

ASX Release 15 December 2017

# SIGNIFICANT SHALLOW OXIDE GOLD INTERSECTED AT SANDSTONE GOLD PROJECT, Western Australia

SRC067	:	36m	@	2.2g/t Au	trom	40m
SRC064	:	11m	@	3.1g/t Au	from	8m
and		29m	@	2.3g/t Au	from	28m
SRC041	:	15m	@	2.4g/t Au	from	33m
SRC048	:	7m	@	7.0g/t Au	from	126m
SRC059	:	9m	@	3.3g/t Au	from	1m
and		4m	@	3.9g/t Au	from	92m
SRC046	:	12m	@	3.9g/t Au	from	32m

- > Reverse Circulation (RC) drilling intersected multiple mineralised structures
- ➤ Shallow oxide gold intersections in holes SRC067, SRC064 & SRC041 suggests potential for free-dig open pit resources
- ➤ Step-out RC drilling planned for early 2018 to expand the strike extent of known gold mineralised structures at Vanguard
- ➢ Aircore program also planned for early 2018 to discover overall extent of the Vanguard mineralised system
- ➤ Potential for Vanguard gold system to extend under 2km wide northeast trending alluvial channel immediately south of Vanguard

Alto's Managing Director Dermot Ryan said:

"The drilling has confirmed high-grade oxide and primary gold mineralisation in multiple structures over +200m of east-west strike, with isolated gold intersections to the north and south, demonstrating that mineralisation remains open in all directions. We still have 300 x 1m samples awaiting Fire assay and their results will help guide our 2018 drilling program."

#### INTRODUCTION

Alto Metals Limited (ASX: AME) ("Alto", "the Company") is pleased to provide an update on its October/November RC drilling program at the Vanguard and Maninga Marley Prospects at its 100% owned Sandstone Gold Project in Western Australia.

At **Vanguard**, 20 RC holes (SRC029 - SRC048, total 3,959m) were completed on 4 November to test for grade, strike extensions and depth continuity of the mineralised system. A second "follow-up" program of 14 shallower RC holes (SRC057 - SRC070, total 1,474 m) was completed at Vanguard from 21 to 27 November.

Refer Figures 1- 4 overleaf for schematic cross sections, Figure 5 for a plan of RC drill hole locations, and Figure 6 for a schematic longitudinal cross section of the identified mineralised structures.

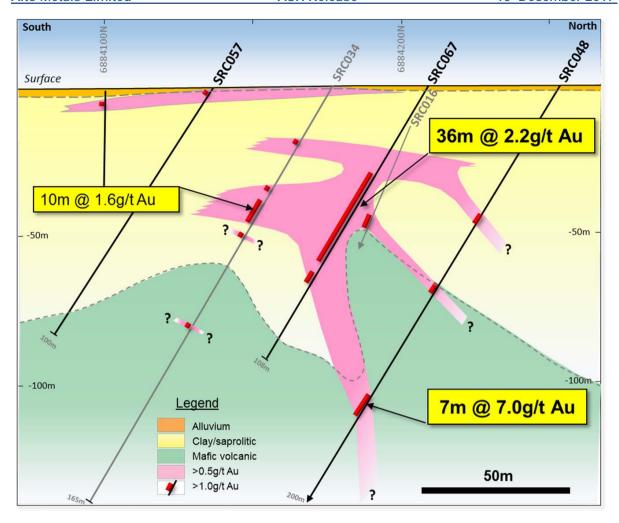


Figure 1. Vanguard Cross Section 740,840mE (GDA94)

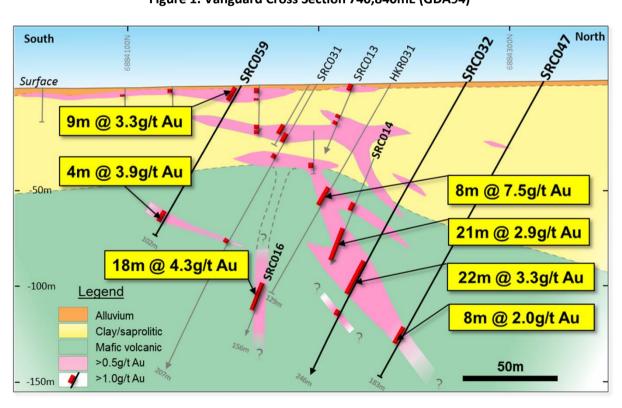


Figure 2. Vanguard Cross Section 740,800mE (GDA94)

