# Sorion Gold<sub>NL</sub>

**ASX Code: ORN** 

### **Issued Capital:**

Ordinary Shares: 484M

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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# New Phase of Drilling Commences at Key Zinc-Copper and Gold-Copper Targets in South Africa

Drilling underway to test significant EM conductor below Kantienpan Zn-Cu Deposit and deep IP anomalies at Marydale Au-Cu Project

# **Highlights:**

- Drilling has commenced at the Kantienpan Zinc-Copper Deposit to test the recently discovered KN1 EM conductor.
- Drilling also planned to commence within days at the Marydale Gold-Copper Project to test newly delineated IP anomalies identified away from the previously drilled NW Quadrant area.

**Orion Gold NL** (**ASX: ORN**) is pleased to advise that a new phase of drilling has commenced to test recently discovered geophysical targets at both the **Kantienpan Zinc-Copper Deposit** and **Marydale Gold-Copper Project**, both of which form part of the Company's extensive portfolio of projects within the Areachap Belt in the Northern Cape Province of South Africa (Figure 5).

Drilling has already commenced at Kantienpan to test the very strong conductive feature identified by recent high-powered fixed loop ground electromagnetic (**HP\_FLEM**) surveys (refer ASX release 4 October 2016), downplunge of historical drilling into shallow, lower conductive features on the same stratigraphic horizon.

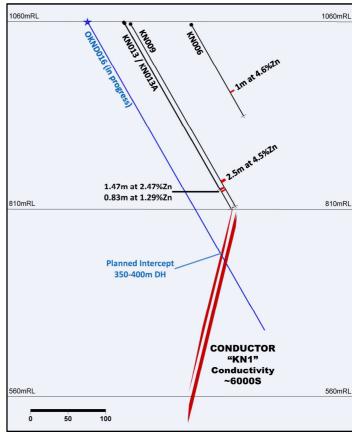


Figure 1: Orthogonal view showing the drill-hole currently in progress to test the new KN1 conductor defined in the recent Orion survey at Kantienpan along with historical drill-holes and significant intersections.

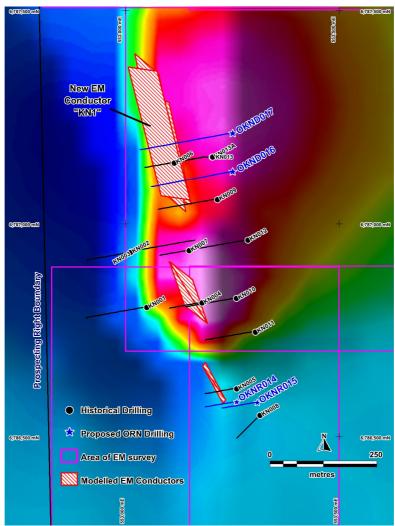


# Kantienpan Zinc-Copper Deposit

Orion recently exercised its option to acquire a 50% interest in Masiqhame Trading 855 Pty Ltd (**Masiqhame**), which holds the prospecting right containing the Kantienpan Deposit and 14 other known zinc-copper occurrences located in the field, and under the terms of the option agreement, can earn up to a 73% interest in Masiqhame (refer ASX release 29 September 2016).

The KN1 conductor is a strong, late channel conductor located down-dip of an historical shallow conductor detected in historical EM surveying (see Figure 1) and tested by historical holes KN006 (1m at 4.59% Zn and 0.24% Cu) and KN013A (1.47m at 2.57% Zn) (refer ASX release 31 May 2016).

The KN1 conductor is modelled to be substantially larger, extending the highly anomalous strike for at least 250m northward, and is highly conductive (~6000-8000S), being ~3 times the conductance of the shallower, drilled, conductor, yet it was not detected in the previous survey due to limitations with the low-powered system used at the time and the use of a much higher base frequency.



**Figure 2**: Plan showing response from Channel 30 from the recently completed HP\_FLEM survey along with modelled conductors (including KN1) from survey data and historical and proposed drilling at Kantienpan.



