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ASX Code: ORN**Issued Capital:**

Ordinary Shares: 556M

Options: 85M

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New massive sulphide discovery at Kantienpan Zinc-Copper Deposit, South Africa

First drill hole intersects 24.66m zone of massive and disseminated sulphides at recently defined EM conductor including 1.91m of massive sulphides

Highlights:

- New zone of massive and disseminated sulphides intersected at the level predicted by the recent high-powered ground EM survey.
- Second drill-hole nearing target depth.
- Mineralised zone includes 1.91m of massive sulphides.
- Sampling completed with assay results expected in 2-3 weeks.
- Strong new intercept at the Prieska Zinc-Copper Project, where ongoing drilling targeting near-surface Zn-Cu mineralisation has returned a latest intersection in OCOD035 of:
 - 20.6m at 1.36% Zn, 0.63% Cu, 0.11g/t Au incl. 2.6m at 5.2% Zn.
- Drilling continuing at the Marydale Gold Project testing the newly identified IP anomaly. Initial results from drilling away from the NW Quadrant have returned anomalous assays confirming the geological model and providing vectors to stronger metal accumulations.

Orion Gold NL (ASX: ORN) is pleased to update on its intensive, ongoing drilling program at its Areachap Belt Projects in the Northern Cape Province, South Africa.

At the **Kantienpan Zinc-Copper Deposit**, the first diamond hole drilled to test the KN1 conductor delineated from a recent high-powered ground electromagnetic (EM) survey has intersected a wide **zone of disseminated and massive sulphides**. The KN1 conductor was modelled to be substantially larger and more conductive than the shallower conductor which was tested by historical drilling (refer ASX release 4 October 2016).

OKND017 has confirmed that the KN1 conductor is a result of massive and disseminated sulphide mineralisation (see Figures 1 and 2). Sampling of the sulphide-bearing zones is underway, with analytical results anticipated in 2-3 weeks. A second drill hole, OKND016, is currently nearing the target interval.

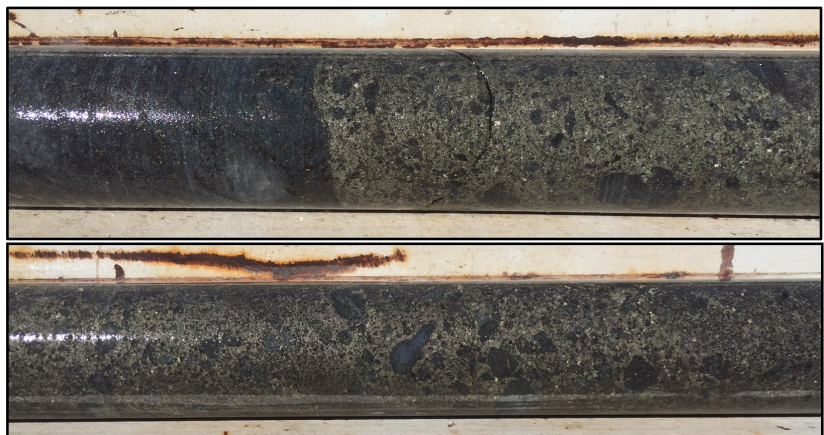


Figure 1: Sulphide-bearing zones at approximately 404m – 406m in OKND017 at the Kantienpan Zinc-Copper Deposit.

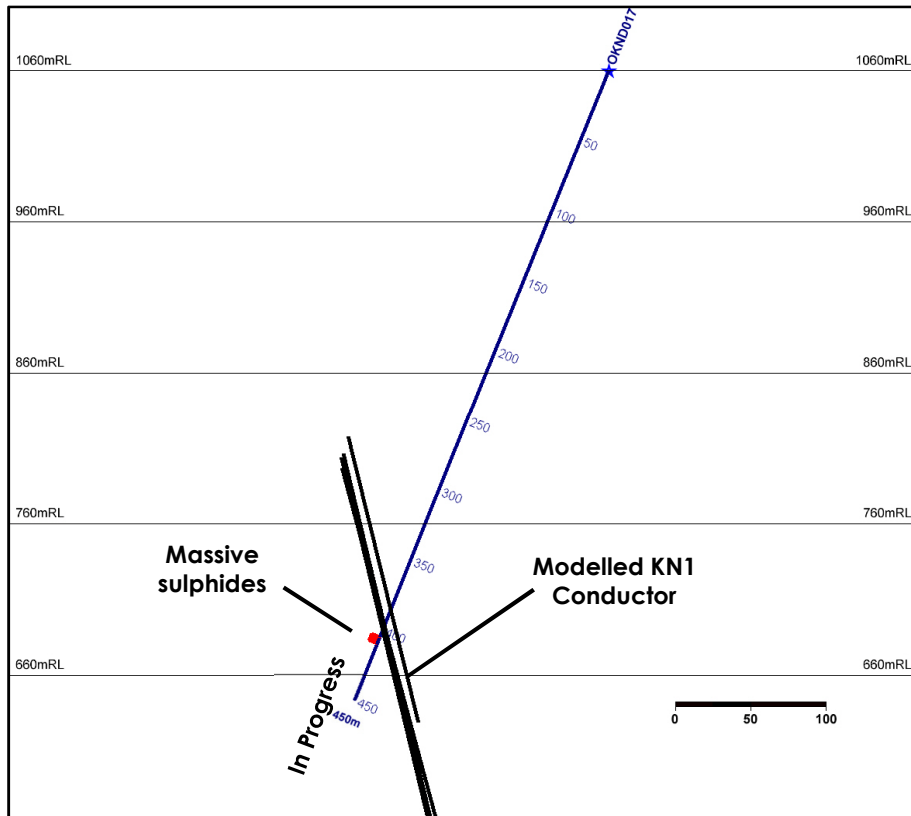


Figure 2: Cross-section showing OKND017 and KN1 conductive body as modelled from both ground and downhole EM. Note that OKND017 is currently at 443.3m with a target depth of 450m.

