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ASX RELEASE **25 September 2018**

MAIDEN GOLD RESOURCE AT INDOMITABLE AND VANGUARD CAMPS, SANDSTONE WA

HIGHLIGHTS

- **Maiden JORC 2012 Inferred Mineral Resource estimate: 2.58Mt @ 1.49 g/t Au for 124,000 ounces for Indomitable & Vanguard Camp deposits at Sandstone Gold Project**
- **The resource estimate encompasses shallow open pitable material in Vanguard & Vanguard North deposits in the "*Vanguard Gold Camp*" and Indomitable, Indomitable North, Piper & Tiger Moth in the "*Indomitable Gold Camp.*"**
- **With exception of Piper (laterite only), all other deposits remain open at depth, with potential to extend the mineralisation down-plunge, and to discover repeat lodes.**
- **Together with existing deposits at Lord Henry and Lord Nelson, Alto's total JORC 2012 mineral resource inventory is 1.2Mt @ 1.6g/t Au for 65,000oz (Indicated) and 3.67Mt @ 1.66g/t Au for 196,000oz (Inferred).**

Alto Metals Limited (ASX: AME, "Alto" or "the Company") is pleased to report the completion of a Mineral Resource Estimate for the Indomitable and Vanguard Camp deposits at Alto's 100% owned Sandstone Gold Project in compliance with the JORC 2012 reporting standard. The resources consist of six individual deposits (Figure 1) which have undergone extensive work and interpretation by Alto's geologists and resource consultant Dr Spero Carras of Carras Mining Pty Ltd.

Commenting on this maiden Mineral Resource for the Indomitable and Vanguard Camp deposits, Alto's Managing Director Dermot Ryan said**:**

"These shallow gold deposits in the Vanguard and Indomitable Camps all have a gold rich lateritic cap overlying the oxide gold mineralisation, most are "blind" in that they are buried under alluvium, and most importantly, the gold grades increase with depth into the transition and fresh rock zones."

"Now that we understand the structural controls on these deposits, the next stage is to RC drill test them (and their associated bodies) along strike and down plunge, where extra ounces of gold can be rapidly added."

"When Alto purchased the project in 2016, there were no JORC 2012 mineral resources. With carefully targeted drilling and adequate funding, there is potential to double the current JORC 2012 mineral resource base to +500,000 ounces over the next 12 months."

The Inferred Mineral Resource for the **Vanguard Camp and Indomitable Camp Gold** deposits by deposit and classification is summarised in Table 1 below, and by rock type in Table 2 below.

Table 1. Inferred Mineral Resources estimated by Carras Mining (JORC 2012) of the Vanguard Camp and Indomitable Camp Gold Deposits

Gold Camp	Deposit	Classification	Tonnes (kt)	Grade (g/t Au)	Contained Gold (oz)
VANGUARD	Vanguard	Inferred	623	1.74	35,000
	Vanguard North	Inferred	233	2.03	15,000
INDOMITABLE	Indomitable	Inferred	787	1.11	28,000
	Indomitable North	Inferred	299	1.40	13,000
	Piper	Inferred	138	1.02	5,000
	Tiger Moth	Inferred	504	1.73	28,000
TOTAL RESOURCES		**Inferred**	**2,584**	**1.49**	**124,000**

Notes:

- All Mineral Resources are estimated under guideline of JORC 2012.
- For reporting purposes, Table 1, Table 2 and Table 3 totals have been rounded. Rounding may result in some slight discrepancies in totals reported.
- Only material within the A$2,000 per ounce gold price optimised Whittle pit shells is reported as Inferred Resource
- The drilling density was sufficient to have defined the Resources as Indicated, however due to the lack of definitive bulk density information all the Resources have been placed in the Inferred category and use nominal assigned regional bulk densities.

Parameters used to define intersections are listed below

Inferred Mineral Resource	Minimum Mining Width downhole (with 0.5m edge dilution)	Intersection Selection with a cut-off grade of	High cut gold applied to all mineralisation
Vanguard	3m	0.5g/t Au	30g/t Au
Vanguard North	3m	0.5g/t Au	20g/t Au
Indomitable Non-alluvial	5m	0.5g/t Au	20g/t Au
Indomitable Alluvial	5m	0.3 g/t Au	20g/t Au
Indomitable North Non-alluvial	5m	0.5g/t Au	15g/t Au
Indomitable North Alluvial	3m	0.5g/t Au	15g/t Au
Piper	3m	0.5g/t Au	10g/t Au
Tiger Moth	3m	0.5g/t Au	25g/t Au

Table 2. Inferred Mineral Resources (JORC 2012) by Rock Type

Rock Type	Tonnes (kt)	Grade (g/t Au)	Contained Gold (oz)
Laterite/Pisolite	674	1.06	23,000
Oxide	837	1.30	35,000
Transition	755	1.85	45,000
Fresh	318	2.07	21,000
TOTAL	**2,584**	**1.49**	**124,000**

Previous Mineral Resource Estimations by Snowden

In late 2016, Snowden Mining Industry Consultants Pty Ltd (Snowden) were commissioned by Alto Metals Ltd to estimate the remaining Mineral Resources in the **Lord Nelson and Lord Henry** open pits under guideline JORC 2012. The results of the Snowden estimations were published by Alto in early 2017. Table 3 below shows the combined total of the 2017 Snowden resource estimations added to the 2018 Carras Mining estimations.

The Total Indicated & Inferred Mineral Resources (JORC 2012) for the Sandstone Gold Project at 25 September 2018 are summarised in Table 3 below.

Table 3. Sandstone Gold Project – Summary of Total Mineral Resources (JORC 2012)

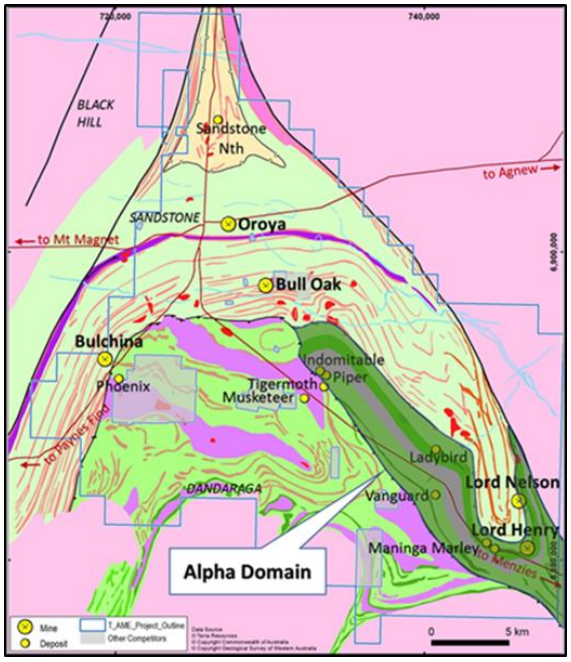
Deposit	Classification	Reporting cut-off (g/t Au)	Tonnage (kt)	Grade (g/t Au)	Contained Gold (oz)
Lord Henry[1]	Indicated	0.8	1,200	1.6	65,000
TOTAL INDICATED			1,200	1.6	65,000
Lord Henry[1]	Inferred	0.8	110	1.3	4,000
Lord Nelson[2]	Inferred	0.8	980	2.2	68,000
Indomitable Camp + Vanguard Camp	Inferred	0.5	2,580	1.49	124,000
TOTAL INFERRED			3,670	1.66	196,000
TOTAL INDICATED & INFERRED			4,870	1.67	261,000

Footnote 1. AME ASX Release 16 May 2017. *"Maiden Lord Henry JORC 2012 Mineral Resource of 69,000oz."*

Footnote 2. AME ASX Release 28 April 2017. *"Lord Nelson Mineral Resource Increased to 68,000oz."*

The locations of the Alto Metals JORC 2012 Mineral Resources referred to in Table 3 above are shown in Figure 1 below.

Figure 1. Sandstone Project, Regional Geological Interpretation showing Alto's Landholdings and Location of Indomitable and Vanguard Gold Camps



RESOURCE ESTIMATION METHODOLOGY FOR THE VANGUARD CAMP AND INDOMITABLE CAMP DEPOSITS

The following general method of modelling was used to produce the resource estimate for each deposit. Initially a comprehensive consistent geological interpretation was carried out on sections. This was done in consultation with the Alto geological team. Intersection selection was then used to define those intersections which were consistent with the geology while having cut off grade and bench height parameters making them amenable to any future open pit mining.

The intersections had parameters as defined in the Notes accompanying Table 1.

Partial edge dilution of these intersections was applied to allow for that dilution which will result during the grade control process when defining the edges of structures. This is because the mineralisation at Sandstone in these deposits does not occur as defined visible lode structures.

Once interpreted, the intersections were wireframed and data within the wireframes was statistically analysed to produce a high grade cut for each deposit. Variography was carried out and used in conjunction with the interpreted wireframe orientations to provide the directional searches to be used in filling the block model. Due to the narrow nature of the wireframes, small blocks were used to provide tonnage estimates consistent with these narrow shapes.

Bulk densities were based on regional values as measured bulk densities have yet to be determined for each deposit. Grade interpolation involved use of the Inverse distance cubed method (ID3). This was to ensure preservation of the local high grade shoots which are characteristic of the Sandstone geology. Even though the areas were well drilled, deposits were classified as Inferred due to the lack of measured bulk densities. For reporting purposes, for each deposit, only those shapes which fell within a Whittle optimised pit shell based on a gold price of A$2000 per ounce were used.

The drilling density was sufficient to have defined the Resources as Indicated, however due to the lack of definitive bulk density information all the Resources have been placed in the Inferred category and use nominal assigned regional bulk densities. Further drilling will be carried out to determine the appropriate bulk densities for all deposits and once this information is available, together with geotechnical drilling to confirm nominal pit slopes used to define the A$2,000/oz Whittle pit shells, Resources can be placed into a higher classification category.

Preliminary metallurgical testwork indicates that 92%+ recovery is reasonable, with further definitive metallurgical testwork planned.

VANGUARD GOLD CAMP

The Vanguard Camp, consisting of Vanguard and Vanguard North (also known as Beefwood) is located approximately 23km southeast of the Sandstone township, on the southern side of the Sandstone - Menzies Road. The general area is covered by a thin layer of pisolitic laterite and has little outcrop. Refer Figures 2 and 3 overleaf.

Based on interpretation of detailed airborne magnetic data and drilling, the Vanguard Camp lies within a northwest trending sequence of basalt, dolerite and fine-grained gabbro and ultramafic rocks with minor intercalated BIF units. This sequence, which has been locally named by Alto as the "***Alpha Domain***", is approximately 35km in length and hosts the Lord Nelson, Lord Henry deposits, the historical deposits of Havilah and Maninga Marley, and many other smaller historical workings which are scattered along the Sandstone -Menzies Road.

Figure 2. Location of Vanguard Camp & AC/RC Drill Holes Over Satellite Imagery

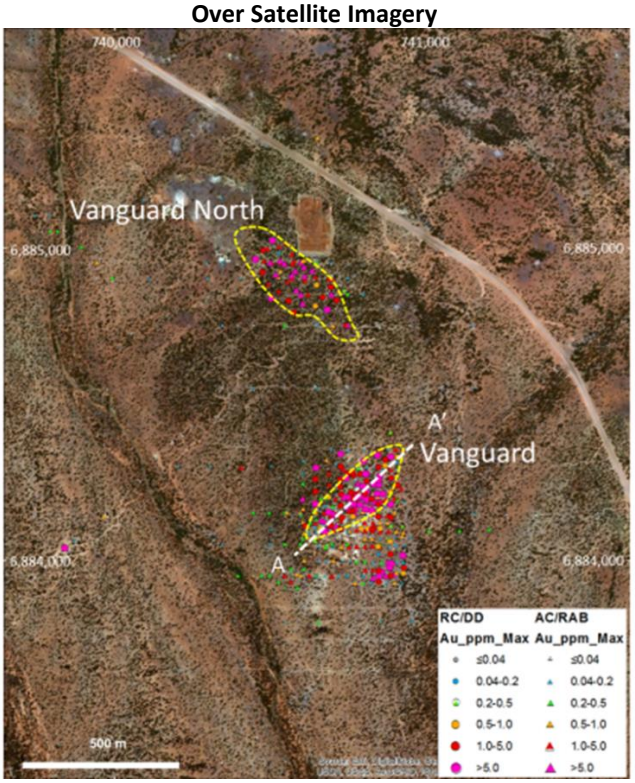
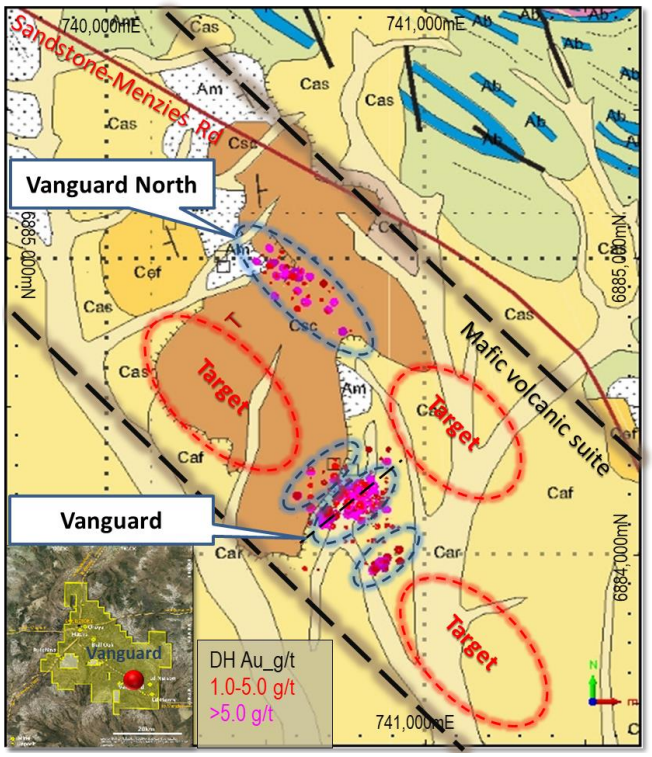


Figure 3. Vanguard Camp Geology, NNW Trending Interpreted Mafic Volcanic Suite & Targets



Vanguard

The historic Vanguard mine produced about 71 ounces of gold during 1912 and is located within an east-west striking, moderately northwards dipping chlorite-biotite-quartz altered shear zone hosted by northwest trending basalt, dolerite and fine-grained gabbro and ultramafic rocks with minor intercalated BIF units.

The workings consist of slots and shallow pits in a quartz-sulphide lode which strikes 060° and dips at -50° to the northwest. Wall rocks are oxidised mafic volcanics (meta-basalt), and intrusives (gabbro/dolerite). Strong quartz-chlorite-biotite-magnetite alteration occurs at depth in the RC holes drilled immediately north of the old workings. The average depth of weathering is 30m - 70m.

Petrographic work by an Alto consultant has confirmed that differentiated dolerite and granophyres have been intersected in Alto drill holes that host the primary gold mineralisation.

The primary gold mineralisation is mainly associated with sulphidic quartz veins which occur in multiple orientations and as plunging shoots. The structures which host the gold mineralisation are interpreted from drilling to strike northeast and have a shallow plunge to the northeast. For details of drill hole locations, assays and cross sections, refer AME: ASX announcements31 May and 23 July 2018, and for block models of long sections and cross sections, refer ***"Vanguard, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

Vanguard North

Two groups of small historical workings are located approximately 500m northwest of the main Vanguard workings. The workings occur over a strike of at least 300m, and lie in the same sequence of rocks as Vanguard.

Gold mineralisation is mainly associated with narrow (1m - 4m wide) pyrite-arsenopyrite rich quartz veins which are interpreted to strike approximately 300° and dip approximately 30°- 35^0 to the southwest. The average depth of weathering varies from 50m - 70m, and the area is covered by 10m - 15m of laterite.

However, there is no outcrop in the area drilled by Alto. For details of drill hole locations, assays and cross sections, refer AME: ASX announcement 20 June 2017, and for block models of long sections and cross sections, refer "***Vanguard North, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

INDOMITABLE GOLD CAMP

The **Indomitable Camp** area is located approximately 20 kilometres southeast of the Sandstone township in an area covered by extensive alluvium. Refer Figures 4 and 5 below.

