

**ASX Code: ORN** 

## **Issued Capital:**

Ordinary Shares: 556M

Options: 85M

## **Directors:**

## **Denis Waddell**

Chairman

## **Errol Smart**

Managing Director, CEO

#### **Bill Oliver**

**Technical Director** 

#### Alexander Haller

Non-Executive Director

## **Management:**

### **Martin Bouwmeester**

Company Secretary & Business Development Manager

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# Disseminated Sulphides Intersected in First Drill Hole into New Large IP Target at Marydale Gold-Copper Project, South Africa

57.3m zone of disseminated sulphides at newly defined IP anomaly

## **Highlights:**

- Semi-continuous, arcuate chargeability anomaly extending some 1.7km from the previously drilled NW Quadrant area delineated from recent geophysical surveys.
- Magnetic and gravity surveys provide important data to support the geological model for mineralisation and potential factors influencing the orientation of the mineralised zone.
- First diamond drill hole to test the newly defined IP anomaly is in progress and has intersected a wide zone of disseminated sulphides between 100.8m and 158.1m down-hole.
- Sampling has been completed with results expected in 2-3 weeks.
- Drilling is continuing with a second rig mobilised to test the IP anomaly.
- Drilling also continues at Kantienpan Zinc-Copper Deposit (intersection of electromagnetic (EM) target in coming days) and Prieska Zinc-Copper Project (targeting near surface Zn-Cu mineralisation).

**Orion Gold NL (ASX: ORN)** is pleased to advise that it has intersected a broad zone of disseminated sulphides in the first diamond hole drilled to test a large target delineated from recently completed geophysical surveys at the **Marydale Gold-Copper Project** in the Northern Cape Province, South Africa.

The extensive chargeability anomaly, which is semi-continuous over 1.7km, extends from the previously drilled NW Quadrant area, where mineralised intercepts such as 50.4m at 2.68g/t gold (including 11.4m at 4.68g/t gold), and 64m at 1.55g/t gold (including 5m at 5.09g/t gold) have been returned from historical and recent drilling (refer Appendix 1 as well as ASX releases 5 October 2016 and 18 November 2015).

Encouragingly, the Company's first drill hole directly testing the induced polarisation (IP) anomaly has intersected wide zone of disseminated sulphides broadly consistent with the modelled position of the chargeability anomaly (Figure 1 and 3).





OWCD032

OWCD034

**Figure 1**: Sulphide-bearing zones in recent hole OWCD032 and current hole OWCD034 at the Marydale Gold-Copper Project.

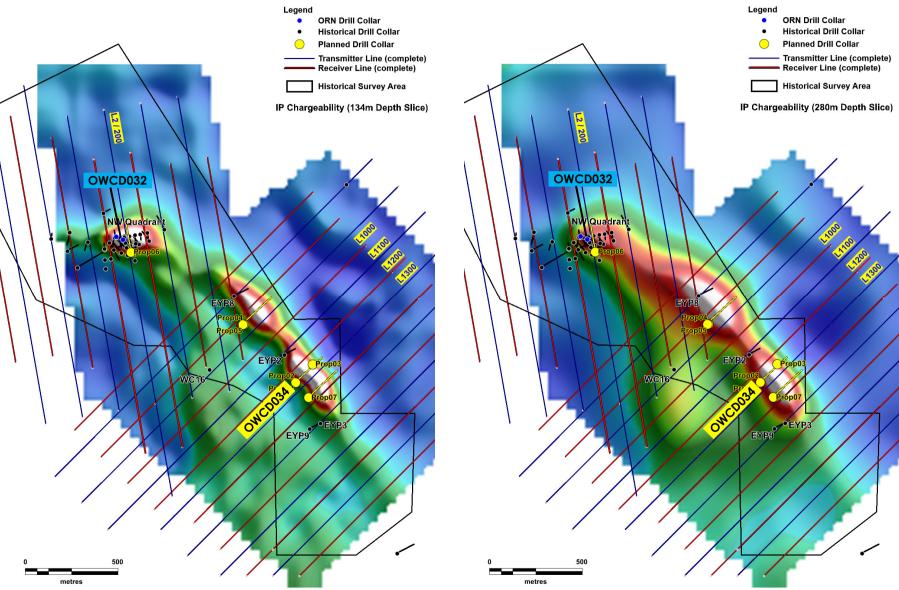


Figure 2: Depth slices of IP response (chargeability) showing planned drilling. Left: 134m below surface. Right: 280m below surface.

