects thick gold mineralisation at Bull Oak, 25 October 2023
- 4. Indomitable continues to deliver 16m @ 7.2 g/t gold from 65m, 18 May 2023
- 5. Bonanza gold intercept at Indomitable 16m @ 13.1 g/t from 13m, 2 May 2023
- 6. Exploration Update (Cessna and Alpha Domian Regional Targets), 13 March 2023
- 7. Exceptional 25m @ 7.5 g/t gold from Indomitable, 24 November 2022
- 8. 80m @ 1.6 g/t gold from extensional drilling at Indomitable, 9 November 2023
- 9. Multiple high-grade targets identified at Hacks and Oroya, 10 October 2023
- 10. Further shallow high-grade gold confirmed at Sandstone, 31 March 2022
- 11. Vanguard returns 24m @ 3.5 g/t gold, Sandstone Gold Project, 8 December 2021
- 12. Multiple high-grade gold intercepts from Vanguard, 4 November 2021
- 13. Exceptional high-grade visible gold from Vanguard, 13 May 2021

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcements noted above



#### Tables 1 & 2: Optimised and Pit Constrained Mineral Resource Estimate for Sandstone Gold Project

Mineral Resource Estimate for the Sandstone Gold Project as at March 2023								
Classification	Cut-off grade (g/t gold)	Tonnes (Mt)	Grade (g/t gold)	Contained gold (koz)				
Total Indicated	0.5	4.3	1.6	226				
Total Inferred	0.5	13.3	1.4	606				
TOTAL	0.5	17.6	1.5	832				

Table 1: Total Mineral Resource Estimate for Sandstone Gold Project

Updated Mineral Resources reported at a cut-off grade of 0.5 g/t gold. Mineral Resources for Indomitable are reported at a cut-off grade of 0.3 g/t gold. Minor discrepancies may occur due to rounding of appropriate significant figures.

#### Table 2: Total Mineral Resource Estimate for Sandstone Gold Project (by deposit)

	Mineral Resource Estimate for the Sandstone Project - March 2023										
			Indicate	ed		Inferred	i	TOTAL			
Prospect	Cut-Off	Tonnes (Mt)	Grade (g/t)	Gold Ounces (koz)	Tonnes (Mt)	Grade (g/t)	Gold Ounces (koz)	Tonnes (Mt)	Grade (g/t)	Gold Ounces (koz)	
Lord Nelson	0.5	1.5	2.1	100	3.5	1.4	163	5.0	1.6	263	
Lord Henry	0.5	1.6	1.5	77	0.3	1.2	13	1.9	1.4	90	
Havilah	0.5				0.9	1.4	38	0.9	1.4	38	
Maninga Marley	0.5				0.1	2.6	8	0.1	2.6	8	
Havilah Camp	0.5				1	1.5	46	1.0	1.5	46	
Vanguard	0.5	0.4	2	26	1.5	1.6	77	1.9	1.7	103	
Vanguard North	0.5				0.4	3.8	47	0.4	3.8	47	
Vanguard Camp	0.5	0.4	2	26	1.9	1.6	124	2.3	2.0	150	
Musketeer	0.5				0.8	1.5	40	0.8	1.5	40	
Indomitable	0.5	0.8	0.9	23	2.2	1.2	81	3.0	1.1	104	
Indomitable East	0.5				1	1.1	34	1.0	1.1	34	
Tiger Moth	0.5				0.5	1.7	28	0.5	1.7	28	
Piper	0.5				0.1	1	4	0.1	1.0	4	
Indomitable Camp	0.5	0.8	0.9	23	4.6	1.1	187	5.4	1.2	210	
Bull Oak	0.5				1.9	1.1	65	1.9	1.1	65	
Ladybird	0.5				0.1	1.9	8	0.1	1.9	8	
Total	0.5	4.3	1.6	226	13.3	1.4	606	17.6	1.5	832	

Updated Mineral Resources reported at a cut-off grade of 0.5 g/t gold and are constrained within a A\$2,500/oz optimised pit shells based on mining parameters and operating costs typical for Australian open pit extraction deposits of a similar scale and geology. Mineral Resources for Lord Henry, Vanguard Camp, Havilah Camp, Piper, Tiger Moth and Ladybird deposits have not been updated. Minor discrepancies may occur due to rounding of appropriate significant figures.

