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**ASX Code:** ORN**Issued Capital:**

Ordinary Shares: 475M

Options: 91M

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## Orion Expands South African Portfolio after Securing Advanced and Highly Prospective Nickel-Copper Project

*New project includes large magmatic nickel-copper deposit with completed concept study plus outstanding exploration potential*

**Highlights:**

- Orion has secured the exclusive right to earn up to an 80% interest in the Jacomynspan Nickel-Copper-PGE Project in South Africa's Northern Cape Province, via a 74% Orion owned South African subsidiary company.
- Orion can earn its equity interest in stages by ultimately completing a Feasibility Study.
- The project area comprises 626km<sup>2</sup> of combined mining and prospecting rights, including overlapping rights held by two companies.
- The project hosts a large sulphide nickel-copper-PGE resource analogous to the Fraser Range style of deposits, and is highly prospective for Nova-Bollinger-style discoveries.
- The project area is also highly prospective for copper-zinc VHMS deposits along the same horizon as that which hosts the world class historical Prieska Copper Mine (PC) Zinc-Copper Project (also under option by Orion).
- This represents a strategic and valuable potential addition to Orion's growing mineral portfolio in the Northern Cape Province, where it has drilling programs currently underway.

**Orion Gold NL (ASX: ORN)** is pleased to announce that it has secured a strategic and potentially valuable addition to its mineral portfolio in the Northern Cape Province of South Africa. Orion has entered into a binding term sheet to acquire the earn-in rights to the prospecting and mining right applications covering an area of 626km<sup>2</sup> in the **Areachap Belt**, near its existing PC zinc-copper and Kantienpan Projects.

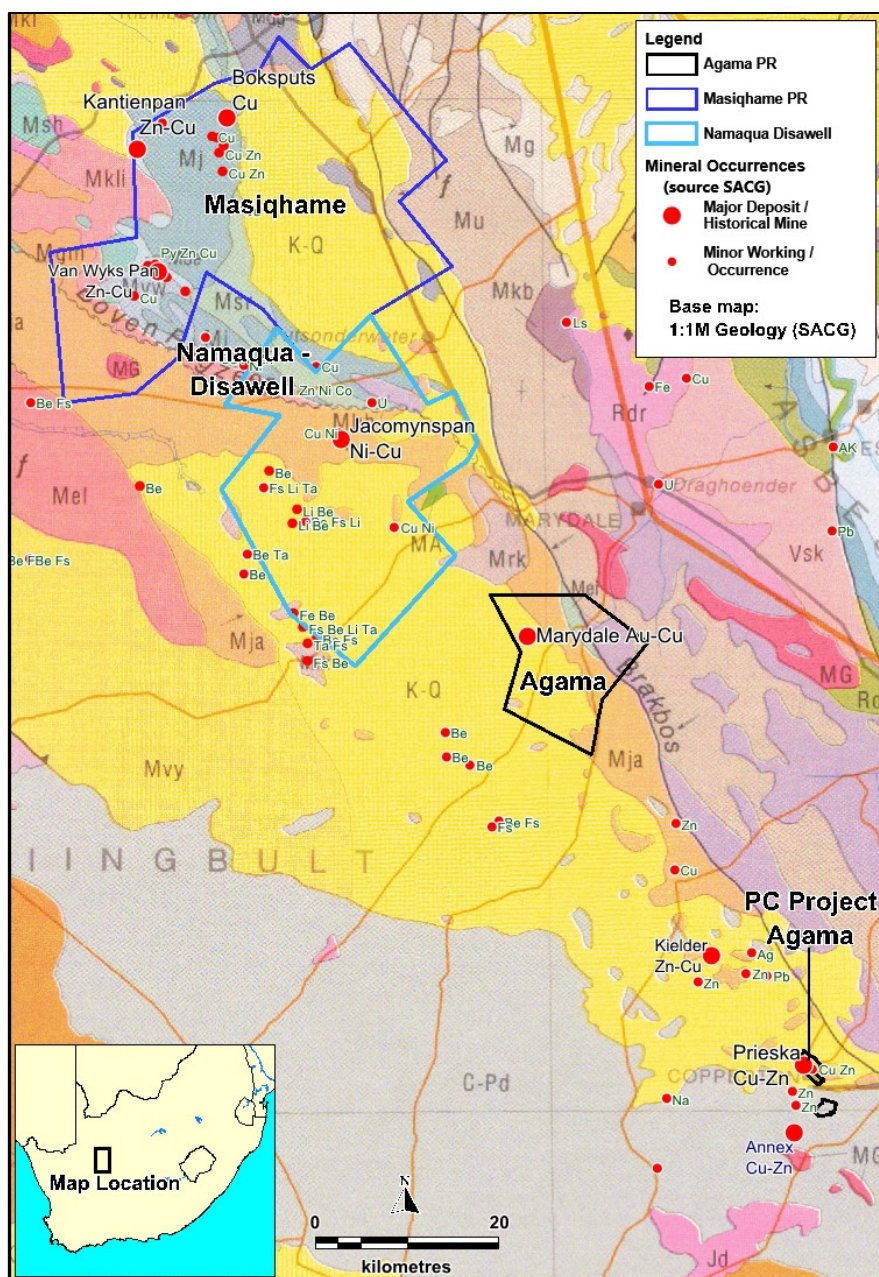
The earn-in rights (refer below) have been acquired over the **Jacomynspan Nickel-Copper-PGE Project (Jacomynspan Project)** from two companies, Namaqua Nickel Mining (Pty) Ltd (**Namaqua**) and Disawell (Pty) Ltd (**Disawell**) (together the **Companies**), which hold partly overlapping prospecting rights and mining right applications.