The HP\_FLEM survey also covered the area already tested by 14 historical drill-holes completed by Iscor (refer ASX release 31 May 2016) and Orion's first drill hole at Kantienpan (OKNR014; refer ASX release 29 September 2016). The HP\_FLEM confirmed that a shallower conductor, with a conductance of ~2000S, is detected at the point where OKNR014 returned an intersection of 7m at 6.44% Zn and 0.43% Cu (refer ASX release 29 September 2016). 11 of the 14 historical drill holes drilled into, or along strike from, this shallow conductor returned significant intersections greater than 1% Zn (refer ASX Release 31 May 2016).

The KN1 conductor has three times higher conductance than any other conductor detected in the EM survey. A positive correlation between higher electromagnetic (**EM**) conductance, attributed to elevated pyrrhotite content associated with the sphalerite (Zn values) in historical drilling, provides encouragement for the potential of the KN1 conductor to be associated with high pyrrhotite-sphalerite mineralisation.

# Marydale Gold-Copper Project

At Marydale, a high-powered induced polarisation (**IP**) survey has continued following the successful trial surveys discussed in the ASX release of 5 October 2016. This survey is designed to verify the historical IP surveys carried out, as well as completely cover the prospective horizon for mineralisation.

The IP survey is being undertaken using higher powered and more modern instruments than the previous survey carried out by Anglo American Prospecting Services (AAPS) in 1973, with the objective of looking deeper and providing more defined targets. The complex sheared and folded stratigraphy may result in higher grade or larger lenses of mineralisation being preserved at depth with blind-to-surface orebodies which the IP survey may detect.

The ongoing survey has better defined the deeper IP anomalies identified in the trial survey (Figures 3 and 4), which have been found to have a significant strike extent along a NNW-trending structural corridor. These anomalies are characterised by both moderate to high chargeability and high resistivity responses, which is interpreted to be related to finer disseminated, more discrete sulphide grains.

Given the compelling nature of this target, the Company has decided to mobilise a diamond core rig to test the anomaly. The aim is to obtain oriented core through the anomaly to enable the geological setting to be properly characterised, and to determine the geological relationship to the broad zones of near surface gold-copper mineralisation intersected in historical drilling and further tested by Orion earlier this year (refer ASX releases 18 November 2015, 25 July 2016, 17 August 2016 and 5 October 2016).

The geophysical surveys are also continuing to detect shallow chargeability anomalies related to the mineralisation intersected in drilling, and tracing this known mineralisation down-dip and along strike will be the focus of a future drill program.

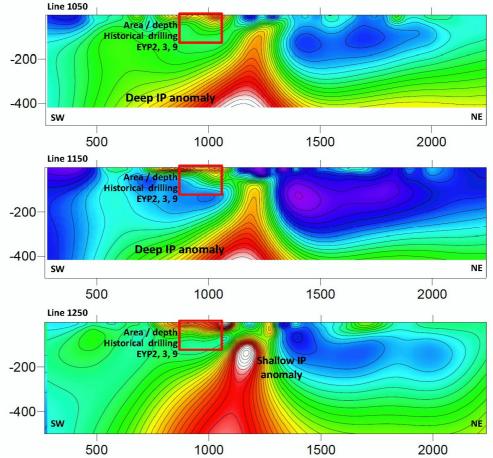


Figure 3: 3D chargeability inversion model sections from recently acquired IP data. Refer Figure 4 for location of section lines, noting that inversions are modelled midway between two lines (i.e. Line 1250 is modelled using data from Line 1200 and 1300).

The results of the IP survey are being integrated with the ground magnetic survey data, which has yielded results as shown in Figure 4. A number of linear features and anomalies (both magnetic highs and lows) are observed even in the preliminary data. Further review and interpretation of the integrated data will be undertaken in the coming weeks as the IP surveys are completed, with the objective of refining drill targets.