#### Table 3: Unconstrained Mineral Resources for Sandstone Gold Project, March 2023

Unconstrained Mineral Resources for the Sandstone Gold Project as at March 2023								
Classification	Cut-off grade (g/t gold)	Tonnes (Mt)	Grade (g/t gold)	Contained gold (koz)				
Total Indicated	0.5	4.3	1.6	227				
Total Inferred	0.5	19.2	1.4	819				
TOTAL	0.5	23.5	1.4	1,046				

Unconstrained Mineral Resources reported at a cut-off grade of 0.5 g/t gold. Minor discrepancies may occur due to rounding of significant figures.

The references in this announcement to Mineral Resource estimates for the Sandstone Gold Project were reported in accordance with Listing Rule 5.8 in the following announcements:

(a): Lord Nelson, Indomitable, Bull Oak release: "Significant increase in shallow gold resources at Sandstone Gold Project" 3 April 2023;

(b) Vanguard Camp, Havilah Camp, Lord Henry: release titled: "Sandstone Mineral Resource increases to 635,000oz gold" 23 March 2022;

(c): Indomitable Camp (Piper & Tiger Moth deposits): release "Maiden Gold Resource at Indomitable & Vanguard Camps, Sandstone WA" 25 Sep 2018; and

(d): Ladybird: release "Alto increases Total Mineral Resource Estimate to 290,000oz, Sandstone Gold Project" 11 June 2019.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the previous market announcement noted above and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the previous market announcement continue to apply and have not materially changed.



## Table 4: Drill collar information for significant assay results (MGA 94 zone 50) – Sandstone North.

	I – I	_						-					
Hole_ID	Hole_Type	m_East	m_North	m_RL	Dip	Azimith	m_MaxDepth	Prospect	From(m)	To(m)	Interval(m)	Au_g/t	g/t*m_Au
SAC374	AC	726418	6910244	533	-60	90	37	Sandstone North	3	5	2	0.26	0.5
								and	9	10	1	0.41	0.4
SAC386	AC	726437	6910000	533	-60	90	25	Sandstone North	6	7	1	0.20	0.2
SAC406	AC	726421	6909922	534	-60	90	37	Sandstone North	6	7	1	0.29	0.3
SAC411	AC	726317	6909921	532	-60	90	38	Sandstone North	37	38	1	0.41	0.4
SAC424	AC	726458	6910382	534	-60	90	11	Sandstone North	4	5	1	0.34	0.3
SAC425	AC	726445	6910382	533	-60	90	39	Sandstone North	8	10	2	0.55	1.1
								incl	9	10	1	0.64	0.6
SAC427	AC	726398	6910381	531	-60	90	39	Sandstone North	2	4	2	0.32	0.6
SAC433	AC	726441	6910417	532	-60	90	11	Sandstone North	6	8	2	0.24	0.5
SAC456	AC	726433	6910276	530	-60	90	30	Sandstone North	4	5	1	0.22	0.2
SAC457	AC	726415	6910280	529	-60	90	25	Sandstone North	5	8	3	0.32	1.0
								incl	7	8	1	0.54	0.5
								and	10	11	1	0.23	0.2
								and	13	14	1	0.25	0.3
								and	16	17	1	0.32	0.3
								and	24	25	1	0.47	0.5
SAC463	AC	726416	6910321	531	-60	90	32	Sandstone North	14	15	1	0.20	0.2

Note: 0.2g/t Au cut off, may include up to 4m <0.2g/t Au as internal dilution.

## Table 5: Drill collar information for significant assay results (MGA 94 zone 50) – Historical Indomitable Drill Results.

