

ASX release

27 January 2017

## December 2016 Quarterly Report

### Highlights

- **25 Slimline reverse circulation/aircore holes completed for 2,523m.**
- **These RC/AC holes were drilled to test Alto's models of oxide gold mineralisation at Indomitable, Piper and Tigermoth.**
- **8 Reverse Circulation (RC) drill holes completed for 1,304m.**
- **2 RC holes each drilled north of Lord Henry and Lord Nelson to test IP targets.**
- **Assay results expected early-mid February.**

#### CORPORATE

**ASX Code: AME****Board of Directors**Dr Jingbin Wang  
Non-Executive ChairmanDermot Ryan  
Managing DirectorStephen Stone  
Terry Wheeler  
Non-Executive Directors**Company Secretary**Sam Middlemas  
Company Secretary/CFO**Capital Structure****Issued Shares:** 151.8M  
**Issued Options:** Nil  
**Performance Shares:** 25M  
**Performance Rights:** 10.75M**Website:**[www.altometals.com.au](http://www.altometals.com.au)**For further information,  
Please contact:****Dermot Ryan  
Managing Director****Tel: 61 8 9381 2808****Fax: 61 8 9381 5545****admin@altometals.com.au**

In late December 2016, Alto Metals Limited (ASX: AME, "Alto" or "the Company") completed a maiden 3,827 metre RC and RC/AC drilling program at its 100% owned Sandstone Gold Project in Western Australia. 2,849 samples were sent to the laboratory (8-12Kg 1m AC samples and 3Kg 4m RC composite samples) but due to a substantial lift in drilling activity by other WA based gold miners and explorers in the December Quarter, sample turn-around has been slower than anticipated. Alto is advised that the AC samples are moving through the sample preparation stage and have commenced entering the analytical circuit of the laboratory. Results for the first 6 AC holes are expected by 3<sup>rd</sup> February, with the rest to follow throughout February.

The drilling was undertaken to provide a preliminary test for extensions to shallow oxide gold mineralisation at the Indomitable and nearby prospects, previously identified by Troy Resources Ltd (Troy), and to test induced polarisation (IP) anomalies immediately north of the Lord Nelson and Lord Henry deposits for sulphide associated mineralisation.

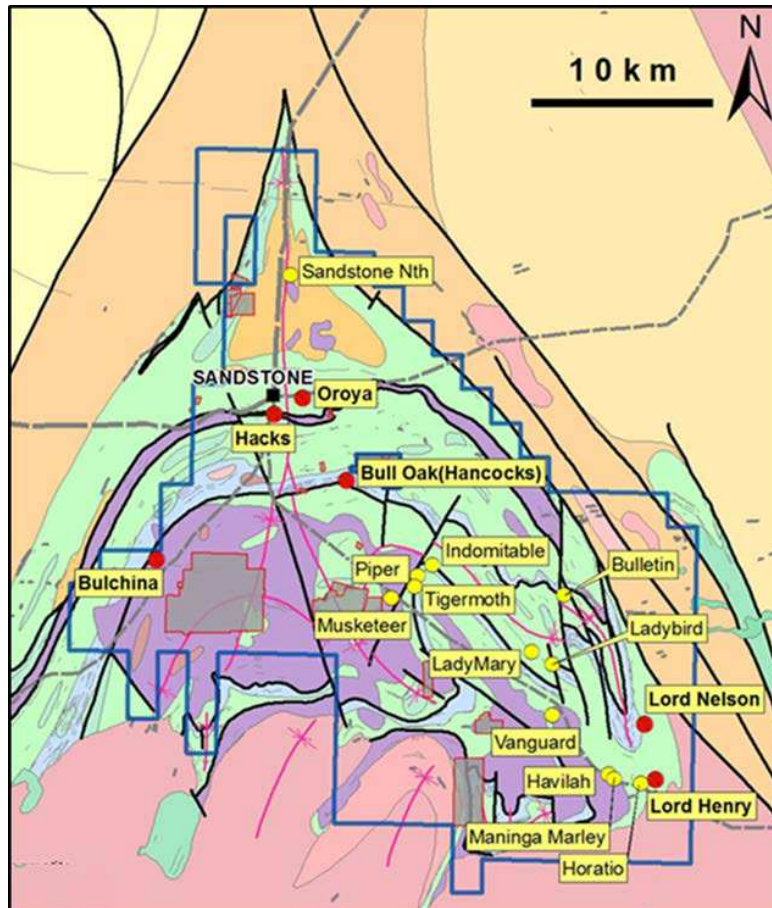
The Company also completed detailed airborne magnetic/radiometric surveys over the Sandstone area on 23<sup>rd</sup> October 2016. This data has been image processed and is being interpreted to identify litho-structural hosted gold targets for drill testing in 2017.