The Namaqua mining right application covers an advanced nickel-copper-platinum group elements (**PGE**) deposit with a completed mining concept study, while the Disawell prospecting rights are focused on zinc-copper volcanogenic hosted massive sulphide (**VHMS**) deposits such as those at the PC zinc-copper and Kantienpan Projects previously announced by Orion (refer ASX Releases – 18 November 2015 and 31 May 2016).

## Jacomynspan Project Overview and Resource

The Jacomynspan Project area is contiguous with the prospecting rights held under the Company's Masiqhame transaction (refer ASX Release – 29 April 2016) and adjacent to the Marydale Prospecting Right (Figure 1), currently being drilled by the Company, under the terms of an exclusive option held by Orion (refer ASX Release – 18 November 2015).

The Jacomynspan Project area contains numerous known occurrences of VHMS style zinc-copper deposits and is highly prospective for magmatic hosted nickel-copper mineralisation similar to that seen in Proterozoic mobile belts worldwide including the Thompsons Belt in Canada and the Albany-Fraser Belt in Western Australia. A number of mafic-ultramafic intrusions have been recognised within the project area, with most historical work focusing on the Jacomynspan Deposit (Figure 1).



**Figure 1:** Map showing the Jacomynspan Project area and Namaqua-Disawell tenure, Northern Cape Province.



The Jacomynspan Deposit was first identified by Anglo American Prospecting Services (**AAPS**) from an airborne electro-magnetic (**EM**) survey in 1971. AAPS drilled a steeply dipping mafic-ultramafic intrusive sill over 4km of strike, defining an ultramafic host with disseminated nickel sulphide mineralisation over a width of 30 - 70m. AAPS also drilled to a depth of about 900m in one area covering approximately 1000m of strike.

Metallurgical test work and mining studies were also undertaken on the deposit, culminating in an economic assessment in 1983 which was generally positive and recommended that more detailed studies be undertaken. However, prevailing macro-economic and geopolitical conditions were not favourable and the option was relinquished by AAPS in 1984.

The surrounding area received exploration attention from a number of large companies in the 1970's with groups such as Phelps Dodge, Anglovaal, Newmont and Goldfields of South Africa all completing investigations, with several nickel-copper bearing intrusive occurrences discovered over a combined trend extending for almost 40km. Yskor also explored a portion of the current tenements for VHMS deposits in the 1990s.

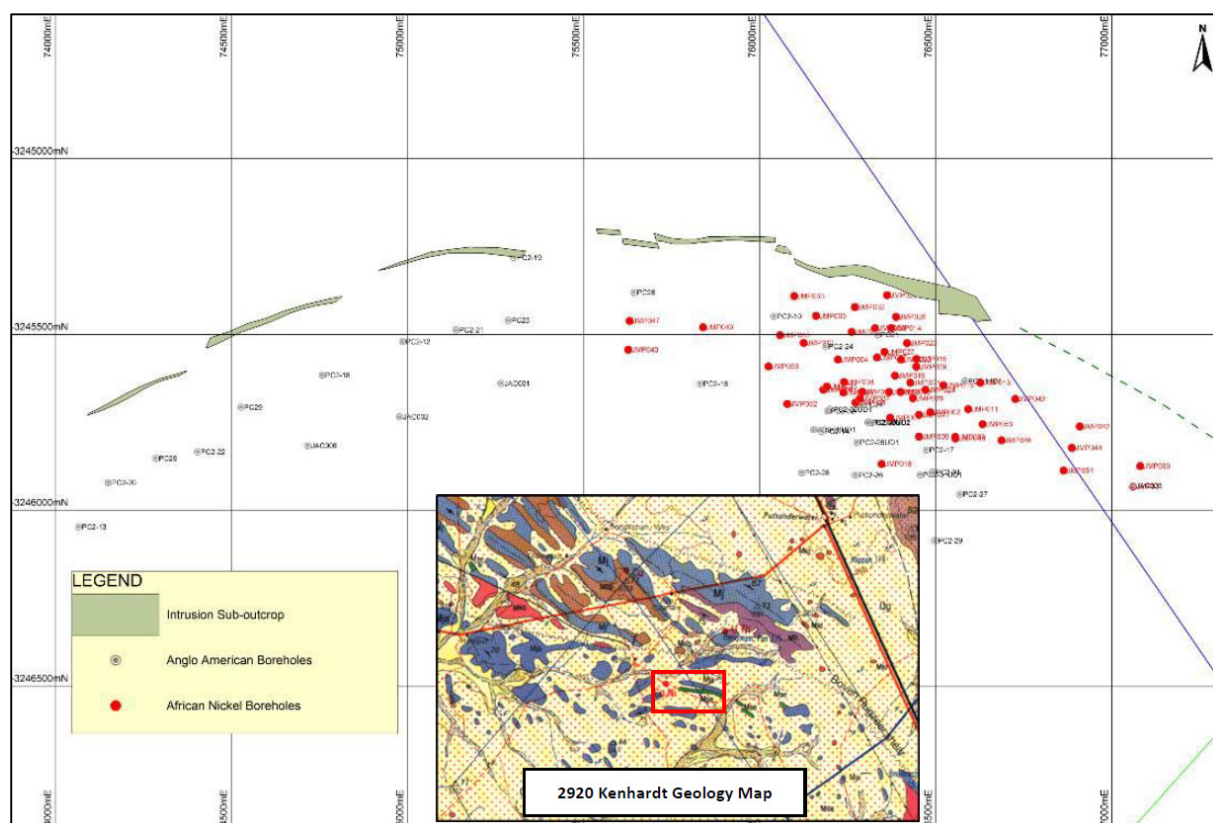
In 2006, the project area was pegged by Namaqua. Exploration activities completed since then have included airborne EM and high-resolution magnetic surveys as well as more than 26,000m of diamond core drilling in 53 holes (Figure 3, Appendix 1).