Relatively shallow aircore and RC drilling has identified a number of laterite and saprolite hosted (oxide) gold occurrences which occur in highly oxidised, high-magnesium basalts and differentiated basaltic units. The gold mineralization is structurally controlled within plunging "shoots" or "stockworks" of quartz veins.

Figure 4. Location of Indomitable Camp prospects & AC/RC Drill Holes Over Satellite Imagery

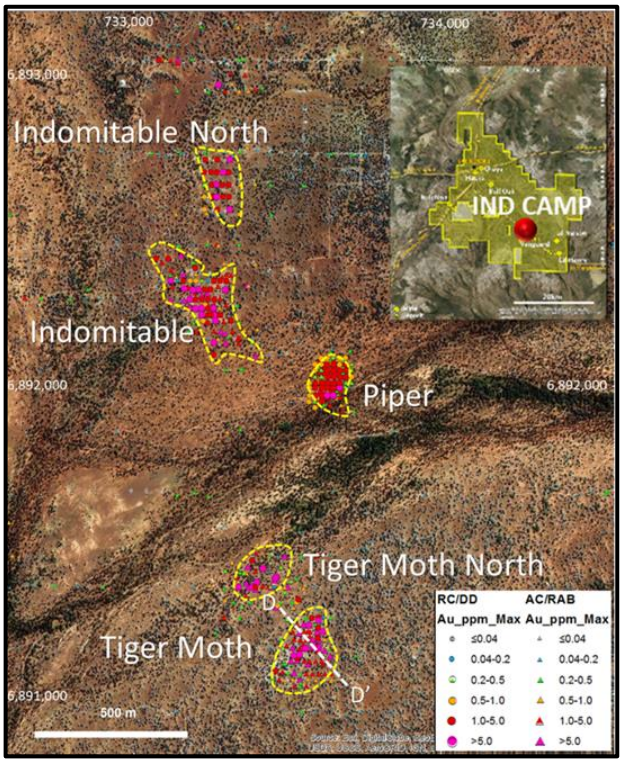
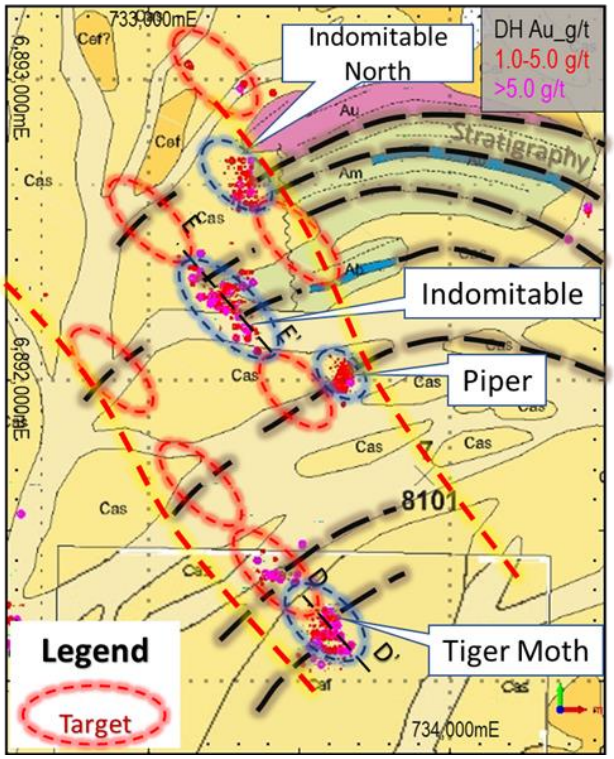


Figure 5. Geology Plan, showing 1,000m Wide NNW Trending "Indomitable Structural Corridor" & Targets



Indomitable

The Indomitable deposit is located within an area of alluvium which covers deeply weathered, high-magnesium basalts, differentiated basalts and ultramafic units. There is no outcrop within the area that surrounds the Indomitable deposit.

At a depth of 10m, a gold bearing pisolitic horizon is located above the saprolite hosted deposits, separated from the main mineralised bodies by a zone of gold depletion about 10m thick. Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general, strike northwest and dip approximately 20° to the west.

Higher grade zones occur in strongly iron altered gossanous zones with associated secondary chalcedonic silica and fuchsite. The strike orientation of the mineralisation approximates the strike of the magnetically low zone in which it occurs.

RC drill holes at Indomitable often terminated within highly oxidised gossanous saprolite at depths of over 120 metres. Drilling intersected moderate to broad widths of mineralised vuggy quartz veining and gossanous saprock, and has shown that gold mineralisation occurs along a northwest striking trend and remains open along strike and down plunge to the northwest. For details of drill hole locations, assays and cross sections, refer AME: ASX announcement 2 March 2017, and for block models of long sections and cross sections, refer ***"Indomitable, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

Indomitable North

The Indomitable North deposit is located 300 metres north of the main Indomitable deposit, within an area of alluvium covering deeply weathered, mafic and ultramafic units. There is no outcrop within the area that surrounds the Indomitable North deposit. A 2m - 4m thick gold bearing flat lying lateritic horizon is located at a depth of approximately 10m below surface. A 10m thick saprolitic zone depleted of gold lies below the gold bearing lateritic horizon.

Gold mineralisation in the saprolite is related to stockwork quartz veining, however there is insufficient drilling data to determine structural controls and orientation of mineralisation. The saprolite mineralisation is currently interpreted to strike north-south and dip 20^0 to the west. Drilling to date indicates that the oxide and primary zones have not yet been adequately tested for a major gold deposit.

Drilling shows low grade zones of gold mineralisation within strong silica, fuchsite and sericite altered ultramafic rock with disseminated arsenopyrite and pyrite. Mineralisation also occurs within wider bucky to vuggy limonite altered quartz veins and throughout the surrounding porous silica, fuchsite altered wallrock. For details of drill hole locations, assays and cross sections, refer AME: ASX announcement 18 September 2018, and for block models of long sections and cross sections, refer ***"Indomitable North, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

Tiger Moth

The Tiger Moth deposit is located within an area of alluvium covering deeply weathered, high-magnesium basalts and differentiated basalt units. There is no outcrop within the area that surrounds the Tiger Moth deposit. A gold bearing pisolitic horizon is located above the saprolite hosted deposits at a depth of 10m below the surface, separated from the main mineralised body by a zone of gold depletion about 10m thick.

Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general dip at a shallow angle to the west. In general the Tiger Moth deposit strikes northwest and dips approximately 20° to the west. For details of drill hole locations, assays and cross sections, refer AME: ASX announcement 17 September 2018 and for block models of long sections and cross sections, refer **"*Tiger Moth, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

Piper

The Piper deposit is located within an area of alluvium, and there is no outcrop within the area that surrounds the Piper deposit. Alto has not undertaken any drilling at Piper but 51 shallow (15m- 20m deep) vertical RC holes totalling 920 metres were drilled at Piper on a 20m x 20m grid for resource confirmation by a previous explorer.

Mineralisation at Piper occurs within pisolitic alluvial material adjacent to a west dipping jaspilitic banded iron formation (BIF). Drilling has intersected a 3m -5m thick mineralised zone of pisolitic alluvium and transported BIF fragments beneath 5m-7m of transported lateritic clay. The gold mineralised pisolitic alluvium is interpreted as a single, horizontal lens.

For further details regarding Piper, refer Troy Resources NL, Sandstone Gold Project, 2011 Information Memorandum. For current block models of long sections and cross sections, refer **"*Piper, JORC 2012, Table 1, Section 3, Figures 1 - 3"*** of this report.

Conclusions and Forward Plans

Throughout 2017-2018, Alto has focussed its aircore and RC drilling programs on known shallow bodies of gold mineralisation that have been identified by previous explorers, but have been under-explored and have not yet been mined.

In particular, these deposits in the Vanguard and Indomitable Camps share a number of attributes: all have a gold rich lateritic cap overlying the oxide (saprolite hosted) gold mineralisation, most are "*blind*" in that there is 5m-10m of alluvium overlying the laterite zones, the base of complete oxidation is deeper around the gold mineralised structures (between 40m-100m deep), and most importantly, the gold grades increase with depth into the transition and fresh rock zones, and these plunging mineraised structures are open at depth.

The next stage at Sandstone is to RC drill test these mineralised bodies down plunge, where extra ounces of gold can be rapidly added. With carefully targeted RC drilling there is potential to double the existing mineral resource base to 500,00 ounces.

At the same time, the Company will commence aircore drill testing of a number of other laterite/soil gold anomalies which were identified in Alto's 2018 soil sampling program.

About Alto and The Sandstone Gold Project

Alto holds ~800km^2 of the prospective Archaean Sandstone Goldfield, 600km north of Perth in the East Murchison Mineral Field of Western Australia. Since acquiring the Project in June 2016, Alto has compiled and reviewed a large legacy database ahead of a series of focused exploration and drilling campaigns which commenced in late-2016. Alto's goal is the delineation of a +1 million ounce JORC 2012 Mineral Resource that could become the basis for a re-establishment of standalone oxide and primary gold mining and milling operations at the Project.

Further information:

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Competent Person Statements

The information in this report that relates to 2018 Vanguard and Indomitable Camp Inferred Mineral Resources is based on resource estimation by Dr. Spero Carras of Carras Mining Pty Ltd. Dr. Carras has disclosed that a related party of his is a very minor security holder of the Company. Dr Carras is a Fellow of the Australasian Institute Mining and Metallurgy (AusIMM) and has over 40 years' experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Dr. S. Carras consents to the inclusion in the report of the matters based on the information in the context in which it appears.

The information in this Report that relates to 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 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 the report of the matters based on the information in the context in which it appears.

Mineral Resource Governance Statement

The Vanguard Camp and Indomitable Camp Mineral Resources are reported as at 25 September 2018. Governance of Alto's Mineral Resources and the estimation process is a key responsibility of the executive management of the Company. The Managing Director of the Company oversees the reviews and technical evaluations of the Mineral Resource estimates. The Company has a number of governance processes in place to manage the Mineral Resource estimates in line with industry best practice. All Mineral Resource estimates are prepared by qualified professionals following JORC Code compliant procedures that ensure representative and unbiased samples are obtained with appropriate QA/QC practices in place. Mineral Resource estimates for the Vanguard Camp and Indomitable Camp deposits are based on information compiled by Carras Mining, who are resource estimators with over 40 years' experience in Archaean geology.

Forward looking Statements

This document may contain certain forward-looking statements. Such statements are only predictions, based on certain assumptions and involve known and unknown risks, uncertainties and other factors, many of which are beyond the Company's control. Actual events or results may differ materially from the events or results expected or implied in any forward-looking statement. The inclusion of such statements should not be regarded as a representation, warranty or prediction with respect to the accuracy of the underlying assumptions or that any forward looking statements will be or are likely to be fulfilled. The Company undertakes no obligation to update any forward-looking statement to reflect events or circumstances after the date of this document (subject to securities exchange disclosure requirements). The information in this document does not take into account the objectives, financial situation or particular needs of any person. Nothing contained in this document constitutes investment, legal, tax or other advice.

APPENDIX

JORC Code, 2012 Edition – Tables 1-3 reports

JORC (2012) Section 1 Sampling Techniques and Data

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

JORC (2012) Table 1, Section 3 Estimation and Reporting of Mineral Resources

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Vanguard

SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Reverse Circulation (RC) drilling was carried out by AME. • RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m calico splits (which were retained for later use). • From the bulk sample, a 4 metre composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • AC and RC 1m splits were submitted to the laboratory if the composite sample assay values are equal to or greater than 0.2g/t Au. **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • RC samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • Rotary Air Blast (RAB) samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC or RAB), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory. **Drilling carried out by Herald Resources Limited (Herald) 1996-1999** • All RAB samples were collected in 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. • All dry RC samples were split at 1m intervals using a 3-tier riffle splitter, with the excess collected in plastic bags and left on site. Wet samples were generally grabbed by hand – samples were also collected in 2m or 4m composites which were sent to the laboratory for initial analysis. For samples returning significant results the corresponding 1m resplits were sent for further analysis. 1m resplits were collected for all 4m composites returning >0.20ppm Au.

Criteria	Commentary
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. • RC drilling was with a KWL 350 drill rig with an onboard 1100/350 compressor using a sampling hammer of nominal 140mm hole. **Drilling carried out by Troy (2001-2009)** • Troy's drilling at Vanguard included RAB and RC drilling. **Drilling carried out by Herald (1996-1999)** • Herald's drilling at Vanguard included RAB and RC drilling.
Drill sample recovery	• AME AC drilling included some wet samples. (Wet AC samples were not used in the Resource estimation.) • AME RC samples generally had good recovery. • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy or Herald RAB and RC sample recovery.
Logging	• AME AC and RC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed. • Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy and Herald drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC and RC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • Troy RAB and RC samples were assayed at Analabs Perth by 50g aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry **Drilling carried out by Herald (1996-1999)** • Herald's RAB samples were typically assayed at Analabs Leonora or Perth for aqua regia AAS

Criteria	Commentary
	gold determination. • RC samples were sent to Analabs Perth for Fire Assay gold only.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20. • For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards. These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • For Troy RC drilling, an average of 1 field duplicate, 1 blank and 1 standard was submitted for every 50 samples. • For Troy 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. **Drilling carried out by Herald (1996-1999)** • There is no available information on the protocols used by Herald.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor.

Criteria	Commentary
	• In July 2017, AME used a DGPS to locate AME drill collars and to re-locate historic Troy drill collars to verify the accuracy of historic data. • In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• In general, the drilling grid at Vanguard was spaced on a nominal 40m x 25m grid.
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area however historic workings have exposed a quartz vein that strikes 070^0 and dips 60^0 to the north. • Geological structures have been interpreted from drilling. • AME's drill holes were first drilled at -60^0 to 200^0 and to 040^0 which was designed to intersect mineralisation perpendicular to stratigraphy. Subsequent drill holes were orientated at -60^0 to 180^0 and to 000^0 which was designed to test and intersect the mineralisation interpreted to be within multiple structures. • Herald drill orientation was typically -60^0 to 180^0 which was designed to intersect mineralisation perpendicular to the quartz vein exposed in the historic workings.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original RC drill samples comprised approximately 3 kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • 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	• AME has reviewed and compiled the technical data for Vanguard internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data. • A Mineral Resource Estimate published by Troy for Vanguard in 2007 was reported by Snowden. • A Mineral Resource Estimate was estimated by Herald for Vanguard in 1999.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Vanguard is located on Exploration Licence 57/1033, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1033 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1033 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  • 2% of the Gross Revenue is payable to a third party
	  • 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • For the period 1907-1912 a total of 64 tons of ore was mined from Vanguard for 71.11 ounces of gold at a grade of 34g/t gold. • Western Mining Corporation (WMC) carried out surface geochemistry, geological mapping and percussion drilling in the 1980's. • Herald completed RAB and RC drilling and resource estimation in the 1990's. • Troy completed RC drilling and resource estimation.
Geology	• The historical workings at Vanguard are located in a sequence of northwest trending mafic and ultramafic rocks with minor intercalated BIF units. • Drilling indicates the Vanguard mineralisation is hosted predominantly within mafic lithologies (dolerite). The average depth of weathering varies from 30 - 70m. • Petrographic work by AME has confirmed that differentiated dolerites and granophyres have been intersected in AME drill holes that host the gold mineralisation. • Gold mineralisation is mainly associated with sulphidic quartz veins which occur in multiple orientations and as plunging shoots. The structures which host the mineralisation are interpreted from drilling to strike and have a shallow plunge to the NE. • In general the Vanguard deposit has a strike and plunge to the NE.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied.