The mineralised package intersected in OKND017 comprised intervals of massive sulphides (principally, pyrrhotite, pyrite, sphalerite and chalcopyrite) which are disrupted by a late quartz vein, clusters of disseminated sulphide veining and banded sulphides/stringers in a gneissic unit.

Following completion of holes OKND016 and OKND017 (Figure 3), a further drill hole will be targeted between the two holes and further down-dip in the conductor. Both structural data and down-hole EM surveys, which are currently underway, will be utilised to optimise further follow-up drilling.

The Kantienpan Deposit lies within the prospecting right held by Masiqhame Trading 855 Pty Ltd (**Masiqhame**), in which Orion has exercised its option to acquire a 50% interest (subject to regulatory approval) and under the option agreement can earn up to a 73% interest (refer ASX release 29 September 2016, Figure 6).

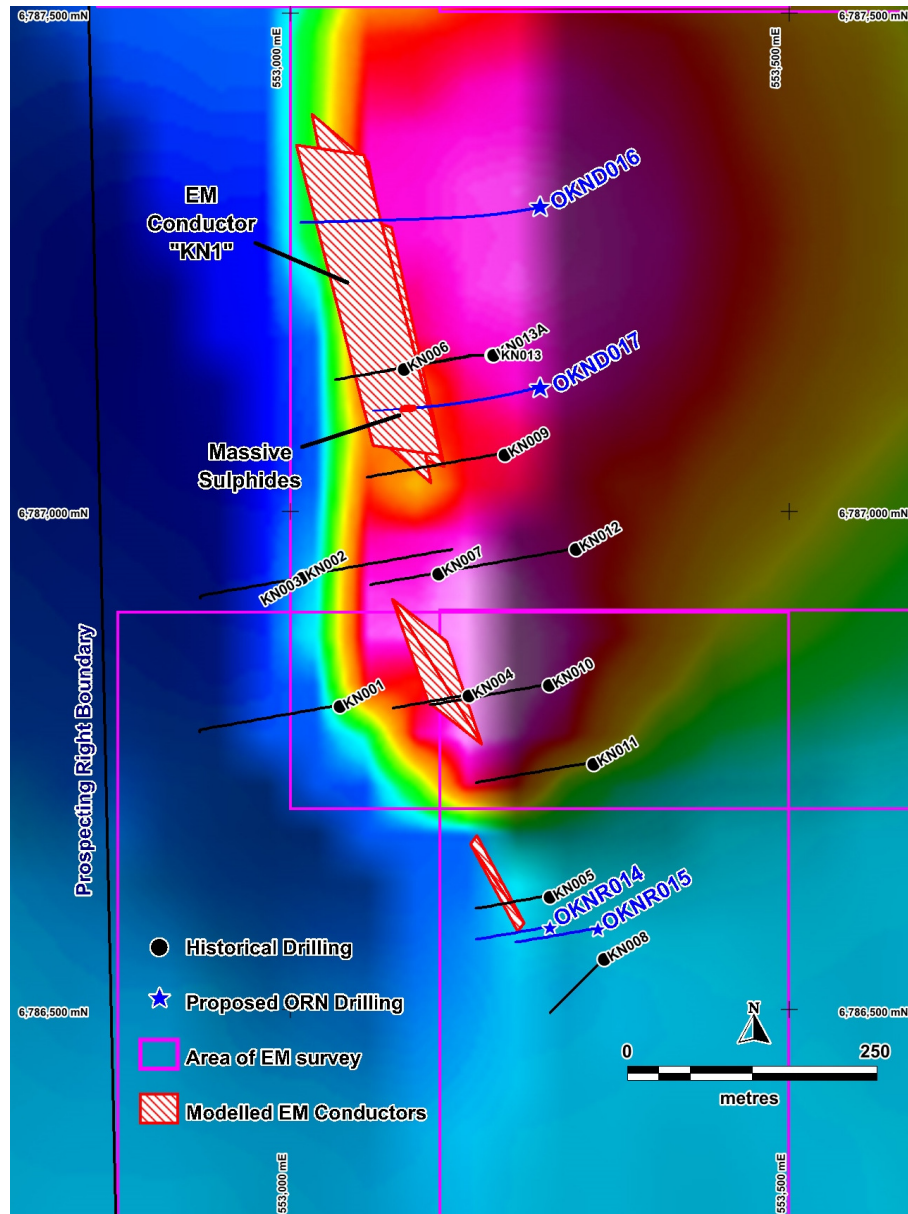


Figure 3: Plan showing Orion's drilling at Kantiengan including OKND017 on response from Channel 30 from Orion's recent HP_FLEM survey. Historical drilling and modelled conductors (including KN1) from survey data are also shown.

Prieska Zinc-Copper Project

Further results have been received from diamond core drilling at the +105 Level Target at the historic Prieska copper mine, zinc-copper project (**PC Project**), with the holes located to test areas up-dip from historical mining areas (Figures 4). Drill hole OCOD035 returned a strong intercept of **20.6m at 1.36% Zn, 0.63% Cu and 0.11g/t Au from 156.1m down-hole** (corresponding to approximately 70m below surface) including 2.6m at 5.2% Zn.

The PC Project covers unmined dip and strike extensions from historical underground mining, with mineralisation having previously been delineated by extensive drilling and geophysics. The current drilling program is designed to confirm, in-fill and extend the historical drilling at the +105 Level Target, where it is targeting mineralisation that would be amenable to extraction via open pit mining (Figure 4).