**Figure 2:** Photos of historical drill core from the Jacomynspan Project, including massive sulphide zones grading up to 4.2% Nickel.

Based on this work and historical AAPS data, a resource was delineated for the Jacomynspan Deposit. The resource for the Jacomynspan Deposit as shown in Table 1 is estimated in accordance with the SAMREC Code (2007) and is therefore a “qualifying foreign resource estimate” as defined in the ASX Listing Rules (further detail below and in Appendix 2). Extensive metallurgical test work, geotechnical appraisal, environmental studies and mine design work was also carried out by Namaqua to complete a concept study and economic assessment for the mining of the deposit. These appraisals support an application for a Mining Right over the area, which is currently in process.

Figure 3 below shows historical drilling on the Jacomynspan resource area, while the existing resource is summarised in Table 1. More detail, including significant intersections and additional figures can be found in Appendices 1 - 3.



**Figure 3:** Plan showing drilling on the Jacomynspan resource area.

| Category     | Tonnes      | Ni          | Cu          | Co          | Pt          | Pd          | Au          |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|              | (Millions)  | %           | %           | %           | g/t         | g/t         | g/t         |
| Indicated    | 42.6        | 0.26        | 0.18        | 0.02        | 0.09        | 0.05        | 0.04        |
| Inferred     | 35.5        | 0.27        | 0.18        | 0.02        | 0.10        | 0.06        | 0.04        |
| <b>Total</b> | <b>78.1</b> | <b>0.26</b> | <b>0.18</b> | <b>0.02</b> | <b>0.10</b> | <b>0.05</b> | <b>0.04</b> |

**Table 1:** Resources at the Jacomynspan Deposit.

**Table 1 Notes:** While this foreign resource is not reported in compliance with the JORC Code, it is the Company's opinion (and the opinion of the Competent Person for this document), that the data quality and validation criteria, as well as the resource methodology and check procedures, are reliable and consistent with criteria as defined by JORC 2012. All tabulated data has been rounded to one decimal place for tonnage and two decimal places for grades. Quantities are reported after the application of 5% geological loss factor and all resources are greater than 75m and less than 900m below surface.

The resource for the Jacomynspan Deposit as shown in Table 1 is estimated in accordance with the SAMREC Code (2007) and is therefore a "qualifying foreign resource estimate" as defined in the ASX Listing Rules.

Errol Smart, Managing Director and CEO of Orion, is acting as the Competent Person for the Mineral Resource and has reviewed data presented by African Nickel Holdings (Pty) Ltd (**African Nickel**), supporting documentation from third party sources and completed a field trip to the Jacomynspan Project, which included viewing drill core from the African Nickel drilling.

The Competent Person has not yet completed sufficient review on the qualifying foreign resource estimate to classify it in accordance with the JORC Code at this time and consequently it is uncertain that, following evaluation and/or further exploration work that the qualifying foreign resource estimate will be able to be reported as a Mineral Resource in accordance with the JORC Code.

Further information regarding the qualifying foreign resource is presented in Appendix 2 below utilising the template prescribed by the JORC Code (2012). The Company plans to carry out further assessment and due diligence on the Mineral Resource, which may include drilling.

### Exploration Potential

Importantly, while numerous mafic-ultramafic targets stretching along a trend of approximately 40km have been interpreted from historical mapping, geophysics and geochemical surveys, Namaqua drilled out only a 1.2km section of strike. This was confined to in-fill drilling on an outcropping ultramafic sill which was discovered and previously drilled by AAPS.

Orion believes a substantial exploration opportunity exists within the project area to search for higher grade, massive and semi-massive accumulations of nickel-bearing sulphides, analogous to the Nova-Bollinger deposit in the Fraser Range Province of Western Australia.

Orion has identified many similarities to the Fraser Range-style of mineralisation from historical data available for the project area and the surrounding Areachap belt. This includes:

- mafic-ultramafic intrusives of late Proterozoic age;
- intruded in intercratonic/craton margin tectonic setting;
- hosted in high metamorphic grade rocks (garnet, amphibolite gneisses) within a mobile belt;
- the presence of evolving magmas yielding multi-phase intrusives, including mafic to ultramafic rocks. Importantly, lithologies observed at the Jacomynspan Project include anorthosites, hartzburgites and various metamorphic equivalents;
- the identification of nickel and copper-bearing sulphides with minor cobalt and PGE's (higher concentrations than in Fraser Range) at numerous localities;
- low-grade, disseminated nickel-copper sulphide bodies are re-intruded by cumulate textured mafics, with net textured and sometimes massive sulphides present; and
- shallow, recent cover sequences (calcrete and soil) obscures much of the surface expression on the belt.