Criteria	Commentary
	• Where AME has reported Troy or Herald grades, a 1.0g/t cut-off grade has been applied. • No metal equivalents have been used or reported. • The reported grades are uncut.
Relationship between mineralisation widths and intercept lengths	• Deeper intercepts in angled holes may or may not be true widths due to a lack of systematic drilling, deep oxidation, interpreted multiple structures and no diamond drill core.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 – Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database Integrity	• The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 1996. Historically, original drilling which included Rotary Air Blast (RAB) and Reverse Circulation (RC) into Vanguard was carried out by Herald Resources Limited (Herald) and Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC and RC drilling. • AME carried out checks on the historic database including assay checks, location checks and down hole survey checks. • The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips. • AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff. • Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).
Site Visit	• AME staff made continual site visits including supervision and management of all drill programs within the Resource area. • Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.
Geological Interpretation	• AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation. • The historical workings at Vanguard are located in a sequence of northwest trending mafic and ultramafic rocks with minor intercalated BIF units. • Drilling indicates the Vanguard mineralisation is hosted predominantly within mafic lithologies (dolerite). The average depth of weathering varies from 30 - 70m. • Petrographic work by AME has confirmed that differentiated dolerites and granophyres have been intersected in AME drill holes that host the gold mineralisation. • Gold mineralisation is mainly associated with sulphidic quartz veins which occur in multiple orientations and as plunging shoots. The structures which host the mineralisation are interpreted from drilling to strike and have a shallow plunge to the NE. • In general the Vanguard deposit has a strike and plunge to the NE.
Dimensions	• The Vanguard deposit has a strike of 150m NW and a width of 250m. The Vanguard area includes a total of 12,804m of drilling. The drilling in the mineralized area for Vanguard includes no DD holes, 91 RC holes for 11,472m and 19 AC holes for 1,332m. • No RAB drilling was included in the Resource estimation process.

Criteria	Commentary
Estimations and Modelling Techniques	1. The following outlines the estimation and modelling technique used for producing Resources for the Vanguard deposit.

Deposit	Orebody Dimensions	Nominal Drill Spacing	Metres of Mineralised Drilling
Vanguard	150m x 250m x 170m	40m x 25m	1,264m

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 3m down hole which equates to an approximate 2-2.5m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

5. The wireframed shapes were audited by AME geological staff.

6. Each mineralisation wireframe had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Vanguard	21

9. A breakdown of pre-Resource volume for each shape was measured. This was to ensure that modelling did not over dilute shapes due to block sizes being used.

10. For each shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

    The selected high grade cut and percentage metal cut is shown below:

Deposit	Maximum Cut (g/t)	Percentage Metal Cut %
Vanguard	30	1

11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
12. The following parameters were used in modelling:

Inverse Distance Power 3 (ID^3)
A minimum number of samples of 2 and a maximum number of samples of 16
The discretisation parameters were 2 x 2 x 1
Search parameters were based on variography and shape orientation.
Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.
Note: ID^3 was used to constrain the high grade shoots.

13. There was no alluvial material.

14. The fundamental block size used was:
<table>
<tr><td>Deposit</td><td>Small Blocks</td></tr>
<tr><td>Vanguard</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation where shapes were narrow.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. Volumes within wireframes were determined and these were then compared with the block estimates of the volumes within those wireframes on a shape by shape basis to ensure that volumes estimated were correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2,000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%. The Resources reported are minimally diluted and further dilution, predominately in hard rock, would be required to produce Reserves.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>All results are reported on a dry tonnage basis.</td></tr>
<tr><td>Cut-off Parameters</td><td>Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.</td></tr>
<tr><td>Mining Factors or Assumptions</td><td>Open pit mining will be the mining method employed going forward.</td></tr>
<tr><td>Metallurgical Factors or Assumptions</td><td>Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.</td></tr>
</table>

Criteria	Commentary
Environmental Factors or Assumptions	• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 40m x 25m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study. Previous work produced similar Resource numbers (within 10% ounces).
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

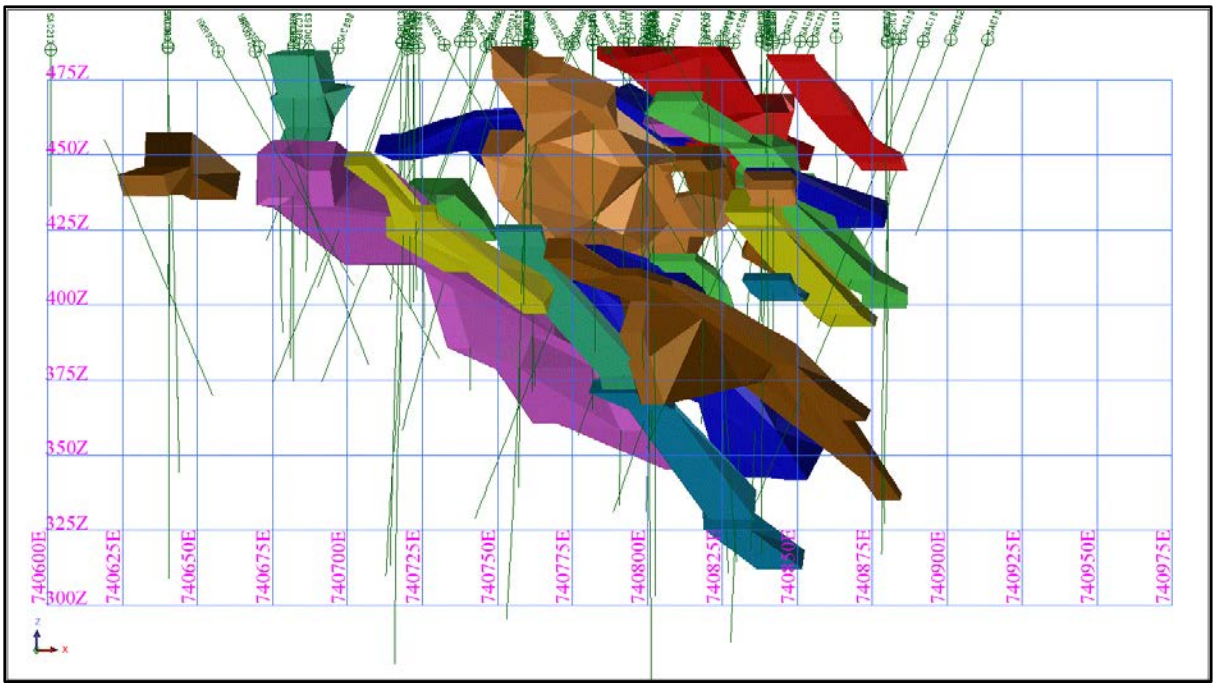

Figure 1: Vanguard - Long Section Looking North

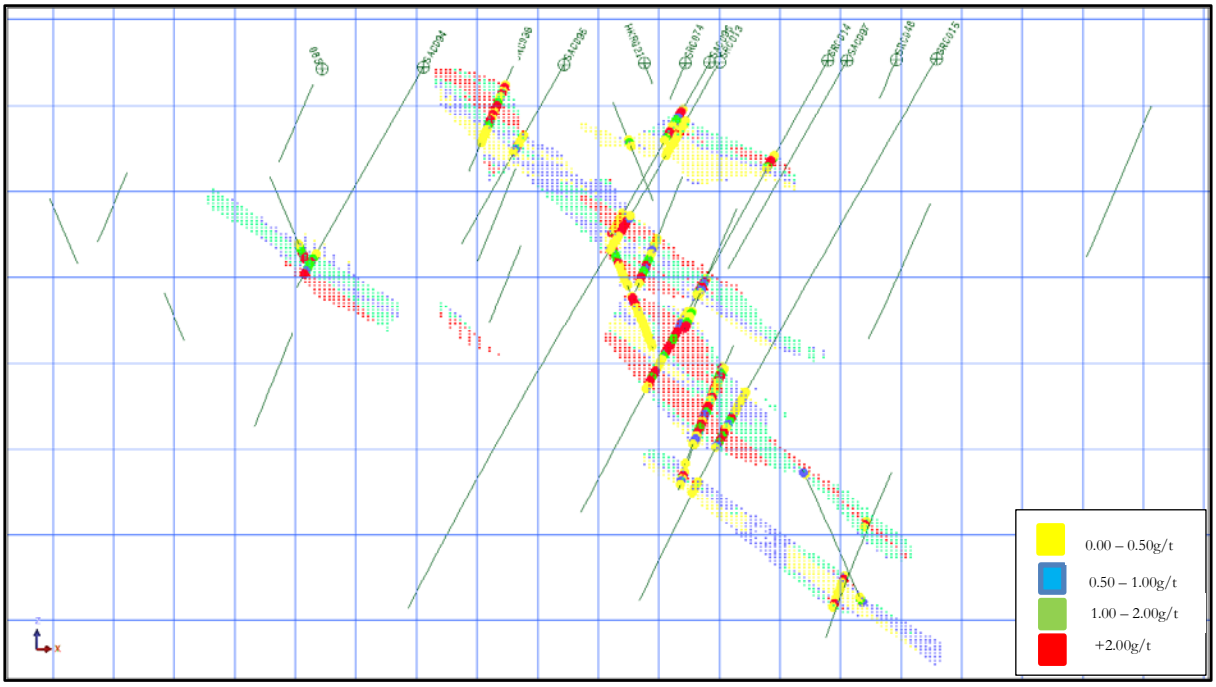

Figure 2: Vanguard - NW Cross Section

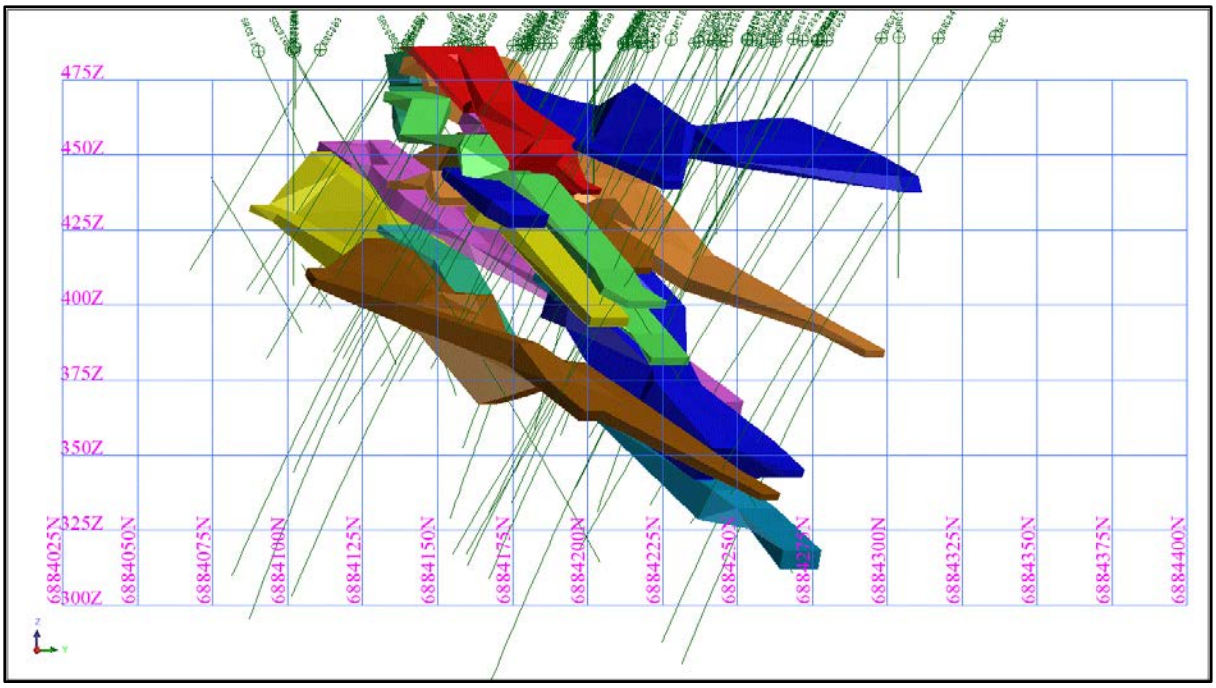

Figure 3: Vanguard - Long Section Looking West

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Vanguard North

SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Reverse Circulation (RC) drilling was carried out by AME. • RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m calico splits (which were retained for later use). • From the bulk sample, a 4 metre composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • 1m calico splits were submitted to the laboratory if the composite sample assay values are equal to or greater than 0.2g/t Au. **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • RC samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • Rotary Air Blast (RAB) and AC samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC, RAB or AC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory.
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. • RC drilling was with a KWL 350 drill rig with an onboard 1100/350 compressor using a sampling hammer of nominal 140mm hole.

Criteria	Commentary
	Drilling carried out by Troy (2001-2009) • Troy's drilling at Vanguard North included RAB and AC drilling. **Drilling carried out by Herald (1996-1999)** • Herald's drilling at Vanguard North included RAB drilling.
Drill sample recovery	• AME AC drilling included some wet samples. (Wet AC samples were not used in the Resource estimation.) • AME RC samples generally had good recovery. • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy and Herald RAB, AC and RC sample recovery.
Logging	• AME AC and RC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed. • Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy and Herald drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC and RC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • Troy RAB, AC and RC samples were assayed at Analabs Perth by 50g aqua regia digest followed by DIBK extraction Flame Atomic Absorption Spectrometry (predominately oxide material). **Drilling carried out by Herald (1996-1999)** • Herald's RAB samples were typically assayed at Analabs Leonora or Perth for aqua regia AAS gold determination. • RC samples were sent to Analabs Perth for Fire Assay gold only.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20.

Criteria	Commentary
	• For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • 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. **Drilling carried out by Herald (1996-1999)** • There is no available information on protocols used by Herald.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. AME's 2018 drill hole collar positions may be accurately located in GDA_94 space by a DGPS or a licensed surveyor in late 2018. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor. • In July 2017, AME used a DGPS to locate AME drill collars and re-locate historic Herald and Troy drill collars to verify the accuracy of historic data. • In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• In general, the drilling grid at Vanguard North was spaced on a nominal 40m x 25m grid.

Criteria	Commentary
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area. • Two small clusters of workings occur at the western end of the Vanguard North mineralised area however they are shallow and no structural geological information is evident. There are no historic reports about the activity undertaken at these workings. • Geological structures have been interpreted from drilling. • AME's drill holes were drilled at -60^0 to 040^0 which was designed to intersect mineralisation perpendicular to the interpreted gold mineralised zones. • The Troy and Herald drill orientation was typically -90^0 which was designed to identify mineralisation in RAB and AC drilling.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original RC drill samples comprised approximately 3kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • 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	• AME has reviewed and compiled the technical data for Vanguard North internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Vanguard North is located on Exploration Licence 57/1033, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1033 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1033 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  • 2% of the Gross Revenue is payable to a third party
	  • 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • A small cluster of shallow workings located at the western end of the mineralised area at Vanguard North were presumably worked around the same time as the main Vanguard workings, however there are no historic reports on the activity undertaken at these workings. • Western Mining Corporation (WMC) carried out surface geochemistry, geological mapping and percussion drilling in the 1980's. • Previous work carried out by Troy Resources NL (Troy) and Herald Resources Limited (Herald) involved drilling and resource estimation.
Geology	• The historical workings at the western end of the mineralised area at Vanguard North are located in a sequence of northwest trending mafic and ultramafic rocks with minor intercalated BIF units. • Drilling indicates the Vanguard North mineralisation is hosted predominantly within mafic lithologies. The average depth of weathering varies from 50 - 70m. • Gold mineralisation is mainly associated with high-grade, narrow sulphidic quartz veins which strike approximately 300° and dip approximately 20° to the southwest. • In general the Vanguard North deposit strikes NW and dips approximately 20° to the SW.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied. • Where AME has reported Troy grades, a 1.0g/t cut-off grade has been applied.