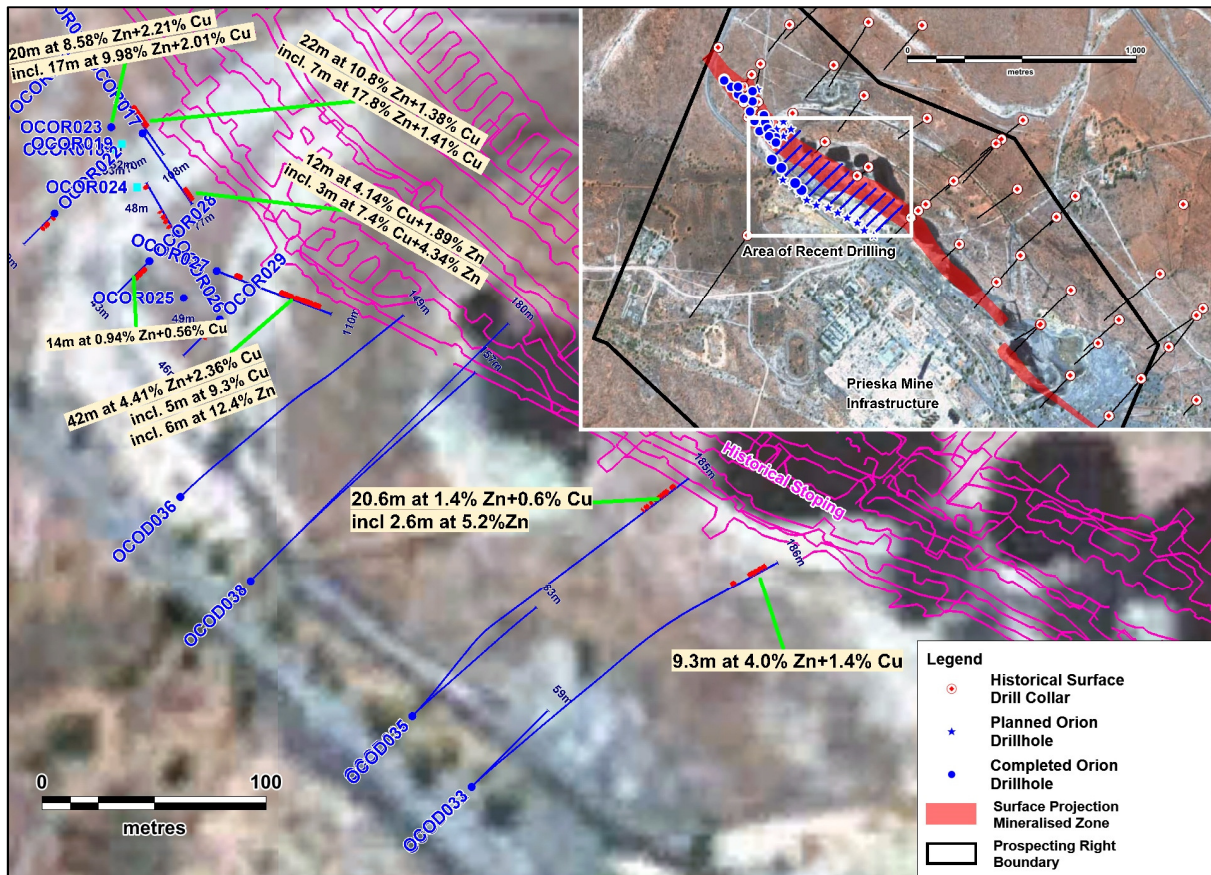


Figure 4: Plan showing the PC Project with completed, proposed and historical drilling at the +105 Level Target.

Diamond core drilling at the +105 Level Target is utilising an innovative shallow drilling method to drill holes to test mineralisation up-dip of historical underground mining. By utilising inclinations of between 15 and 30 degrees from the horizontal, the holes can be planned to intersect the mineralisation at targeted elevations.

All significant intersections are tabulated in Appendix 1, including those stated in the ASX releases of 25 July 2016, 22 August 2016 and 13 September 2016 with best results including:

- **22m at 10.8% Zn, 1.38% Cu and 0.3g/t Au from 57m, including:
7m at 17.8% Zn and 1.41% Cu (OCOR016);**
- **20m at 8.58% Zn, 2.21% Cu and 0.3g/t Au from 48m, including:
17m at 9.98% Zn and 2.01% Cu (OCOR023);**
- **42m at 4.41% Zn, 2.36% Cu and 0.42g/t Au from 55m, including:
5m at 9.28% Cu from 55m & 6m at 12.4% Zn from 75m (OCOR027);**
- **9.3m at 4.0% Zn, 1.4% Cu, 0.13g/t Au and 9.0g/t Ag from 170m (OCOD033);**
- **12m at 4.14% Cu, 1.89% Zn and 0.29g/t Au from 57m, including:
3m at 7.4% Cu and 4.34% Zn (OCOR017); and**
- **20.6m at 1.36% Zn, 0.63% Cu, and 0.1g/t Au from 156.1m, including:
2.6m at 5.2% Zn (OCOD035).**

Drilling is currently in progress with hole OCOD038 (Figure 4) underway. Assays are pending for holes OCOD036 and OCOD037, which intersected massive sulphides over 38.91m (103.02 - 141.93m) and 6.71m (144.41 - 151.20m) respectively.

As announced in previous ASX releases, modelling of the mineralisation intersected in the drilling is now underway with the objective of producing Mineral Resources compliant with the JORC Code in early 2017 and feeding these resource estimates into pre-feasibility studies with a target completion date of mid-2017. To aid these studies a large diameter diamond core hole is being drilled to provide material for metallurgical testwork (OCOD039).