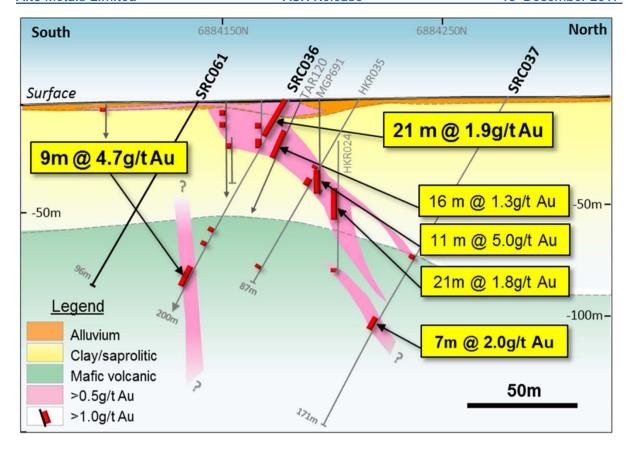


Figure 3. Vanguard Cross Section 740,760mE (GDA94)

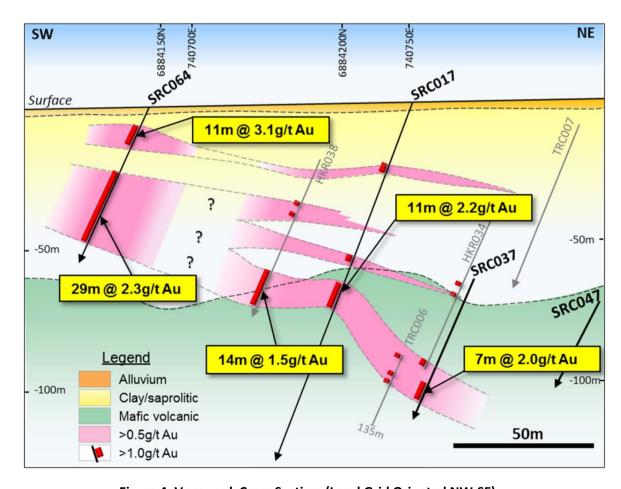


Figure 4. Vanguard Cross Section (Local Grid Oriented NW-SE)

Figure 5 below shows the location of the Vanguard grid, Alto's RC drill hole collars, and a general outline of the gold mineralized structures defined to date. Collar details of Alto RC drill holes completed in October-November 2017 are tabulated in Appendix 1.

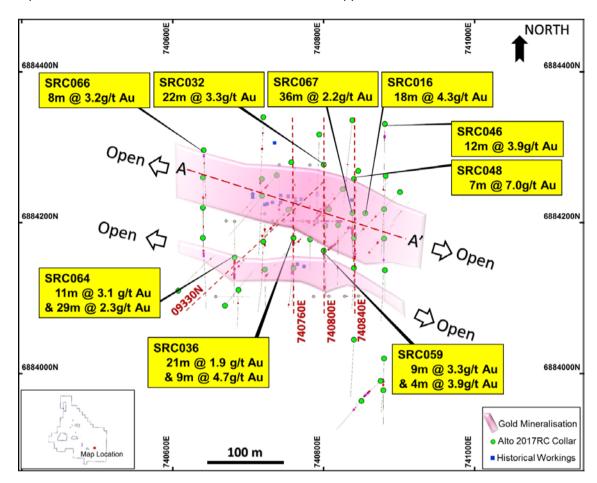


Figure 5. Vanguard Prospect, Plan of 2017 RC Drill Hole locations and Mineralised Structures

Figure 6 below shows a NW to SE longitudinal section (+/-20m window) which illustrates the orientation and continuity of the multiple mineralised structures defined by the recent RC drilling.