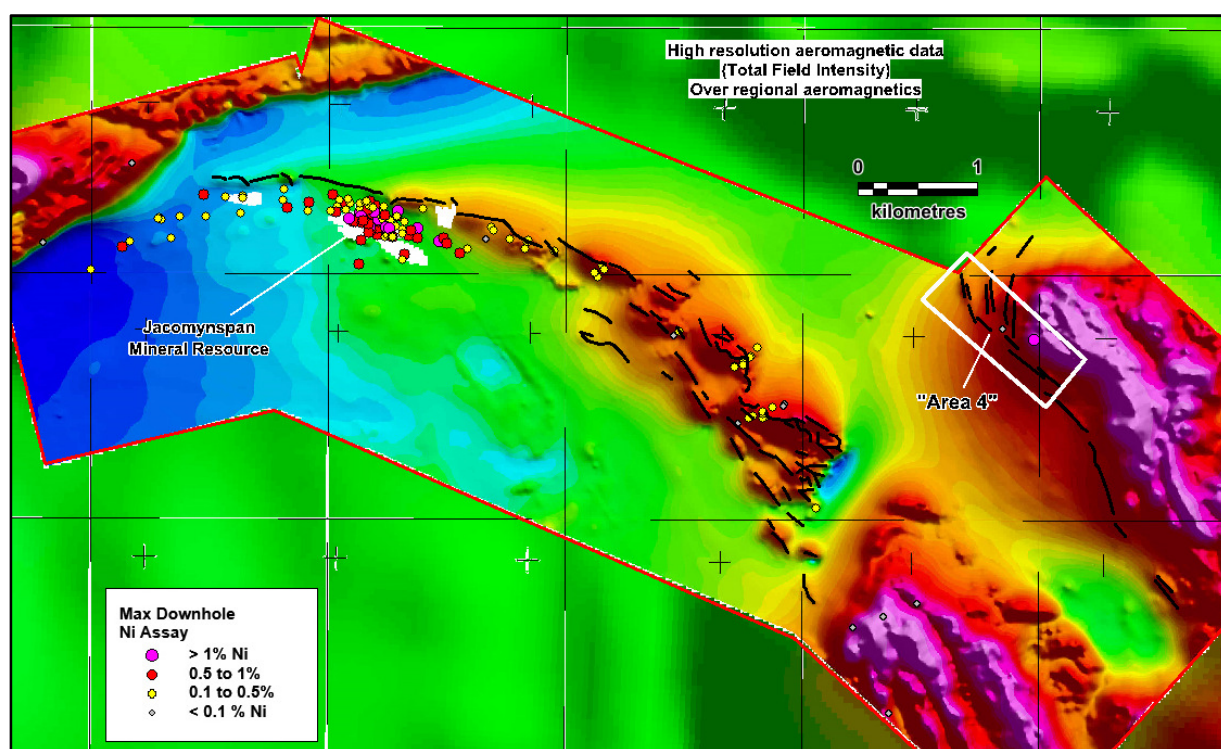
While Namaqua did not do any follow-up exploration on satellite intrusive bodies and geophysical targets, the entire Jacomynspan Project area was covered by airborne EM and magnetic surveys. The high resolution airborne magnetic survey targeted the distinct magnetic fingerprint of hartzburgites within, and extending from, the drilled resource area and produced a high quality target map that was never followed up on (Figure 3). Within the resource area, the hartzburgite units are noted to contain higher concentration of metals.



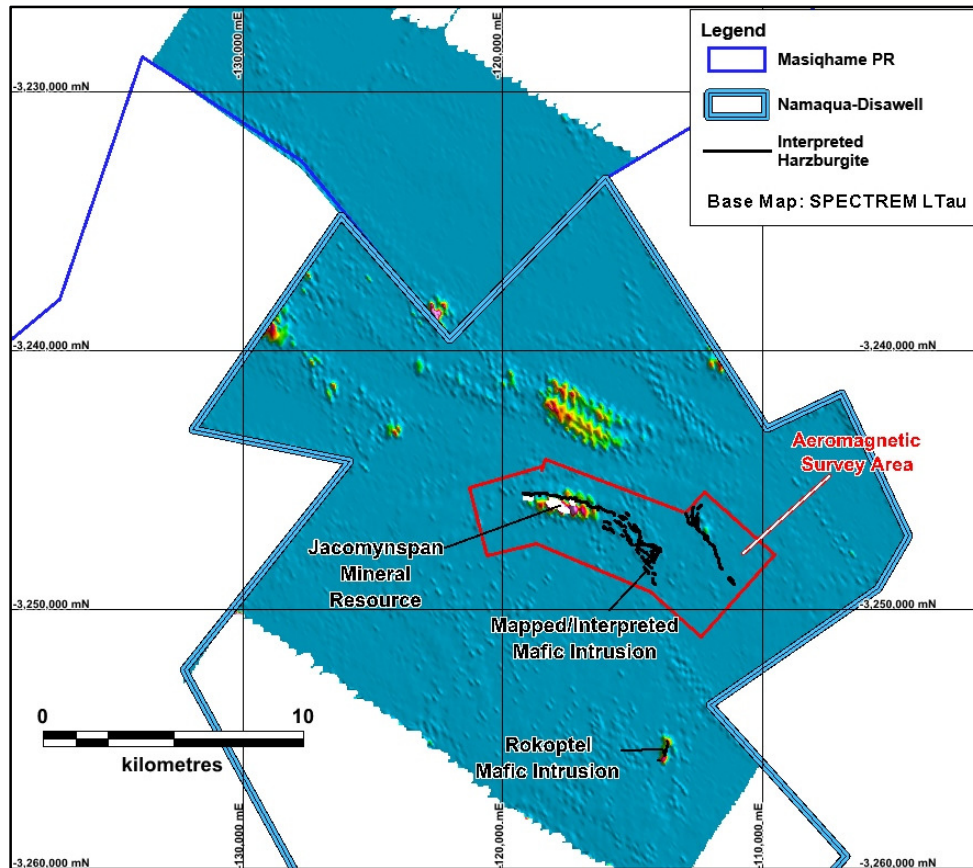
Importantly, there are occurrences of known nickel-copper bearing intrusives that have not been adequately drill tested, or indeed drill tested at all. None of the identified bodies have been closed off on strike and the dip extent and 3D geometry has not been established. The target bodies are intruded into a fold and thrust belt and the Company believes that favourable geometries with flat-dipping basal contacts are likely to be developed. Feeder zones and large bodies transgressing stratigraphy are considered higher quality targets.

Orion has identified several high quality targets from available data with all the key exploration indicators that justify further investigation as priority targets. Areas of combined VHMS and Nickel-Copper intrusive potential are of particular interest.

The later mafic intrusives have intruded through and been emplaced in VHMS prospective horizons and may have sourced additional sulphur from those lithologies triggering deposition of immiscible metal sulphides from the intrusive melt.



