

## Sandstone Gold Project, Western Australia

# Thick gold mineralisation confirmed at Bull Oak including 55m @ 1.5 g/t gold

RC drilling confirms continuity of mineralisation over 400m strike and remains open Assays pending for a further 14 holes from Bull Oak. Regional drilling ongoing.

# Highlights

- Initial assay results from the first four holes of an 18 hole RC program at Bull Oak, targeting extensions of mineralisation both below and around the shallow open pit, have delivered significant thick gold intercepts within the host granodiorite and the surrounding country rock, including:
  - o **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 overall intercept of 227m @ 0.44 g/t gold from 26m (SRC969) - ended in mineralisation;

- Results are of similar tenor to two previous deeper holes which intersected multiple stacked lodes, returning overall significant +150m intercepts of:
  - o 157m @ 0.5 g/t gold from 143m, incl. 1m @ 18.7 g/t gold from 297m ended in mineralisation (TRCD706)
  - 260m @ 0.41 g/t gold from 36m, incl. 10m @ 2.1 g/t gold from 256m, incl 1m @ 14.3 g/t gold from 260m ended in mineralisation (SRC360)
- Mineralisation has now been **extended to ~400m strike and remains open** along strike and at depth.
- High-grade mineralisation identified **outside the granodiorite** at the contact with surrounding rocks.
- The current mineral resource for Bull Oak is 65,000 oz at 1.1 g/t gold constrained within a A\$2,500 pit shell capturing the majority of the historical shallow drilling and is limited by the extent of drilling.
- Further assays remain pending from additional extensional drilling at Bull Oak and regional prospects.

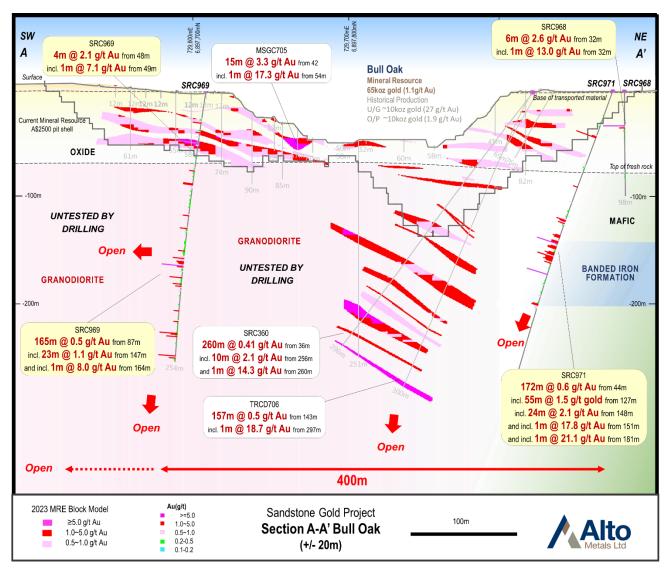
Alto's Managing Director, Matthew Bowles said: "These first few intercepts from below the shallow mined Bull Oak pit have confirmed the continuity of thick gold mineralisation over 400 metres of strike, outside the resource, and remains open. Importantly, the drilling has also demonstrated that mineralisation is not constrained to the granodiorite but also extends into the surrounding rocks, highlighting the potential for considerable near-term growth within a larger, single pit.

Our low-cost, targeted exploration is continuing to deliver as we focus on growing our existing resource base and advancing regional prospects. We have a number of additional assays still pending from Bull Oak and with drilling ongoing at regional targets, shareholders can look forward to further news flow over the coming months."

## Alto Metals Limited

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**Figure 1**: Drill section at Bull Oak looking north-west, showing two of the completed deeper drill holes (SRC969 and SRC971) to test extensions of the multiple stacked lodes below the open pit and current mineral resource.

**Alto Metals Limited** (ASX: AME) (Alto or the Company) is pleased to report gold results from drilling at the Bull Oak deposit, located within the Company's 100% owned Sandstone Gold Project, in Western Australia.

New assay results in this release are from one-metre photon assays relating to the first four RC holes (SRC968-971) of an 18 hole RC program at Bull Oak, targeting extensions to the known gold mineralisation.

SRC971 was drilled in the north-east part of the deposit near the interpreted margin of the granodiorite. The drilling passed through the oxide zone and intersected mafic rocks and a wide interval of banded-iron-formation (BIF) intermixed with granodiorite, interpreted to be the contact of the Bull Oak intrusive (refer to Figures 1 and 2).

Significant assay results include:

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)



SRC969 was drilled in the south-west part of the Bull Oak granodiorite targeting mineralisation at depth below the current mineral resource, and was a step-out hole approximately 200m along strike from previous deep drill hole SRC360 which intersected multiple stacked lodes in an overall intercept of **260m @ 0.41 g/t** gold from 36m (including a high grade intercept of **up to 14.3 g/t gold**), with the hole ending in mineralisation. SRC969 also intersected multiple stacked lodes and ended in mineralisation.

Significant assay results include:

• **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 overall intercept of 227m @ 0.44 g/t gold from 26m (SRC969);

SRC969 also returned shallow oxide gold intercepts of:

• 4m @ 2.1 g/t gold from 48m, incl.

1m @ 7.1 g/t gold from 49m.

SRC968 is one of the fourteen shallow vertical holes (~100m depth) drilled outside the granodiorite to test for potential extension of shallow quartz reefs into the surrounding rocks. The drill hole intersected quartz veining within oxide above fresh mafic rocks (refer to Figures 1 and 2). Significant assay results from SRC968 include **6m @ 2.6 g/t gold** from 32m, incl. **1m @ 13.0 g/t gold** from 32m.

Refer to Figures 1-4 and Table 4 for significant results.