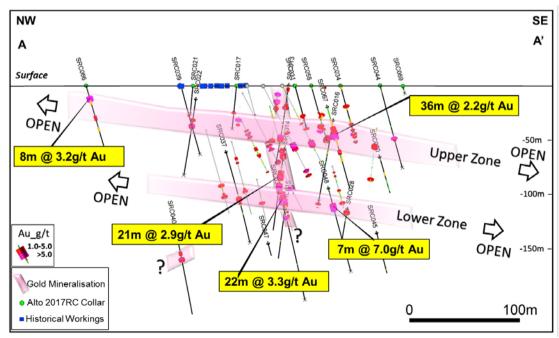


Figure 6. Vanguard Prospect, NW to SE Longitudinal Section (+/-20m window) showing Gold Mineralised Structures

### Geology

The mineralised host rock at Vanguard has been described by Dr Roger Townend of Townend Mineralogy Laboratory in Perth as altered granophyric felsic dolerite. The differentiated dolerite retains a primary igneous texture although often showing significant hydrothermal/metasomatic alteration. Dr Townend commented: "The assayed gold mineralisation appears to be associated with the granophyric dolerites or their included veins, and is therefore not dissimilar with the Mt Charlotte granophyre deposit". (Refer Alto's ASX Report dated 9 November 2017)

Differentiated dolerite is considered a favourable host for large high-grade orogenic gold deposits in WA, with examples being the Barton Dolerite at Northern Star Resources Ltd's Jundee deposit, Gold Fields Ltd's Argo-Junction deposits at St Ives and Mt Charlotte at Kalgoorlie.

### **Assaying**

Alto's 50gm Fire assay results from 1 metre samples are summarised in Table 1 below, and Alto's 50gm Fire assay results from 4 metre composite samples are summarised in Table 2.

Table 1. Vanguard Prospect, 1m RC Samples, 50gm Fire Assays, +0.5g/t Au

Hole	From	То	Interval	Grade
ID	(m)	(m)	(m)	(g/t Au)
SRC036	0	21	21	1.86
and	68	70	2	0.78
and	75	77	2	3.15
and	89	98	9	4.75
and	199	201	2	1.45
CDC027	4.0	47	1	0.61
SRC037	46	47	1	0.61
and	115	116	1	0.51
and	118	125	7	2.00
SRC038	29	30	1	1.32
and	59	60	1	1.12
and	64	66	2	0.88
and	75	77	2	2.27
and	82	83	1	1.94
and	31	32	1	1.41
and	88	89	1	1.57
and	143	144	1	0.50
SRC039	31	32	1	1.41
and	88	89	1	1.57
and	143	144	1	0.5
SRC040	41	42	1	2.09
and	83	84	1	4.37
and	174	175	3	1.69
and	180	181	3	3.45
5.10				3.13
SRC041	33	48	15	2.41
and	66	67	1	0.70
SRC042	51	59	8	1.33
and	99	103	4	0.65
and	169	171	2	0.94
SRC043	57	58	1	1.56
	_			
and and and	63 65 70	58 67 7 76	1 4 2 6	1.56 1.32 0.88 1.43

Table 1. (Cont'd) Vanguard Prospect, 1m RC Samples, 50gm Fire Assays, +0.5g/t Au
\* Denotes 4m comp

Hole	From	То	Interval	Grade
ID	(m)	(m)	(m)	(g/t Au)
SRC044	55	58	3	2.2
CD CO 4 F	27	20	4	4.04
SRC045	37	38	1	1.04
and	82	3	2	2.10
and	89	90	1	1.60
and	97	99	2	1.14
and	123	127	4	0.65
and	196	197	1	0.70
SRC047	144	152	8	2.00
31100-17		132		2.00
SRC048*	52	56	4	1.83
and*	80	84	4	3.50
and	126	133	7	7.00
SRC057	3	6	3	0.86
SRC058	28	29	1	1.00
and	32	4	2	1.00
and	42	48	6	0.91
and	104	108	4	1.31
SRC059	1	10	9	3.3
and*	92	94	4	3.9
CDCOCO	0	4	4	0.05
SRC060	0	1	1	0.85
and	12	13	1	0.86
and	18	20	2	0.72
SRC061	0	2	2	0.54
SRC063	8	9	1	1.20
and	35	36	1	2.27
and	65	66	1	0.56
SRC064	8	19	11	3.13
and	28	32	4	3.10
and	36	38	2	1.80
and	41	42	16	3.30