Criteria	Commentary
	• No metal equivalents have been used or reported. • The reported grades are uncut.
Relationship between mineralisation widths and intercept lengths	• Deeper intercepts in angled holes may or may not be true widths due to a lack of systematic drilling, deep oxidation and no diamond drill core.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 – Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database Integrity	• The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 1996. Historically, original drilling which included Rotary Air Blast (RAB), Air Core (AC) and Reverse Circulation (RC) into Vanguard North was carried out by Herald Resources Limited (Herald) and Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC and RC drilling. • AME carried out checks on the historic database including assay checks, location checks and down hole survey checks. • The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips. • AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff. • Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).
Site Visit	• AME staff made continual site visits including supervision and management of all drill programs within the Resource area. • Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.
Geological Interpretation	• AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation. • The historical workings at the western end of the mineralised area at Vanguard North are located in a sequence of northwest trending mafic and ultramafic rocks with minor intercalated BIF units. • Drilling indicates the Vanguard North mineralisation is hosted predominantly within mafic lithologies. The average depth of weathering varies from 50 - 70m. • Gold mineralisation is mainly associated with high-grade, narrow sulphidic quartz veins which strike approximately 300° and dip approximately 20° to the southwest. • In general the Vanguard North deposit strikes NW and dips approximately 20° to the SW.
Dimensions	• The Vanguard North deposit has a strike of 300m NW and a width of 150m. The Vanguard North area includes a total of 3,350m of drilling. The drilling in the mineralized area for Vanguard North includes no DD holes, 14 RC holes for 1,510m and 26 AC holes for 1,840m. • No RAB drilling was included in the Resource estimation process.

Criteria	Commentary
Estimations and Modelling Techniques	1. The following outlines the estimation and modelling technique used for producing Resources for the Vanguard North deposit.

Deposit	Orebody Dimensions	Nominal Drill Spacing	Metres of Mineralised Drilling
Vanguard North	300m x 150m x 80m	40m x 25m	159m

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 3m down hole which equates to an approximate 2-2.5m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

5. The wireframed shapes were audited by AME geological staff.

6. Each mineralisation wireframe had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Vanguard North	10

9. A breakdown of pre-Resource volume for each shape was measured. This was to ensure that modelling did not over dilute shapes due to block sizes being used.

10. For each shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

    The selected high grade cut and percentage metal cut is shown below:

Deposit	Maximum Cut (g/t)	Percentage Metal Cut %
Vanguard North	20	5

11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
12. The following parameters were used in modelling:

Inverse Distance Power 3 (ID^3)
A minimum number of samples of 2 and a maximum number of samples of 16
The discretisation parameters were 2 x 2 x 1
Search parameters were based on variography and shape orientation.
Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.
Note: ID^3 was used to constrain the high grade shoots.

13. There was no alluvial material.

14. The fundamental block size used was:
<table>
<tr><td>Deposit</td><td>Small Blocks</td></tr>
<tr><td>Vanguard North</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation where shapes were narrow.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. Volumes within wireframes were determined and these were then compared with the block estimates of the volumes within those wireframes on a shape by shape basis to ensure that volumes estimated were correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2,000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%. The Resources reported are minimally diluted and further dilution, predominately in hard rock, would be required to produce Reserves.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>• All results are reported on a dry tonnage basis.</td></tr>
<tr><td>Cut-off Parameters</td><td>• Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.</td></tr>
<tr><td>Mining Factors or Assumptions</td><td>• Open pit mining will be the mining method employed going forward.</td></tr>
<tr><td>Metallurgical Factors or Assumptions</td><td>• Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.</td></tr>
</table>

Criteria	Commentary
Environmental Factors or Assumptions	• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 40m x 25m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study.
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

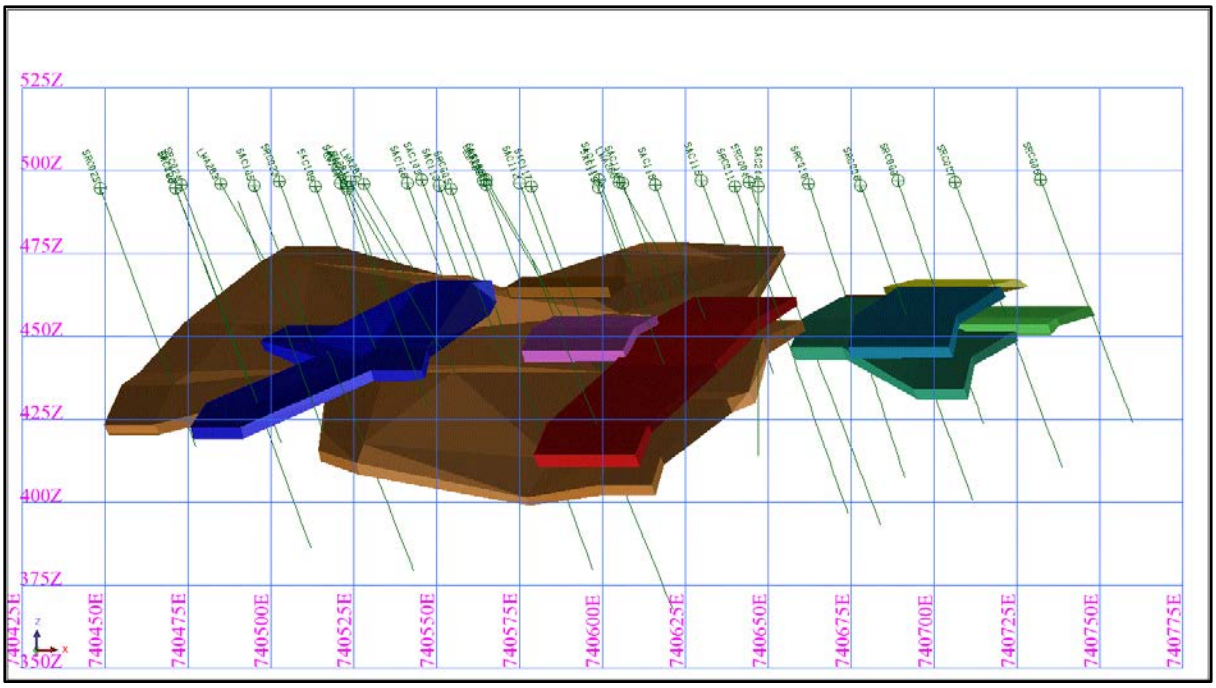

Figure 1: Vanguard North - Long Section Looking North

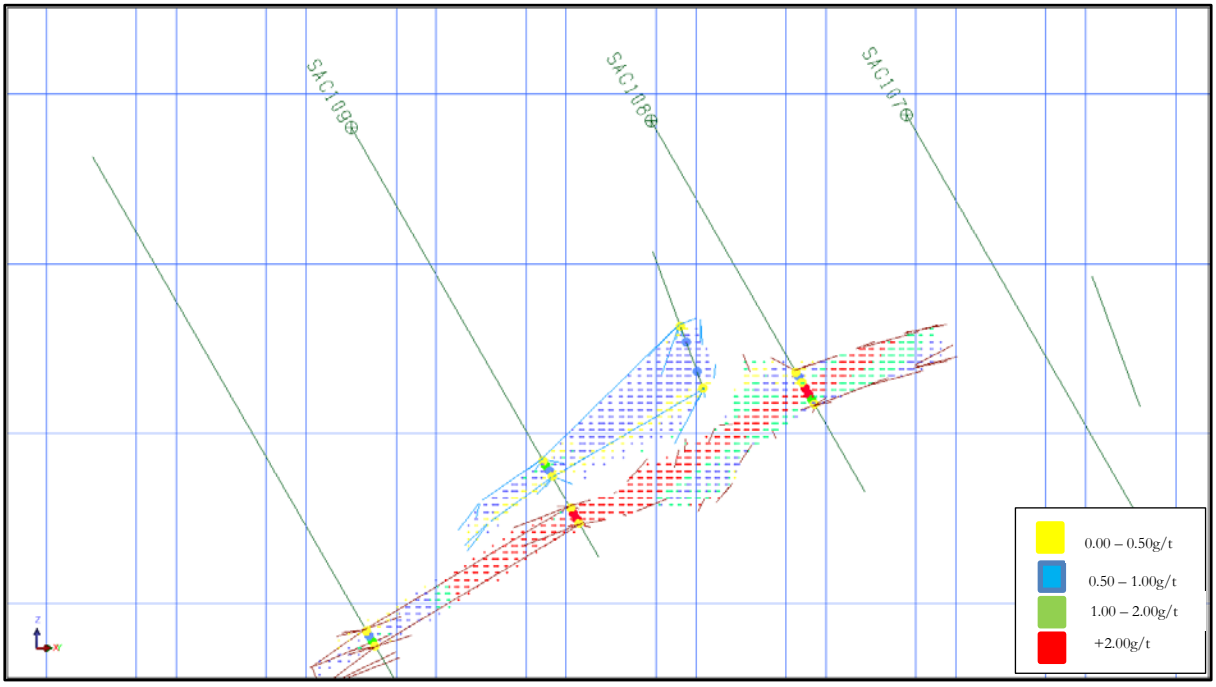

Figure 2: Vanguard North - NW Cross Section

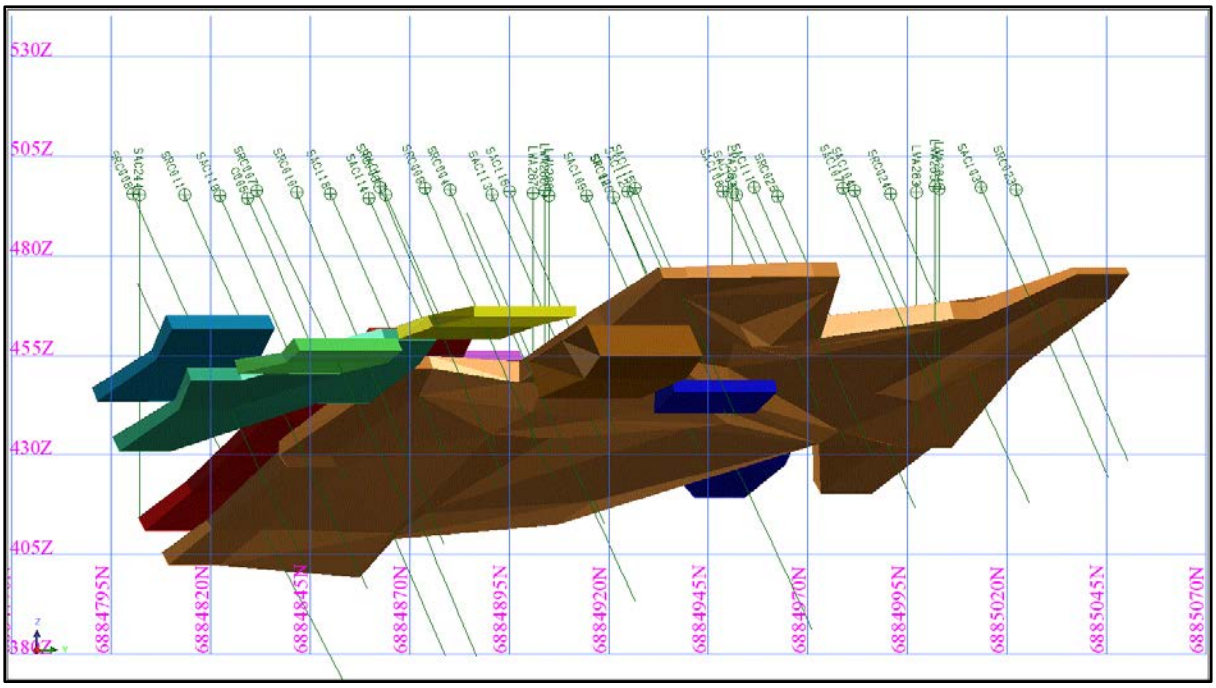

Figure 3: Vanguard North - Long Section Looking West

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Indomitable

SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Reverse Circulation (RC) drilling was carried out by AME. • RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m calico splits (which were retained for later use). • From the bulk sample, a 4 metre composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • 1m calico splits were submitted to the laboratory if the composite sample assay values were equal to or greater than 0.2g/t Au. **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • RC samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • Rotary Air Blast (RAB) and AC samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC, AC or RAB), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory. • Double tube coring was used to drill the diamond drill (DD) hole. The core hole was orientated using a crayon marker spear so that accurate structural measurements could be taken, and the hole was regularly surveyed using an Eastman down hole camera. The core was split using an Almonte coresaw, sampled as half core, and the remaining half core was retained for future reference. All core samples were sent to Analabs in Perth for analysis where the whole sample was crushed then pulverised in a ring pulveriser. The samples were then analysed using classical Fire Assay process by firing a 50 gram portion of the sample.

Criteria	Commentary
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. • RC drilling with Hydco 35 rig with a 5.5 inch diameter bit and onboard cyclone and riffle splitter and with a KWL 350 drill rig with an onboard 1100/350 compressor using a sampling hammer of nominal 140mm hole. **Drilling carried out by Troy (2001-2009)** • Troy's drilling at Indomitable included RAB, AC, RC and DD drilling.
Drill sample recovery	• AME AC drilling included some wet samples. (Wet AC samples were not used in the Resource estimation.) • AME RC samples generally had good recovery. • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy AC and RC sample recovery.
Logging	• AME AC and RC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed. • Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC and RC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • SGS Australia Pty Ltd (SGS) located in Perth, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. SGS at the time, were certified to the ISO 9001 requirements for all related inspection, verification, testing and certification activities. • RC and AC samples were assayed using 50 g fire assay with AAS finish, and sample sizes were noted as being 2kg.

Criteria	Commentary
	• All diamond core was half split, all core was forwarded to Analabs and a 50g fire assay was produced for each 1m interval.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20. • For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards. These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • For Troy RC drilling, an average of 1 field duplicate, 1 blank and 1 standard was submitted for every 50 samples. • For Troy 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.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. AME's 2018 drill hole collar positions may be accurately located in GDA_94 space by a DGPS or a licensed surveyor in late 2018. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor. • In July 2017, AME used a DGPS to locate AME drill collars and re-locate historic Troy drill collars to verify the accuracy of historic data.

Criteria	Commentary
	• In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• In general, the drilling grid at Indomitable was spaced on a nominal 25m x 25m grid. • Troy's RAB, AC and RC drill holes at Indomitable were spaced between 20m and 200m apart.
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area. • Geological structures have been interpreted from drilling. • The Troy and AME drill orientation was typically -60^0 to 090^0 which was designed to intersect mineralisation perpendicular to the interpreted gold mineralised zones, but some sections on Indomitable were drilled -60^0 towards 270^0.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original RC drill samples comprised approximately 3kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • 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	• AME has reviewed and compiled the technical data for Indomitable internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Indomitable is located on Exploration Licence 57/1031, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1031 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1031 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  ◦ 2% of the Gross Revenue is payable to a third party
	  ◦ 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • There has not been any mining carried out at Indomitable. • Previous work carried out by Troy involved surface geochemistry, geophysics, geological mapping and drilling. • There has been no known historical mining due to 20 -30m of alluvial cover.
Geology	• The Indomitable deposit is located within an area of alluvium covering deeply weathered, high-magnesium basalts, differentiated basalts and ultramafic units. There is no outcrop within the area that surrounds the Indomitable deposit. • Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general, dip at a shallow angle to the west. • A gold bearing pisolitic 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. • In general the Indomitable deposit strikes NW and dips approximately 20° to the W.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied. • Where AME has reported Troy grades, a 1.0g/t cut-off grade has been applied.

Criteria	Commentary
	• No metal equivalents have been used or reported. • The reported grades are uncut.
Relationship between mineralisation widths and intercept lengths	• Any near-surface mineralisation from 0m to 20m is interpreted to be horizontal (intersecting alluvials) hence vertical intercepts can be considered to be true thickness. • Deeper intercepts in angled holes may or may not be true widths due to a lack of systematic drilling, deep oxidation and no outcrop.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 - Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database Integrity	• The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 2001. Historically, original drilling which included Rotary Air Blast (RAB), Air Core (AC), Reverse Circulation (RC) and Diamond Drilling (DD) into Indomitable was carried out by Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC and RC drilling. • AME carried out checks on the historic database including assay checks, location checks and down hole survey checks. • The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips. • AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff. • Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).
Site Visit	• AME staff made continual site visits including supervision and management of all drill programs within the Resource area. • Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.
Geological Interpretation	• AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation. • The Indomitable deposit is hosted in highly oxidised, high-magnesium basalts, differentiated basalts and ultramafic units. Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general dip at a shallow angle to the west. • A gold bearing pisolitic 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. • In general the Indomitable deposit strikes NW and dips approximately 20° to the W.
Dimensions	• The Indomitable deposit has a strike of 500m NW and a width of 300m. The Indomitable area includes a total of 10,674m of drilling. The drilling in the mineralized area for Indomitable includes 1 DD hole for 190m, 44 RC holes for 5,234m and 53 AC holes for 5,250m. • No RAB drilling was included in the Resource estimation process.