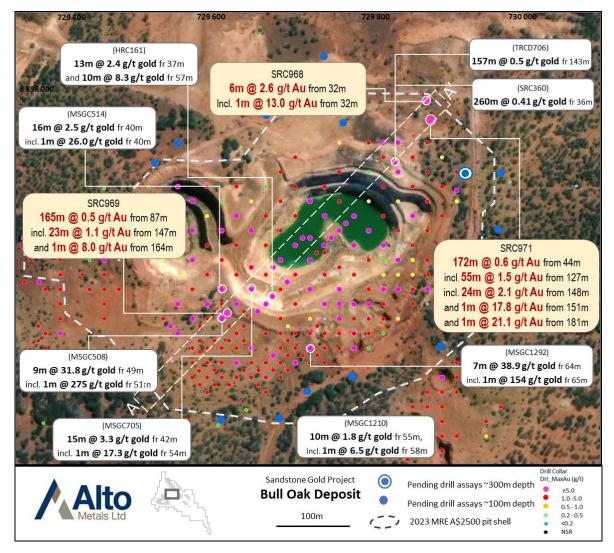


Figure 2: Plan view of Bull Oak Mine showing historical Alto Metals drilling.



## **Discussion of results**

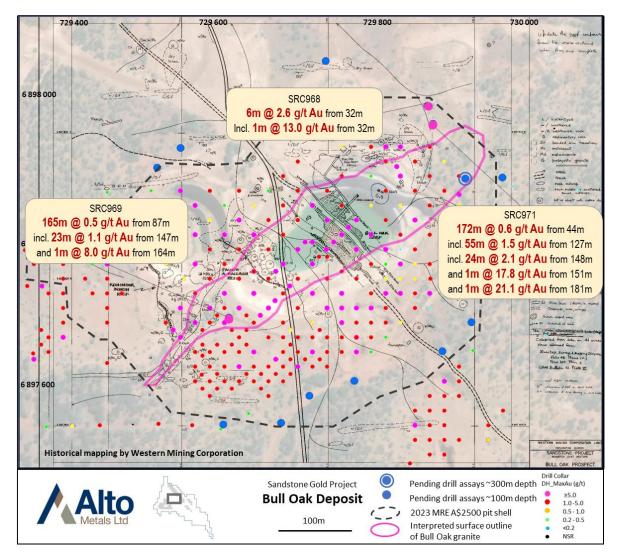
Drilling has confirmed that the multiple stacked lodes identified in previous drilling below the shallow mined pit, extend along strike **for at least 400m with mineralisation open to the south-west** toward the margin of the granodiorite which is yet to be defined by drilling.

SRC969 has returned similar assay results to;

- previous Alto drill hole SRC360 which intersected multiple stacked lodes in an overall intercept of 260m @ 0.41 g/t gold from 36m, including a high grade intercept of up to 14.3 g/t gold, with the hole ending in mineralisation approximately 250m below surface; and
- two deeper historical holes drilled by WMC and Troy in 1985 and 2009, which intersected multiple mineralised reefs with numerous instances of visible gold reported. The WMC diamond hole was only selectively assayed in mineralised zones, while the Troy hole returned 157m @ 0.5 g/t gold from 143m, incl. 1m @ 18.7 g/t gold from 297m (TRCD706) with the hole ending in mineralisation.

Drilling has also confirmed that **gold mineralisation is not constrained to the granodiorite** and extends into the surrounding rocks. Assay results from SRC971 at the granodiorite-BIF contact have confirmed that this is a favourable geological position for high-grade gold mineralisation. Historical surface geological mapping and shallow drilling defined multiple east-west oriented, sub-vertical BIF units that have been intruded by the granodiorite that remain untested by drilling at depth. These target areas represent an exciting opportunity to potentially define further high-grade mineralisation, additional to the multiple stacked lodes within the granodiorite, to be included in future mineral resource updates.

The drilling reaffirms the **significant potential to extend mineralisation below the shallow mined pit along strike and at depth**, as highlighted in Figure 1.



**Figure 3**: Plan view of Bull Oak Mine showing historical and Alto Metas drilling overlaid with historical mapping by Western Mining Corporation. Also highlighted are the three main reefs, Bull Oak, Kohinoor North and Faugh-A-Ballagh.



## About Bull Oak

- The Bull Oak deposit is located within the Hancocks Mining Centre, approximately 5km southeast of Sandstone, and produced a total of 39,936oz of gold at an average grade of 38g/t Au between 1904 and 1943.
- Underground mining was carried out at Bull Oak, targeting the higher-grade reefs. Historical production from the reefs was 10,617oz at a grade of 27g/t Au. Herald Resources Ltd commenced open pit mining at Bull Oak in April 1997 and ceased mining in September 1997, producing 161,431 tonnes at 1.87 g/t Au for 9,701oz of gold.
- Exploration activities by WMC, Elmina and Herald between 1983 and 1999 included geological mapping, deflation lag sampling, drilling, resource estimation and open pit mining. Troy Resources NL carried out pit mapping between 1999 and 2009 and completed one diamond drill hole in 2009.
- The Bull Oak granodiorite is a porphyritic intrusion with a strike length of approximately 500 m and a width of up to 150 m. The intrusion has a depth of at least 250 m and has relatively steep dipping boundaries, which has not been defined at depth. The intrusion trends north-east cutting across an east-west striking sequence of mafic rocks and BIF units. The granodiorite does not outcrop and is intensely kaolinised to clay plus quartz with depth of to approximately 60 m below surface. The fresh granodiorite is a medium grained, pale grey, biotite granodiorite with traces of pyrite.
- Mineralisation at the Bull Oak deposit is associated with multiple north-west trending quartz reefs, which dip
  approximately 30 degrees to the north-east. These include the three main gold reefs (Bull Oak, Faugh-A-Ballagh, and
  Kohinoor North) with a fourth reef (Monarch) between Faugh-A-Ballagh and Kohinoor North and two additional reefs
  overlying the main Bull Oak reef. The style of mineralisation at Bull Oak appears to be similar to that observed at Lord
  Henry, with multiple stacked lodes within a granodiorite.
- A geological log of WMC diamond drillhole MSGD010, which was sited on the footwall side of the Bull Oak Reef, identified the Faugh-A-Ballagh reef as 40 cm of ironstained quartz from ~48 m below surface. The Kohinoor North Reef was seen as a cluster of quartz veins at 127 m below surface. Another 40 cm vein was seen at 102 m below surface.