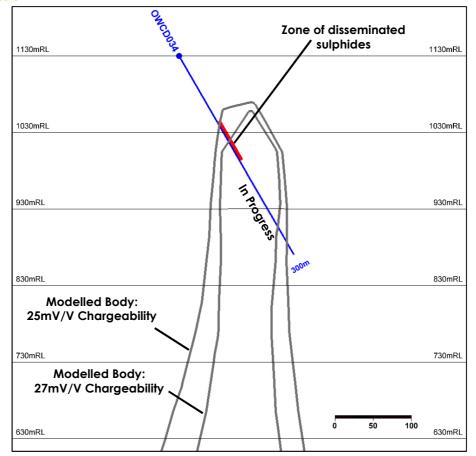


Figure 3: Cross-section showing OWCD034 and inversion models of chargeability response from IP survey. Note that OWCD034 is currently at 205.5m with a target depth of 300m.

As discussed in the ASX release of 5 October 2016, the chargeability anomalies are believed to be related to gold-copper mineralisation intersected in drilling within the Marydale Gold-Copper Project.

OWCD034 is still in progress at the time of writing and further drilling is planned to test other parts of the chargeability anomaly both at depth and along strike (Figure 2).

The chargeability features mapped by the Company's high-powered 3D IP survey correlate to an arcuate shear zone observable in ground magnetic data (Figure 4). The current hypothesis is that the gold-copper mineralisation has been re-mobilised from a volcanogenic sulphide source during deformation and concentrated within and adjacent to the shear zone.

High-resolution magnetic and gravity data is being used to further develop the geological model for mineralisation as further data is generated by the ongoing drilling. OWCD034 is currently at 205.5m with a wide zone of disseminated sulphides intersected between 100.8m and 158.1m. Figure 4 shows the location of this zone relative to the modelled chargeability anomalies (detailed inversion model sections are included in the ASX release of 5 October 2016).

Sampling of the sulphide-bearing zone has been completed and despatched for analysis. Any further zones of sulphide bearing material will also be fast-tracked for analysis. Results are anticipated in 2-3 weeks.

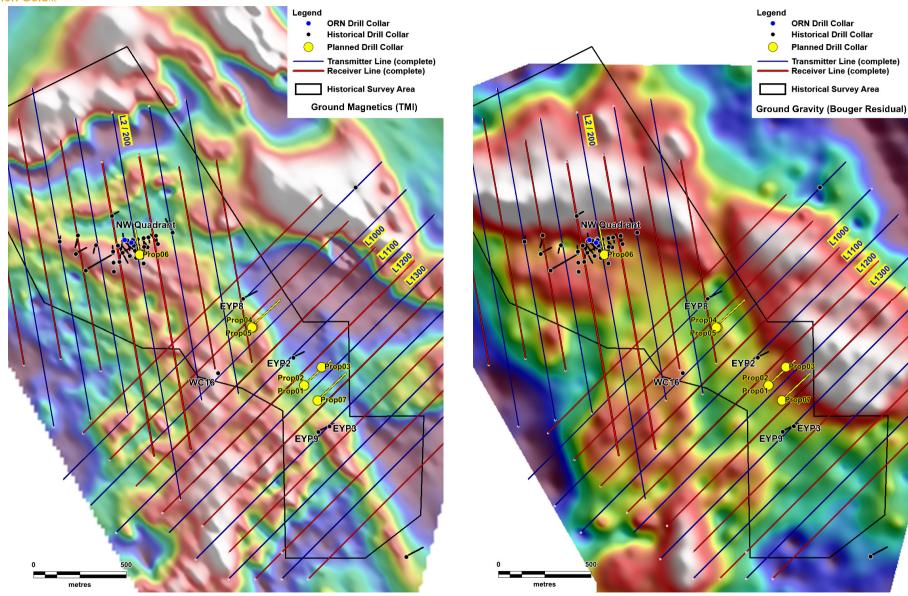


Figure 4: Images from recently completed ground magnetic (left) and ground gravity (right) surveys.



Once drilling of OWCD034 is completed, drilling of a deeper hole, designed to test the chargeability anomaly down-dip from OWCD034, will commence. Data from the IP survey indicates that the chargeability anomalies are more continuous along strike at depth and deeper drilling will test changes in the system with increasing depth (Figure 2). In addition, a second drill rig is being mobilised to test another of the shallower anomalies identified in the 3D IP survey.