Criteria	Commentary
Estimations and Modelling Techniques	1. The following outlines the estimation and modelling technique used for producing Resources for the Indomitable deposit.

Deposit	Orebody Dimensions	Nominal Drill Spacing	Metres of Mineralised Drilling
Indomitable	500m x 300m x 170m	25m x 25m	1,370m
Indomitable - Alluvium		20m x 20m (mostly)	
Indomitable - Alluvium		40m x40m (approx. 25%)	

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes in non-alluvial material were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 5m down hole which equates to an approximate 3-3.5m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

    Alluvial material was based on a 0.3g/t nominal cut-off grade to achieve continuity using intersection selection parameters as above.

5. The wireframed shapes were audited by AME geological staff.

6. Each mineralisation wireframe had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Indomitable	23

9. A breakdown of pre-Resource volume for each shape was measured. This was to ensure that modelling did not over dilute shapes due to block sizes being used.

10. For each shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
The selected high grade cut and percentage metal cut is shown below:
<table>
<tr><td>Deposit</td><td>Maximum Cut (g/t)</td><td>Percentage Metal Cut %</td></tr>
<tr><td>Indomitable</td><td>20</td><td>3</td></tr>
</table>
11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

12. The following parameters were used in modelling:

• Inverse Distance Power 3 (ID^3)
• A minimum number of samples of 2 and a maximum number of samples of 16
• The discretisation parameters were 2 x 2 x 1
• Search parameters were based on variography and shape orientation.
• Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.
• Note: ID^3 was used to constrain the high grade shoots.

13. The alluvial mineralisation used differing ranges of search and directions than those which were applied to deeper material.

14. The fundamental block size used was:

<table>
<tr><td>Deposit</td><td>Small Blocks</td></tr>
<tr><td>Indomitable</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation where shapes were narrow.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. Volumes within wireframes were determined and these were then compared with the block estimates of the volumes within those wireframes on a shape by shape basis to ensure that volumes estimated were correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2,000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%. The Resources reported are minimally diluted and further dilution, predominately in hard rock, would be required to produce Reserves.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>• All results are reported on a dry tonnage basis.</td></tr>
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Criteria	Commentary
Cut-off Parameters	• Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
Mining Factors or Assumptions	• Open pit mining will be the mining method employed going forward.
Metallurgical Factors or Assumptions	• Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.
Environmental Factors or Assumptions	• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 25m x 25m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study.
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

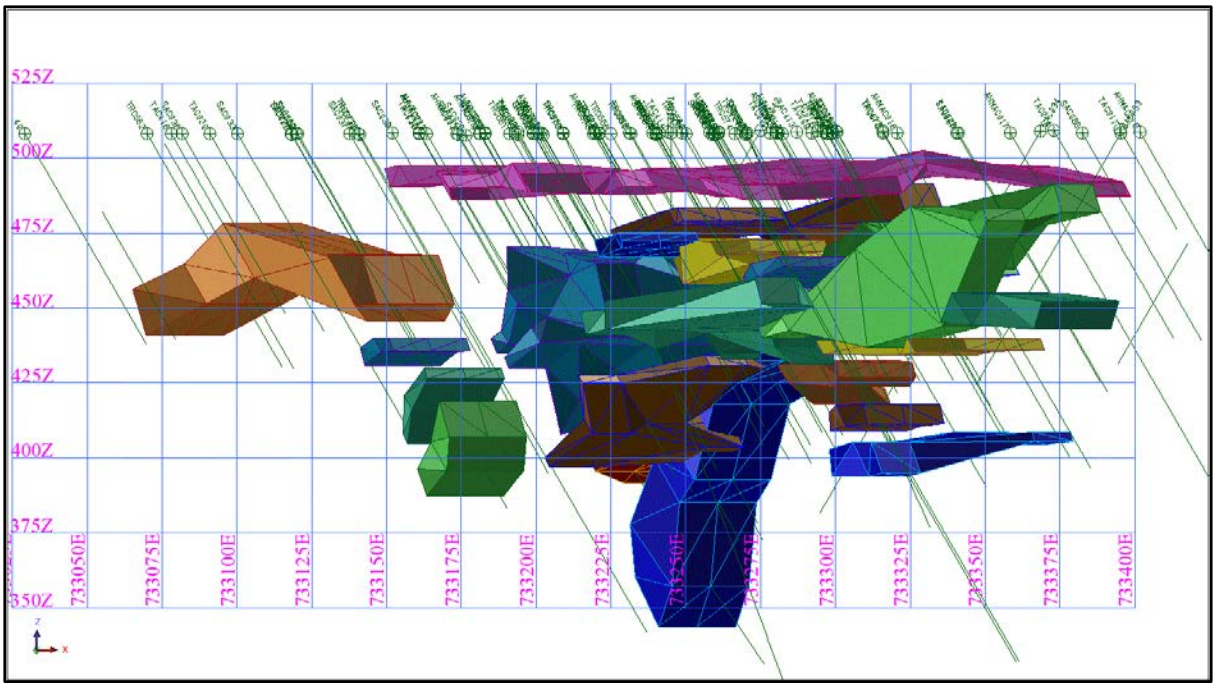

Figure 1: Indomitable - Long Section Looking North

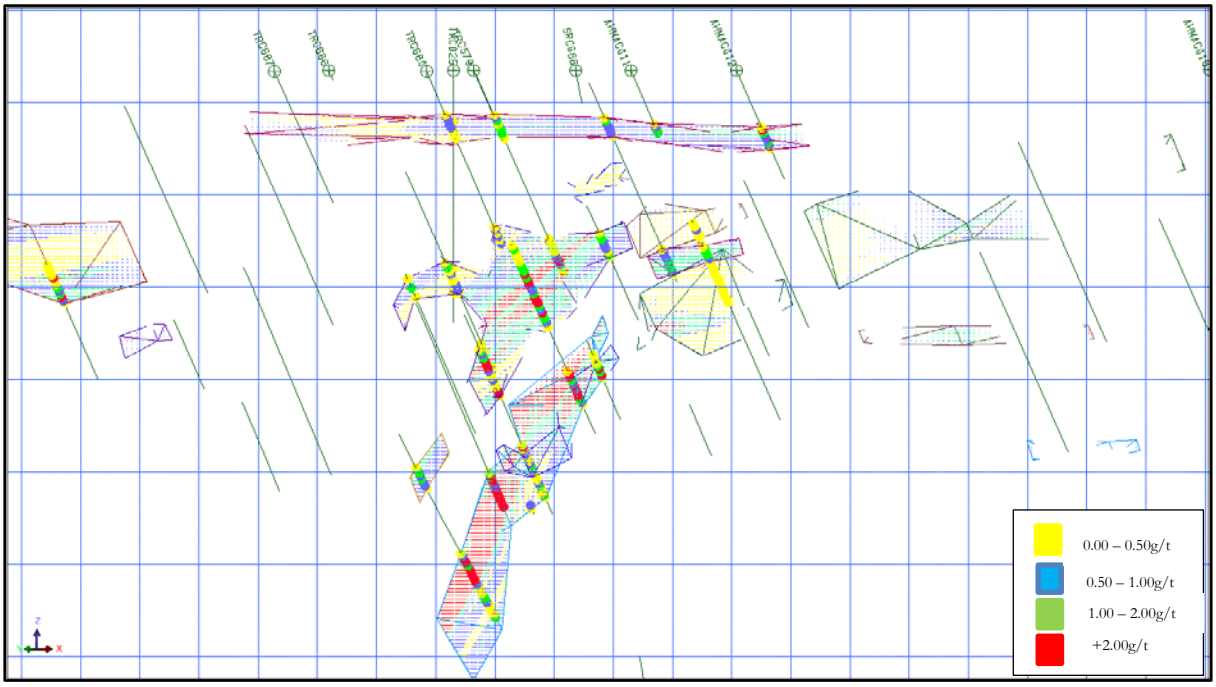

Figure 2: Indomitable - NE Cross Section

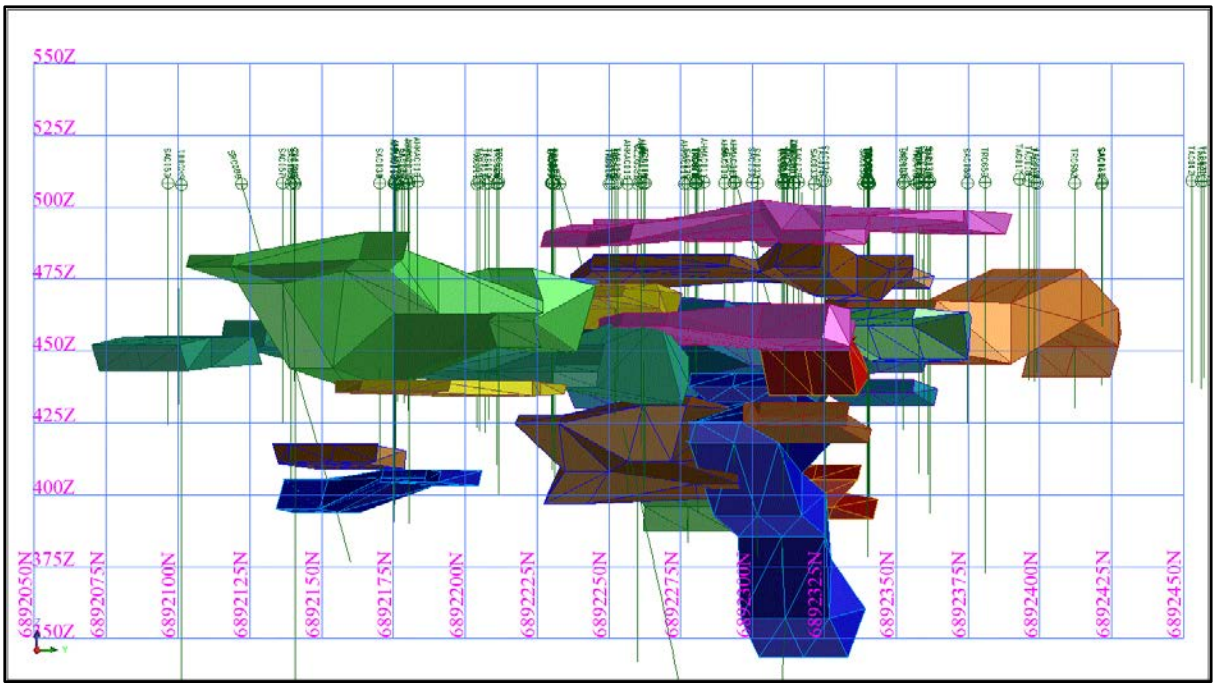

Figure 3: Indomitable - Long Section Looking West

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Indomitable North

SECTION 1 - Sampling Techniques and Data

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Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • If the composite sample returned assay values equal to or greater than 0.2g/t Au, the whole poly-weave bag was passed through a riffle splitter to produce a 1kg sample that was submitted to the laboratory for analysis. (Only carried out for AC drilling in 2018 at Indomitable North). **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • Reverse Circulation (RC) samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • Rotary Air Blast (RAB) and AC samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC, RAB or AC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory.
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. **Drilling carried out by Troy (2001-2009)** • Troy's drilling at Indomitable North included RAB, AC and RC drilling.
Drill sample recovery	• AME AC samples produced in 2018 were dry and had excellent recovery. • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy RAB, AC and RC sample recovery.
Logging	• AME AC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed.

Criteria	Commentary
	• Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC and RC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • SGS Australia Pty Ltd (SGS) located in Perth, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. SGS at the time, were certified to the ISO 9001 requirements for all related inspection, verification, testing and certification activities. • RC and AC samples were assayed using 50 g fire assay with AAS finish, and sample sizes were noted as being 2kg.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20. • For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards. These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • 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

Criteria	Commentary
	blank samples were routinely used in RAB or AC drilling. • Troy engaged Maxwell to undertake periodic audit of the exploration QAQC data.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. AME's 2018 drill hole collar positions may be accurately located in GDA_94 space by a DGPS or a licensed surveyor in late 2018. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor. • In July 2017, AME used a DGPS to locate AME drill collars and re-locate historic Troy drill collars to verify the accuracy of historic data. • In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• In general, the drilling grid at Indomitable North was spaced on a nominal 40m x 20m grid. • Troy's RAB, AC and RC drill holes at Indomitable North were spaced between 20m and 200m apart.
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area. • Geological structures have been interpreted from drilling. • AME's 2018 drill holes were drilled at -90^0 which was designed to intersect mineralisation in the top 20m. • The Troy and AME drill orientation was typically -60^0 to 090^0 which was designed to intersect mineralisation perpendicular to the interpreted gold mineralised zones.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original AC drill samples comprised approximately 3kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • Sampling data was recorded on field sheets and entered into a database then sent to the head office.

Criteria	Commentary
	• Laboratory submission sheets are also completed and sent to the laboratory prior to sample receival.
Audits and reviews	• AME has reviewed and compiled the technical data for Indomitable North internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Indomitable North is located on Exploration Licence 57/1031, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1031 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1031 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  • 2% of the Gross Revenue is payable to a third party
	  • 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • There has not been any mining carried out at Indomitable North. • Previous work carried out by Troy involved surface geochemistry, geophysics, geological mapping and drilling. • There has been no known historical mining due to 20 -30m of alluvial cover.
Geology	• The Indomitable North deposit is located within an area of alluvium covering deeply weathered, mafic and ultramafic units. There is no outcrop within the area that surrounds the Indomitable North deposit. • Gold mineralisation in the saprolite is related to stockwork quartz veining, however there is insufficient drilling data to determine structural controls and orientation of mineralisation. • A gold bearing pisolitic 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. • In general the near surface mineralisation at Indomitable North is horizontal. • In general the saprolite mineralisation strikes NS and dips 20^0 to the W.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied. • Where AME has reported Troy grades, a 1.0g/t cut-off grade has been applied.

Criteria	Commentary
	• No metal equivalents have been used or reported. • The reported grades are uncut.
Relationship between mineralisation widths and intercept lengths	• Near-surface mineralisation from 0m to 20m is interpreted to be horizontal (intersecting alluvials) hence vertical intercepts can be considered to be true thickness. • Deeper intercepts in angled holes may or may not be true widths due to a lack of systematic drilling, deep oxidation and no outcrop.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 – Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database Integrity	• The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 2001. Historically, original drilling which included Rotary Air Blast (RAB), Air Core (AC) and Reverse Circulation (RC) into Indomitable North was carried out by Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC and RC drilling. • AME carried out checks on the historic database including assay checks, location checks and down hole survey checks. • The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips. • AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff. • Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).
Site Visit	• AME staff made continual site visits including supervision and management of all drill programs within the Resource area. • Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.
Geological Interpretation	• AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation. • The Indomitable North deposit is located within an area of alluvium covering deeply weathered, mafic and ultramafic units. There is no outcrop within the area that surrounds the Indomitable North deposit. • Gold mineralisation in the saprolite is related to stockwork quartz veining, however there is insufficient drilling data to determine structural controls and orientation of mineralisation. • A gold bearing pisolitic 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. • In general the near surface mineralisation at Indomitable North is horizontal. • In general the saprolite mineralisation strikes NS and dips 20^0 to the W.
Dimensions	• The Indomitable North deposit has a strike of 150m NS and a width of 150m. The Indomitable North area includes a total of 3,424m of drilling. The drilling in the mineralized area for Indomitable North includes no DD holes, 21 RC holes for 2,359m and 49 AC holes for 1,065m. • No RAB drilling was included in the Resource estimation process.

Criteria	Commentary
Estimations and Modelling Techniques	1. The following outlines the estimation and modelling technique used for producing Resources for the Indomitable North deposit.

Deposit	Orebody Dimensions	Nominal Drill Spacing	Metres of Mineralised Drilling
Indomitable North	150m x 150m x 140m	40m x 20m	524m
Indomitable North -Alluvium		20m x 20m	

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes in non-alluvial material were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 5m down hole which equates to an approximate 3-3.5m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

    Alluvial material was based on a 0.5g/t nominal cut-off grade and a 3m minimum mining width including 0.5m of edge dilution.