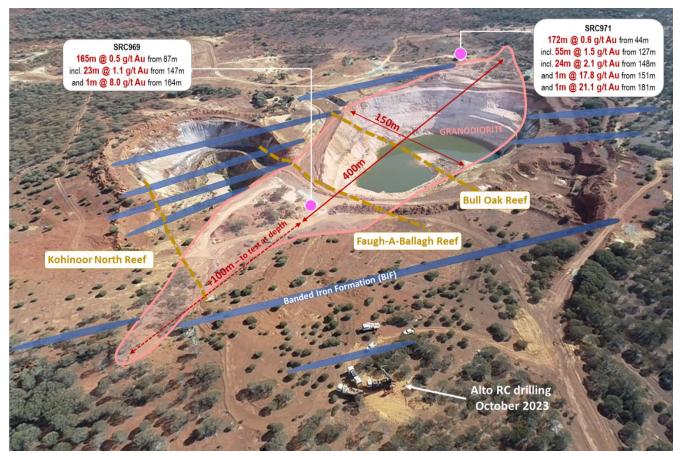


Figure 4: Oblique drone image over the open-pit Bull Oak Mine, mined by Herald Resource Ltd.



Unmined high-grade gold intersections from historical drilling below the Bull Oak pit include:

- 13m @ 2.4 g/t gold from 37m, incl. 1m @ 17.1 g/t gold from 39m; and 0 10m @ 8.3 g/t gold from 57m, incl. 3m @ 25.8 g/t gold from 57m (HRC161)
- 10m @ 1.8 g/t gold from 55m, incl. 1m @ 6.5 g/t gold from 58m; (MSGC1210) 0
- 7m @ 38.9 g/t gold from 64m, incl. 1m @ 154.0 g/t gold from 65m; (MSGC1292) 0
- 9m @ 31.4 g/t gold from 49m, incl. 1m @ 275.0 g/t gold from 51m; (MSGC508) 0
- 16m @ 2.5 g/t gold from 40m, incl. 1m @ 26.0 g/t gold from 40m; (MSGC514) 0
- 15m @ 3.3 g/t gold from 42m, incl. 1m @ 17.3 g/t gold from 54m; (MSGC705) 0
- 11m @ 2.1 g/t gold from 59m, incl. 1m @ 12.5 g/t gold from 59m; (MSGC824) 0
- 4m @ 2.3 g/t gold from 37m, and 2m @ 4.9 g/t gold from 60m; (MSGC583) 0

The current Inferred Mineral Resource for Bull Oak is 1.9Mt at 1.1 g/t gold for 65,000 oz, reported at a 0.5 g/t gold cut-off, constrained within an A\$2,500 pit shell and is defined to a depth of 160m from surface. This resource captures the majority of the shallow drilling and is limited by the extent of drilling.

## Upcoming news flow and planned exploration for Dec Q2023

- First phase of 5,000m of resource and extensional RC drilling
  - Further assays pending from 14 RC holes of extensional and resource drilling at Bull Oak due Nov/Dec 0
  - Drilling ongoing at regional prospects, including Hacks and Vanguard North ongoing 0
- Low-cost geochemical sampling over Sandstone North and other regional prospects initial results pending
- Low-cost lithium exploration work is continuing at Sandstone, including multi-element geochemical sampling along parts of the Edale Shear along the eastern tenement boundary, where are number of prospective targets have already been identified – results pending

Alto remains focused its low-cost exploration to grow the existing core resource base within the Alpha Domain, while continuing to review and progress the multiple advanced brownfield prospects, as part of the Company's longer term strategy to support a stand-alone operation at the Sandstone Gold Project.



Figure 5: Growth and development pipeline for Sandstone Gold Project



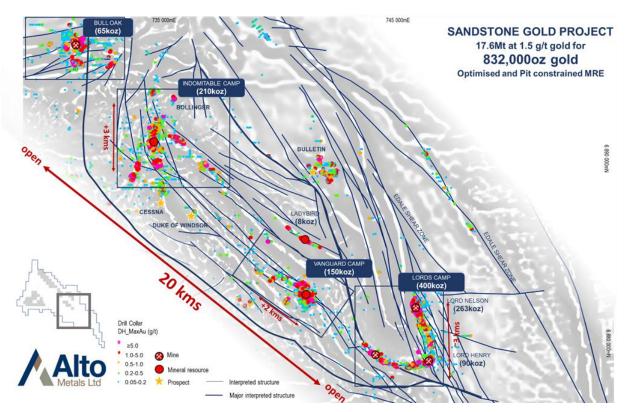


Figure 6: Location of total current mineral resources for Sandstone Gold Project

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 Alto Metals Limited +61 8 9381 2808

## **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.

#### **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.



## **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:

Outstanding growth potential Identified at the Bull Oak Gold Mine,19 September 2023

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

#### **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 Westerns 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.

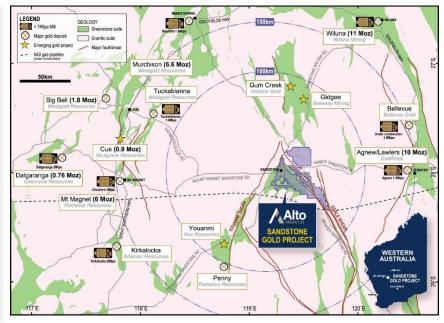


Figure 7. Location of Sandstone Gold Project within the East Murchison Gold Field, WA



## 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			

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.

	Mineral Resource Estimate for the Sandstone Project - March 2023										
	Indicated Inferred							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 >0.2 g/t Au (MGA 94 zone 50) – Bull Oak.