Consultants are in the process of finalising JORC (2012) compliant Mineral Resource estimates for Lord Henry and Lord Nelson.

## ACTIVITIES IN THE DECEMBER 2016 QUARTER

### Drilling in the Lady Hamilton, Lord Nelson and Lord Henry Areas

The oxide gold prospects within the Lady Hamilton area include **Indomitable, Indomitable East, Tigermoth, Piper and Musketeer**. Refer Figure 1 for geology and location.



**Figure 1. Regional Geological Interpretation of Sandstone Greenstone Belt with Known Gold Prospects**

These prospects were initially identified by Troy's grid based rotary airblast (RAB) drilling program and then followed up by aircore and RC drilling. They are broadly aligned along a major north-north-east striking shear corridor which appears to terminate magnetic units (interpreted to be either banded iron formations [Bif] or mafic volcanic units) which are prominent in detailed magnetic imagery.

The **Indomitable prospect** is located within an area of alluvium covering mafic and ultramafic rocks. At **Indomitable East**, there are a series of old gold workings striking east-south-east which have limited historical production. Alto completed 15 AC holes for 1,618m and two RC holes for 302m over the Indomitable area.

The **Tigermoth** and **Piper prospects** also occur within the same large area of alluvium. Magnetic data suggests considerable structural complexity where north-west and north-south trends merge. It has been partially tested by broad spaced drilling (generally 200m x 100m spacing) but this has not been tested the area definitively. Alto completed 4 AC holes for 743m and 2 RC holes for 246m over Tigermoth, and 2 AC holes for 162m at Piper.

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The collar location information for the 25 AC/RC holes and 8 deeper RC holes is tabulated in Appendices 1 and 2 at the back of this report. Refer Figure 2 for Lady Hamilton prospect areas.



**Plate 1: RC Drill Rig at Indomitabile**



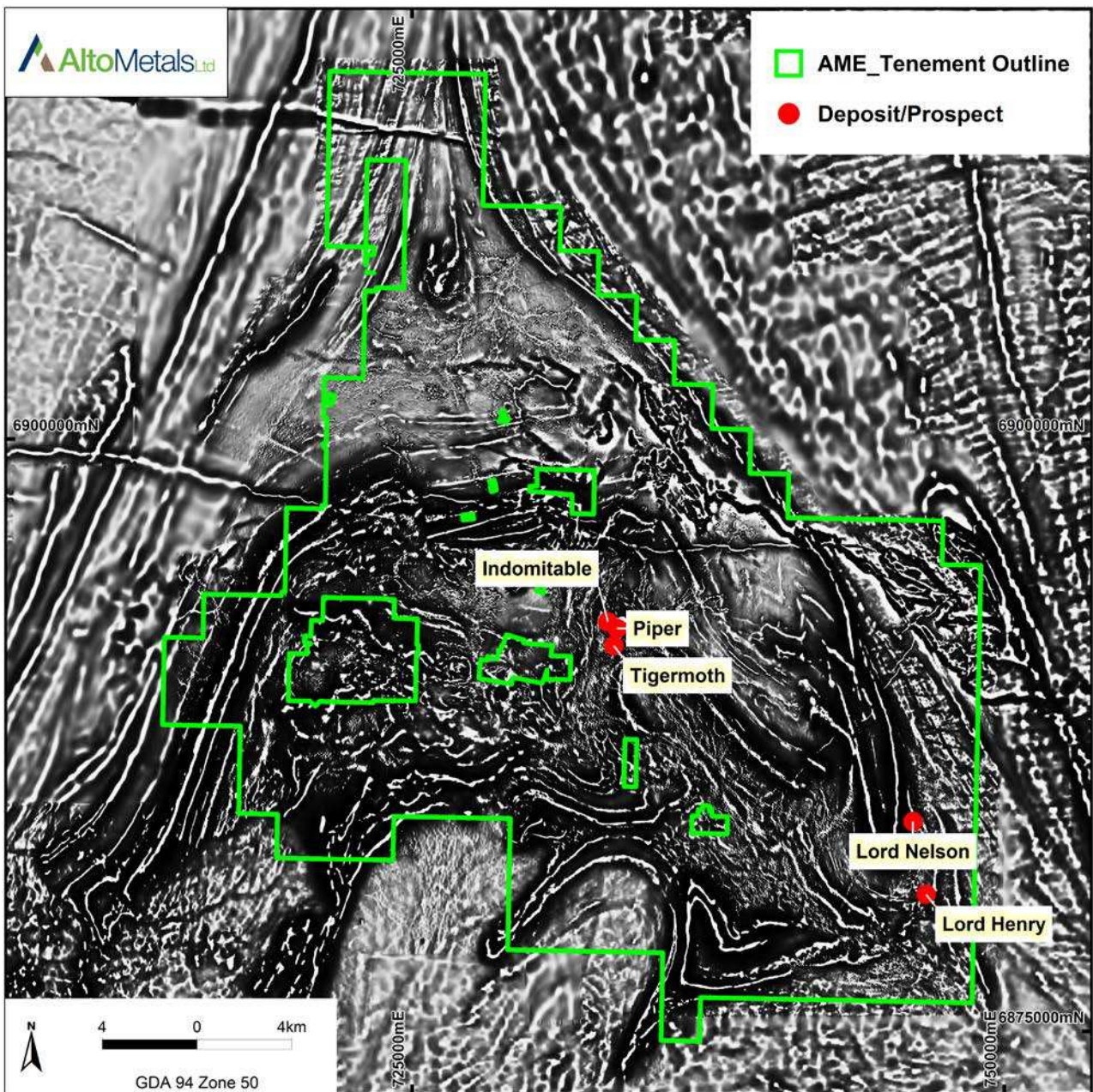
**Plate 2: AC/RC Drill Rig at Indomitabile**