The deeper IP anomalies were not previously detected and remain untested. While further surveying will yield more detailed information about these new targets, it is worth noting that they are located along the regional trend (NNW-SSE) from the NW Quadrant where the majority of successful historical drilling has been carried out. A clear structural corridor linking the targets is evidenced in the high-resolution ground magnetic data.

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 the signing of 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.



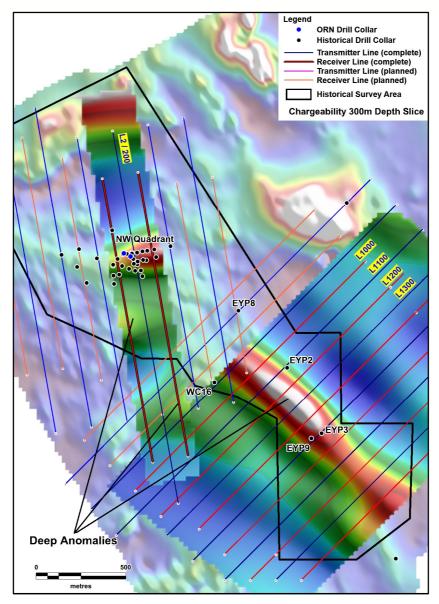


Figure 4: Depth slices of IP response (chargeability) 300m below surface over TMI image of recently acquired high resolution ground magnetic data.

**Errol Smart** 

**Managing Director and CEO** 

# **Company Enquiries:**

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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:

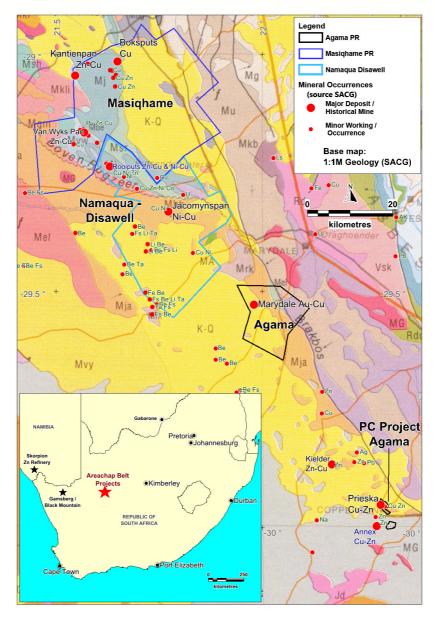
- An option to acquire an advanced volcanic massive sulphide copper-zinc project with nearterm production potential. The option gives Orion the right to acquire an effective 73.33% interest in a portfolio of projects including an exploration project at the Prieska Copper Project, located near Copperton 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).
- 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 Exploration Results at the Kantienpan Deposit and Marydale Project 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 1.



### **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:

- disclaim any obligations or undertaking to release any updates or revisions to the information to reflect any change in expectations or assumptions;
- do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this release, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and
- disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).



Appendix 1: 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> <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>EM survey (Kantienpan / Masiqhame)</li> <li>Ground electromagnetic surveys are industry standard geophysical techniques in exploration for sulphide hosted base metal deposits. The fixed loop technique was used for this survey as the orientation of the mineralisation was known and to minimise environmental impacts. The area and depth targeted by these surveys was planned based on previous drilling and survey results.</li> <li>IP survey (Marydale)</li> <li>IP surveys are industry standard geophysical techniques 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> </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>	No new drilling results presented so not applicable.
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>	No new drilling results presented so not applicable.



Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate 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>	No new drilling results presented so not applicable.
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>	No new drilling results presented so not applicable.
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>EM survey (Kantienpan / Masiqhame)</li> <li>Fixed loop ground EM survey carried out by Spectral Surveys using a 1000m x 1000m single turn loop, 200A transmitter HPTX + SQUID + SM24. Stations measured on 100m x 100m grid, with 50m x 50m infill on known mineralisation margins.</li> <li>IP survey (Marydale)</li> <li>IP survey data shown used 3D pole-dipole method with 100m offsets. This had been determined to generate superior data for location, definition and 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> </ul>