Hole_ID F	Hole_Type	m_East	m_North	m_RL	Dip .	Azimith m	n_MaxDepth	Prospect	From(m)	To(m)	nterval(m	Au_g/t	g/t*m_Au	Comments
SRC968	RC	729875	6897990	535	-90	0	98	Bull Oak	32	38	6	2.6	15.8	
								incl.	32	35	3	5.1	15.2	
								and incl.	32	33	1	13.0	13.0	
								and	44	45	1	0.2	0.2	
								and	77	78	1	0.2	0.2	
DCOCO	DC	720011	6007700	525	00	225	254	and	80	81	1 5	0.3	0.3	
RC969	RC	729611	6897703	535	-80	225	254	Bull Oak incl.	26 <mark>30</mark>	31	5 1	0.7 2.0	3.7 2.0	
								and	30 37	31 40	1 3	0.7	2.0	
								incl.	39	40	3 1	1.0	1.0	
								and	43	44	1	0.8	0.8	
								and	43	52	4	2.1	8.3	
								incl.	49	50	1	7.1	7.1	
								and	61	63	2	0.3	0.7	
								and	68	69	1	0.2	0.2	
								and	72	78	6	0.5	3.2	
								incl.	75	76	1	1.2	1.2	
								and	80	81	1	0.3	0.3	
								and	26	253	227	0.4	100.6	More than 4m internal waste
								and	87	252	165	0.5	77.6	More than 4m internal waste
								and incl.	87	92	5	1.2	6.2	
								and incl.	87	89	2	2.3	4.5	
								and incl.	94	95	1	0.4	0.4	
								and incl.	98	99	1	0.4	0.4	
								and incl.	102	110	8	0.2	2.0	
								and incl.	116	118	2	1.1	2.3	
								and incl. and incl.	128 128	134 130	6 2	0.6 1.2	3.9 2.4	
								and incl.	141	170	29	0.9	26.2	
								and incl.	147	170	23	1.1	24.8	
								and incl.	157	165	8	2.1	16.6	
								and incl.	164	165	1	8.0	8.0	
								and incl.	173	174	1	0.2	0.2	
								and incl.	175	177	2	1.6	3.2	
								and incl.	175	176	1	2.9	2.9	
								and incl.	178	188	10	0.6	6.4	
								and incl.	180	185	5	1.0	4.8	
								and incl.	181	185	4	1.1	4.4	
								and incl.	181	182	1	2.0	2.0	
								and incl.	187	188	1	0.7	0.7	
								and	192	193	1	0.3	0.3	
								and	200	201	1	0.3	0.3	
								and	206	207	1	1.2	1.2	
								and	212	213	1	0.2	0.2	
								and	215	219	4	0.5	2.1	
								incl.	216	217 222	1	1.1	1.1	
								and	221 224	222 225	1 1	0.2 0.2	0.2 0.2	
								and and	224 226	225 231	5	0.2 1.8	0.2 8.8	
								incl.	220	231	4	2.1	8.5	
								and	236	231	4 2	0.2	0.5	
								and	248	253	5	1.3	6.7	
								incl.	248	251	3	2.0	6.1	
RC970	RC	729763	6897957	535	-60	225	296	Bull Oak	28	30	2	0.5	0.9	
								incl.	28	29	1	0.6	0.6	
								and	94	96	2	0.3	0.6	
								and	108	110	2	0.8	1.6	
								and	118	122	4	0.4	1.8	
								incl.	120	122	2	0.6	1.3	
								and incl.	120	121	1	1.1	1.1	
								and	129	130	1	0.2	0.2	
								and	150	151	1	0.3	0.3	
								and	215	217	2	0.3	0.6	
								and	219	220	1	0.2	0.2	
								and	250	252	2	1.7	3.4	
								incl.	250	251	1	3.0	3.0	
								and	263	264	1	0.2	0.2	
								and	288	290	2	1.1	2.3	



# Table 4 continued: Drill collar information for significant assay results >0.2 g/t Au (MGA 94 zone 50) – Bull Oak.

Hole_ID	Hole_Type	m_East	m_North	m_RL	Dip	Azimith r	m_MaxDepth	Prospect	From(m)	To(m)	nterval(m	Au_g/t	g/t*m_Au	Comments
SRC971	RC	729885	6897964	535	-70	225	296	Bull Oak	24	25	1	0.2	0.2	
								and	31	36	5	0.3	1.5	
								incl.	33	34	1	0.5	0.5	
								and	44	47	3	2.2	6.7	
								and	73	77	4	0.5	1.9	
								incl.	73	74	1	0.7	0.7	
								and	95	96	1	1.1	1.1	
								and	110	111	1	0.7	0.7	
								and	118	120	2	0.3	0.6	
								and	124	125	1	0.4	0.4	
								and	44	216	172	0.6	110.0	More than 4m internal waste
								and	127	216	89	1.1	97.9	More than 4m internal waste
								and	127	182	55	1.5	84.7	More than 4m internal waste
								incl.	127	134	7	1.2	8.2	
								and incl.	128	129	1	2.2	2.2	
								and incl.	143	172	29	1.9	54.0	
								and incl.	148	172	24	2.1	49.6	
								and incl.	151	155	4	5.1	20.3	
								and incl.	151	152	1	17.8	17.8	
								and incl.	175	176	1	0.2	0.2	
								and incl.	181	182	1	21.1	21.1	
								and	187	188	1	0.2	0.2	
								and	190	193	3	0.4	1.2	
								incl.	190	192	2	0.5	1.0	
								and	198	200	2	0.3	0.5	
								and	202	203	1	0.6	0.6	
								and	209	216	7	0.8	5.5	
								incl.	210	214	4	1.0	4.1	
								and	229	230	1	0.2	0.2	

Note: 0.2g/t Au cut off, may include up to 4m <0.2g/t Au as internal dilution. May include >4m internal dilution where referred to in above table.