Table 2. Vanguard Prospect, 4m Composite RC Samples, 50gm Fire Assay, +0.5g/t Au

Hole	From	To Interval		Grade
ID	(m)	(m)	(m)	(g/t Au)
SRC046	32	44	12	3.90
and	168	172	4	0.98
SRC065	48	52	4	1.31
SRC066	12	20	8	3.20
and	32	36	4	1.48
and	76	80	4	0.58
and	116	120	4	1.29
SRC067	36	72	36	2.21
and	76	80	4	0.93
SRC068	40	44	4	0.90
		<u>'</u>		
SRC070	92	96	4	0.60

#### **MANINGA MARLEY**

The Maninga Marley Prospect is located approximately 6 km southeast of Vanguard within Alto's "Alpha Mafic Volcanic Domain". The first recorded production from the Maninga Marley area was in 1904 and a total of 47,106oz were produced from the Havilah and Maninga Marley mines up until 1929. The bulk of the production was recovered during 1907 - 1911. The production figures for each mine are tabulated below. (Refer AME ASX Release 9 October 2017).

In 1997, Herald Resources Ltd drilled 35 shallow RC holes (total 2,347m, average depth 67m) at Maninga Marley, in search of oxide gold ore to feed its CIP/CIL plant. Although numerous high-grade gold intersections were made, there was only a thin veneer of soft oxide material and Herald did no further work.

Troy Resources NL undertook several RC drilling campaigns in the same area (2002-2003 & 2009) and planned a small open pit at Havilah based on a reported (JORC 2004) Inferred Mineral Resource of 80,000t at 3.1g/t Au for 8,000oz.

**Cautionary Note:** A Competent Person has not completed sufficient work to accurately classify the Troy (JORC 2004) estimate as a Mineral Resource under the JORC 2012 Code.

In early November 2017, Alto commenced a scout drilling program at Maninga Marley to follow up historic high-grade gold intersections. Eight RC holes (SRC049-SRC056, total of 1,048m) were drilled to test up-dip and down-dip of historic high-grade drill intersections.

Alto's holes encountered ultramafic rocks with only minor gold mineralisation, and the lack of down-dip continuity suggests that the historic drill holes may have intersected shallow plunging shoots. The best intersections were in RC hole SRC050: 1m at 1.22g/t Au from 93 metres depth, and hole SRC053: 1m at 0.81g/t Au from 129m.

RC drill holes are planned for 2018 to test the Havilah and Maninga Marley prospects for plunging high-grade shoots.

### **ABOUT ALTO AND THE SANDSTONE GOLD PROJECT**

Alto has two main objectives at its 100% owned 800km<sup>2</sup> Sandstone Gold Project in Western Australia:

- In the short term, the delineation of relatively shallow gold deposits (new deposits such as Vanguard North, Vanguard and Indomitable and existing deposits such Lord Nelson and Lord Henry) that can be economically mined and trucked to one of several operating or planned gold treatment facilities in the region.
- In the medium to longer term, the discovery of major "West Australian class" (5 million ounce) high-grade oxide and/or primary gold deposits, which could become the basis for major new mining operations with their own processing facility.

Alto's External Research Advisory Committee (ERAC) led by Professor David Groves, together with the Alto exploration team, have identified a number of litho-structural target areas which have the potential to host million-ounce gold deposits.

These target areas are being progressively assessed and ranked, using both the large legacy database which Alto has assembled from WA Mines Department Open File system, and by field observations.

These project areas are shown Figure 7 overleaf. The initial field assessment of these project areas, which includes mapping and geochemical sampling, has commenced.

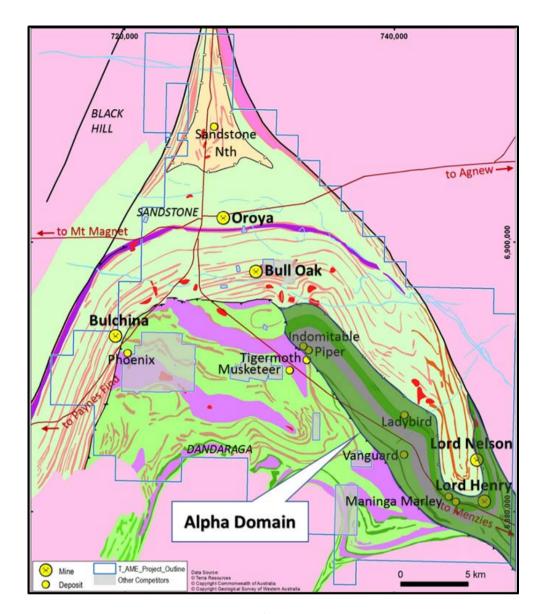


Figure 7. Geological Interpretation of Sandstone Greenstone Belt, showing Alto's Landholdings and Major Prospects