The PC 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 6).

Marydale Gold-Copper Project

At the Marydale Gold-Copper Project, initial results have been received from drill hole OWCD034, which tested new induced polarisation (**IP**) anomalies away from the NW Quadrant (refer ASX release 23 November 2016).

Assay results from the disseminated sulphide-bearing zone show low-level anomalism over a wide interval of 17m, with best results of 2m at 0.15g/t Au and 0.14% Cu from 118m, and 0.6m at 0.2g/t Au and 0.16% Cu from 133m.

These results confirm that the sulphides are gold-copper bearing, with a likely common source to the mineralisation that was intersected in the NW target area and with likely zonation of gold and base metals in vertical and lateral extent.

Drilling is continuing to vector in on accumulations of these sulphides with elevated target metal content. The drill rig is currently moving onto drill hole OWCD035 (Figure 5) to test another shallower anomaly delineated in the recent high-powered IP survey. To accelerate drilling in a cost effective manner, a percussion drilling rig has now been brought in to drill pilot holes that will be completed through the IP anomalies with diamond drill core.

Following this initial drilling and trenching, structural analysis and mineral petrography have been completed. Orion has been working extensively with Tect Geological Consulting, who have substantial expertise in interpreting and modelling complex mineralisation systems, specifically in medium to high-grade metamorphic terranes with complex deformational histories, such as those encountered in the Areachap Terrane.

Based on Tect's input, the Company has established a revised model for gold-copper mineralisation at the Marydale Project. It is now thought that gold-copper mineralisation is derived from remobilisation of an earlier-formed VMS sulphide body. Mineralisation appears to be remobilised along a shear corridor, which is part of a major regional shear that trends southward to Copperton. It is interpreted that this shear corridor has acted as a pathway for remelted sulphides in a high-temperature alteration environment. The original source of VMS mineralisation is likely to be similar to that at the Company's other projects (Kantienpan and Prieska) and elsewhere on Orion's Areachap prospecting rights.

Remobilisation of massive sulphides during metamorphism in high-grade metamorphic terranes is common and the segregation of even small amounts of sulphide assemblages can significantly redistribute metals – especially precious metals – around and within mineralised systems. Partial melting of polymetallic massive sulphide ores under high temperature metamorphism is catalyzed by the coexistence of numerous metals within the sulphides (e.g. Pb, Zn and Cu), which effectively lower the required temperature for partial melting and remobilisation of certain metals, with gold particularly prone to remobilisation, along with copper.