Criteria	Commentary
Sampling	Western Mining Corporation (1983-1993) and Elmina NL (1993-1996)
techniques	<ul> <li>Reverse Circulation (RC) drilling was used to collect samples over 1m intervals via a cyclone and riffle splitter unless the sample was too damp or puggy in which case the sample was grabbed from throughout the bag.</li> </ul>
	• From the bulk 1m RC samples, a sample was collected then submitted to the laboratory for analysis.
	• WMC drill assays were assayed at a WMC laboratory using their own aqua regia style of analysis.
	• WMC diamond drilling (HQ & NQ) was also used to obtain samples.
	• Elmina reportedly submitted RC 1m drill samples for fire assay at Analabs or Ultratrace in Perth. <u>Herald Resources Limited (1996-1999)</u>
	• Rotary air blast (RAB) drilling was used to obtain 4m composites using a scoop off each 1m sample heap, with the majority of significant intersections >0.2ppm Au re-sampled at 1m intervals and sent to Analabs Perth for aqua regia AAS gold determination.
	• Drill assays from RAB drill samples were not used in the mineral resource estimate but were used to assist with interpretation.
	Troy Resources NL (1999-2009)
	• RC drilling was used to obtain samples which were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. Samples were collected in 1 m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use).
	• RAB drilling was used to obtain samples, which were collected in 1 m intervals and laid on the ground.
	• Diamond drilling was used to obtain samples. An RC pre-collar was drilled with a diamond tail and half-core submitted as samples.
	• From the bulk samples (RAB or RC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis.
	• The composite samples were then sent to the laboratory for analysis. Any composite sample that assayed >0.1 g/t Au was revisited and the 1m samples re-submitted for gold assay.
	• Troy RAB samples were assayed at Analabs Perth by 50 gm aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry. The technique had a lower detection limit of 0.01 ppm Au.
	• Troy RC and diamond core samples were analysed at Genalysis Laboratory in Perth for gold by fire assay on a 50g sample (method FAA505).
	• Drill assays from RAB drill samples were not used in the mineral resource estimate.
	Alto Metals Limited (2021)
	Samples were collected by RC drilling.
	• For RC drilling and sampling, the rig-mounted in-line cyclone and cone splitter was used to produce a bulk sample and an approximately 3 kg sample for each 1 m interval.
	• From the bulk 1m sample a 4 m composite sample was collected using a split PVC scoop and then submitted Intertek Genalysis ("Intertek") in Maddington for fire assay. 1 m splits were submitted if the composite sample assay values are equal to or greater than 0.2 g/t Au.
	Alto Metals Limited (2023)
	Samples were collected by reverse circulation (RC) drilling.
	• RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1m intervals and 1m calico splits.
	• The bulk sample was placed directly onto the ground and the 1m samples were sent directly to Intertek Minerals ("Intertek").
	• Field duplicate samples were collected using a second calico bag on the drill rig cyclone.
	•
Drilling	<u>Alto Metals</u>
techniques	• RC drilling program used a KWL 350 drill rig with an onboard 1100cfm/350psi compressor and a truck mounted 1000cfm auxiliary and 1000psi booster.
	The face sampling hammer had a nominal 140 mm hole.

# JORC Code, 2012 Edition Table 1 – Section 1 Sampling Techniques and Data



Criteria	Commentary
	Previous companies
	• RC drilling used various drilling companies and drill rigs of similar capacity to the drill rig used by Alto Metals.
	• WMC RC drilling was by roller bit or hammer using a cross over sub.
	For Troy diamond drilling, triple tube coring was used due to the friable nature of the oxide zone lithologies
	being drilled. The angled core holes were orientated where possible using a crayon marker spear tool and
	the holes were regularly surveyed using an Eastman downhole camera.
Drill sample	• WMC and Elmina noted on the logging sheets where samples were wet. Comments on recovery were also
recovery	noted on the logging sheets where relevant. There is no other information on sample recovery.
	• The WMC diamond drillhole MSGD010 (251.4m depth) was reported as being close to 100% recovery.
	• Alto has no quantitative information on Troy or Herald RAB and RC sample recovery. There were no reported sample recovery issues.
	<ul> <li>Alto reviewed the WMC and Elmina logging sheets to determine if a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. The review concluded that there were no issues.</li> </ul>
	Alto RC drillholes reported no issues with recovery.
	The cyclone was routinely cleaned at the end of each rod.
	No relationship between recovery and grade has been identified.
Logging	• WMC and Elmina drill logging was reported on log sheets with laboratory assay data typically for each metre.
	• The logging was commentary based with no specific geological codes used for events such as top of fresh rock, base of oxidation etc. However, the logging and descriptions are of sufficient quality that the lithologies drilled can be correlated with later logging carried out by Herald and Troy, who used detailed logging codes.
	Detailed logging codes were used for the Troy diamond drillhole.
	• There are no photographic records however the two deep diamond drillholes are stored at the DMIRS core yard.
	• Alto RC drill chips were sieved from each 1 m sample and geologically logged.
	• Washed drill chips from each 1 m sample were stored in chip trays.
	• Geological logging of drillhole intervals was carried out with sufficient detail to meet the requirements of resource estimation.
Subsampling	WMC and Elmina
techniques and sample preparation	• 1 m samples were collected via a cyclone and riffle splitter unless the sample was too damp or puggy in which case the sample was grabbed from throughout the bag.
preparation	No composite sampling was undertaken.
	WMC drill assays were assayed at a WMC laboratory using their own aqua regia style of analysis.
	WMC diamond drill core was sampled over mineralized intervals.
	Elmina reportedly submitted drill samples for fire assay at Analabs or Ultratrace in Perth. <u>Herald</u>
	<ul> <li>For samples obtained from RAB drilling, 4 m composites were collected using a scoop off each 1m sample heap, with the majority of significant intersections &gt;0.2ppm Au re-sampled at 1 m intervals and sent to Analabs Perth for aqua regia AAS gold determination.</li> </ul>
	Troy
	• RC drilling was used to obtain samples which were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. Samples were collected in 1 m intervals into bulk plastic bags and 1 m 3kg calico bags (which were retained for later use).
	• RAB drilling was used to obtain samples, which were collected in 1m intervals and laid on the ground.
	• AC drilling was used to obtain samples via a cyclone every for each 1 m interval, which was laid on the ground.
	• From the bulk samples (RAB, AC or RC), a 5 m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis.
	• The composite samples were then sent to the laboratory for analysis. Any composite sample that assayed >0.1 g/t Au was revisited and the 1m samples re-submitted for gold assay.
	• Troy RAB samples were assayed at Analabs Perth by 50gm aqua regia digest followed by DIBK extraction