**Figure 4:** High-resolution aeromagnetic survey data with hartzburgite targets and historical drilling.



**Figure 5:** Late time constant (Tau) data from the Namaqua – Disawell SPECTREM airborne EM survey showing the high resolution magnetic survey area including the Jacomynspan Mineral Resource and harzburgite hosted Nickel-Copper targets.

Orion will be utilising its experience and expertise developed in exploring for magmatic nickel-copper deposit in the Fraser Range Province of Western Australia to reinterpret the extensive database for the Jacomynspan Project area and rank the exploration targets. These will then be followed up with modern high-powered geophysical tools and methods which have not previously been applied in the Areachap belt before drill testing.

An example of one such target is the “AAPS Area 4” Prospect (Figure 4), located about 3,000m north-east of the drilled resource area, on a satellite intrusive body. AAPS followed up on the mapping of gossan fragments in calcrete cover with shallow RAB drilling and later diamond drill-hole JAC007, which intersected sulphide mineralisation over 62.5m grading 0.26% Nickel, 0.17% Copper and 0.018% Cobalt (Appendix 1).

Reports by AAPS stated that layering was observed in the geological and geochemical data, indicating the potential for magmatic processes to enrich nickel grades within this intrusive. A review of the later Namaqua Nickel airborne EM data shows that the drill-hole is located on an anomaly that can be picked from that data, validating this targeting method. The harzburgite host is also identified by the high resolution magnetics.

No further work has been completed at this occurrence since it was identified and drilled by AAPS in 1977.

The airborne EM and magnetic survey data have also identified numerous stratigraphic (VHMS) targets, which have not been tested. These anomalies follow the trend of the VHMS horizon extending onto the neighbouring Orion-Masiqhame prospecting right (refer ASX Releases 29 April 2016 and 31 May 2016).

## Key Terms of the Option

Orion's earn-in right is via a South African-registered special-purpose vehicle (**SPV**), which will be established by Orion as its vehicle for investment in the joint ventures and of which historically-disadvantaged South African (**HDSA**) shall hold a minimum of 26% of the issued shares. Key terms of the transaction are set out below:

- Orion SPV has the exclusive opportunity to earn up to an 80% interest (Orion 59.2%) in the Companies. The Companies are privately owned South African companies with 26% or greater HDSA ownership.
- Conditions precedent to the commencement of earn in rights (**Earn-In Commencement Date**) include:
  - Due diligence to be conducted by Orion;
  - Orion providing the Companies with an initial exploration program to be carried out for the first 6 month period following the Earn-In Commencement Date (**Initial Program**);
  - The Companies obtaining all necessary approvals for Orion to access the Jacomynspan Project and conduct exploration activities including the Initial Program;
  - Orion providing proof of financial capacity to execute the Initial Program prior to 9 January 2017; and
  - The parties entering into a comprehensive earn-in agreement prior to 10 November 2016.
- Orion SPV is able to earn an initial interest of 25% (Orion 18.5%) in the Companies via staged expenditure of US\$0.5 million on the Jacomynspan Project over the 12 months from the Earn In Commencement Date (**First Earn In Right**) including:
  - Expenditure commitment of US\$0.25 million in the first 6 months; and
  - A further \$0.25 million must be spent within 12 months of the Earn-In Commencement Date (US\$0.5 million in total expenditure).
- Once Orion SPV has earned the initial 25% interest:
  - The Companies will issue Orion with fully paid ordinary shares in the Companies (**Shares**) which shall result in Orion SPV being the holder of 25% of the total Shares on issue immediately following such issue of Shares;
  - The Companies will record a shareholder loan account in favour of Orion SPV to the value of the First Earn In Right expenditure incurred by Orion and shall continue to record further expenditure by the Orion SPV as an increase in the shareholder loan account (**Orion Loan**);
  - Orion can elect to increase its interest via further expenditure, as detailed below, or maintain its 25% interest by contributing pro-rata to exploration; and
  - Within 30 days, the parties will negotiate the terms of a shareholders agreement to govern the terms of relationship between the shareholders.
- Following the First Earn-in Right, should Orion elect to increase its interest via further expenditure, the Orion SPV can earn a further 25% interest (making its total interest 50% (Orion 37%)) by expending a further US\$1 million on the Jacomynspan Project (US\$1.5 million total expenditure) over a further 12 months (2 years from Earn-In Commencement Date) (**Second Earn In Right**).
- Once Orion SPV has earned a 50% interest:
  - The Companies will issue Orion with Shares which shall result in Orion SPV being the holder of 50% of the total Shares on issue immediately following such issue of Shares; and



- Orion can elect to increase its interest via further expenditure, as detailed below, or maintain its 50% interest by contributing pro-rata to exploration.
- Following the Second Earn in Right, should Orion elect to increase its interest via further expenditure, Orion SPV can earn a further 30% interest (making its total interest 80% (Orion 59.2%)) by:
  - Expending a further US\$0.5 million on the Jacomynspan Project (US\$2 million total expenditure) over a further 12 months (3 years from Earn In Commencement Date);
  - Completing a bankable feasibility study, which has been reviewed and signed off by an independent external expert; and
  - Providing or securing project finance terms to develop a mining operation within the Project Area as per the bankable feasibility study and which shall not result in any Shareholder dilution.
- On the Earn-In Commencement Date, Orion will be appointed as the operator and manager of the joint ventures and will have the right to appoint a minimum of one director to the boards of the Companies.
- The Companies shareholders on the date of execution of the Term Sheet (**Signature Date**) shall be entitled to a 2% royalty in proportion to their beneficial interest in the Companies at the Signature Date, on net smelter returns arising from the production and sale of metals from the Jacomynspan Project's SAMREC resource as at the Signature Date (**Royalty**). At any time following the Earn-In Commencement Date, Orion shall have the right at its sole discretion to buy out the Royalty for an aggregate value of US\$2 million.
- As noted above, all expenditure by Orion shall be advanced to the Companies as an Orion Loan. In addition to the Orion Loan, the Companies have existing shareholder loans of ZAR78.5 million (US\$5.4 million) as at the Signature Date (together **Shareholder Loans**). Following the completion of the First Stage Earn In, the parties will negotiate the terms of a Shareholders Loan to govern the terms of the Shareholder Loans. The Shareholder Loan agreement will contain clauses normally contemplated by a formal agreement negotiated in good faith between the parties.
- Should Orion fail to meet its earn in right commitments, then either the parties will re-negotiate the terms of the Term Sheet or, if the parties are unable to agree those new terms, then Orion will relinquish its rights to earn any further interest in the Companies and the Term Sheet will be at an end.