The Marydale Gold-Copper Project is being acquired as part of Orion's option to acquire Agama Exploration & Mining (Pty) Ltd (**Agama**). In July 2015, the Company announced that it had signed a binding term sheet giving Orion the right to acquire the unlisted company, Agama, a South African-registered company which, through its subsidiary companies, ultimately holds an effective 73.33% interest in the Prieska Zinc-Copper Project and the Marydale Gold-Copper Project (Figure 5).

The Company also continues to drill near surface targets at the Prieska Zinc-Copper Project with massive sulphides continuing to be intersected in drilling (ASX release 2 November 2016). In addition, drilling is ongoing at the Kantienpan Zinc-Copper Deposit with both holes nearing the modelled depth of the EM target. It is anticipated that the target zone will be reached in coming days.

Errol Smart

**Managing Director and CEO** 

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## **About Orion**

Orion Gold is focused on acquiring, exploring and developing large tenement holdings or regional scale mineral opportunities in world-class mineral provinces. The Company has acquired quality projects in proven mineral provinces.

Recently, the Company has secured an outstanding growth and diversification opportunity in the global gold and base metals sectors and has secured options and earn-in rights over a combined area of 1790km<sup>2</sup> on the highly prospective Areachap belt, North Cape Province of South Africa (Figure 5). These include:

An option to acquire an advanced volcanic massive sulphide copper-zinc project with near-term production potential. The option gives Orion the right to acquire an effective 73.33% interest in a portfolio of projects including an exploration project at the Prieska Copper Project, located near Copperton in the Northern Cape province of South Africa, and the Marydale Prospecting Right, a virgin gold discovery of possible epithermal origin, located 60 km from the Prieska Copper Project. The Company is progressing extensive due diligence investigations. (refer ASX release 18 November 2015).



#### Orion Gold<sub>NL</sub>

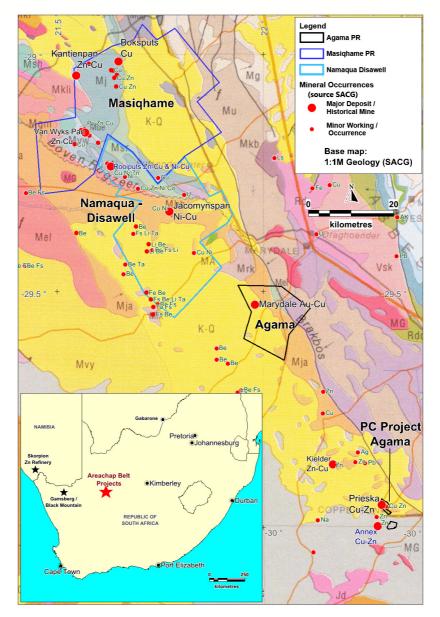
- An earn in right to ultimately earn a 73% interest in a 980km² prospecting right area located approximately 80 km north of the Prieska copper Project. The project area contains several VMS and VHMS zinc and copper targets including the advanced stage Kantienpan zinc copper project. (refer ASX releases 29 April 2016 and 31 May 2016).
- An earn in right to ultimately earn an 80% interest, via a South African registered special purpose vehicle which will be 74% owned by Orion, to prospecting and mining right applications covering a combined and partially overlapping area of 626km². The mineral rights areas include an advanced stage ultramafic hosted nickel copper project, analogous to the geology of the Fraser Range, Western Australia. Several VMS and VHMS copper-zinc targets are also located within this mineral rights package. (refer ASX release 14 July 2016).

The Company also continues to explore a large tenement package on the Connors Arc in Queensland, where a significant intermediate sulphidation, epithermal gold and silver system has been identified at Aurora Flats. The project lies between the Cracow and Mt Carlton epithermal deposits. The Company is increasing its focus on this project, following promising reports from expert consultants, and its fieldwork has led to the discovery of substantial epithermal systems at the Veinglorious and Chough Prospects.

The Company also holds a substantial tenement holding in the Albany-Fraser Belt, host to Australia's two most significant discoveries of the last decade (the Tropicana Gold Deposit and the Nova Nickel-Copper-Cobalt Deposit). Part of this tenement holding was acquired from entities associated with Mark Creasy who is a large shareholder in Orion. Orion's intensive, systematic exploration programs have successfully defined 34 targets to date by a combination of geological, geochemical and geophysical methods.

Additionally, the Company owns the Walhalla Project located in Victoria, which is prospective for gold, copper – nickel and PGEs.