Criteria	Commentary
	Flame Atomic Absorption Spectrometry. The technique had a lower detection limit of 0.01 ppm Au.
	• Troy RC and diamond core samples were analysed at Genalysis Laboratory in Perth for gold by fire assay on a 50g sample (method FAA505).
	Alto Metals (2021)
	• Alto's 4 m and 1 m RC samples were transported to Intertek, located in Perth, Western Australia, who were responsible for sample preparation and assaying for all RC drillhole samples and associated check assays.
	• Intertek are NATA certified for all related inspection, verification, testing and certification activities.
	• Intervals of 4 m composite samples reporting greater than 0.2 g/t Au (with constrain intervals) were selected for re-assay, and 1 m re-split samples were submitted for 50g fire assay.
	• Samples are dried, pulverised to 90% passing -75um.
	• RC samples were analysed using 50g fire assay with AAS finish.
	• Field duplicates comprised an approximately 3kg sample and were collected either by spear for submission
	of 4 m composite samples.
	The rig mounted cone splitter was routinely cleaned at the end of each rod.
	Sample sizes are considered to be appropriate for the style of mineralisation. <u>Alto Metals (2023)</u>
	• 1m RC samples were transported to Intertek, located in Perth, Western Australia, who were responsible for sample preparation and assaying for all RC drill hole samples and associated check assays.
	• 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.
	• The 500g sample is assayed for gold by Photon Assay along with quality control samples including certified reference materials, blanks and sample duplicates.
	Sample sizes are appropriate to give an indication of mineralisation.
	• The technique is appropriate for the material and style of mineralization.
Quality of	There are no deleterious elements present which could affect the technique.
assay data	• There is no information available to Alto to indicate that the gold is refractory gold.
and 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. Field duplicates are collected using a second calico bag on the drill rig cyclone.
	• 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.
	Laboratory and field QA/QC results are reviewed by Alto Metals personnel.
	• The Fire Assay method is considered to be a total extraction technique. There are no deleterious elements present which could affect the technique.
	• 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.
	• The Photon Assay technique is a fast and chemical free alternative to the traditional fire assay or Aqua Regia process and utilizes high energy x-rays. The process is non-destructive on samples and utilises a significantly larger sample than the conventional 50 g fire assay (FA50AAS) or 10 g Aqua Regia (AR10MS). <u>Troy</u>
	For Troy RC drilling, an average of 1 field duplicate, 1 blank and 1 standard was submitted for every 50 samples.
	For Troy RAB and AC drilling, field duplicates and standards were used at 1:50 however no blank samples     were routinely used in RAB or AC drilling.
	Troy engaged Maxwell to undertake periodic audit of the exploration QAQC data on a monthly basis.
	• Troy's reported QA/QC methodology and data from other prospect areas in the Sandstone area at the time Troy was exploring at Bull Oak, were reviewed in the absence of field QA/QC data specific to the Bull Oak deposit.
	Laboratory Repeat assays were reported for Troy drill assays.



Criteria	Commentary
	WMC, Elmina and Herald
	There is no available information on the protocols used by Elmina or Herald.
	• There is no available documentation for the WMC procedures of QAQC protocols however it is known that the laboratory included one repeat analysis, one standard and one blank in each tray of 50 samples.
	Laboratory Repeat assays were reported for WMC and Elmina drill assays and reviewed by Alto.
	• Where Elmina and WMC drillholes were identified within proximity, the drilling assay data showed an acceptable correlation.
	There were no anomalous assays reported that could not be explained.
	<ul> <li><u>Alto</u></li> <li>RC samples were submitted to the laboratory with field duplicates, certified standards and field blank samples inserted at a ratio of 1:20.</li> </ul>
	• 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.
	Laboratory and field QA/QC results were reviewed by Alto personnel.
Verification of sampling and	• Drilling carried out by WMC, Elmina, Herald and Troy Resources NL was compiled by Alto from WA Dept Mines Open File records (WAMEX).
assaying	• 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. For some of the earlier reports (ie WMC and Elmina) the data was manually entered into Excel.
	• All collar, survey and assay data was checked by printing all original data records and checking against the Alto database.
	• The data was also checked using various methods in ArcGIS and Micromine. Google Earth and aerial drone imagery was also used to check collar positions where historical evidence was visible in satellite imagery.
	• Values below the analytical detection limit were replaced with half the detection limit value or assigned a value of -0.005 ppm Au in the database.
	• Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
	• Significant intersections and stopes reported within previous drillholes were checked for potential smearing and found to be acceptable.
	Alto Metals
	All significant intersections are reviewed by alternative company personnel.
	• Field data is recorded on logging sheets and entered into excel prior to uploading to and verification in Datashed.
	Laboratory data is received electronically and uploaded to and verified in Datashed and Micromine.
	<ul> <li><u>Twinned Holes</u></li> <li>WMC completed several diamond twin holes adjacent to RC drillholes which had a substantial gold</li> </ul>
	• WMC completed several diamond twin holes adjacent to RC drillholes which had a substantial gold intersection. The assays for the diamond holes were of samples obtained by shaving material from the soft weathered granite and chipping bits off the harder quartz veins. The differences in assays grades is considered due to the poor sampling methodology and as such the data is not considered reliable.
	• WMC drilling was carried out at 20 m x 40 m spacing. Elmina carried out infill drilling which reduced the spacing to 14m. The WMC and Elmina drilling shows acceptable correlations.
	• The geological logging and the mineralised intervals and in particular the high-grade intersections showed an acceptable correlation.
Location of	The grid used for the project area is GDA94, Map Grid of Australia 94, Zone 50.
data points	• WMC and Elmina drillholes were reported using an AMG grid established by contract surveyors.
	• Herald reported that all previously reported drilling (WMC and Elmina) was checked on the ground.
	Troy drilling was located with DGPS.
	• Alto registered and cross-checked historical mine plans, drill location plans, satellite and aerial drone imagery to verify the location of all drill collars.
	No issues were identified.
	Most of the drilling is vertical with no down-hole surveys carried out.