5. The wireframed shapes were audited by AME geological staff.

6. Each mineralisation wireframe had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Indomitable North	13

9. A breakdown of pre-Resource volume for each shape was measured. This was to ensure that modelling did not over dilute shapes due to block sizes being used.

10. For each shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
The selected high grade cut and percentage metal cut is shown below:
<table>
<tr><th>Deposit</th><th>Maximum Cut (g/t)</th><th>Percentage Metal Cut %</th></tr>
<tr><td>Indomitable North</td><td>15</td><td>1</td></tr>
</table>
11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

12. The following parameters were used in modelling:

• Inverse Distance Power 3 (ID^3)
• A minimum number of samples of 2 and a maximum number of samples of 16
• The discretisation parameters were 2 x 2 x 1
• Search parameters were based on variography and shape orientation.
• Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.
• Note: ID^3 was used to constrain the high grade shoots.

13. The alluvial mineralisation used differing ranges of search and directions than those which were applied to deeper material.

14. The fundamental block size used was:

<table>
<tr><th>Deposit</th><th>Small Blocks</th></tr>
<tr><td>Indomitable North</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation where shapes were narrow.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. Volumes within wireframes were determined and these were then compared with the block estimates of the volumes within those wireframes on a shape by shape basis to ensure that volumes estimated were correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%. The Resources reported are minimally diluted and further dilution, predominately in hard rock, would be required to produce Reserves.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>• All results are reported on a dry tonnage basis.</td></tr>
</table>

Criteria	Commentary
Cut-off Parameters	• Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
Mining Factors or Assumptions	• Open pit mining will be the mining method employed going forward.
Metallurgical Factors or Assumptions	• Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.
Environmental Factors or Assumptions	• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 40m x 20m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study.
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

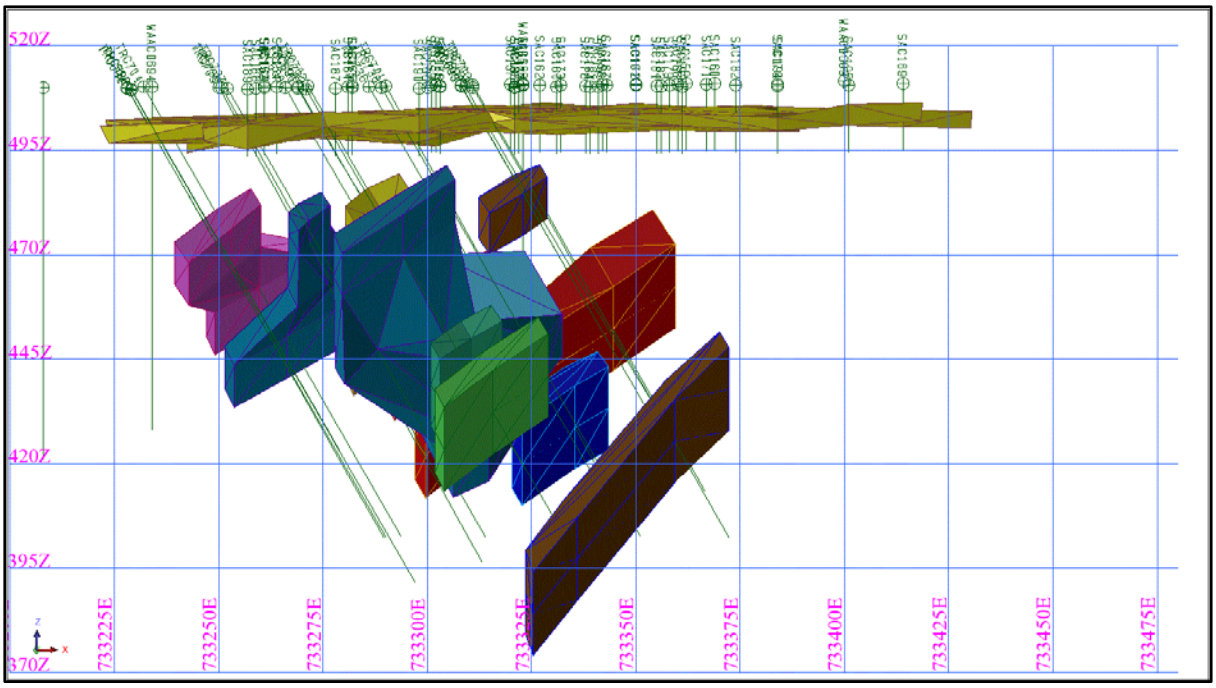

Figure 1: Indomitable North - Long Section Looking North

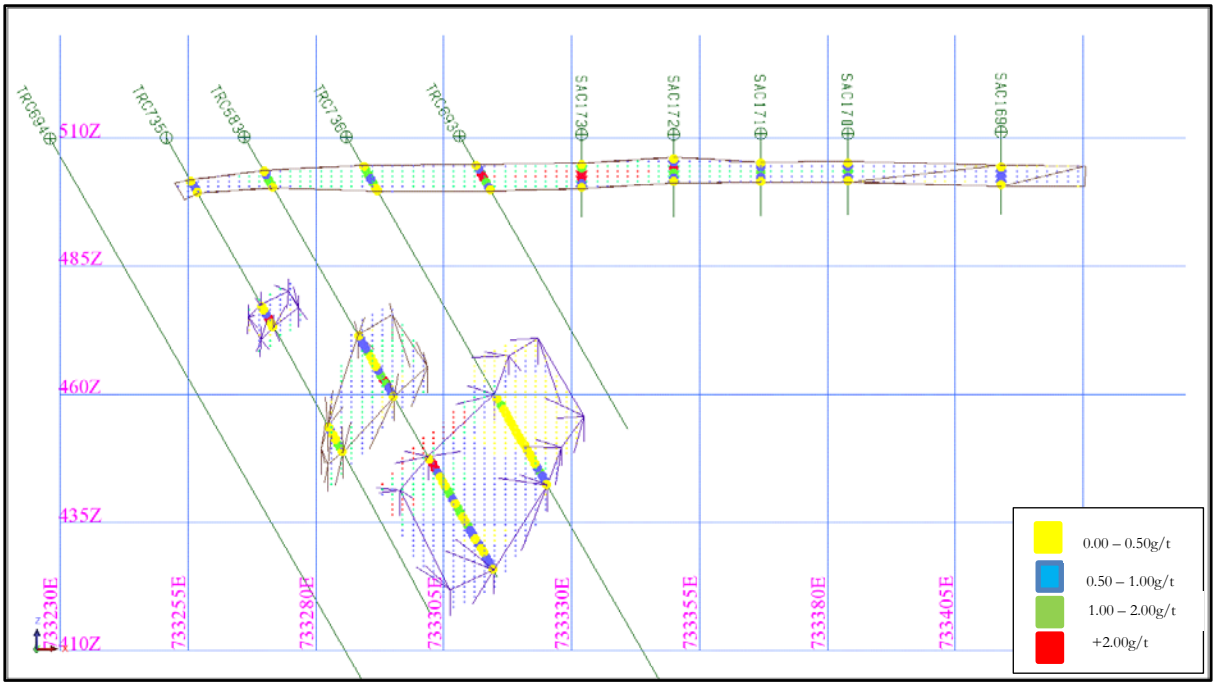

Figure 2: Indomitable North – Section 6892650mN

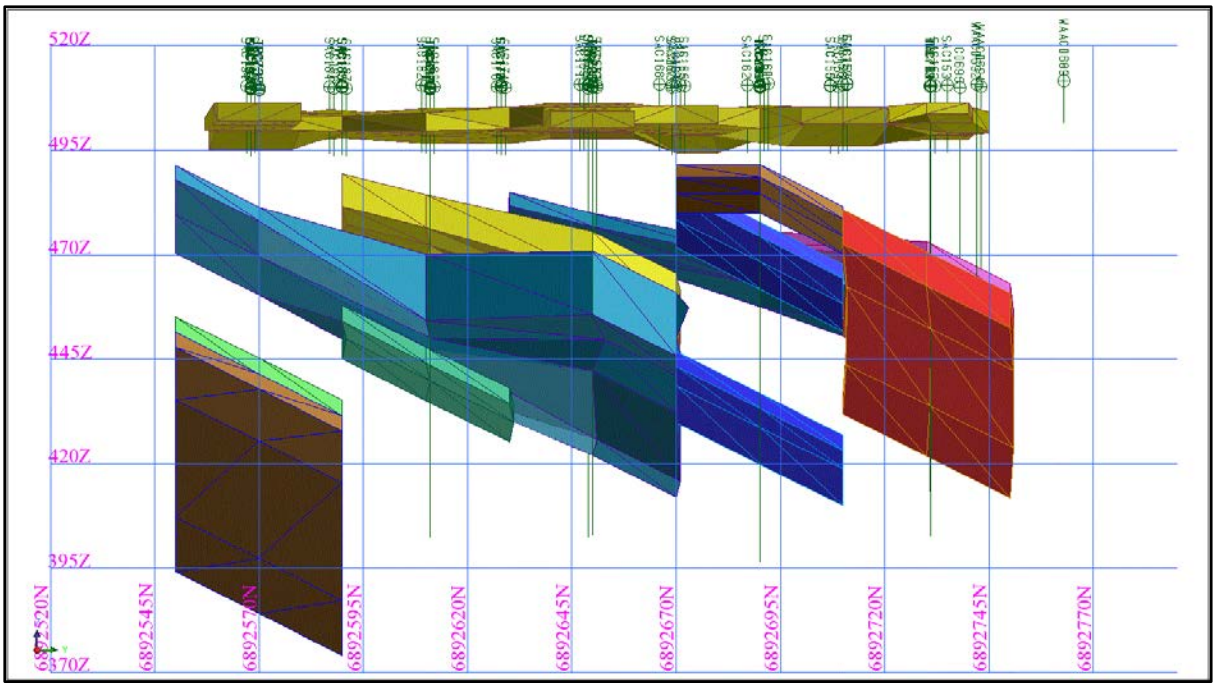

Figure 3: Indomitable North - Long Section Looking West

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Piper

SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • 1m resplits were collected and submitted to the laboratory if the composite sample assay values are equal to or greater than 0.2g/t Au. **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • Reverse Circulation (RC) samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • Rotary Air Blast (RAB) and AC samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC or AC or RAB), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory.
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. **Drilling carried out by Troy (2001-2009)** • Troy's drilling at Piper included RAB, AC and RC drilling.
Drill sample recovery	• AME AC drilling included some wet samples. (Wet AC samples were not used in the Resource estimation). • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy AC and RC sample recovery.
Logging	• AME AC and RC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed.

Criteria	Commentary
	• Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • Troy RC samples were assayed at Genalysis Laboratory located in Perth, Western Australia. Genalysis were responsible for sample preparation and assaying for drill hole samples and associated check assays. Genalysis at the time, were certified to the ISO 9001 requirements for all related inspection, verification, testing and certification activities. • RC and AC samples were assayed using 50 g fire assay with AAS finish, and sample sizes were noted as being 2kg.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20. • For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards. These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • 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

Criteria	Commentary
	blank samples were routinely used in RAB or AC drilling. • Troy engaged Maxwell to undertake periodic audit of the exploration QAQC data.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. AME's 2018 drill hole collar positions may be accurately located in GDA_94 space by a DGPS or a licensed surveyor in late 2018. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor. • In July 2017, AME used a DGPS to locate AME drill collars and re-locate historic Troy drill collars to verify the accuracy of historic data. • In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• Troy's RAB, AC and RC drill holes at Piper were spaced on a nominal 20m x10m grid.
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area. • Geological structures have been interpreted from drilling. • AME AC drill holes were drilled at -60^0 to 270^0 which was designed to intersect potential primary mineralisation beneath the shallow alluvial mineralisation. • The Troy drill orientation was typically -90^0 which was designed to intersect mineralisation perpendicular to the interpreted alluvial gold mineralised zones, which was the only material included in the Resource.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original RC drill samples comprised approximately 3kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • Sampling data was recorded on field sheets and entered into a database then sent to the head office.

Criteria	Commentary
	• Laboratory submission sheets are also completed and sent to the laboratory prior to sample receival.
Audits and reviews	• AME has reviewed and compiled the technical data for Piper internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data. • The Mineral Resource Estimate published by Troy for Piper in 2009 was prepared by a Competent Person as part of an application for a Mining Lease by Troy.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Piper is located on Exploration Licence 57/1031, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1031 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1031 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  • 2% of the Gross Revenue is payable to a third party
	  • 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • There has not been any mining carried out at Piper. • Previous work carried out by Troy involved surface geochemistry, geophysics, geological mapping and drilling. • There has been no known historical mining due to 20 -30m of alluvial cover.
Geology	• The Piper deposit is located within an area of alluvium. There is no outcrop within the area that surrounds the Piper deposit. • Mineralisation at Piper occurs within pisolitic alluvial material adjacent to a west dipping jaspilitic banded iron formation (BIF). • Drilling has intersected a 3-5m thick mineralised zone of pisolitic alluvium and transported BIF fragments beneath 5-7m of transported lateritic clay. • Mineralisation is interpreted as a single, horizontal lens.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied. • Where AME has reported Troy grades, a 1.0g/t cut-off grade has been applied. • No metal equivalents have been used or reported. • The reported grades are uncut.

Criteria	Commentary
Relationship between mineralisation widths and intercept lengths	• Mineralisation from 0m to 20m is interpreted to be horizontal (intersecting alluvials) hence vertical intercepts can be considered to be true thickness.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 – Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database Integrity	• The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 2001. Historically, original drilling which included Rotary Air Blast (RAB), Air Core (AC), and Reverse Circulation (RC) into Piper was carried out by Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC. • AME carried out checks on the historic database including assay checks, location checks and down hole survey checks. • The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips. • AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff. • Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).
Site Visit	• AME staff made continual site visits including supervision and management of all drill programs within the Piper area. This included inspection of all available historic drill spoil. • Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.
Geological Interpretation	• AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation. • The Piper deposit is located within an area of alluvium. There is no outcrop within the area that surrounds the Piper deposit. • Mineralisation at Piper occurs within pisolitic alluvial material adjacent to a west dipping jaspilitic banded iron formation (BIF). • Drilling has intersected a 3-5m thick mineralised zone of pisolitic alluvium and transported BIF fragments beneath 5-7m of transported lateritic clay. • Mineralisation is interpreted as a single, horizontal lens.
Dimensions	• The Piper deposit has a strike of 150m NW and a width of 150m. The Piper area includes a total of 2,138m of drilling. The drilling in the mineralized area for Piper includes no DD holes, 52 RC holes for 1,010m and 55 AC holes for 1,128m. • All of the data used to estimate the Piper Resource is based on historical drilling carried out by Troy. AME drilling is proximal to the Resource. • No RAB drilling was included in the Resource estimation process.

Criteria	Commentary
Estimations and Modelling Techniques	1. The following outlines the estimation and modelling technique used for producing Resources for the Piper deposit.

Deposit	Orebody Dimensions	Nominal Drill Spacing	Metres of Mineralised Drilling
Piper	150m x 150m x 25m	20m x 10m	499m

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 3m down hole which equates to a 3m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

5. The wireframed shape was audited by AME geological staff.

6. The wireframed shape had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Piper	1

9. A breakdown of pre-Resource volume for the shape was measured. This was to ensure that modelling did not over dilute the shape due to block sizes being used.

10. For the shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

    The selected high grade cut and percentage metal cut is shown below:

Deposit	Maximum Cut (g/t)	Percentage Metal Cut %
Piper	10	0

11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
12. The following parameters were used in modelling:

Inverse Distance Power 3 (ID^3)
A minimum number of samples of 2 and a maximum number of samples of 16
The discretisation parameters were 2 x 2 x 1
Search parameters were based on variography and shape orientation.
Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.