#### **Further information:**

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#### **Competent Person Statement**

The information in this Report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Dermot Ryan, who is an employee of Xserv Pty Ltd and a Director and security holder of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy and a Fellow 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 Ryan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Historic exploration results and mineral resources referred to in this Report were previously reported by Troy Resources NL pursuant to JORC Code 2004. Alto Metals Limited understands that this information has not been updated since to comply with the JORC Code 2012, but believes the information has not materially changed since it was last reported.

Appendix 1. Collar details of Alto RC Drill Holes Completed in October-November 2017

Hole	East	North	RL	Dip	Azimu	Depth	Date	Prospect
ID	GDA94	GDA94	(m)	Degree	th	(m)	Completed	Пооресс
SRC029	740820	6884100	486	-60	0	201	14/10/2017	Vanguard
SRC030	740820	6884160	486	-60	0	207	14/10/2017	Vanguard
SRC031	740802	6884196	487	-60	180	207	15/10/2017	Vanguard
SRC032	740800	6884277	488	-60	180	246	17/10/2017	Vanguard
SRC033	740840	6884045	485	-60	180	153	18/10/2017	Vanguard
SRC034	740840	6884180	488	-60	180	165	19/10/2017	Vanguard
SRC035	740838	6884336	490	-60	180	231	21/10/2017	Vanguard
SRC036	740760	6884180	487	-60	180	213	22/10/2017	Vanguard
SRC037	740757	6884280	488	-60	180	171	23/10/2017	Vanguard
SRC038	740720	6884175	487	-60	180	200	25/10/2017	Vanguard
SRC039	740718	6884258	488	-60	180	200	26/10/2017	Vanguard
SRC040	740720	6884340	489	-60	180	235	27/10/2017	Vanguard
SRC041	740640	6884180	486	-60	180	200	29/10/2017	Vanguard
SRC042	740640	6884260	487	-60	180	201	30/10/2017	Vanguard
SRC043	740880	6884020	486	-60	180	150	30/10/2017	Vanguard
SRC044	740880	6884179	477	-60	180	207	31/10/2017	Vanguard
SRC045	740882	6884262	489	-60	180	200	1/11/2017	Vanguard
SRC046	740881	6884331	490	-60	180	189	2/11/2017	Vanguard
SRC047	740794	6884317	488	-60	180	183	3/11/2017	Vanguard
SRC048	740840	6884258	489	-60	180	200	4/11/2017	Vanguard
SRC049	744529	6880850	460	-60	180	100	5/11/2017	Maninga
SRC050	744529	6880854	462	-60	180	150	5/11/2017	Maninga
SRC051	744668	6880681	460	-60	180	99	7/11/2017	Maninga
SRC052	744669	6880779	460	-60	180	150	7/11/2017	Maninga
SRC053	744708	6880787	460	-60	180	150	7/11/2017	Maninga
SRC054	745063	6880564	463	-60	180	99	8/11/2017	Maninga
SRC055	745058	6880647	463	-60	180	150	9/11/2017	Maninga
SRC056	745178	6880589	461	-60	180	150	10/11/2017	Maninga
SRC057	740840	6884140	487	-60	180	100	21/11/2017	Vanguard
SRC058	740819	6884197	487	-60	180	150	22/11/2017	Vanguard
SRC059	740800	6884163	487	-60	180	102	22/11/2017	Vanguard
SRC060	740782	6884178	487	-60	180	80	22/11/2017	Vanguard
SRC061	740760	6884140	486	-60	180	96	23/11/2017	Vanguard
SRC062 SRC063	740722 740687	6884138 6884111	486 485	-60 -60	180 180	96 100	23/11/2017 24/11/2017	Vanguard
SRC064	740687	6884154	486	-60	180	120	24/11/2017	Vanguard Vanguard
SRC065	740682	6884220	486	-60	180	100	25/11/2017	Vanguard
SRC066	740641	6884296	486	-60	180	138	25/11/2017	Vanguard
SRC067	740838	6884213	487	-60	180	108	26/11/2017	Vanguard
SRC068	740879	6883978	485	-60	180	90	27/11/2017	Vanguard
SRC069	740881	6884137	487	-60	180	80	27/11/2017	Vanguard
SRC070	740880	6884218	488	-60	180	114	27/11/2017	Vanguard
					Total	6,481m		