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**Airborne Magnetic Survey**

Due to transported overburden, deep weathering and lack of outcrop in the Sandstone region, collection and interpretation of high quality airborne magnetic data is considered essential to define stratigraphy and favourable structures for emplacement of gold mineralisation.

On 23<sup>rd</sup> October the Company completed a detailed airborne magnetic/radiometric survey with 50m line spacing and 30m sensor height over portions of the Company's landholdings not previously surveyed in detail. The survey comprised 10,358 line km of mag/rad surveying covering an area of ~460 km<sup>2</sup>. Levelled and processed data and imagery is currently being interpreted by a specialist geophysical consultant.



**Figure 2. Magnetic Image Showing Prospects**

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### Lady Hamilton Induced Polarisation Survey

The recently completed 20 line km Lady Hamilton off-set pole-dipole IP survey was designed to be integrated with detailed magnetic data and former Troy gravity data, in order to map out stratigraphic boundaries, zones of deeper oxidation, and possible deeper sulphide accumulations. The survey data is also currently being processed by a specialist geophysical consultant.

### Other Projects

The Company holds granted tenements and tenement applications in Western Australia over five project areas (Lake Harris, Yalgoo, Peranbye, Gascoyne and Marmion) prospective for sand hosted "in situ recovery" style (ISR) and calcrete hosted uranium deposits. The current strategy is to maintain the uranium exploration portfolio, but the Company will review its commitment to uranium exploration in the near future. (Refer Appendix 4)

The Company also holds two Exploration Licence applications for gold on the contact between the Yilgarn Craton and Fraser Orogen east of Norseman.

As the Company's financial and technical resources are focussed solely on the Sandstone Gold Project, the Company's option to acquire an interest in the Cue Project tenement applications from prospector Bruce Legendre expired on 20<sup>th</sup> December without being exercised.

### **ALTO'S EXTERNAL RESEARCH ADVISORY COMMITTEE**

An External Research Advisory Committee (ERAC) chaired by Emeritus Professor David Groves has been commissioned to oversee Alto's research and development (R&D) activities. The committee consists of a multi-disciplinary team of geoscientists, and a primary researcher based at The University of Western Australia. The scope of the ERAC is to incorporate traditional and emerging exploration techniques and technologies for testing on Alto's project areas. The Sandstone Belt has been the focus of limited research to date, in comparison with other similar greenstone belts. The team is developing an understanding of the mineralising systems of the Sandstone Greenstone Belt.