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, including 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.

Recently, the Company secured an outstanding growth and diversification opportunity in the global base metals sector after entering into an option to acquire an advanced volcanic massive sulphide copper-zinc project located in South Africa 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 kilometres from the Prieska Copper Project. The Company is progressing extensive due diligence investigations.

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 now a significant shareholder in Orion. The project area was previously explored by Western Areas Ltd which identified mafic-ultramafic intrusives within the project area as well as nickel-copper-cobalt-PGE anomalies. 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.

## Competent Persons Statement

The information in this report that relates to Exploration Results at the Jacomynspan Project complies with the 2012 Edition of the 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.

The information in this report which relates to the Jacomynspan SAMREC (2007) resource has been compiled and assessed under the supervision of Mr Errol Smart, Orion Gold NL's Managing Director. Mr Smart has concluded that the information provided in this document complies with ASX Listing Rule 5.12 and is an accurate representation of the data and studies available and relating to this resource. However Mr Smart, as the Competent Person, has not yet completed sufficient review on the qualifying foreign resource estimate to classify it in accordance with the JORC Code at this time and consequently it is uncertain that, following evaluation and/or further exploration work that the qualifying foreign resource estimate will be able to be reported as a Mineral Resource in accordance with 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.

## 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 (+0.2% Ni) from the Jacomynspan Deposit.

| Drill hole | East (LO21) | North (LO21) | Depth   | From   | To     | Length | Ni (%) | Cu (%) | Co (%) |
|------------|-------------|--------------|---------|--------|--------|--------|--------|--------|--------|
| PC21       | 76335.46    | -3245501.29  | 256.27  | 121.76 | 131.03 | 9.27   | 0.22   | 0.16   | 0.02   |
|            |             |              |         | 137.67 | 191.04 | 53.37  | 0.34   | 0.18   | 0.02   |
| PC23       | 75286.74    | -3245460.12  | 297.67  | 204.6  | 214    | 9.4    | 0.22   | 0.17   | 0.02   |
|            |             |              |         | 219.2  | 233.45 | 14.25  | 0.26   | 0.18   | 0.02   |
| PC24       | 76289.74    | -3245699.87  | 668.6   | 540.83 | 599.19 | 58.36  | 0.60   | 0.30   | 0.03   |
|            |             |              |         | 605.15 | 641.24 | 36.09  | 0.24   | 0.17   | 0.02   |
| PC26       | 74285.80    | -3245852.99  | 276.9   | 166.85 | 178.3  | 11.45  | 0.44   | 0.32   | 0.00   |
| PC28       | 75643.61    | -3245380.77  | 200     | 138.67 | 146.32 | 7.65   | 0.26   | 0.20   | 0.02   |
| PC29       | 74527.74    | -3245707.67  | 300     | 165    | 178.47 | 13.47  | 0.20   | 0.15   | 0.02   |
| PC2-10     | 76040.67    | -3245448.96  | 256.27  | 182.47 | 193.33 | 10.86  | 0.23   | 0.11   | 0.02   |
| PC2-11     | 76583.51    | -3245632.94  | 307.74  | 195.51 | 229.93 | 34.42  | 0.25   | 0.19   | 0.02   |
| PC2-11D1   | 76583.51    | -3245632.94  | 256.73  | 242.65 | 254.78 | 12.13  | 0.38   | 0.27   | 0.03   |
| PC2-12     | 74986.54    | -3245520.67  | 341.03  | 273.21 | 282.13 | 8.92   | 0.28   | 0.19   | 0.02   |
| PC2-13     | 74067.19    | -3246047.57  | 284.9   |        |        |        |        |        |        |
| PC2-14     | 76175.95    | -3245776.06  | 530.05  | 459.16 | 487.63 | 28.47  | 0.25   | 0.14   | 0.02   |
| PC2-15     | 72462.86    | -3244818.17  | 306.14  |        |        |        |        |        |        |
| PC2-16     | 75831.84    | -3245640.57  | 490.21  | 383.79 | 408.31 | 24.52  | 0.23   | 0.17   | 0.02   |
| PC2-17     | 76473.60    | -3245829.00  | 519.28  | 430.1  | 443.19 | 13.09  | 0.33   | 0.24   | 0.03   |
| PC2-18     | 74758.66    | -3245616.03  | 262.54  | 176.42 | 190.45 | 14.03  | 0.22   | 0.15   | 0.02   |
| PC2-19     | 75302.81    | -3245281.90  | 190.98  |        |        |        |        |        |        |
| PC2-20     | 74151.32    | -3245922.23  | 300.75  |        |        |        |        |        |        |
| PC2-21     | 75138.38    | -3245487.55  | 279.65  | 222.7  | 249.06 | 26.36  | 0.26   | 0.18   | 0.02   |
| PC2-22     | 74404.76    | -3245834.29  | 314.93  | 201.85 | 209.28 | 7.43   | 0.21   | 0.18   | 0.01   |
| PC2-23     | 70109.19    | -3245184.58  | 250.13  |        |        |        |        |        |        |
| PC2-24     | 76186.88    | -3245534.13  | 299.65  | 201.85 | 209.28 | 7.43   | 0.21   | 0.18   | 0.01   |
| PC2-26     | 76272.06    | -3245900.51  | 801.45  | 637.72 | 697.5  | 59.78  | 0.29   | 0.19   | 0.00   |
| PC2-26UD1  | 76276.77    | -3245807.46  | 396.09  | 298.81 | 348.29 | 49.48  | 0.27   | 0.18   | 0.00   |
| PC2-27     | 76569.10    | -3245954.74  | 684.82  | 586.22 | 655.74 | 69.52  | 0.24   | 0.15   | 0.00   |
| PC2-28     | 76119.78    | -3245893.74  | 732.85  | 627.33 | 665.89 | 38.56  | 0.35   | 0.22   | 0.00   |
|            |             |              |         | 637.72 | 660.24 | 22.52  | 0.31   | 0.21   | 0.00   |
|            |             |              |         | 665.24 | 697.5  | 32.26  | 0.30   | 0.20   | 0.00   |
| PC2-28UD1  | 76153.71    | -3245770.95  | 383.07  | 310.17 | 340.38 | 30.21  | 0.28   | 0.13   | 0.00   |
| PC2-29     | 76497.62    | -3246086.99  | 231     |        |        |        |        |        |        |
| PC2-30     | 76318.46    | -3245751.83  | 953.68  | 794.1  | 818.9  | 24.8   | 0.26   | 0.19   | 0.03   |
|            |             |              |         | 824.9  | 862.17 | 37.27  | 0.26   | 0.21   | 0.02   |
| PC2-30UD1  | 76309.37    | -3245750.64  | 493.17  |        |        |        |        |        |        |
| PC2-30UD2  | 76308.48    | -3245750.31  | 510.00  | 366.2  | 369.01 | 2.81   | 0.31   | 0.19   | 0.00   |
| PC2-31     | 76491.30    | -3245892.16  | 1034.67 | 911.93 | 915.83 | 3.9    | 0.42   | 0.23   | 0.03   |
|            |             |              |         | 941.98 | 956.98 | 15     | 0.24   | 0.17   | 0.02   |
| PC2-31UD1  | 76455.76    | -3245899.75  | 594.57  | 374.12 | 434.29 | 60.17  | 0.35   | 0.18   | 0.00   |
|            |             |              |         | 443.77 | 446.01 | 2.24   | 0.30   | 0.34   | 0.00   |
| PC2-32     | 76193.23    | -3245718.61  | 946.89  |        |        |        |        |        |        |