The Company has an experienced management team with a proven track record in exploration, development and adding shareholder value.



**Figure 5:** Regional geology map of the Areachap Belt showing prospecting rights currently under option to Orion and noted mineral occurrences as per published data from South African Council for Geoscience.

## **Competent Persons Statement**

The information in this report that relates to Orion's Exploration Results at the PC and Marydale Projects complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Errol Smart, Orion Gold NL's Managing Director. Mr Smart (PrSciNat) is registered with the South African Council for Natural Scientific Professionals, a ROPO for JORC purposes and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code. Mr Smart consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears. The Exploration Results are based on standard industry practises for drilling, logging, sampling, assay methods including quality assurance and quality control measure as detailed in Appendix 2.



#### **Disclaimer**

This release may include forward-looking statements. Such forward-looking statements may include, among other things, statements regarding targets, estimates and assumptions in respect of metal production and prices, operating costs and results, capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These forward-looking statements are based on management's expectations and beliefs concerning future events. Forward-looking statements inherently involve subjective judgement and analysis and are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of Orion. Actual results and developments may vary materially from those expressed in this release. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. Orion makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release. All information in respect of Exploration Results and other technical information should be read in conjunction with Competent Person Statements in this release. To the maximum extent permitted by law, Orion and any of its related bodies corporate and affiliates and their officers, employees, agents, associates and advisers:

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- disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).



## Appendix 1: Significant Intersections from the Marydale Gold-Copper Project.

Drill hole	East (UTMz34S)	North (UTMz34S)	Depth (m)	From (m)	To (m)	Length (m)	Αυ (g/t)	Cυ (%)
OWCD032	594756	6733064	128.0	22	86	64	1.55	0.26
			incl.	48	69	21	2.93	0.34
			incl.	49	54	5	5.09	0.37
OWCD033	594720	6733080	150.4	67.5	92.5	25	1.81	0.31
			incl.	70.1	81.7	11.6	2.63	0.36
			incl.	71.4	74.45	3.05	4.23	0.45
				134.1	137.5	2.4	1.61	0.32
				145.0	147.9	2.9	1.17	0.29
OWCD034	595680	6732300	***	Drilling in Progress				

- 1. All intersections > 1m > 0.3 g/t gold are quoted and include up to 2 metres internal waste.
- 2. OWCD034 is currently at 205.5 metres, drilling is ongoing.
- 3. It is recommended that the supporting information contained in Appendix 2 is read in conjunction with these results.



Appendix 2: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results.

## <u>Section 1 Sampling Techniques and Data</u>

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<ul> <li>Drilling</li> <li>Diamond core drilling targeted to verify and aid interpretation of historical drilling.</li> <li>Sampling carried out under supervision using procedures outlined below including industry standard QA/QC.</li> <li>Samples submitted for analysis by ALS is pulverized in its entirety and split to obtain a 0.2g sample for digestion and analysis.</li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Geophysical surveys</li> <li>IP surveying is an industry standard geophysical technique in exploration for disseminated and semi massive sulphide hosted base metal deposits. After a comprehensive trial of different techniques the 3D pole-dipole method was determined to provide superior data for interpretation of sub surface features.</li> <li>Gravity and magnetic data is used to determine characteristics indicative of sub-surface geology</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Diamond core drilling using NQ sized core.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Samples are individually weighed to quantify recovery and variations in recovery are recorded on the sample ledger (e.g. small samples).</li> <li>No grade variation with recovery noted.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</li> </ul>	<ul> <li>All holes logged on 1m intervals using visual inspection of both full and split core.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul> <li>Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Qualitative logging of colour, grainsize, weathering, structural fabric, lithology, alteration type and sulphide mineralogy carried out.</li> <li>Quantitative estimate of sulphide mineralogy and quartz veining.</li> <li>Logs recorded at the drill site and entered into digital templates at the project office.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>NQ core cut at core yard and half core taken as sample.</li> <li>Sample preparation was undertaken at ALS Laboratory Johannesburg, an ISO accredited laboratory. ALS utilises industry best practise for sample preparation for analysis involving drying of samples, crushing to &lt;5mm if required and then pulverising so that +85% of the sample passes 75 microns.</li> <li>Certified reference materials (CRM), blanks and replicates are inserted every 30 samples and analysed with each batch.</li> <li>Lab supplied CRM's, blanks and replicates are analysed with each batch.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Samples from drilling were submitted to ALS Chemex in Johannesburg. Samples were analysed for base metals using a four acid digest and ICP-OES and for gold by fire assay with AAS finish.</li> <li>External quality assurance of the laboratory assays is monitored by the insertion of blanks, duplicates and CRM's.</li> <li>Coarse field duplicates consisting of a split sub-sample of the original crushed sample material.</li> <li>Three CRMs are alternated through the sample stream and where possible matched to the material being drilled.</li> <li>Two blank are used (pulp and chips).</li> <li>No external laboratory checks have been carried out at this stage, apart from the bias test mentioned above.</li> <li>Geophysical surveys</li> <li>IP survey data shown used 3D pole-dipole method with 100m offsets. This had</li> </ul>
		IP survey data shown used 3D pole-dipole method with 100m offsets. This had been determined to generate superior data for location, definition and