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or 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>No new drilling intersections are presented so not applicable</li> <li>IP and EM 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>Station locations have been located using handheld GPS with an accuracy of +/- 5 metres.</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 spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <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> </ul>	EM survey (Kantienpan / Masiqhame)  Survey carried out using 100m spaced lines, 100m spaced stations.  In fil of 50m x 50m spacing on margins of known mineralisation.  IP survey (Marydale)  IP survey carried out using 100m spaced offset receiver lines from a central
Orientation of data in relation to geological structure	<ul> <li>Whether sample compositing has been applied.</li> <li>Whether the orientation of sampling achieves unbiased sampling of 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</li> </ul>	transmitter line, 100m spaced stations along each line.  EM survey (Kantienpan / Masiqhame)  Survey carried out on lines oriented relative to mineralisation intersected in historical drilling.  IP survey (Marydale)  Survey carried out on lines oriented relative to mineralisation intersected in
Sample security	<ul> <li>sampling bias, this should be assessed and reported if material.</li> <li>The measures taken to ensure sample security.</li> </ul>	historical drilling and anomalies delineated in previous AAPS IP survey.  No new drilling results presented so not applicable.
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> <li>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.</li> </ul>	<ul> <li>EM survey (Kantienpan / Masiqhame)</li> <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 Masiqhame to prospect for all minerals for a period of five years effective from 12 March 2014.</li> <li>The Prospecting Right was granted in respect of the farm Koegrabe 117 comprising Portions 2 – 11; Boksputs 118 Portions 1, 7, 8, 9, 10; Kantien Pan 119 Portions 1 and 2; Wan Wyks Pan Portions 1 – 5; and Zonderpan Portions 1, 5, 6, 7, 8 situated in the Magisterial/ Administrative District of Kenhardt, Northern Cape Province. The total area measures 98435.8548 Ha in extent.</li> </ul>
		<ul> <li>IP survey (Marydale)</li> <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 (Agama Subsidiary) to prospect for copper, lead, zinc, silver and gold for a period of three 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 Agama 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>EM survey (Kantienpan / Masiqhame)</li> <li>Much of the background information in this announcement is sourced from: <ul> <li>Roussouw, D, 2003. A technical risk evaluation of the Kantienpan volcanic-hosted massive sulphide deposit and its financial viability. M.Sc. thesis, University of Pretoria, 118 pp.</li> </ul> </li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>Du Toit, M.C, 1998. The metallogeny of the Upington-Kenhardt Area.         Explanation: Metallogenic Sheets 2820 and 2920, South African Council for Geoscience, 108p.</li> <li>Previous exploration in the northern Areachap belt including at the Kantienpan Deposit was carried out by Iscor, with exploration also carried out by Anglo American, Phelps Dodge, Anglovaal and Newmont.</li> <li>Exploration activities across the Project area included surface geochemical sampling, geophysical surveying and diamond core drilling.</li> </ul>
		<ul> <li>IP survey (Marydale)</li> <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 volcanogenic massive sulphide (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 Agama 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 Agama 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.	The project areas are 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.



Criteria	JORC Code explanation	Commentary
		<ul> <li>Stratiform/strata bound lenses of massive to semi-massive sulphides occur in the northern, central and southern sectors of the Areachap Group. The 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 Kantienpan Deposit is a VMS deposit, a globally significant and well studied mineralisation style.</li> <li>The Witkop Gold prospect (Marydale) 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 veins and lenses in chloritic schist (shear zones or drag folds). The parallel to sub-parallel veins dip steeply to the north 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>	No new drilling results presented so not applicable.



Criteria	JORC Code explanation	Commentary
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 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>	No new drilling results presented so not applicable.
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>	No new drilling results presented so not applicable.
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 in text of announcement.
Balanced reporting	<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>	Diagrams show all results from geophysical 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>	The Company's previous ASX releases have detailed historical exploration works on the Areachap Project and surrounds.
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> </ul>	Further drilling planned as detailed in announcement.



Criteria	JORC Code explanation	Commentary
	<ul> <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>	