| Drill hole | East<br>(LO21) | North<br>(LO21) | Depth  | From   | To     | Length | Ni<br>(%) | Cu<br>(%) | Co<br>(%) |
|------------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|-----------|
| PC2-32UD1  | 76200.08       | -3245713.61     | 478.54 | 374.12 | 434.29 | 60.17  | 0.35      | 0.18      | 0.00      |
| JAC001     | 75265.72       | -3245639.80     | 475.84 | 457    | 465.79 | 8.79   | 0.33      | 0.14      | 0.00      |
| JAC002     | 74978.22       | -3245734.30     | 571.8  | 511    | 513.85 | 2.85   | 0.29      | 0.14      | 0.02      |
|            |                |                 |        | 521.2  | 527.1  | 5.9    | 0.35      | 0.15      | 0.02      |
| JAC003     | 77060.13       | -3245930.89     | 437.03 | 309.27 | 315.03 | 5.76   | 0.29      | 0.15      | 0.01      |
|            |                |                 |        | 333.57 | 342.17 | 8.6    | 0.27      | 0.15      | 0.03      |
| JAC004     | 78355.00       | -3246376.00     | 519.83 |        |        |        |           |           |           |
| JAC005     | 81585.00       | -3246527.00     | 377.6  |        |        |        |           |           |           |
| JAC006     | 74718.03       | -3245816.56     | 440.63 | 408    | 411.15 | 3.15   | 0.23      | 0.20      | 0.02      |
|            |                |                 |        | 420.23 | 424.23 | 4      | 0.27      | 0.19      | 0.02      |
| JAC007     | 82117.00       | -3246565.00     | 382.44 | 305    | 367.5  | 62.5   | 0.26      | 0.17      | 0.02      |
| HP1        | 77436.00       | -3245716.00     | 205    |        |        |        |           |           |           |
| HP2        | 77666.00       | -3245776.00     | 230    | 104    | 105.4  | 1.4    | 0.26      | 0.03      | 0.01      |
| HP3        | 74339.00       | -3240521.00     | 232.5  |        |        |        |           |           |           |
| HP4        | 73832.00       | -3239839.00     | 205.4  |        |        |        |           |           |           |
| HP5        | 77891.43       | -3245822.69     | 375    | 66     | 67.6   | 1.6    | 0.18      | 0.01      | 0.01      |
| HP6        | 77648.00       | -3245828.00     | 421    |        |        |        |           |           |           |
| HP7        | 76878.30       | -3245525.83     | 197    |        |        |        |           |           |           |
| HP8        | 77455.00       | -3245652.00     | 276    |        |        |        |           |           |           |
| HP9        | 78108.00       | -3245949.00     | 222    |        |        |        |           |           |           |
| HP10       | 77125.00       | -3245553.00     | 205    |        |        |        |           |           |           |
| HP11       | 78416.00       | -3246164.00     | 350    |        |        |        |           |           |           |
| HP12       | 77010.53       | -3245537.23     | 300    |        |        |        |           |           |           |
| HP13       | 78692.00       | -3246166.00     | 230    |        |        |        |           |           |           |
| HP14       | 78300.40       | -3245961.31     | 168    |        |        |        |           |           |           |
| HP15       | 78432.93       | -3245852.17     | 100    |        |        |        |           |           |           |
| HP16       | 77123.18       | -3245552.92     | 244    |        |        |        |           |           |           |
| HP17       | 78239.73       | -3245865.30     | 48     |        |        |        |           |           |           |
| HP18       | 78400.00       | -3245654.00     | 74     |        |        |        |           |           |           |
| HP19       | 78317.35       | -3245847.80     | 101.3  |        |        |        |           |           |           |
| HP20       | 78248.00       | -3245852.00     | 150    |        |        |        |           |           |           |
| HP21       | 78348.73       | -3245865.08     | 152    |        |        |        |           |           |           |
| HP22       | 78446.07       | -3245887.25     | 141    |        |        |        |           |           |           |
| HP25       | 80442.00       | -3247496.00     | 195    |        |        |        |           |           |           |
| HP26       | 76839.00       | -3245550.00     | 490    |        |        |        |           |           |           |
| 2425       | 76444.33       | -3245533.70     | 216.3  | 142.5  | 181.7  | 39.2   | 0.26      | 0.17      | 0.00      |
| 2426       | 76759.75       | -3245557.68     | 220.82 | 107.42 | 111.95 | 4.53   | 0.32      | 0.22      | 0.00      |
| 2427       | 76938.64       | -3245589.50     | 250    |        |        |        |           |           |           |
| 2428       | 77657.29       | -3245791.82     | 193.44 | 113.67 | 183.25 | 69.58  | 0.12      | 0.09      | 0.00      |
| 2429       | 77507.32       | -3245786.00     | 225.93 | 153.7  | 156.76 | 3.06   | 0.35      | 0.21      | 0.00      |
| 2430       | 77799.47       | -3245856.03     | 250    |        |        |        |           |           |           |
| 2431       | 77227.05       | -3245670.59     | 250    |        |        |        |           |           |           |
| PC21 DG    | 76348.41       | -3245428.79     | 75.9   | 8.33   | 13.34  | 5.01   | 0.21      | 0.13      | 0.00      |
|            |                |                 |        | 22.04  | 74.3   | 52.26  | 0.31      | 0.16      | 0.00      |