13. There was no non-alluvial material.

14. The fundamental block size used was:
<table>
<tr><td>Deposit</td><td>Small Blocks</td></tr>
<tr><td>Piper</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. The volume within the wireframe was determined and then compared with the block estimates of the volume within the wireframe to ensure that the volume estimated was correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2,000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>• All results are reported on a dry tonnage basis.</td></tr>
<tr><td>Cut-off Parameters</td><td>• Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.</td></tr>
<tr><td>Mining Factors or Assumptions</td><td>• Open pit mining will be the mining method employed going forward.</td></tr>
<tr><td>Metallurgical Factors or Assumptions</td><td>• Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.</td></tr>
<tr><td>Environmental Factors or Assumptions</td><td>• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.</td></tr>
</table>

Criteria	Commentary
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 20m x 10m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study. Previous work produced similar Resource numbers (within 10% ounces).
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

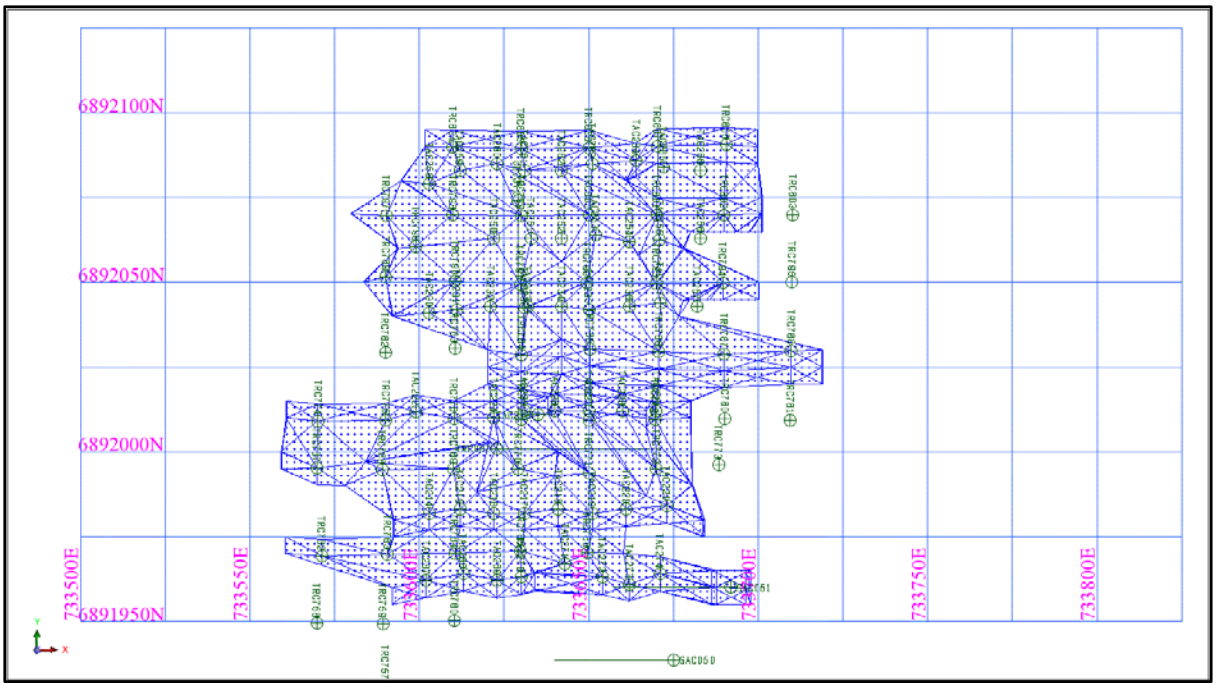

Figure 1: Piper – Plan Showing Extent of Horizontal Alluvial Lens

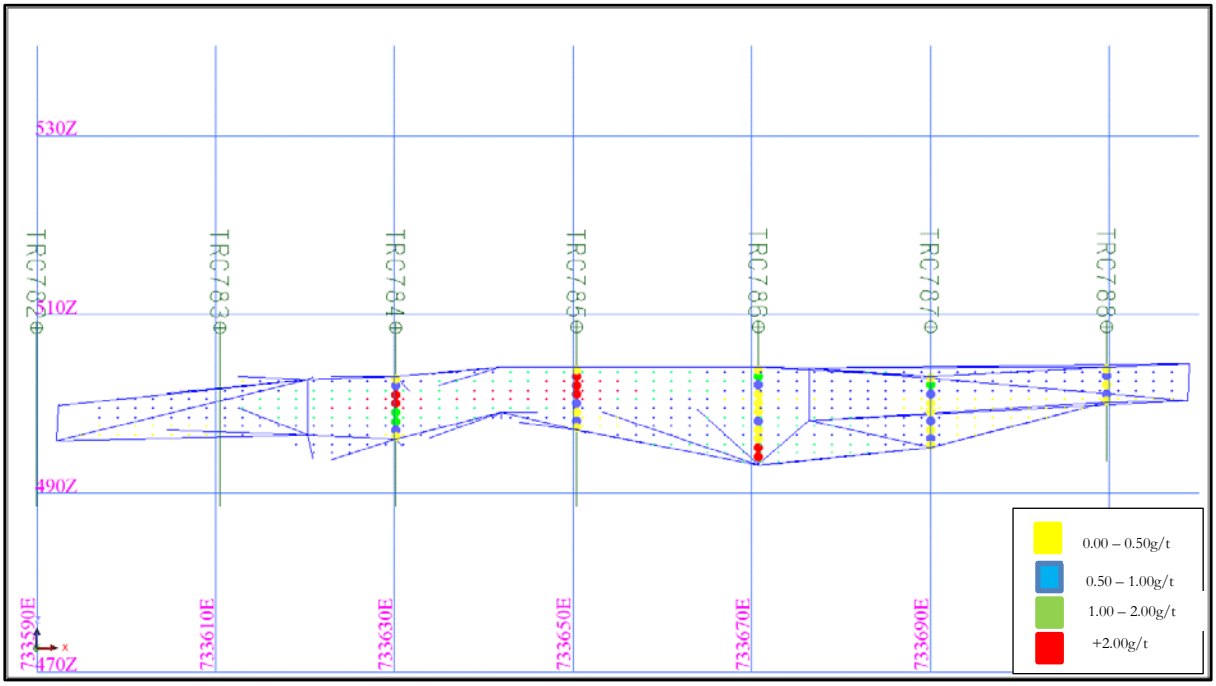

Figure 2: Piper – Section 6892030mN

JORC 2012 TABLE 1 REPORT
SANDSTONE PROJECT
Tiger Moth

SECTION 1 - Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	**Drilling carried out by Alto Metals Ltd (AME)** • Air Core (AC) samples were passed through a cross-over sub, and whole samples were collected into poly-weave bags at 1m intervals. • From the bulk sample, a 4m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • If the composite sample returned assay values equal to or greater than 0.2g/t Au, the whole poly-weave bag was passed through a riffle splitter to produce a 1kg sample that was submitted to the laboratory for analysis. (Only carried out for AC drilling in 2018 at Tiger Moth). • Reverse Circulation (RC) drilling was carried out by AME. • RC samples were passed directly from the in-line cyclone through a rig mounted cone splitter. Samples were collected in 1m intervals into bulk plastic bags and 1m calico splits (which were retained for later use). • From the bulk sample, a 4 metre composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • 1m calico splits were submitted to the laboratory if the composite sample assay values are equal to or greater than 0.2g/t Au. **Drilling carried out by Troy Resources NL (Troy) 2001-2009** • RC samples were passed directly from the in-line cyclone through a rig mounted multi-tier riffle splitter. • Samples were collected in 1m intervals into bulk plastic bags and 1m 3kg calico bags (which were retained for later use). • AC samples were collected in 1m intervals and laid on the ground. • From the bulk samples (RC or AC), a 5m composite sample was collected using a split PVC scoop and then submitted to the laboratory for analysis. • Where anomalous gold zones were detected, 1m re-split samples were collected at a later date and submitted to the laboratory. • Double tube coring was used to drill all of the diamond drill (DD) holes. The core holes were orientated where possible using a crayon marker spear so that accurate structural measurements could be taken, and the holes were regularly surveyed using an Eastman down hole camera. The core was split using an Almonte coresaw, sampled as half core, and the remaining half core was retained for future reference. All core samples were sent to Analabs in Perth for analysis where the whole sample was crushed then pulverised in a ring pulveriser. The samples were then analysed using classical Fire Assay process by firing a 50 gram portion of the sample.

Criteria	Commentary
Drilling techniques	**Drilling carried out by AME** • AC drilling with Drill Boss 200 rig with depth capacity of 150m, with a blade bit producing a sample of 85mm diameter and a down hole hammer bit producing a sample of 96mm diameter. • RC drilling with Hydco 35 rig with a 5.5 inch diameter bit and onboard cyclone and riffle splitter. **Drilling carried out by Troy (2001-2009)** • Troy's drilling at Tiger Moth included AC, RC and DD drilling.
Drill sample recovery	• AME AC samples produced in 2018 were mostly dry. Previous AC drilling included some wet samples. (Wet AC samples were not used in the Resource estimation.) • AME RC samples generally had good recovery. • Recovery was estimated as a percentage and recorded on field sheets prior to entry into the database. • AME has no quantitative information on Troy AC and RC sample recovery.
Logging	• AME AC and RC drill chips were sieved from each 1m sample and geologically logged. • Washed drill chips from each 1m sample were stored in chip trays and photographed. • Geological logging of drill hole intervals was carried out with sufficient detail to meet the requirements of resource estimation. • Troy drill holes were logged using detailed geological codes that were correlated with AME logging codes.
Subsampling techniques and sample preparation	**Drilling carried out by AME** • MinAnalytical Laboratory Services Australia Pty Ltd located in Canning Vale, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. MinAnalytical is certified to NATA in accordance with ISO 17025:2005 ISO requirements for all related inspection, verification, testing and certification activities. • 3kg 4m composite AC and RC samples were dried and then ground in an LM5 ring mill for 85% passing 75 Microns. • Subsequently, intervals of 4m composite samples reporting greater than 0.2g/t Au were selected for re-assay, and 1m re-split samples were submitted for 50gm fire assay. • AC and RC 1m samples were analysed using 50 gm fire assay with AAS finish. **Drilling carried out by Troy (2001 - 2009)** • SGS Australia Pty Ltd (SGS) located in Perth, Western Australia, were responsible for sample preparation and assaying for drill hole samples and associated check assays. SGS at the time, were certified to the ISO 9001 requirements for all related inspection, verification, testing and certification activities. • RC and AC samples were assayed using 50 g fire assay with AAS finish, and sample sizes were noted as being 2kg. • All diamond core was half split, all core was forwarded to Analabs and a 50g fire assay was

Criteria	Commentary
	produced for each 1m interval.
Quality of assay data and laboratory tests	**Drilling carried out by AME** • For AME 4m composite sampling; field duplicates and field blank samples were inserted at a ratio of 1:20. • For 1m re-split samples; field standards, field duplicates and field blanks were inserted at a ratio of 1:20. • AME produced their own Standards using the bulk residues remaining from laboratory prepared samples. Grades of 0.3g/t, 0.6g/t and 0.9g/t were submitted as matrix matched non-distinguishable Standards. These Standards as well as other certified reference Standards were used. • 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 AME personnel. **Drilling carried out by Troy (2001 - 2009)** • For Troy RC drilling, an average of 1 field duplicate, 1 blank and 1 standard was submitted for every 50 samples. • For Troy AC drilling, field duplicates and standards were used at 1:50 however no blank samples were routinely used in Rotary Air Blast (RAB) or AC drilling. • Troy engaged Maxwell to undertake periodic audit of the exploration QAQC data.
Verification of sampling and assaying	• AME has not conducted any independent verification of the assay data as no samples were submitted to other laboratories for check assaying during the assaying period. However, AME submitted their own Standards to the laboratory used and recent independent assaying of the AME Standards has shown values consistent with AME nominal values. • Values below the analytical detection limit were replaced with half the detection limit value. • Troy engaged Maxwell to undertake independent periodic audit of their exploration QAQC data on a monthly basis.
Location of data points	• The grid is based on GDA94 zone 50. • AME used handheld Garmin GPS to locate and record drill collar positions, accurate to +/- 5 metres. AME's 2018 drill hole collar positions may be accurately located in GDA_94 space by a DGPS or a licensed surveyor in late 2018. • Troy drill hole collars were recorded using either GPS, DGPS or by a licenced surveyor. • In July 2017, AME used a DGPS to locate AME drill collars and re-locate historic Troy drill collars to verify the accuracy of historic data. • In March 2018, AME engaged an independent licenced surveyor to obtain accurate collar

Criteria	Commentary
	survey data for a substantial number of AME drill holes and historic drill hole collars.
Data spacing and distribution	• In general, the drilling grid at Tiger Moth was spaced on a nominal 25m x 25m grid. • Troy's AC and RC drill holes at Tiger Moth were spaced between 20m and 200m apart.
Orientation of data in relation to geological structure	• There is no outcrop in the drilled area. • Geological structures have been interpreted from drilling. • AME's 2018 drill holes were drilled at -90^0 which was designed to intersect mineralisation in the top 20m. • The Troy and AME drill orientation was typically -60^0 to 090^0 which was designed to intersect mineralisation perpendicular to the interpreted gold mineralised zones, but some sections on Tiger Moth were drilled -60^0 towards 180^0.
Sample security	**Drilling carried out by AME** • 4m composite and 1m original RC drill samples comprised approximately 3kg of material within a labelled and tied calico bag. • Individual sample bags were placed in a larger plastic poly-weave bag then into a bulka bag that was tied and dispatched to the laboratory via McMahon Burnett freight. • 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	• AME has reviewed and compiled the technical data for Tiger Moth internally. No independent audit had been previously carried out. • Troy engaged Maxwell to undertake periodic independent audit of the exploration QAQC data. • The Mineral Resource Estimate published by Troy for Tiger Moth in 2007 was reported by Snowden.

SECTION 2 - Reporting of Exploration Results

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

Criteria	Commentary

Mineral tenement and land tenure	• Tiger Moth is located on Exploration Licence 57/1031, granted on 20 September 2016 to Sandstone Exploration Pty Ltd, a wholly owned subsidiary of ASX listed AME.
	• E57/1031 is currently in good standing with the Department of Mines, Industry Regulation and Safety.
	• E57/1031 is part of AME's Sandstone Gold Project. The total project area covers approximately 800 km^2 with five exploration licences all granted on 20 September 2016 and two prospecting licences granted on 11 June 2016.
	• The following royalties apply:
	  • 2% of the Gross Revenue is payable to a third party
	  • 2.5% payable to the State Government
	• There are no registered heritage sites.
	• AME has undertaken heritage surveys with the Native Title Claimants and the surveys have cleared the areas of the Resource of any heritage sites.
	• There are no current known impediments to obtaining a licence to operate in the area.

Exploration done by other parties	• Historically gold was first discovered in the Sandstone area in the 1890's. • There has not been any mining carried out at Tiger Moth. • Previous work carried out by Troy involved surface geochemistry, geophysics, geological mapping and drilling. • There has been no known historical mining due to 20 -30m of alluvial cover.
Geology	• The Tiger Moth deposit is located within an area of alluvium covering deeply weathered, high-magnesium basalts and differentiated basalt units. There is no outcrop within the area that surrounds the Tiger Moth deposit. • Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general, dip at a shallow angle to the west. A gold bearing pisolitic 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. • In general the Tiger Moth deposit strikes NW and dips approximately 20° to the W.
Drill hole information	• All material drill hole information used for Resource estimation has been reported on a continual basis by AME.
Data aggregation methods	• When AME exploration results have been reported for the Resource areas, a 0.5g/t cut-off grade has been applied. • Where AME has reported Troy grades, a 1.0g/t cut-off grade has been applied. • No metal equivalents have been used or reported.

Criteria	Commentary
	• The reported grades are uncut.
Relationship between mineralisation widths and intercept lengths	• Near-surface mineralisation from 0m to 20m is interpreted to be horizontal (intersecting alluvials) hence vertical intercepts can be considered to be true thickness. • Deeper intercepts in angled holes may or may not be true widths due to a lack of systematic drilling, deep oxidation and no outcrop.
Diagrams	• Diagrams are included to accompany this JORC table.
Balanced reporting	• All available AME drill hole Au assay results published, use 0.5g/t Au cut-off grade.
Other substantive exploration data	• There is no other material information available for the Resource area at this stage.
Further work	• Further drilling may be carried out in future to provide appropriate bulk density measurements and samples for more detailed metallurgical testwork. Geotechnical work for pit slope analysis will also be undertaken.