Hole_ID	Hole_Type	m_East	m_North	m_RL	Dip	Azimith n	n_MaxDepth	Prospect	From(m)	To(m)	Interval(m)	Au_g/t	g/t*m_Au
LWA245	AC	733562	6893452	503	-60	90	50	Indomitable	31	32	1	2.7	2.7
LWA246	AC	733542	6893452	503	-60	90	50	Indomitable	24	25	1	1.0	1.0
								and	29	30	1	0.8	0.8
								and	32	33	1	1.0	1.0
								and	45	48	3	1.2	3.5
								incl.	46	47	1	2.3	2.3
TAC055	AC	732541	6891554	495	-60	90	86	Indomitable	65	69	4	4.3	17.0
								incl.	65	67	2	7.4	14.7
								and	80	85	5	0.3	1.5
TAR285	RAB	732642	6892285	498	-60	90	246	Indomitable	25	35	10	1.4	14.0
								incl.	25	30	5	2.4	12.0
TVR905	RAB	733741	6893763	509	-90	0	92	Indomitable	35	40	5	0.3	1.7
								and	50	60	10	3.0	30.0
								incl.	50	55	5	5.5	27.3
								and	70	92	22	0.9	19.1
								incl.	90	92	2	4.7	9.3
TVR939	RAB	733387	6893653	505	-90	0	74	Indomitable	35	50	15	2.3	34.5
TVR1141	RAB	731649	6891554	495	-90	0	46	Indomitable	5	10	5	1	5.0

Note: 0.5g/t Au cut off, may include up to 4m < 0.5g/t Au as internal dilution.



## JORC 2012 TABLE 1 REPORT SANDSTONE PROJECT

# SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling	Sandstone North
techniques	Samples were collected by air core (AC) drilling.
-	• AC samples were collected from the in-line cyclone placed directly onto the ground (bulk sample).
	• From the bulk samples, a 4m composite sample was collected using a split PVC scoop and then submitted to Intertek Laboratory in Perth for analysis of gold by photon analysis.
	<ul> <li>Where the 4m composite sample reported &gt;0.1 g/t gold, 1m samples were later collected from the bulk sample using a split PVC scoop and then submitted to Intertek Laboratory in Perth for analysis of gold by photon analysis.</li> </ul>
	Indomitable
	<ul> <li>Samples were collected by air-core drilling (AC) and rotary air blast drilling (RAB).</li> </ul>
	Troy Resources NL (Troy) 1999-2009
	<ul> <li>Rotary Air Blast (RAB) and air core drilling (AC) samples were collected in 1m intervals and laid on the ground.</li> </ul>
	<ul> <li>From the bulk samples (RAB or AC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis.</li> </ul>
	<ul> <li>Where anomalous gold zones were detected, 1m re-split samples were collected and submitted to the laboratory.</li> </ul>
Drilling techniques	Sandstone North
0 1	• AC drilling was carried out by Challenge Drilling using a custom built trick mounted air-core drill rig with an on board compressor.
	Indomitable
	Troy RAB and AC drill holes were drilled by Bostech Drilling or Kennedy Drilling.
Drill sample	Sandstone North
recovery	• Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database.
·	• AC samples generally had good recovery due to the shallow depth of the drilling and minimal groundwater intersected.
	• The cyclone was routinely cleaned at the end of each rod.
	• There does not appear to be a relationship with sample recovery and grade and there is no indication of sample bias.
	No relationship between recovery and grade has been identified.
	Indomitable
	Alto has no quantitative information on Troy RAB and AC sample recovery.
Logging	Sandstone North
	• Alto's AC drill chips were sieved from each 1m bulk sample and geologically logged.
	Washed drill chips from each 1m sample were stored in chip trays.
	Geological logging of drillhole intervals was carried out at 1m intervals.
	Indomitable
	Detailed geology logging codes were used for the Troy drill holes.