### **CORPORATE**

On 12<sup>th</sup> October 2016, Alto announced the appointment of **Dr Jingbin Wang** as Non-Executive Chairman of the Board, coincident with the retirement of Ms Anna Mao. Dr Wang is a geologist with extensive international minerals experience, and since 2004 has been Chairman of Sinotech Minerals Exploration Co. Ltd. He has been President of the prestigious Beijing Institute of Geology for Mineral Resources since 2002, and is the Chairman and Director of East Africa Metals Inc. (TSX-V) and Nickel North Exploration Corp. (TSX-V) and a Director of Orca Gold Inc. (TSX-V).

On 2<sup>nd</sup> December 2016, Alto announced the appointment of **Mr Terry Wheeler** as Non-executive Director of the Company, and the resignation of Mr William Robertson. In the 1970's Mr Wheeler was Chief Chemist of the Kambalda Nickel Operations in the Eastern Goldfields of WA. He and his wife Christina established Genalysis Laboratory Services in 1975, and grew the company into one of the largest and most successful analytical companies in the southern hemisphere with over 300 technical staff. In 2007, Genalysis Laboratory Services was purchased by Intertek Group plc.

## CAPITAL RAISINGS

On 26<sup>th</sup> October 2016 the Company announced that it had raised \$1.0 million from a private share placement of 7,407,404 ordinary fully paid shares at 13.5 cents per share to professional and sophisticated investors as defined under Section 708 of the Corporations Act (2001). The issue price of 13.5 cents per share represented a 3% discount to the 5 day traded VWAP. Following the issue of these placement shares, the Company has 151,883,037 ordinary fully paid shares on issue. These additional funds were raised to allow a second round of drilling at Sandstone planned to commence in February 2017, and for working capital.

### Summary Capital Structure at 31 December 2016

Total Fully Paid Ordinary Shares on issue at 31 December 2016:	151,883,037
Unlisted Performance Shares on Issue at 31 December 2016:	25,000,000
Unlisted Performance Rights on Issue at 31 December 2016:	10,750,000

### Investments in ASX Listed Companies at 31 December 2016

Company	Security	Symbol	No. Shares	Price	Fair Mkt Value
Antipa Minerals Ltd	Shares	AZY	25,573,183	\$0.021	\$537,000
Enterprise Metals Ltd	Shares	ENT	2,500,000	\$0.012	\$30,000
				<b>TOTAL</b>	<b>\$567,000</b>

### Cash Position

The Company's cash position at 31 December 2016 was \$2.38 million.



**Dermot Ryan**  
**Managing Director**

### **Competent Person Statement**

*The information in this Report that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Dermot Ryan, who is an employee of Xserv Pty Ltd and a Director and security holder of the Company. Mr Ryan is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Ryan consents to the inclusion in this report of the matters based on information in the form and context in which it appears.*

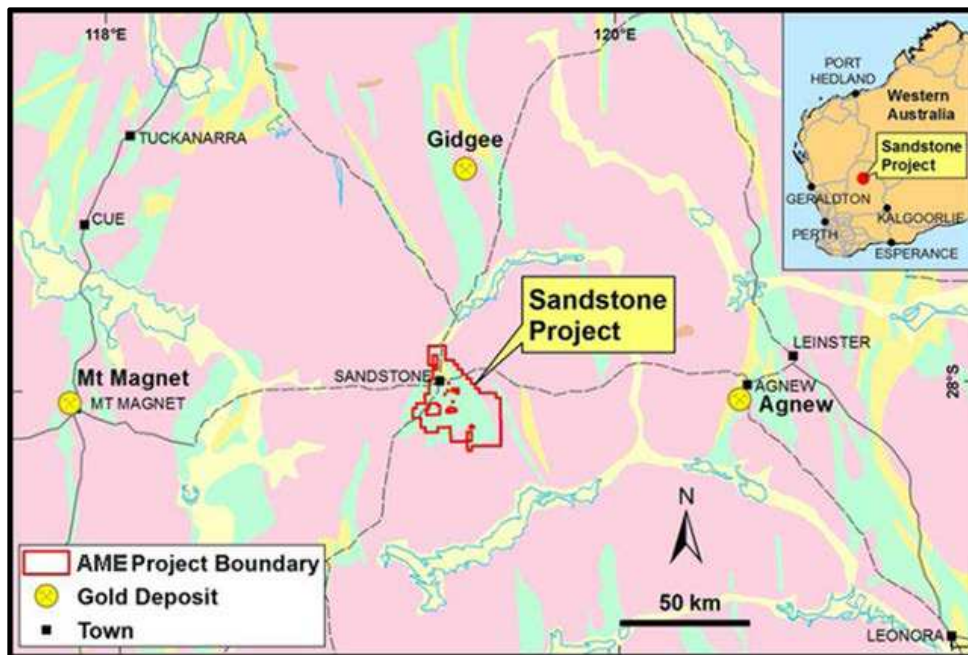
*All historic exploration results and mineral resources referred to in this Report were previously reported by Troy Resources NL pursuant to JORC Code 2004. Alto Metals Limited understands that this information has not been updated since to comply with the JORC Code 2012, but believes the information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