SECTION 3 – Estimation and Reporting of Mineral Resources

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

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Database Integrity</td><td>

The sample data used for Resource Estimation work was obtained from various drilling programs carried out since 2001. Historically, original drilling which included Air Core (AC), Reverse Circulation (RC) and Diamond Drilling (DD) into Tiger Moth was carried out by Troy Resources NL (Troy). Alto Metals Limited (AME) carried out a program of AC and RC drilling.
AME carried out checks on the historic database including assay checks, location checks and down hole survey checks.
The original data was geologically logged and work by AME has continued using a lithological code system and photographic records of all drill chips.
AME data was originally captured on field sheets and uploaded into Excel by AME staff for input into Data Shed. Data was continually validated by AME staff.
Normal checks were carried out using Surpac Software by Carras Mining Pty Ltd (CM).

</td></tr>
<tr><td>Site Visit</td><td>

AME staff made continual site visits including supervision and management of all drill programs within the Resource area.
Dr Spero Carras of CM (Competent Person) has visited the Sandstone area and reviewed projects on the ground. Dr Carras also spent a significant amount of time working independently on the Sandstone geology and geophysics.

</td></tr>
<tr><td>Geological Interpretation</td><td>

AME staff together with CM staff were involved in all aspects of the geological interpretation used for the Resource estimation.
The Tiger Moth deposit is hosted in highly oxidised, high-magnesium basalts and differentiated basalt units. Gold mineralisation is related to stockwork quartz veining within saprolite, and although supergene processes have laterally redistributed the mineralisation envelope, the mineralised horizons in general dip at a shallow angle to the west. A gold bearing pisolitic 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.
In general the Tiger Moth deposit strikes NW and dips approximately 20° to the W.

</td></tr>
<tr><td>Dimensions</td><td>

The Tiger Moth deposit has a strike of 500m NW and a width of 240m. The Tiger Moth area includes a total of 11,629m of drilling. The drilling in the mineralized area for Tiger Moth includes 2 DD holes for 270m, 32 RC holes for 3,456m and 124 AC holes for 7,903m.
No RAB drilling was included in the Resource estimation process.

</td></tr>
<tr><td>Estimations and Modelling Techniques</td><td>
1. The following outlines the estimation and modelling technique used for producing Resources for the Tiger Moth deposit.
<table>
<tr><th>Deposit</th><th>Orebody Dimensions</th><th>Nominal Drill Spacing</th><th>Metres of Mineralised Drilling</th></tr>
<tr><td>Tiger Moth</td><td>500m x 240m x 120m</td><td>25m x 25m</td><td>1,255m</td></tr>
</table>
</td></tr>
</table>

Criteria	Commentary

2. Wireframes were provided by AME for:

    a. Topography based on drill collar data
    b. Bottom of Oxidation (BOCO)
    c. Top of Fresh Rock (TOFR)
    d. Base of Alluvium (BOA)

3. CM carried out a review of the weathering surfaces in conjunction with AME geologists.

4. Based on geology and using intersection selection, domainal shapes were wireframed at a 0.5g/t nominal cut-off grade. These domainal shapes could contain values less than 0.5g/t within the wireframes. The parameters used for intersection selection were 3m down hole which equates to an approximate 2-2.5m bench height. The intersections could include 1m of internal dilution and all intersections included 0.5m of edge dilution. This edge dilution was added to allow for the non-visible edge definition which would be experienced in the mining process.

    The above parameters were used for both alluvial and non-alluvial material.

5. The wireframed shapes were audited by AME geological staff.

6. Each mineralisation wireframe had an assigned strike, dip and plunge.

7. The majority of data was 1m lengths and weights were used when modelling the deposit.

8. The number of shapes used was as follows:

Deposit	Number of Shapes
Tiger Moth	33

9. A breakdown of pre-Resource volume for each shape was measured. This was to ensure that modelling did not over dilute shapes due to block sizes being used.

10. For each shape a detailed set of weighted statistics was produced. Based on the statistics, high grade cuts were determined using both the GAP method and the method of Denham. The GAP method determines the beginning position of non-linearity of the cumulative probability plot, in the tail. The Denham method uses statistical distribution theory based on the gamma distribution and the co-efficient of variation.

    The selected high grade cut and percentage metal cut is shown below:

Deposit	Maximum Cut (g/t)	Percentage Metal Cut %
Tiger Moth	25	30
Tiger Moth (Excluding Outliers)	25	5

    The Tiger Moth deposit contains 3 very high grade outliers at depth of grade 100g/t, 130g/t and 500g/t. These were cut back to 25g/t to prevent any pit optimisation program driving a potential pit to an artificially greater depth.

11. Normalised variograms were run and directional variograms were produced for down hole, down dip, down plunge.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
12. The following parameters were used in modelling:

Inverse Distance Power 3 (ID^3)
A minimum number of samples of 2 and a maximum number of samples of 16
The discretisation parameters were 2 x 2 x 1
Search parameters were based on variography and shape orientation.
Note: for blocks that did not meet these requirements, the parameters were relaxed and the search radii were increased.
Note: ID^3 was used to constrain the high grade shoots.

13. The alluvial mineralisation used differing ranges of search and directions than those which were applied to deeper material.

14. The fundamental block size used was:
<table>
<tr><td>Deposit</td><td>Small Blocks</td></tr>
<tr><td>Tiger Moth</td><td>2mN x 2mE x 1mRL</td></tr>
</table>
Small blocks were used to ensure adequate volume estimation where shapes were narrow.

15. To check that the interpolation of the block model honoured the drill data, validation was carried out comparing the interpolated blocks to the sample composite data.

16. Volumes within wireframes were determined and these were then compared with the block estimates of the volumes within those wireframes on a shape by shape basis to ensure that volumes estimated were correct.

17. Classification was carried out using a combination of drill hole density and geology as the guide. While both of these criteria were considered adequate, a lack of detailed bulk density work resulted in the Resource being classified as Inferred. All Resource was classified as Inferred.

18. Resources were estimated within an A$2,000 per ounce gold price optimised Whittle pit shell. The optimised Whittle pit shells provided a reasonable basis for defining the portion of models that may have prospects for economic exploitation in the foreseeable future and could therefore reasonably be declared as Open Pit Resources. (Optimisation used a metallurgical recovery of 92%. The Resources reported are minimally diluted and further dilution, predominately in hard rock, would be required to produce Reserves.)

19. Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.
</td></tr>
<tr><td>Moisture</td><td>All results are reported on a dry tonnage basis.</td></tr>
<tr><td>Cut-off Parameters</td><td>Operating cost estimates developed by CM indicated that a break even mill feed cut-off grade for deposits in the Sandstone area was likely to be 0.5g/t Au.</td></tr>
<tr><td>Mining Factors or Assumptions</td><td>Open pit mining will be the mining method employed going forward.</td></tr>
<tr><td>Metallurgical Factors or Assumptions</td><td>Preliminary metallurgical testwork suggested high recoveries (92%+) would be achieved.</td></tr>
</table>

Criteria	Commentary
Environmental Factors or Assumptions	• There are currently no known environmental factors which will affect the project. To date, there have been no issues in carrying out drilling and having POW's approved.
Bulk Density	• The following bulk densities (t/m^3) were used: Alluvial: 2.0 Oxide: 1.8 Transition: 2.2 Fresh: 2.6 The bulk densities used were based on assumed regional values. They have not been determined by measurement.
Classification	• In general drill hole spacing of 25m x 25m was used, with some infill holes. • Even though the drilling density and geological understanding was considered adequate to place the classification into a higher category of Resource, the Resource has been classified as Inferred due to the lack of bulk density measurements. • The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits and Reviews	• There have been no other audits and reviews carried out using the same data as has been used in this study. Previous work produced similar Resource numbers (within 10% ounces).
Discussion of Relative Accuracy and Confidence	• The interpretation of the deposit is robust and it is unlikely that a different interpretation could be produced.

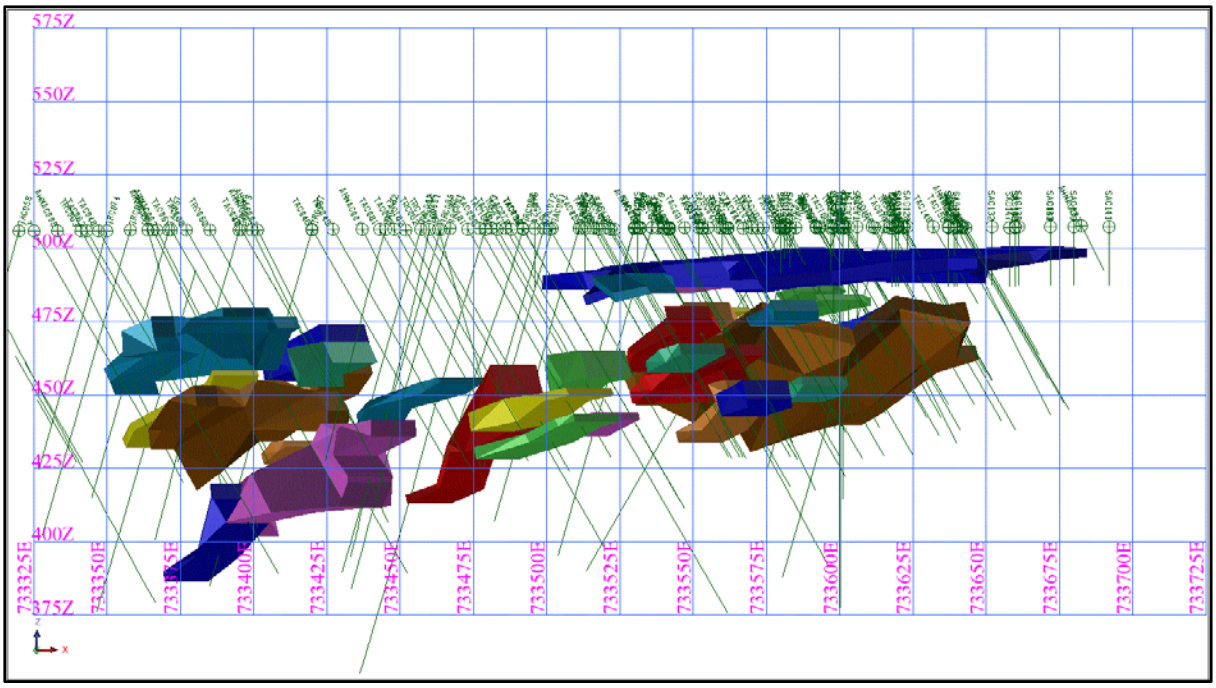

Figure 1: Tiger Moth - Long Section Looking North

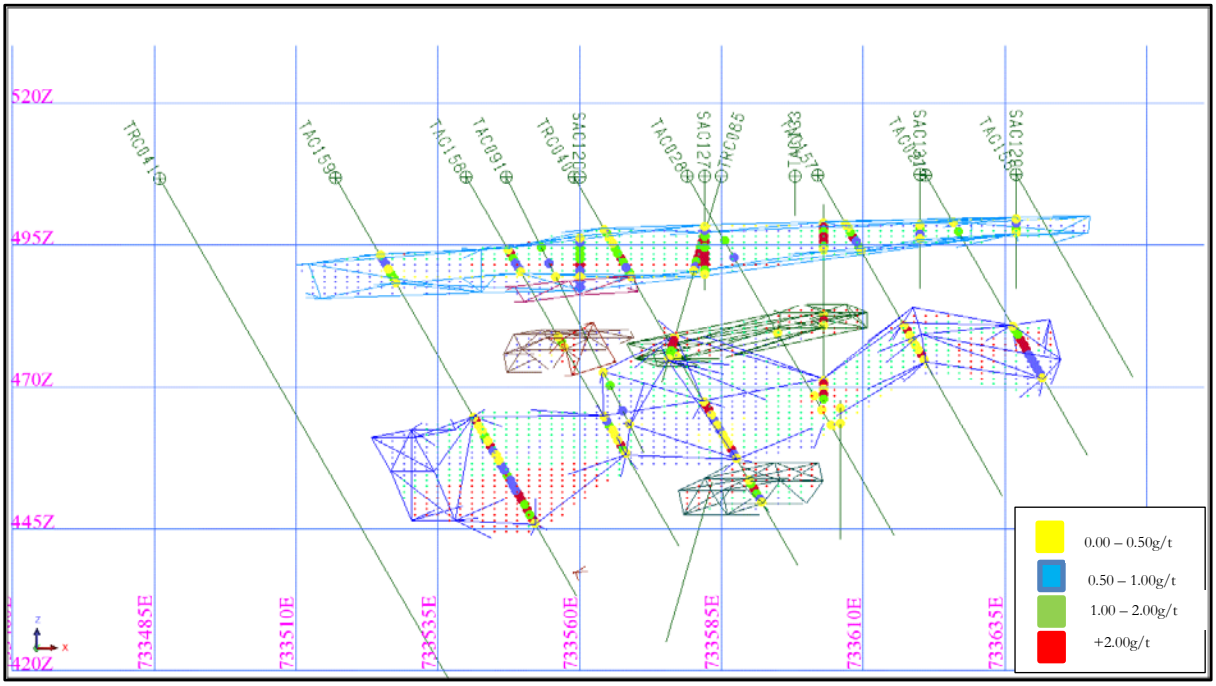

Figure 2: Tiger Moth – Section 6891150mN

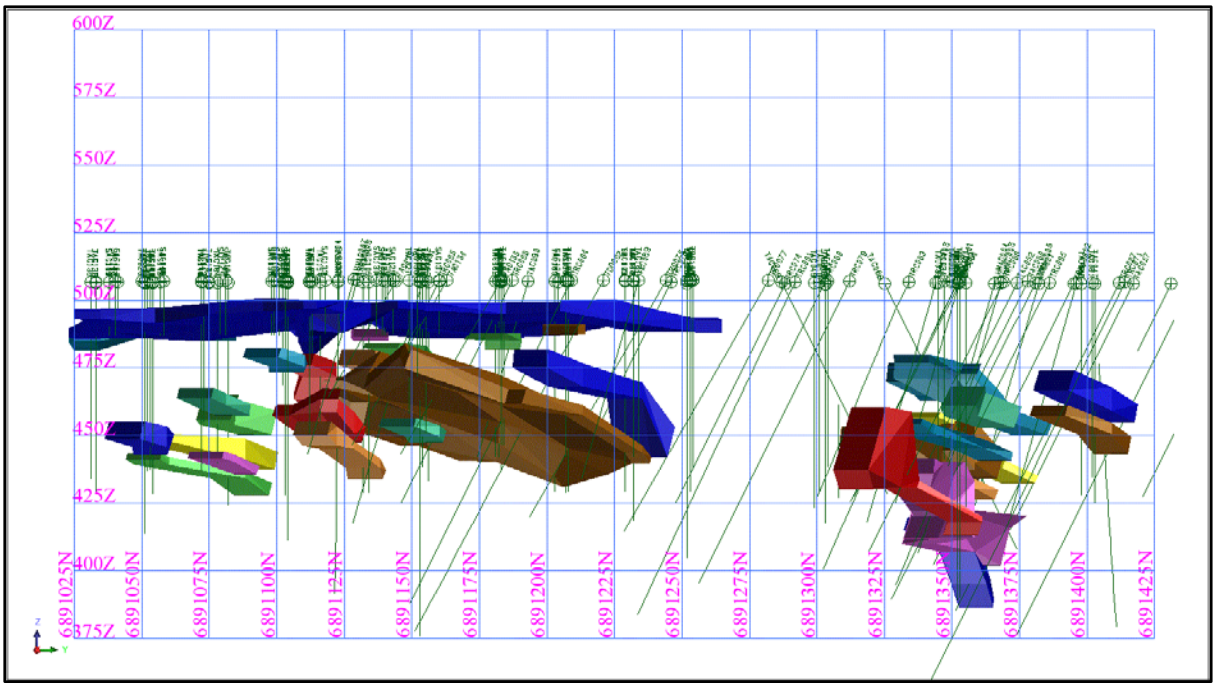

Figure 3: Tiger Moth - Long Section Looking West