All Co-ordinates in MGA94 Zone 50, and tenement E57/1033

# JORC Code, 2012 Edition - Table 1 report

# 15 December 2017 - Sandstone Project

### Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	<ul> <li>RC drilling carried out by Alto Metals Ltd in October-November 2017.</li> <li>RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1 m intervals into bulk plastic bags and 1 m calico splits (which were retained for later use).</li> <li>From the bulk sample, a 4 m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis.</li> <li>1 m calico splits were submitted to the laboratory if the composite sample assay values are equal to or greater than 0.2 g/t Au.</li> <li>In certain cases, selected samples from some holes were passed from the cyclone through a rig mounted cone splitter, and samples collected into calico bags at 1 m intervals were submitted directly for analysis. The remaining bulk sample was placed on the ground in 1 m intervals.</li> </ul>
Drilling techniques	<ul> <li>RC drilling was with a KWL 350 drill rig with an onboard 1100/350 compressor using a sampling hammer of nominal 140mm hole.</li> </ul>
Drill sample recovery	<ul> <li>The 1m calico samples were selectively weighed using hand-held scales to ensure a consistent sample weight of 2-3 kg was obtained.</li> <li>RC recoveries in bulk plastic bags were recorded as a percentage by visual examination.</li> <li>A truck mounted 1000/1000 auxiliary/booster was used as required.</li> <li>Samples were mostly dry, except for a portion of the clay zone where the samples were recorded as moist, and several holes at depths generally greater than 150m downhole.</li> <li>It is not known whether a relationship exists between sample recovery and grade and whether sample bias may have occurred.</li> </ul>
Logging	<ul> <li>RC drill chips were sieved from each 1 m sample and geologically logged.</li> <li>Due to the heavily oxidised nature of the drilled areas, a portion of the samples consisted of clay.</li> <li>Washed drill chips from each 1 m sample were stored in chip trays and photographed.</li> <li>Geological logging of drillhole intervals was done with sufficient detail to meet the requirements of resource estimation.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>RC samples were sent to MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia.</li> <li>MinAnalytical were responsible for sample preparation and assaying for drillhole samples and associated check assays.</li> <li>MinAnalytical is certified to NATA in accordance with ISO17025:2005 requirements for all related inspection, verification, testing and certification activities.</li> <li>4m composite RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 microns.</li> <li>1m RC samples from within 4m composite sample intervals reporting +0.2ppm Au, or selected based on geological observation, were dried then crushed and homogenised to produce a 3 kg sample for the LM5 ring mill.</li> <li>For the 4m composite sampling, field duplicate samples were collected at a rate of 1:40 and field blank samples were inserted at a rate of 1:40.</li> <li>For the 1m sampling, field blank samples were inserted at a rate of 1:40, and field standards were inserted at a rate of 1:40, giving an overall 1:20 sample to standard ratio. And found to be acceptable.</li> <li>QA/QC procedures for sub-sampling follow MinAnalytical procedures.</li> <li>Sample sizes are considered appropriate for the grain size of the material being sampled.</li> </ul>
Quality of assay data	RC samples were analysed using an Aqua Regia digest with an ICP/MS finish for gold and a limited suite of base metal elements (Ag, As, As, Bi, Cu, Co, Ni, Pb, Sb, Te, W, Zn). This