Criteria	Commentary
	<ul> <li>The average depth of the WMC inclined RC drillholes is ~70m. No down hole survey data was reported however it is considered unlikely that any actual variation from the reported dip over the short drillhole length would be materially significant.</li> </ul>
	• Down hole survey data for WMC diamond drillhole MSGD10 was reported as -89° at 126 m and 250 m depth.
	• Down hole surveys for the Troy diamond drillhole TRCD706 were carried out by a contract surveyor and are considered reliable.
	<ul> <li>Alto drillhole was located using a handheld GPS unit, accurate to +/-5 m (northing and easting).</li> </ul>
	<ul> <li>Subsequently RM Surveys (licensed surveyor) carry out collar surveys with RTK GPS with accuracy of +/- 0.05 m to accurately record the easting, northing and RL prior to drillholes being used for resource estimation.</li> </ul>
	All drillholes were surveyed down hole using a north seeking Gyro at 30 m intervals.
Data spacing and distribution	• At the Bull Oak deposit, drilling by WMC and Elmina was carried out on 20 m spaced cross-sections with most holes being drilled vertically at spacings of either 20 m or 40 m. Infill drilling by Elmina reduced the spacing to 14 m. Not all Elmina drilling has been captured by Alto.
	• Maximum down hole drill depth was 299.8 m (TRCD706) with an average drill depth of 46 m.
	• The maximum drill depth below surface was WMC diamond drillhole MSGD10 (~250 m).
Orientation of	Geological structures have been interpreted from drilling and surface and 1:500 scale pit geological mapping.
data in	<ul> <li>Geological structures have been interpreted normalining and surface and 1.500 scale pit geological mapping.</li> <li>The Bull Oak granite is a porphyritic intrusion with a strike length of approximately 500 m and a width of up</li> </ul>
relation to geological	to 150 m. The intrusion has a depth of at least 250 m and has relatively steep dipping boundaries. The intrusion trends north-east cutting across mafic rocks between the BIF units.
structure	• Mineralisation at the Bull Oak deposit is associated with north-west trending quartz reefs, which dip approximately 30 degrees to the north-east.
	• The Bull Oak granite is itself cut by three main gold reefs (Bull Oak, Faugh-A-Ballagh, and Kohinoor North) with a fourth reef (Monarch) between the Faugh-A-Ballagh and Kohinoor North and two additional reefs overlying the main Bull Oak reef.
	Drill orientation was typically vertical or -60 degrees to the south-west.
	• Sample bias is not considered to be an issue due to the well-defined geological structures and appropriate orientation of drilling.
	• Drilling at the Hill View was either vertical or oriented at -60 degrees to the north-west, perpendicular to the interpreted strike of the host banded-iron-formation which is interpreted to control the gold mienralisation.
	• At Worker Granite, drilling was mostly vertical to intersect the interpreted shallow dipping mineralisation similar to Bull Oak.
Sample	No sample security details are available for WMC, Elmina or Herald drill samples.
security	• Troy reported that their drill samples were collected in a labelled and tied calico bag. Up to six calico bags are then placed in a larger polyweave bag that is labelled with the laboratory address and sender details and tied with wire. The polyweave bags were picked up by a courier firm who counted the number of polyweave bags before taking them to the Mt Magnet depot. The samples were picked up by the courier's road train and transported to Perth. Upon receipt of the samples the laboratory checked the sample IDs and total number of samples and notified Troy of any differences from the sample submission form.
	• For Alto drilling, RC drill samples comprised approximately 3 kg of material within a labelled and tied calico bag.
	• Individual sample bags were placed in a larger labelled poly-weave bag then into a bulka bag that was labelled, tied and dispatched to the laboratory via freight contractors or company personnel.
	• Sampling data was recorded on field sheets and entered into a database then sent to the head office.
	• Laboratory submission sheets are also completed and sent to the laboratory prior to sample receival.
Audits and reviews	• Alto has reviewed and compiled the technical data for Bull Oak internally. No independent audit had been previously carried out.
	• Troy engaged Maxwell to undertake periodic independent audit of Troy's exploration QAQC data on a monthly basis.
	• Troy engaged Snowden to prepare a NI43-101 Report, which included a discussion on Bull Oak in 2007.
	• Mineral Resource Estimates have previously been carried out at Bull Oak by WMC, Elmina, Herald and Troy.



## JORC (2012) Table 1 – Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure	<ul> <li>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.</li> <li>Bull Oak is located on Prospecting Licence 57/1378, granted on 11 July 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed Alto Metals Limited (AME).</li> <li>The following royalties apply:         <ul> <li>2% of the Gross Revenue is payable to a third party</li> </ul> </li> </ul>
	2.5% payable to the State Government
	• The Bull Oak deposit has been previously mined by open pit methods in 1997.
	• Hill View and Worker Granite mineralisation is located on E57/1030, granted on 20 September 2016.
	There are no current known impediments to obtaining a licence to operate in the area.
Exploration done by	• The Bull Oak deposit is located within the Hancocks Mining Centre, which produced a total of 39,936oz of gold at an average grade of 38g/t Au between 1904 and 1943.
other parties	• Previously reported estimates of historical production from reefs associated with the Bull Oak granite (Bull Oak, Faugh-a-Ballagh, Kohinoor North) between 1907 and 1917 are;
	10,617oz at a grade of 27g/t Au; and
	<ul> <li>9,710oz at a grade of 26g/t Au.</li> <li>Modern exploration by WMC. Elmina and Herald between 1082 and 1000 included geological mapping.</li> </ul>
	Modern exploration by WMC, Elmina and Herald between 1983 and 1999 included geological mapping, deflation lag sampling, drilling, resource estimation and open pit mining.
	• Herald commenced open pit mining at Bull Oak in April 1997 and ceased mining in September 1997. Herald reportedly produced 161,431 tonnes at 1.87 g/t Au for 9,701oz of gold.
	Troy carried out pit mapping, RAB and diamond drilling between 1999 and 2009.
Geology	• The area is generally covered by 0.5 m to 2 m of lateritic soil. The dominant lithology is metabasalt with minor metadolerite, divided by numerous sedimentary marker beds (banded iron formation or BIF). The BIF units strike east-west and have near vertical dips.
	• The Bull Oak granite is a porphyritic intrusion with a strike length of approximately 500 m and a width of up to 150 m. The intrusion has a depth of at least 250 m and has relatively steep dipping boundaries. The intrusion trends north-east cutting across mafic rocks between the BIF units. The granite does not outcrop and is intensely kaolinised to clay plus quartz to a depth of approximately 60 m below surface. The fresh granite is a medium grained, pale grey, biotite granodiorite with traces of pyrite.
	• Mineralisation at the Bull Oak deposit is associated with north-west trending quartz reefs, which dip approximately 30 degrees to the north-east.
	• The Bull Oak granite is itself cut by three main gold reefs (Bull Oak, Faugh-A-Ballagh, and Kohinoor North) with a fourth reef (Monarch) between the Faugh-A-Ballagh and Kohinoor North and two additional reefs overlying the main Bull Oak reef.
	• A geological log of WMC diamond drillhole MSGD010, which was sited on the footwall side of the Bull Oak Reef, identified the Faugh-A-Ballagh reef as 40 cm of ironstained quartz from ~48 m below surface. The Kohinoor North Reef was seen as a cluster of quartz veins at 127 m below surface. Another 40 cm vein was seen at 102 m below surface.
	• Depth of weathering is interpreted from drilling data to be approximately 60 m. The water table is reported as approximately 35 m below surface.
	• In general, the Bull Oak deposit has a northwest strike and dips to the northeast approximately 30 degrees.
	• The Worker Granite is a porphyritic intrusion approximately 1km south of Bull Oak. Drill samples show the fresh rock to be a porphyritic, biotite granodiorite.
	• Historical production records indicate that a quartz reef within the granite, striking 330 degrees with a 25 degree dip to the south-east, was mined to produce approximately 1,328 ounces from 1,135 tonnes.
	• Mineralisation at the Hill View prospect appears to be associated with a north-east trending banded-iron- formation within mafic rocks that dips steeply to the south-east.
	Historical production records indicate that approximately 200 ounces was produced from approximately 400 tons.