Criteria	JORC Code explanation	Commentary
		<ul> <li>interpretation of sub surface features.</li> <li>Survey utilises IRIS Elrec PRO 10 channel receivers and a Scintrex 15kVA transmitter.</li> <li>Ground magnetic data collected using Geometrics Cesium Vapour or GEM Potassium magnetometer with GPS and base station.</li> <li>Ground gravity data collected using Scintrex CG-5 Gravity meter with Leica TRK GPS system.</li> </ul>
Verification	The verification of significant intersections by either independent or	Drilling
of sampling and assaying	<ul> <li>alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>The Managing Director is the Competent Person and is personally supervising the drilling and sampling along with experienced geologists.</li> <li>Both the Managing Director and the Technical Director have reviewed the raw laboratory data and independent geologists have confirmed the calculation of the significant intersections.</li> </ul>
		Geophysical surveys
		<ul> <li>IP and other geophysical data collected on site and validated by geophysical technician daily. Data (raw and processed) sent to consultant geophysicist for review and quality control. Further processing of data carried out by the Company's consultant geophysicist.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillhole and station locations have been located using handheld GPS with an accuracy of +/- 5 metres.</li> <li>All of the Orion drill hole collars will be surveyed by a qualified surveyor using a differential GPS which may result in minor adjustments to coordinate data.</li> <li>Downhole surveys are completed using an electronic multi-shot instrument.</li> <li>Topographic control is based on topographic data derived from public data.</li> <li>All data is collected in UTM WGS84 Zone 34 (Southern Hemisphere) and these coordinates are used in diagrams shown.</li> </ul>
Data . ,	Data spacing for reporting of Exploration Results.	Drilling
spacing and distribution	<ul> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Current drilling is targeting IP anomalies, utilising the same pad but intersecting target at vertical spacing of approximately 200m.</li> </ul>
		Geophysical surveys
		IP survey carried out using 100m spaced offset receiver lines from a central transmitter line, 100m spaced stations along each line.



Criteria	JORC Code explanation	Commentary
		<ul> <li>Ground magnetic surveys carried out by "continuous walking" method, with continuous measurements taken while walking along 100m spaced lines.</li> <li>Ground gravity surveys carried out on a 100m x 100m spaced grid, oriented NW-SE consistent with regional stratigraphy.</li> </ul>
Orientation	Whether the orientation of sampling achieves unbiased sampling of	Drilling
of data in relation to geological structure	<ul> <li>possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drilling is oriented perpendicular, or at a high angle to, the previously interpreted attitude of the mineralisation.</li> <li>As a result most holes intersect the mineralisation at an acceptable angle.</li> <li>The intersections will be corrected once the mineralised zone is modelled in three dimensions and local attitude can be accurately determined.</li> <li>No sampling bias is anticipated as a result of hole orientations.</li> </ul>
		<ul> <li>Geophysical surveys</li> <li>Surveys carried out on lines oriented relative to mineralisation intersected in historical drilling and anomalies delineated in previous Anglo American Prospecting Services (AAPS) IP survey.</li> </ul>
		<ul> <li>IP survey carried out in two orientations to ensure measurements taken perpendicular to interpreted stratigaphy, mineralisation and other features. All data merged in 3D.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Chain of custody is managed by the Company. Samples were stored on site in a secure locked building and then freighted directly to the lab.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been carried out at this stage.