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## ABOUT ALTO METALS LIMITED

Alto Metals Limited is an Australian public company listed on the Australian Securities Exchange with 151,883,037 ordinary fully paid shares on issue. The Company completed the acquisition of the 723km<sup>2</sup> Sandstone Gold Project on 23<sup>rd</sup> June 2016.

The Sandstone Greenstone Belt has produced over 1.3 million ounces of gold from numerous underground and open pit mining operations since the discovery of gold at the end of the 19<sup>th</sup> Century, the lack of outcrop and the presence of deep weathering and alluvial cover has hampered exploration and discovery. Between 1994 and 2010, some 612,000 ounces was produced by Herald Resources Ltd and Troy Resources Ltd, largely from shallow oxide ore to feed the Nungarra Mill, and since 2010 when the mill was closed, there has been no exploration.



**Figure 3. Regional Geology showing Greenstone Belts and Location of Sandstone Project**

Alto has two immediate objectives at Sandstone:

1. the delineation of relatively shallow (free dig) oxide gold mineralisation that can be economically mined and trucked to one of several operating gold treatment facilities in the region, and
2. the delineation of further high-grade shear hosted primary (sulphide) gold mineralisation at depth in the immediate vicinity of mined oxide deposits such as Lord Nelson, Lord Henry and Bulchina through a combination of IP surveys and RC and diamond core drilling. This includes the re-modeling and re-estimation of remnant Indicated & Inferred Mineral Resources (JORC 2004 compliant) previously estimated by Snowdens on behalf of Troy Resources NL (Troy).

A longer-term objective is the discovery of new, large high-grade oxide and primary gold deposits, which will be assisted through a better understanding of the lithological and structural controls on gold mineralisation within the Sandstone Greenstone Belt.

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To achieve both the immediate and longer term objectives, Alto has commenced various exploration initiatives including:

- the capture and compilation of historic drilling and assay data from WA Department of Mines and Petroleum Mines Open File reports,
- a review of the geology and drill hole data for all known prospects in the region,
- the purchase and processing of existing high-resolution airborne magnetic data,
- the flying of a new detailed airborne magnetic survey,
- the commissioning of a JORC 2012 compliant Mineral Resource estimate for the Lord Nelson and Lord Henry deposits,
- the completion of a 3-Dimensional Induced Polarisation (3DIP) survey over the Lady Hamilton oxide gold area,
- the establishment of an External Research Advisory Committee chaired by Emeritus Professor David Groves, a leader in Archaean geology and orogenic gold mineralisation, to guide research in the hunt for the million ounce deposit, and
- the completion of a 3,827m combined aircore/RC drilling program in November-December 2016 to test extensions of known oxide gold mineralised systems and several IP targets.

More extensive geophysical and drilling programs will be implemented in 2017, following the receipt of assays from the 2016 maiden AC/RC drilling program, and the progressive compilation and review of Alto's Sandstone database.