Criteria	Commentary
Subsampling	Sandstone North
techniques and sample preparation	<ul> <li>All samples were transported to Intertek, located in Perth, Western Australia, who were responsible for sample preparation and assaying for all drill hole samples and associated check assays.</li> <li>Samples submitted for analysis via Photon assay technique were dried, crushed to nominal 85% passing 2mm, linear split and a nominal 500g sub sample taken.</li> </ul>
	<ul> <li>The 500g sample is assayed for gold by Photon Assay along with quality control samples including certified reference materials, blanks and sample duplicates.</li> </ul>
	<ul> <li>Sample sizes are appropriate to give an indication of mineralisation.</li> </ul>
	<ul> <li>The technique is appropriate for the material and style of mineralization.</li> </ul>
	Indomitable
	Sample sizes are appropriate to give an indication of mineralisation.
	The sampling technique is appropriate for the material and style of mineralization.
	<ul> <li>Troy samples were sent to various laboratories located in Perth, Western Australia, who were responsible for sample preparation and assaying for drill hole samples and associated check assays. The laboratories at the time, were certified to the ISO 9001 requirements for all related inspection, verification, testing and certification activities. Assays were submitted for 50g Aqua Regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry.</li> </ul>
Quality of	Sandstone North
assay data	There are no deleterious elements present which could affect the technique.
and	There is no information available to Alto to indicate that the gold is refractory gold.
laboratory	Industry purchased Blanks and Standards and are inserted at a rate of 1 per 25 samples.
tests	Field duplicates are inserted by Alto at a rate of 1 every 100 samples.
	• Laboratory Certified Reference Materials and/or in-house controls, blanks, splits and replicates are analysed with each batch of samples by the laboratory. These quality control results are reported along with the sample values in the final report. Selected samples are also re-analysed to confirm anomalous results.
	<ul> <li>Laboratory and field QA/QC results are reviewed by Alto Metals personnel. Indomitable</li> </ul>
	<ul> <li>The Aqua Regia technique is considered to be a partial extraction technique where gold encapsulated in refractory sulphides or some silicate minerals may not be fully dissolved, resulting in partial reporting of gold content.</li> </ul>
	Alto has no information to indicate that the gold at Sandstone is refractory.
	• For Troy drilling, an average of 1 field duplicate, 1 blank and 1 standard were submitted for every 50 samples.
	• Troy engaged an external consultant to undertake periodic audit of the exploration QAQC data on a monthly basis.
	Laboratory Repeat assays were reported for Troy drill assays.
Verification	Sandstone North
of sampling	All significant intersections are reviewed by alternative company personnel.
and assaying	• The drilling program included extension and infill drill holes therefore twinned holes were not applicable.
	• Field data is recorded on logging sheets and entered into excel prior to uploading to and verification in Micromine and Datashed.
	Laboratory data is received electronically and uploaded and verified in Excel, Micromine and Datashed. <u>Indomitable</u>
	• Drilling information pertaining to drilling carried out by Troy was compiled by Alto from WA Dept Mines Open File records (WAMEX).
	Data was transferred from WAMEX digital files to Alto's database.
	• The original WAMEX files were generally in excel or text format and were readily imported into Alto's database.
	All significant intersections are reviewed by alternative company personnel.