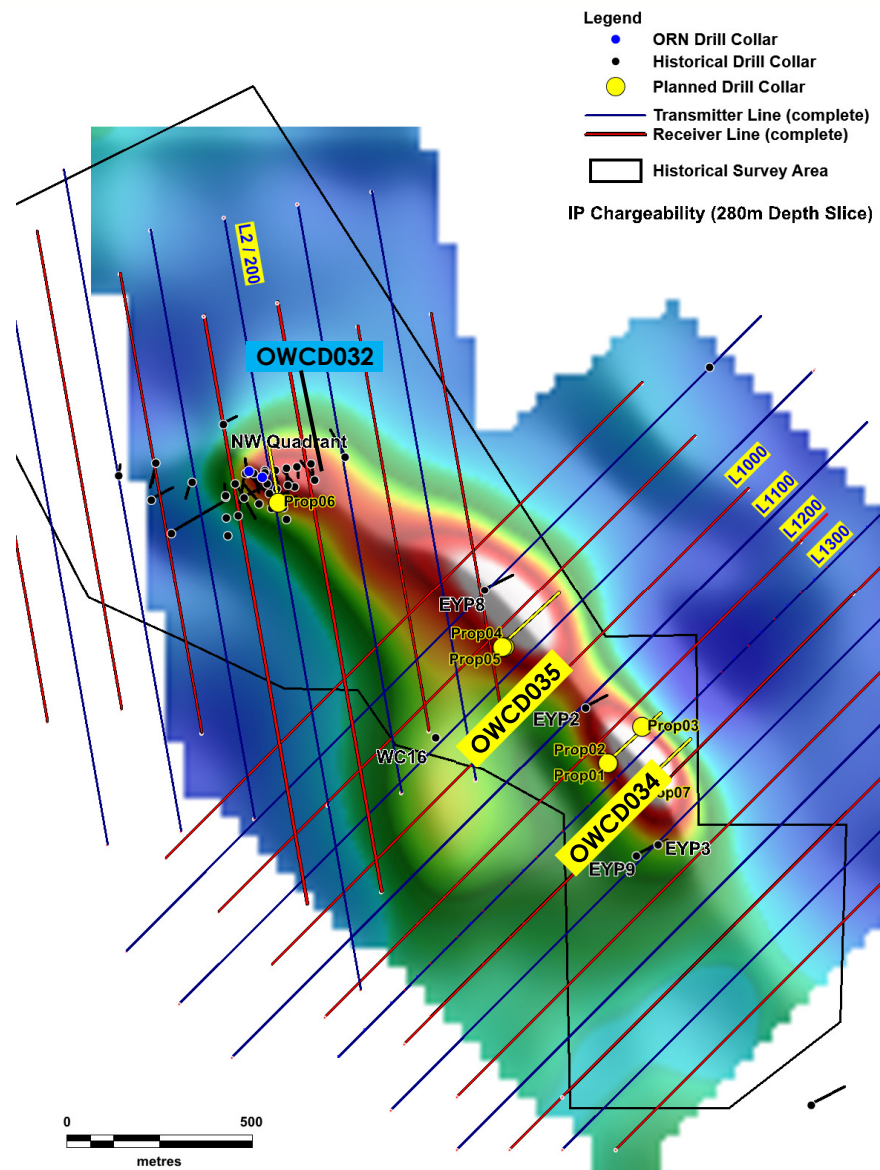
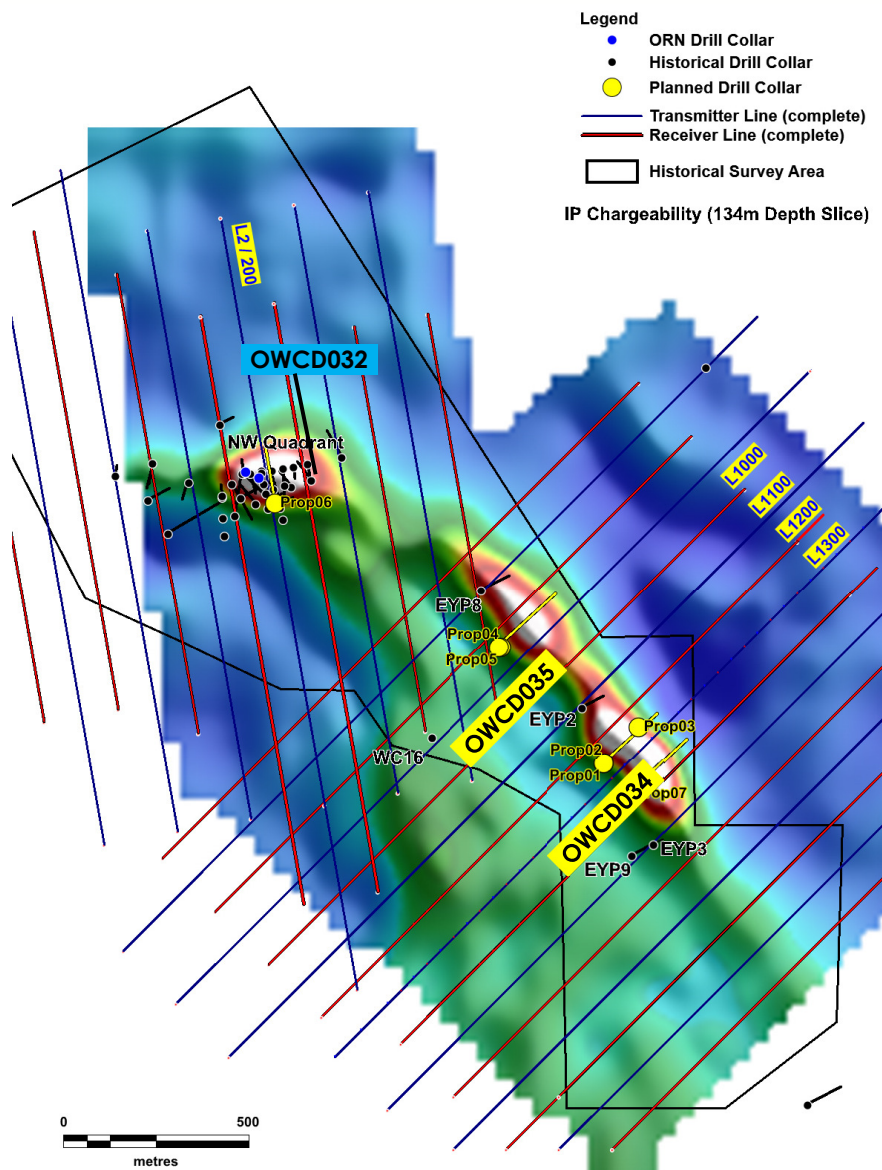


Figure 5: Depth slices of IP response (chargeability) showing planned drilling. Left: 134m below surface. Right: 280m below surface.

Examples of similar styles of mineralisation globally include the Montauban Zn-Pb-Au-Ag deposit in the Grenville Province in Canada and the Renström Zn-Pb-Cu-Ag-Au deposit, which is one of several operating mines in the Early Proterozoic Skellefte District in Northern Sweden.

Orion is encouraged by the new understanding of the Marydale mineralisation, which highlights potential for both a proximal, base metal-rich volcanogenic massive sulphide (VMS) source and significant remobilised shear-hosted, gold-copper bearing sulphides that can be traced using IP surveys and structural mapping tools.

Given the characteristic zonation both laterally and vertically in shear-modified VMS deposits, the Company anticipates that the Marydale gold-copper deposits are likely to be zoned and will require testing laterally and vertically in the now identified shear corridor.

In addition, variation in the degree of strain in the sheared host lithologies observed between drill hole OWCD034, and drill holes OWCD032 and OWCD033, which were drilled in the north western zone of the prospect, indicates that the distribution of metals may also be affected by the geometry and intensity of shearing.



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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 1790km² on the highly prospective Areachap belt, North Cape Province of South Africa (Figure 6). 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 sheared remobilised VMS 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

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.