# <u>Section 2 Reporting of Exploration Results</u>

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> </ul>	<ul> <li>The mineral rights to the property are vested in the State and the Act regulates the exploration and mining industry in South Africa. A prospecting right in accordance with the Act was granted to a subsidiary company of Agama (Subsidiary) to prospect for copper, lead, zinc, silver and gold for a</li> </ul>



Criteria	JORC Code explanation	Commentary
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	<ul> <li>period of two years effective from 10 February 2010.</li> <li>The Prospecting Right was granted in respect of the farm Eyerdop Pan 58 comprising Portion 1 (Neeldale), Portion 2 (Witkop), Portion 3 (Eyerdop Put) and Portion 4 (Rooipan), situated in the Magisterial/ Administrative District of Prieska, Northern Cape Province. The total areas measures 17555.3 Ha in extent.</li> <li>An application to renew the above Prospecting Right for a further period of three years was submitted to the Department of Mineral Resources (DMR). The Subsidiary has been informed by the DMR that the renewal has been granted</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The Marydale Project was explored by AAPS as part of two phases of regional exploration carried out in the general area. The first exploration phase was conducted between July 1975 and June 1982. The second phase of exploration was carried out between August 1988 and March 1989. Initial exploration activities on the project conducted during the 1970's and 1980's were focused primarily on the search for VMS.</li> <li>Towards the end of the 1980's AAPS recognised the potential of gold mineralisation associated with volcanic massive sulphide deposits. The exploration focus during 1988 – 1989 by AAPS shifted from base minerals to gold mineralisation as the primary objective. This work led to the discovery of the Witkop gold mineralisation within the Marydale Project.</li> <li>In early 2010, the Subsidiary was granted the prospecting rights to the project and additionally acquired from AAPS all the exploration data covering their work during 1975 – 1982 and 1988 – 1989 including drill core, drill chips and surface geochemistry data. The Subsidiary subsequently undertook geological mapping, and imagery analysis, geophysical re-interpretation, review surface geochemistry and several phases of exploration percussion and diamond drilling.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The project area is underlain by rocks from the Areachap Group. The Areachap Group comprises the eastern most group of rocks of the Gordonia Sub-province, Namaqua Metamorphic Province. The Areachap Group occurs along a narrow belt (about 280 km long and up to 30 km wide) from north of Upington in the north to Prieska in the South.</li> <li>Stratiform/strata bound lenses of massive to semi-massive sulphides occur in the northern, central and southern sectors of the Areachap Group. The</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>northern sector is host to the Areachap deposit, the central sector is host to the Boksputs, Kantienpan, Van Wyks Pan, Rooiputs and Jacomyns Pan deposits and the southern sector hosts the Copperton, Annex and Kielder deposits.</li> <li>The project area is underlain by quartzite, conglomerate, schist and gneiss of the Areachap Group, Namaqua-Natal Metamorphic Complex.</li> <li>The Witkop Gold prospect is hosted within quartz-feldspar-biotite-hornblende gneiss, quartz-feldspar-biotite gneiss, amphibolite, biotite-mica schist and quartz-feldspar gneiss. The precursor rocks are believed to be andesitic, dacitic and rhyodacitic volcanic rocks. Mineralisation occurs as a series of intermittently developed lenses in chloritic schist (shear zones or drag folds). The parallel to sub-parallel lenses dip steeply to the south-west with a general ENE-WSW to E-W strike. The vein contacts are generally sharp but some sulphides with associated Au mineralisation also occur in the sheared wall rocks.</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Refer to Appendix 1 and the notes attached thereto.
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of</li> </ul>	<ul> <li>Significant intercepts are calculated by averaging the length weighted assay results for gold (Au) within the interval in question.         Intercepts presented area all gold assays &gt; 0.3g/t using a minimum downhole intercept width of 2m and a maximum consecutive internal dilution of 2m.     </li> <li>Extreme high grades over the sampling widths are uncommon. Refer</li> </ul>



Criteria	JORC Code explanation	Commentary		
	<ul> <li>such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Appendix 2 of ASX release 17 August 2016 for example.		
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	All intersections are reported as downhole lengths as insufficient information is available to calculate true widths.		
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Refer to Figures 1 - 4		
Balanced	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	Drilling		
reporting		Representative results have been included only.		
		IP survey		
		Diagrams show all results from IP survey collected to date.		
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>The Company's previous ASX releases have detailed historical exploration works on the Areachap Project and surrounds.</li> <li>Refer ASX releases of 18 November 2015, 15 July 2016, 17 August 2016 and 5 October 2016.</li> </ul>		
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Further drilling planned as detailed in announcement.		