Location of • <u>Sandsto</u>	
	ne North
data points • All data	is reported based on GDA 94 zone 50.
Alto use	ed handheld Garmin GPS to locate and record drill collar positions, accurate to +/-5 metres g and easting), which is sufficient for exploration drilling.
Axis true	ble surveys are undertaken by the drilling contractor typically at 30m intervals using a Champ e north seeking gyro.
Indomit	
	is reported in GDA 94 zone 50.
	ling was located with a differential GPS (accurate to <1m).
	s no available down hole survey data for the Troy drilling however it is unlikely that hole deviation would be material given that the holes are either vertical or shallow.
Data spacing and	ne North ar spacing is sufficient for the purposes of exploration drilling.
	ing was composited downhole for estimation using a 1m or 4m interval.
Indomit	
	ar spacing is variable given that the drilling is exploration and not for resource estimation.
	lling was composited downhole for estimation using a 1m, 4m or 5m interval.
	ne North
	entation was at -60 degrees to the east which is designed to intersect mineralisation dicular to interpreted mineralised zones.
structure • Geologi	cal and mineralised structures have been interpreted at Indomitable from surface geological g and drilling.
Indomit	able_
Drill orie	entation is typically vertical or -60° to 090° which is designed to intersect mineralisation
	mately perpendicular. However the drilling is mostly exploration and there is minimal to no
outcrop	hence little information is available with respect to geological structure.
Sample security • Sandsto	ne North
AC drill	samples comprised approximately 3 kg of material within a labelled and tied calico bag.
	al sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was I dispatched to the laboratory via freight contractors or company personnel.
Samplin	g data was recorded on field sheets and entered into a database.
	sion sheets are also completed and sent to the laboratory prior to sample receival.
Indomit	
bags are sender o the num picked u laborato	borted that their drill samples were collected in a labelled and tied calico bag. Up to six calico then placed in a larger polyweave bag that is labelled with the laboratory address and details and tied with wire. The polyweave bags were picked up by a courier firm who counted aber of polyweave bags before taking them to the Mt Magnet depot. The samples were up by the courier's road train and transported to Perth. Upon receipt of the samples the ory checked the sample IDs and total number of samples and notified Troy of any differences e sample submission form.
Audits and reviews • Sandsto	ne North
Alto's Sector Alto Alto's Sector Alto Alto's Sector Alto Alto Alto Alto Alto Alto Alto Alto	enior Exploration Geologist supervised the drilling program and ensured that sampling and practices adhered to Alto's prescribed standards.
	xploration Manager has reviewed the significant assay results against field logging sheets
and dril	I chip trays and confirmed the reported assays occur with logged mineralised intervals and I that assays of standards and blanks inserted by the Company were appropriately reported.
	rnal audits or reviews have been undertaken at this stage.
	able
Indomit	



# **SECTION 2 - Reporting of Exploration Results**

Criteria	Commentary
Mineral tenement and land tenure	• Alto's Sandstone Project is located in the East Murchison region of Western Australia and overlies the Sandstone Greenstone Belt with approximately 730 km <sup>2</sup> of granted tenements including prospecting, exploration and mining licences all 100% owned by Sandstone Exploration Pty Ltd, which is a 100% subsidiary of Alto Metals.
	• To date there have been no issues obtaining approvals to carry out exploration and there are no known impediments to potential future development or operations, subject to relevant regulatory approvals, over the leases where significant results have been reported.
	• Royalties include up to 2% of the Gross Revenue payable to a third party, and a 2.5% royalty payable to the State Government.
Exploration	Sandstone North
done by other	• In 1909, numerous gold mining leases were pegged within the Sandstone North area.
parties	• Official recorded production from GML573B (Oroya Extended), which covers the area of the Sandstone North deposit, is 223.05 fine ounces of gold from 282 tonnes of ore at an average grade of 24.6 g/t Au. Small pits and shafts extend north-south over a strike length of approximately 300m. The deepest shaft reportedly extends to 23m below surface.
	• WMC carried out geochemical lag sampling, geological mapping, airborne and ground magnetic surveying, and RC drilling between 1983 and 1989 in the general area with most of the drilling focused on the area of the old workings.
	• Elmina NL and Herald Resources Limited held the project between 1993 and 1999 but did not carry out any drilling. Elmina carried out polygonal mineral resource estimation.
	• Jade Creek Resources held tenure in the 1990s and carried out RAB drilling across selected peaks of gold in lag surface anomalies.
	Troy completed RAB and RC drilling in 2003. <u>Indomitable</u>
	<ul> <li>Troy commenced exploration in 1999 and completed drilling, mineral resource estimation, feasibility studies and open pit mining.</li> </ul>
Geology	Sandstone North
	• Geological structures have been interpreted from drilling, geophysical data and surface geological mapping.
	• Sandstone North area comprises sediments (shales, siltstones) and ultramafic rocks which have a northerly strike and a sub-vertical dip. A major north-south trending structural feature, termed the Sandstone Syncline lies in the central part of the prospect area.
	• Drilling at depth has shown the shales to be black, graphitic and locally pyritic. Ultramafic rocks occur within the shales as units up to 50m wide and as a major unit in the eastern part of the prospect.
	• Soil sampling has defined an arsenic/gold/lead anomaly approximately 6km and several hundred metres wide, which appears to be coincident with the axis of the Sandstone Syncline.
	• Previous drilling has defined mineralization at the Sandstone North deposit, close to the contact with sediments (shales/siltstones) and ultramafic rocks. Mineralisation occurs within iron-stained quartz veins, which strike to the north and dip approximately 75 degrees to the west and plunge to the NNW at approximately 60 degrees.
	• Depth of weathering is interpreted from drilling data to be approximately 30m in the north of the deposit and up to 60m in the south. The water table is reported as approximately 25m below surface.
	Indomitable
	• The Indomitable Camp is located within an area of alluvium covering deeply weathered, mafic and ultramafic units and banded iron formation. Banded iron formation is exposed on the surface at Indomitable East. Elsewhere there is no outcrop.
	• Gold mineralisation is interpreted to be related to quartz veining within saprolite and fresh rock.
	• A gold bearing horizon is located above the saprolite hosted deposits at a depth of 10m below the surface, separated from the main mineralised bodies by a zone of gold depletion about 10m thick.