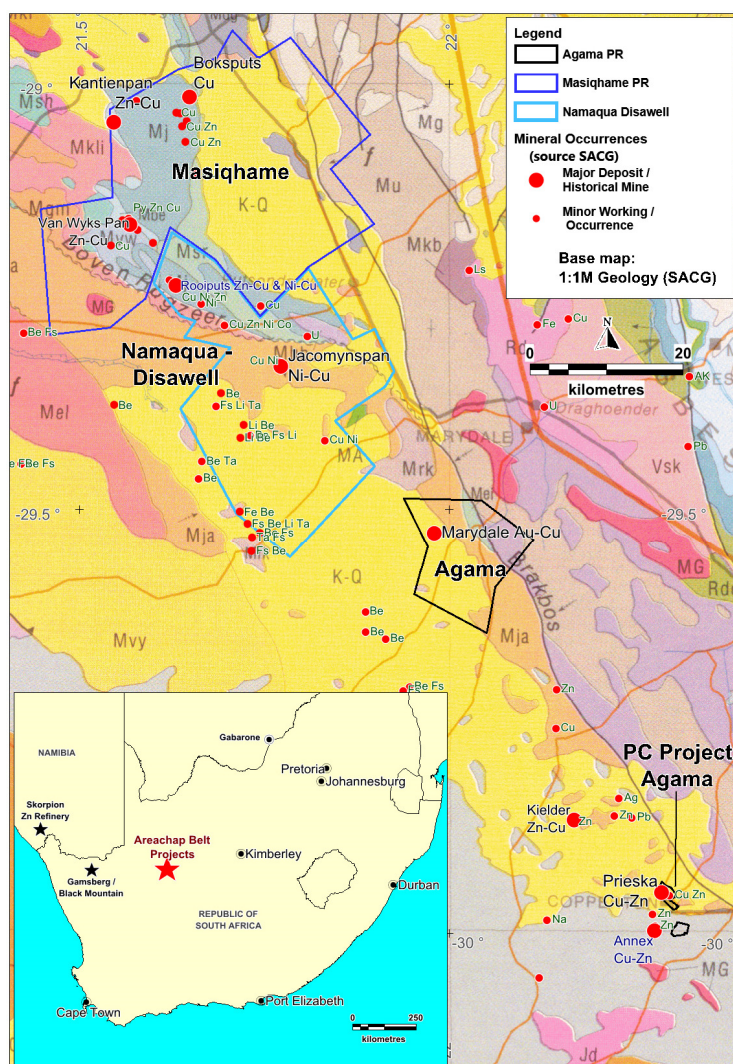


Figure 6: Regional geology map of the Areachap Belt showing prospecting rights currently under option to Orion and noted mineral occurrences as per published data from South African Council for Geoscience.

Competent Persons Statement

The information in this report that relates to Orion's Exploration Results at the PC, Marydale and Kantienpan Projects comply 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 4.

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: Significant Intersections from Orion drilling at the Kantienpan Zinc-Copper Deposit.

Hole ID	Collar Location (UTM Zone 34S)		Dip / Azimuth	Total Depth (m)	Intercept Data			Assay Data	
	Easting	Northing			From (m)	To (m)	Length (m)	Zn (%)	Cu (%)
OKNR014	553260	6786583	-60 / 260	78	60	67	7.0	6.45	0.43
				<i>including</i>	63	66	3.0	7.94	0.50
OKNR015	553308	6786582	-60 / 260	135	<i>No intersection</i>				
OKND016	553250	6787305	-65 / 260	***	<i>Drilling In Progress</i>				
OKND017	553250	6787125	-65 / 260	***	<i>Drilling In Progress</i>				

1. All intersections > 1% Zn.
2. OKND016 is currently at 387.9m with planned depth of 510m.
3. OKND017 is currently at 443.3m with planned depth of 450m.
4. It is recommended that the supporting information contained in Appendix 4 is read in conjunction with these results.

Appendix 2: Significant Intersections from Orion drilling at the Marydale Gold-Copper Project.

Drill hole	East (UTMz34S)	North (UTMz34S)	Depth (m)	From (m)	To (m)	Length (m)	Au (g/t)	Cu (%)
OWCD032	594756	6733064	128.0	22	86	64	1.55	0.26
			<i>incl.</i>	48	69	21	2.93	0.34
			<i>incl.</i>	49	54	5	5.09	0.37
OWCD033	594720	6733080	150.4	67.5	92.5	25	1.81	0.31
			<i>incl.</i>	70.1	81.7	11.6	2.63	0.36
			<i>incl.</i>	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	271.5	<i>Low level anomalism as discussed in text, no significant results</i>				
OWCD035	595680	6732300	---	<i>Drilling in Progress</i>				

1. All intersections > 1m >0.3 g/t gold are quoted and include up to 2 metres internal waste.
2. Drill rig is currently setting up on OWCD035.
3. It is recommended that the supporting information contained in Appendix 4 is read in conjunction with these results.

Appendix 3: Significant Zinc-Copper Intersections from Orion drilling at the PC Project.