Criteria	Commentary
and	
and laboratory tests	<ul> <li>technique is considered a partial digest.</li> <li>1m samples, and 4m composite samples reporting &gt;4000ppb Au, were analysed by 50g Fire Assay method. This technique is considered a total digest.</li> <li>No geophysical tools or handheld XRF instruments were used to determine the geochemical results.</li> <li>Laboratory Certified Reference Materials and/or in-house controls, blanks, splits and replicates are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report. Selected samples are also reanalysed to confirm anomalous results.</li> <li>Laboratory and field QA/QC results are reviewed by Alto personnel.</li> </ul>
Verification of sampling and assaying	<ul> <li>Alto has not conducted any independent verification of the assay data.</li> <li>Drill chips were inspected where significant intersections were reported.</li> <li>No twinned holes have been drilled to date.</li> <li>Data is entered and validated in Micromine. Alto also has a Datashed database maintained by a Database Administrator.</li> <li>Values below the analytical detection limit were replaced with half the detection limit value.</li> </ul>
Location of data points	<ul> <li>The Vanguard and Havilah-Maninga Marley grids are ibased on GDA94.</li> <li>Alto used handheld GPS to locate and record drill collar positions, accurate to +/-5 metres horizontal.</li> <li>There is no documentation on the collar survey methodology or downhole surveys for Troy and Herald Resources AC and RC holes. Although most drill sites have been rehabilitated, some drill collars are still marked in the field by a strip of PVC protruding from the surface, and they can be accurately located in GDA94 space.</li> <li>Downhole surveys were completed on Vanguard, and Havilah-Maninga Marley RC holes using a north- seeking gyro down hole survey tool operated by the drilling contractor.</li> <li>DGPS data is also used for topographic control.</li> </ul>
Data spacing and distribution	<ul> <li>Drill holes were typically spaced on a 40m by 40m spacing at Vanguard.</li> <li>The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedure, where such an estimation has been undertaken.</li> <li>4m composite sampling has been undertaken with 1m resplits collected where assay results were reported above 0.2ppm Au. 4m composites from holes SRC065 - SRC070 went straight to 50gm FA.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Geological structures have been interpreted from drilling due to the lack of outcrop in the Vanguard and Maninga Marley areas.</li> <li>The historic drill orientation for Vanguard and Havilah-Maninga Marley was typically -60° on north south and east west grids.</li> <li>Alto's drill orientation at Vanguard was -60° on 180° and at Havilah-Maninga Marley was -60° on 180°.</li> </ul>
Sample security	<ul> <li>4m composite and 1m original RC drill samples comprised approximately 3 kg of material within a labelled and tied calico bag.</li> <li>Individual sample bags were placed in a larger plastic polyweave bag then into a bulka bag that was despatched to the laboratory via McMahon Burnett freight.</li> <li>Sampling data was recorded on field sheets and entered into a database then sent to the head office.</li> <li>Laboratory submission sheets are also completed and sent to the laboratory prior to sample receival.</li> </ul>
Audits or reviews	<ul> <li>Alto has reviewed and compiled available technical data for Vanguard and Havilah-Maninga Marley. No audit has been completed to date.</li> </ul>

# Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>Alto's drilling program at Vanguard and Havilah-Maninga Marley was completed on E57/1033, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed Alto Metals Limited.</li> <li>The total Sandstone Project area covers approximately 800 km² with five exploration licences granted on 20 September 2016 and two prospecting licences granted on 11 June 2016, and two exploration licence applications and two prospecting licence applications.</li> </ul>
Exploration done by other parties	<ul> <li>Previous work carried out by Troy and Herald Resources at Vanguard was described in Alto's ASX releases dated 20 June 2017 and 20 July 2017.</li> <li>Previous work carried out by Troy and Herald Resources at Havilah-Maninga Marley was described in Alto's ASX release dated 29 August 2017.</li> <li>At Vanguard, Herald Resources undertook RAB and RC drilling around the old Vanguard workings (on ML57/22) in 1999, and estimated a Mineral Resource (JORC 2004) of 330,000t at 1.57g/t Au for 16,657oz.</li> <li>At Havilah-Maninga Marley, Herald Resources undertook RC drilling (51 drill holes) between 1997-1999, on 40m x 20m spacing to target strike extensions of historic workings.</li> <li>Between 1999-2009 Troy undertook shallow AC and RC drilling at Vanguard and Havilah-Maninga Marley, drilling on east-west and north-south grids.</li> </ul>
Geology	Interpreted geology of Vanguard and Havilah-Maninga Marley is described in this report.
Drill hole Information	<ul> <li>Alto's drill hole collar information and assay results +0.5 g/t Au are reported in this report.</li> <li>Herald and Troy's drilling results for the same areas were published in Alto's ASX releases dated 20 July 2017 and 29 August 2017.</li> </ul>
Data aggregation methods	<ul> <li>Alto's gold assay results +0.5 g/t Au for Vanguard RC drilling are reported in this report.</li> <li>Troy's and Herald's gold assay results +1.0 g/t Au for Vanguard, and Havilah-Maninga Marley drilling (on sections drilled by Alto) were reported graphically in previous reports.</li> <li>Aggregate sample assays are calculated using a length weighted average.</li> <li>Where aggregated intercepts presented in the report include shorter lengths of high grade mineralisation, these shorter lengths have also been tabulated.</li> <li>No metal equivalents have been used or reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>At Vanguard the mineralisation strikes in multiple directions; E-W, NNW-SSE and NW-SE with both steep and shallow dipping quartz sulphide veins.</li> <li>Alto drill holes were typically oriented -60 → 180, and were designed to intersect the mineralisation perpendicular to the interpreted ore zones.</li> <li>All intersections are reported as downhole length and no correction for true width has been applied. The relationship between true width and downhole length is not known at this stage given the variable orientation of the mineralisation.</li> <li>At Havilah-Maninga Marley, the mineralisation generally strikes east-west and is associated with wide zones of quartz stockworks within and associated mafic volcanic rocks.</li> <li>All intersections are reported as downhole length and no correction for true width has been applied. The relationship between true width and downhole length is not known at this stage given the variable orientation of the mineralisation.</li> </ul>
Diagrams	Refer to figures in main body of report.
Balanced reporting	All available Alto drill hole Au assay results published, using a +0.5 g/t Au cut-off grade.
Other substantive exploration data	No other material information available for prospect areas at this stage.

Criteria	Commentary							
Further work	be undertaken.							
	<ul> <li>Estimat assay re</li> </ul>		C 2012 Mineral	Resources	may also be	undertaker	n following receipt of all	
Moisture			any details reg y's Vanguard	-			r modelling ource estimate.	
Cut-off parameters		<ul> <li>Alto has reported the exploration results above a 0.5 g/t Au cut-off grade due to the shallow nature of the mineralisation.</li> </ul>						
Mining factors or assumptions	No mini	ng assump	tions at this ea	rly stage.				
Metallurgical factors or assumptions	1930's?	) so metal		s not availa	-		s and diggings (1900 - the oxide gold	
	and dig	gings (1900	-	etallurgical	-	-	nall and large shafts but there is no report	
Environmental	It is ass	umed that	no environment	al factors ex	ist that could	prohibit an	y potential mining.	
factors or assumptions		<ul> <li>The Sandstone area has a strong history of mining, and there is strong local support for mining in the area.</li> </ul>						
Bulk density	<ul> <li>No bulk</li> </ul>	density me	easurements ur	ndertaken at	this early sta	ige of explo	oration.	
Classification	Troy published a (JORC 2004 compliant) Mineral Resource estimate for Vanguard (refer Snowden Report 2007) as follows:							
	Pro	spect	Category	Tonnage (Kt)	Grade (g/t Au)	Gold (Koz)		
	Va	nguard	Indicated	105	1.50	5.06	-	
	Va	nguard	Inferred	225	1.60	11.57		
			any details reg 2004) complian				g undertaken for the	
	Troy pu	blished a (		npliant) Mine			for Havilah (refer	
	Pro	spect	Category	Tonnage (Kt)	Grade (g/t Au)	Gold (Koz)		
		vilah	Indicated	285	1.7	15.5	_	
		vilah	Inferred	41	2.1	2.8	a considerate les este el	
			any details reg 04) compliant N				g undertaken for the	
Audits or reviews	<ul> <li>The Snowden Mineral Resource estimates published by Troy in 2007 for Vanguard was peer reviewed as part of Snowden's standard internal peer review process. Alto is not aware of any external reviews of the above Mineral Resource estimate.</li> </ul>							
Discussion of relative accuracy/confidence			any details reg 2004) complian	_			g undertaken for the	