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**Appendix 1: Details of RC/AC Drill Collars**

Hole	Grid	East	North	RL (m)	Dip (Deg)	Azimuth (Deg)	Depth (m)	Prospect
AHMAC001	MGA94_50	733435	6891353	498	-60	120	94	Tigermoth
AHMAC002	MGA94_50	733366	6891394	498	-60	120	99	Tigermoth
AHMAC003	MGA94_50	733400	6891343	498	-60	120	102	Tigermoth
AHMAC004	MGA94_50	733365	6891364	498	-60	120	111	Tigermoth
AHMAC005	MGA94_50	733330	6891383	498	-60	120	99	Tigermoth
AHMAC006	MGA94_50	733720	6891130	498	-60	120	97	Tigermoth
AHMAC007	MGA94_50	733680	6891130	498	-60	120	67	Tigermoth
AHMAC008	MGA94_50	733640	6891130	498	-60	120	74	Tigermoth
AHMAC009	MGA94_50	733180	6892295	498	-60	90	138	Indomitable
AHMAC010	MGA94_50	733220	6892295	498	-60	90	113	Indomitable
AHMAC011	MGA94_50	733280	6892280	498	-60	90	24	Indomitable
AHMAC012	MGA94_50	733300	6892260	498	-60	90	105	Indomitable
AHMAC013	MGA94_50	733260	6892260	498	-60	90	123	Indomitable
AHMAC014	MGA94_50	733160	6892280	498	-60	90	123	Indomitable
AHMAC015	MGA94_50	733180	6892260	498	-60	90	126	Indomitable
AHMAC016	MGA94_50	733400	6892180	498	-60	90	105	Indomitable
AHMAC017	MGA94_50	733240	6892180	498	-60	90	138	Indomitable
AHMAC018	MGA94_50	733320	6892180	498	-60	90	129	Indomitable
AHMAC019	MGA94_50	733280	6892180	498	-60	90	136	Indomitable
AHMAC020	MGA94_50	733360	6892180	498	-60	90	91	Indomitable
AHMAC021	MGA94_50	733200	6892180	498	-60	90	106	Indomitable
AHMAC022	MGA94_50	733680	6891920	499	-60	270	81	Piper
AHMAC023	MGA94_50	733720	6891920	499	-60	270	81	Piper
AHMAC024	MGA94_50	734660	6892420	506	-60	180	81	Indomitable East
AHMAC025	MGA94_50	734660	6892460	506	-60	180	80	Indomitable East

\*Grid: MGA94\_50, All holes are located within E57/1031

**Appendix 2: Details of RC Drill Collars**

Hole	Grid	East	North	RL (m)	Dip (Deg)	Azimuth (Deg)	Depth (m)	Prospect
AHMRC001	MGA94_50	733173	6892315	498	-60	90	92	Indomitable
AHMRC002	MGA94_50	733165	6892310	498	-60	90	210	Indomitable
AHMRC003	MGA94_50	733400	6891368	495	-60	120	114	Tigermoth
AHMRC004	MGA94_50	733532	6891124	495	-60	90	132	Tigermoth
ALNRC001	MGA94_50	745815	6884988	476	-60	79	180	Lord Nelson
ALNRC002	MGA94_50	745840	6884580	474	-60	79	180	Lord Nelson
ALHRC001	MGA94_50	746596	6881040	454	-60	165	264	Lord Henry
ALHRC002	MGA94_50	746616	6880955	458	-60	165	132	Lord Henry

\*Grid: MGA94\_50, All holes are located within E57/1031

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**Tenement Information as Required by Listing Rule 5.3.3**
**Appendix 3: Gold Projects - Tenement Schedule at 31 December 2016**

Tenement	Project	Interest Held	Holder	Lease Status
E57/1029	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E57/1030	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E57/1031	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E57/1033	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E57/1044	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E57/1054	Sandstone	100%	Sandstone Exploration Pty Ltd	Application
P57/1377	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
P57/1378	Sandstone	100%	Sandstone Exploration Pty Ltd	Granted
E63/1768	Fraser Range	100%	Alto Metals Limited	Application
E63/1769	Fraser Range	100%	Alto Metals Limited	Application

**Note:** Sandstone Exploration Pty Ltd is a wholly owned subsidiary of Alto Metals Limited

**Appendix 4: Uranium Projects - Tenement Schedule at 31 December 2016**

Tenement	Project	Interest Held	Holder	Lease Status
E08/2651	Gascoyne	100%	Alto Metals Limited	Application
E28/1958	Harris Lake	100%	Alto Metals Limited	Granted
E59/1855	Peranbye	100%	Alto Metals Limited	Granted
E59/2060	Yalgoo	100%	Alto Metals Limited	Granted
E59/2180	Yalgoo	100%	Alto Metals Limited	Granted
E29/980	Marmion	100%	Alto Metals Limited	Application

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