Criteria	Commentary
Drill hole	The locations of all relevant drill holes are shown on various plans in the report.
information	<ul> <li>Drill hole collar and relevant information for drill holes with significant mineralisation is included in tables in the main report.</li> </ul>
Data aggregation methods	<ul> <li><u>Sandstone North</u></li> <li>Reported mineralised intervals +0.2 g/t Au may contain 2 to 4 metres of internal waste (or less than 0.2 g/t Au low grade mineralisation interval).</li> <li>No metal equivalent values have been reported. The reported grades are uncut. <u>Indomitable</u></li> <li>Mineralised intervals for historical drilling are reported +0.5 g/t Au and may contain 2 to 4 metres of internal waste (less than 0.5 g/t Au mineralisation).</li> <li>No metal equivalent values have been reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li><u>Sandstone North</u></li> <li>Mineralisation at the Sandstone North deposit occurs within west-dipping (~70 degrees), north-striking quartz veins that plunge approximately 60 degrees to the NNW.</li> <li>Drill orientation was typically vertical, or -60 degrees dip to 090 or 270 degrees which was designed to intersect mineralisation approximately perpendicular to the strike.</li> <li>The mineralisation is dipping and drill intercepts are reported as down hole widths not true widths.</li> <li>It is unknown if the downhole intercepts are representative of true widths given the current understanding of the mineralisation and geological structures.</li> <li><u>Indomitable</u></li> <li>Drill holes were either vertical or angled at -60° and designed to intersect perpendicular to the host stratigraphy or interpreted strike and dip of the mineralisation however there is minimal to no outcrop hence little information is available with respect to geological structure.</li> <li>It is unknown if the downhole intercepts are representative of true widths given the current understanding of the mineralisation and geological structures.</li> </ul>
Diagrams	• Relevant sections and plans have been included in the main report and in previous reports which are referenced and can be found on the Company website or ASX site.
Balanced reporting	<ul> <li>Drill hole collar and relevant information for the reported drill holes with significant mineralisation is included in a table.</li> <li>The locations of all drill holes are shown on a plan in the report showing maximum gold value at the collar.</li> </ul>
Other substantive exploration data	<ul> <li>All material information has been included in the report.</li> <li>There are no known deleterious elements.</li> </ul>
Further work	• Further exploration activity to be carried out including soil sampling and drilling as discussed in the report.