Criteria	Commentary
Drillhole information	• Drillhole collar and relevant information for drill holes with significant gold mineralisation is included in a table in the main report.
Data aggregation methods	<ul> <li>Historical drill intercepts reporting over 1 g/t gold (using a 0.2 g/t gold cut-off) are included in a table. Reported mineralised intervals may contain 2 m to 4 m of internal waste (or less than 0.2 g/t Au low grade mineralisation interval).</li> <li>No metal equivalent values have been reported.</li> </ul>
Relationship between mineralisati on widths and intercept lengths	<ul> <li>The reported grades are uncut.</li> <li>Mineralisation at the Bull Oak deposit is associated with northwest trending quartz reefs, which dip approximately 30 degrees to the northeast.</li> <li>Drill orientation was typically vertical or -60 degrees to the southwest.</li> <li>Downhole intercepts are not reported as true widths however are considered to be close to true widths based on the drill orientation and current understanding of the mineralisation.</li> </ul>
Diagrams	Relevant sections and plans have been included in the main report and in previous reports which can be found on the Company website or ASX site.
Balanced reporting	• All drillhole information and significant mineralised intercepts and widths have been reported in previous reports which can be found on the Company website or ASX site.
Other substantive exploration data	<ul> <li><u>Bulk Density</u></li> <li>Bulk density determinations (physical measurements) were carried out by WMC on diamond core from drillhole MSGD10 at ~5 m intervals to 90 m depth below surface. The measured density values increased from 1.61 t/m<sup>3</sup> (5.2 m depth) to 2.69 t/m<sup>3</sup> (75.5 m depth).</li> </ul>
	<sup>3</sup> <sup>2.5</sup> <sup>2</sup> <sup>1.5</sup> <sup>1</sup> <sup>0.5</sup> <sup>0</sup> <sup>2</sup> <sup>1.5</sup> <sup>0</sup> <sup>2</sup> <sup>1.5</sup> <sup>0</sup> <sup>0</sup> <sup>2</sup> <sup>1.5</sup> <sup>0</sup> <sup>0</sup> <sup>1.5</sup> <sup>0</sup> <sup>0</sup> <sup>1.5</sup> <sup>0</sup> <sup>0</sup> <sup>1.74</sup> t/m <sup>3</sup> ) <sup>1.74</sup> t/m <sup>3</sup> )
	The following bulk densities were used by Herald Resources in a 1996 mineral resource estimate.
	<ul> <li>Oxide: 1.84 t/m<sup>3</sup></li> <li>Transition: 2.25 t/m<sup>3</sup></li> <li>Fresh: 2.64 t/m<sup>3</sup></li> <li>Metallurgy</li> <li>Herald reported that mining activities (oxide) at Bull Oak during 1997 were 161,431 tonnes at 1.87g/t Au.</li> </ul>
	<ul><li>Recovery was reported as 95%.</li><li>The Bull Oak deposit is hosted predominantly within a granite intrusion, somewhat similar to the Lord</li></ul>
	<ul> <li>Nelson and Lord Henry gold deposits.</li> <li>Snowden were engaged by Alto in 2016 to estimate a JORC 2012 Mineral Resource for the Lord Nelson and Lord Henry gold deposits. Snowden commented that although the previous operation focused on oxide material, with a suitable process flowsheet the sulphide ore should also be economic.</li> </ul>
	<ul> <li>In addition, in 2018 and 2019 Alto carried out preliminary metallurgical test work on oxide, transitional and fresh ore from the Indomitable, Vanguard, Ladybird and Havilah deposits within the Sandstone Greenstone Belt. Recovery was &gt;90%.</li> </ul>



Criteria	Commentary
	• It is reasonable to conclude there are likely to be no issues with recovery for the Bull Oak deposit in oxide, transitional or fresh material.
	Previous Mining Activity (underground and open pit)
	• Available historical underground workings were obtained from the DMIRS and digitized to produce a 3DM. The workings were imported into and reviewed in Micromine together with previous drilling logs to determine whether the current estimate should be depleted for historical activity.
	• It was considered that historical activity mostly occurred within the Herald open pit and therefore did not affect the current estimate.
	<ul> <li>A final plan of the Herald open pit was obtained from the DMIRS and digitized to a standard sufficient to enable the current estimate to be depleted for previous mining activity by Herald.</li> </ul>
Further work	Further exploration and resource drilling may be carried out.