Drill hole	East (UTMz34S)	North (UTMz34S)	Depth (m)	From (m)	To (m)	Length (m)	Cu (%)	Zn (%)	Au (g/t)	Ag (g/t)
Ocor012A	624166	6686808	39	23	31	8	0.31	0.92	0.03	0.5
				36	39	3	0.50	1.36	0.02	0.6
Ocor013A	624199	6686776	42	15	20	5	0.92	1.56	0.04	0
				36	42	6	0.60	0.68	0.03	0.3
Ocor014	624228	6686776	42	35	40	5	2.10	0.34	0.01	0
Ocor015	624228	6686744	108	83	86	3	0.40	1.40	0.05	2.3
Ocor016	624340	6686653	108	57	79	22	1.38	10.8	0.30	9.7
			incl.	62	69	7	1.41	17.8	0.26	6.9
Ocor017	624361	6686618	77	57	69	12	4.14	1.89	0.29	9.9
			incl.	63	66	3	7.40	4.34	0.08	1.3
Ocor018	624348	6686611	53	Hole abandoned, collapsed in leached zone						
Ocor019	624353	6686614	52	Hole abandoned, collapsed in leached zone						
Ocor020	624300	6686626	38	10	20	10	0.39	1.13	0.16	1.0
Ocor021	624280	6686669	49	6	12	6	0.17	0.63	0.01	0.1
				19	22	3	0.21	0.92	0.01	0.3
Ocor022	624321	6686583	39	3	5	2	0.19	0.95	0.01	0
				9	18	9	0.45	0.61	0.04	0.3
Ocor023	624347	6686621	85	48	68	20	2.21	8.58	0.36	12.1
			incl.	63	66	17	2.01	9.98	0.37	2.3
Ocor024	624358	6686594	47	Hole abandoned, collapsed in leached zone						
Ocor025	624378	6686544	49	8	25	17	0.86	1.00	0.55	8.1
Ocor026	624375	6686573	70	16	26	10	0.11	0.61	0.01	0.4
				59	63	4	0.50	0.04	0.11	1.0
				64	68	4	0.06	0.60	0.01	0.2
Ocor027	624393	6686556	110	55	97	42	2.36	4.41	0.42	13.6
			incl.	55	60	5	9.28	0.10	0.65	31.6
			incl.	75	81	6	0.90	12.4	0.29	6.7
Ocor028	624363	6686561	43	7	24	14	0.94	0.56	0.09	0.9
Ocor029	624394	6686534	46	5	25	20	0.53	0.65	0.10	1.5
Ocor030	624292	6686713	103	71	77	6	1.90	0.85	0.39	8.2
Ocor031	624252	6686723	61	17	20	3	1.22	0.26	0.03	1.0
				46	60	14	0.30	0.71	0.01	0.6
Ocod032	624503	6686323	59	Hole abandoned due to excess deviation						
Ocod033	624503	6686323	186.14	161	163	2	0.14	1.02	0.14	7.0
				170.71	180.05	9.34	1.40	4.00	0.13	9.0
Ocod034	624477	6686355	82.88	Hole abandoned due to excess deviation						
Ocod035	624477	6686355	184.7	156.1	176.7	20.6	0.63	1.36	0.11	8.9
			incl.	167.9	170.5	2.6	0.49	5.20	0.11	13.9
Ocod036	624375	6686455	149.25	Assays Awaited						
Ocod037	624406	6686417	157.29	Assays Awaited						
Ocod038	624406	6686417	----	In Progress						
Ocod039	624353	6686622	---	In Progress						

1. All intersections > 1m and >0.3% copper or > 0.5% zinc are quoted.
2. New results are shown in bold type.
3. Hole OCOD039 is a large diameter diamond core hole being drilled for metallurgical purposes.
4. It is recommended that the supporting information contained in Appendix 4 is read in conjunction with these results.

Appendix 4: The following tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. 	<p>Kantienpan</p> <ul style="list-style-type: none"> Diamond core drilling at Kantienpan targeted to test EM target – conductive body detected in ground EM survey interpreted to be related to sulphide mineralisation. Historical drilling was carried out on sections spaced between 100 and 200 metres, with holes drilled at 50 metre spacing on section. Current drilling is also being carried out at 50m spacing on section, with sections either stepping out 50 or 100 metres from historical results. <p>Marydale</p> <ul style="list-style-type: none"> Diamond core drilling targeted to verify and aid interpretation of historical drilling, no consistent drill spacing achieved as yet. <p>PC Project</p> <ul style="list-style-type: none"> Drilling (RC & DD) carried out on 45m spaced sections aiming to define an approximate 45m x 45m pattern. Infill drilling carried out in certain areas to better define mineralisation or geotechnical conditions and limits of historical stoping. Sampling carried out under supervision using procedures outlined below including industry standard QA/QC. <p>All Drilling</p> <ul style="list-style-type: none"> ORN RC drilling sampled every metre by splitting at the sampling yard. ORN DD drilling sampled by splitting core in half using diamond saw, sampled every metre unless sample intervals adjusted to match geological intervals. Samples submitted for analysis by ALS is pulverized in its entirety and split to obtain a 0.2g sample for digestion and analysis.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Reverse circulation drilling using a face sampling hammer. Diamond core drilling using NQ sized core.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> Samples are individually weighed to quantify recovery and variations in recovery are recorded on the sample ledger (e.g. small samples). Cyclone, splitters and sample buckets cleaned regularly. No grade variation with recovery noted.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> All holes logged on 1m intervals using visual inspection of washed drill chips and both full and split core. Qualitative logging of colour, grainsize, weathering, structural fabric, lithology, alteration type and sulphide mineralogy carried out. Quantitative estimate of sulphide mineralogy and quartz veining. Logs recorded at the drill site and entered into digital templates at the project office.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> 1m samples from RC drilling collected by passing entire 1 metre sample through a splitter. Sampling on site aims to generate a < 2kg sub sample to enable the entire sample to be pulverised without further splitting. NQ core cut at core yard and half core taken as sample. 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 <5mm if required and then pulverising so that +85% of the sample passes 75 microns. CRM's, blanks and replicates are inserted every 30 samples and analysed with each batch. Lab supplied CRM's, blanks and replicates are analysed with each batch.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable 	<ul style="list-style-type: none"> 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. External quality assurance of the laboratory assays is monitored by the insertion of blanks, duplicates and certified reference materials (CRM) Coarse field duplicates consisting of a split sub-sample of the original crushed sample material. Three CRMs are alternated through the sample stream and where possible matched to the material being drilled.

Criteria	JORC Code explanation	Commentary
	levels of accuracy (ie lack of bias) and precision have been established.	<ul style="list-style-type: none"> Two blank are used (pulp and chips). No external laboratory checks have been carried out at this stage, apart from the bias test mentioned above.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> The Competent Person is personally supervising the drilling and sampling along with experienced geologists. The Managing Director is regularly on site to inspect drilling and sampling activities. 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.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Collar data has been laid out using a handheld GPS and these coordinates are reported here. 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. Downhole surveys are completed using an electronic multi-shot instrument. All data is collected in UTM WGS84 Zone 34 (Southern Hemisphere) and these coordinates are reported above.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Kantienpan - drilling is continuing to be spaced at between 100 metres and 200m along strike. PC Project - drill holes (RC & DD) intersected the mineralisation on approximately 45m spacing with some infill drilling in areas of interest. Marydale – drilling is targeting IP anomalies, utilising the same pad but intersecting target at vertical spacing of approximately 200m. Insufficient data to map grade distribution at this time at any of the prospects, once further drilling is carried out the appropriate data spacing to accurately estimate grade distribution will be better understood.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> At all prospects drilling is being carried out perpendicular to mineralisation defined in historical drilling and modelled EM conductors. No orientation based sampling bias has been identified in the data at this point.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Chain of custody was managed by the Competent Person.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews have been carried out at this stage.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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 style="list-style-type: none"> The mineral rights to the property are vested in the State and the Act regulates the exploration and mining industry in South Africa. <p>Kantienpan</p> <ul style="list-style-type: none"> A prospecting right in accordance with the Act was granted to Masiqhame Trading 855 (Masiqhame) to prospect for all minerals for a period of five years effective from 12 March 2014. The Prospecting Right was granted in respect of the farm Koegrabe 117 comprising Portions 2 – 11; Bokspuits 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. <p>Marydale</p> <ul style="list-style-type: none"> 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 period of two years effective from 10 February 2010. 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. 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 <p>PC Project</p> <ul style="list-style-type: none"> The Prospecting Right is held by a subsidiary company of Agama Exploration and Mining (Pty) Ltd through which Agama holds a 73.33% effective interest in the project. The Prospecting Right covers a strike of 2,200m for the Deep Sulphide Exploration Target mineralisation out of a total interpreted strike of 2,800m. The Prospecting Right covers the complete known strike of the +105 Level Target. All of the required shaft infrastructure and lateral access underground development is available within the Prospecting Right.

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>Kantienpan</p> <ul style="list-style-type: none"> Much of the background information in this announcement is sourced from: 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. Du Toit, M.C, 1998. The metallogeny of the Upington-Kenhardt Area. Explanation: Metallogenic Sheets 2820 and 2920, South African Council for Geoscience, 108p. 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. Exploration activities across the Project area included surface geochemical sampling, geophysical surveying and diamond core drilling. <p>Marydale</p> <ul style="list-style-type: none"> The Marydale Project was explored by Anglo American Prospecting Services (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. 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. 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. <p>PC Project</p> <p><u>Deep Sulphide Target</u></p> <ul style="list-style-type: none"> All exploration and life of mine drilling (V, D and F holes) was done by Anglovaal, resulting in a substantial amount of hardcopy data from which the Company has been able to assess the prospectivity of the remaining

Criteria	JORC Code explanation	Commentary
		<p>mineralisation.</p> <ul style="list-style-type: none"> The Anglovaal exploration resulted in the delineation and development of a large mine. <p><u>+105m Level Target</u></p> <ul style="list-style-type: none"> The 2012 drilling of the NW section of the +105m Level Target was carried out by the current tenement holder.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The deposits lie in the Areachap Group, a volcano-sedimentary belt hosting other VMS deposits including Areachap, Bokspits, Kielder and Prieska (or Copperton). The Marydale 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. The PC and Kantienpan Deposits are Volcanogenic Massive Sulphide (VMS) deposit, a globally significant and well studied mineralisation style The historically mined section of the PC deposit is confined to a tabular, stratabound horizon in the northern limb of a refolded recumbent synform which plunges at approximately 45° to the southeast. It is hosted within deformed gneisses of the Copperton Formation, which have been dated at 1,285 Ma and forms part of the Namaqualand Metamorphic Complex. The mineralised zone outcrop has a strike of 2,400m, was oxidised and or affected by leached and supergene enrichment to a depth of approximately 100m, and outcrops as a well developed gossan. It has a dip of between 55° and 80° to the northeast at surface and a strike of 130° to the north. The width of the mineralised zone exceeds 35m in places but averages between 7m and 9m. The mineralised zone persists to a depth of 1,100m (as deep as 1,200m in one section) after which it is upturned. The +105m Level Target area comprises the oxide / supergene / mixed zone (and a zone of remnant primary sulphides) situated from above the upper limit of mining at approximately 100m depth up to surface.
Drill hole Information	<ul style="list-style-type: none"> <i>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:</i> 	<ul style="list-style-type: none"> Appendix 1 lists all the data from Orion's drilling at Kantienpan, including location data. Appendix 2 lists all the data from Orion's drilling at Marydale, including

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	<ul style="list-style-type: none"> o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length. • 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. 	<p>location data.</p> <ul style="list-style-type: none"> • Appendix 3 lists all the data from Orion's drilling at the PC Project, including location data.
Data aggregation methods	<ul style="list-style-type: none"> • 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. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • Significant intercepts in Appendices 1 - 3 were calculated by averaging the length weighted assay results for Cu, Zn and Au. • Intercepts presented are all intersections > 1% Zn, except Appendix 2 where intercepts presented are all intersections > 0.3g/t gold .
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • 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'). 	<ul style="list-style-type: none"> • All intersections to be reported are downhole widths. • True widths are unknown at this time as the geometry of the mineralisation has not been determined.
Diagrams	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Drill hole location plans shown as Figures 3, 4 and 5. • Figure 2 shows new Kantienpan intersection on cross section.
Balanced reporting	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • All significant results are reported in Appendices 1 - 3.
Other substantive exploration	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • The Company's previous ASX releases have detailed historical exploration works on the Areachap Projects and surrounds.

Criteria	JORC Code explanation	Commentary
data	<i>method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • More detail on further work will be available following receipt of assays from drilling and results of follow up drilling as discussed in text.