| Drill hole | East<br>(LO21) | North<br>(LO21) | Depth  | From   | To     | Length | Ni<br>(%) | Cu<br>(%) | Co<br>(%) |
|------------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|-----------|
| PC23 DG    | 75291.84       | -3245354.57     | 54.65  | 28.72  | 33.9   | 5.18   | 0.22      | 0.15      | 0.00      |
|            |                |                 |        | 40.15  | 51.55  | 11.4   | 0.24      | 0.17      | 0.00      |
| PC2-11DG   | 76590.25       | -3245510.27     | 76.73  | 16.47  | 26.74  | 10.27  | 0.27      | 0.19      | 0.00      |
|            |                |                 |        | 32.63  | 43.74  | 11.11  | 0.22      | 0.15      | 0.00      |
| BP001      | 79287.00       | -3246780.00     | 174    | 159    | 174    | 15     | 0.23      | 0.00      | 0.01      |
| BP002      | 79320.00       | -3246759.00     | 250    | 116    | 153    | 37     | 0.22      | 0.00      | 0.01      |
|            |                |                 |        | 176    | 181    | 5      | 0.22      | 0.00      | 0.01      |
|            |                |                 |        | 185    | 204    | 19     | 0.21      | 0.00      | 0.01      |
|            |                |                 |        | 212    | 216    | 4      | 0.23      | 0.00      | 0.01      |
|            |                |                 |        | 226    | 236    | 10     | 0.26      | 0.00      | 0.01      |
| BP003      | 79425.00       | -3246702.00     | 250    | 115    | 209    | 94     | 0.23      | 0.00      | 0.01      |
| BP004      | 79512.00       | -3247205.00     | 220    | 139    | 141    | 2      | 0.20      | 0.01      | 0.01      |
| BP005      | 79596.00       | -3247167.00     | 204    | 103    | 112    | 9      | 0.20      | 0.00      | 0.01      |
|            |                |                 |        | 128    | 135    | 7      | 0.21      | 0.01      | 0.01      |
| BP006      | 79678.00       | -3247172.00     | 200    |        |        |        |           |           |           |
| BP007      | 79734.00       | -3247101.00     | 160    |        |        |        |           |           |           |
| HP001      | 77338.36       | -3245671.48     | 150    | 71     | 74     | 3      | 0.23      | 0.15      | 0.02      |
|            |                |                 |        | 111    | 119    | 8      | 0.21      | 0.12      | 0.02      |
| HP002      | 78178.07       | -3246051.73     | 220    | 22     | 0.22   | 0.01   | 0.01      | 22        | 0.22      |
|            |                |                 |        | 10     | 0.20   | 0.00   | 0.01      | 10        | 0.20      |
|            |                |                 |        | 33     | 0.21   | 0.00   | 0.01      | 33        | 0.21      |
| HP003      | 78234.61       | -3245992.47     | 215    | 3      | 0.21   | 0.00   | 0.01      | 3         | 0.21      |
|            |                |                 |        | 11     | 0.21   | 0.00   | 0.01      | 11        | 0.21      |
|            |                |                 |        | 3      | 0.22   | 0.00   | 0.01      | 3         | 0.22      |
|            |                |                 |        | 3      | 0.22   | 0.00   | 0.01      | 3         | 0.22      |
| JP001      | 74612.44       | -3245559.13     | 150    | 89     | 94     | 5      | 0.28      | 0.17      | 0.02      |
| JP002      | 76306.37       | -3245441.45     | 120    | 84     | 99     | 15     | 0.24      | 0.14      | 0.02      |
| JMP001     | 76371.46       | -3245737.03     | 666.51 | 523.08 | 585    | 61.92  | 0.47      | 0.27      | 0.03      |
|            |                |                 |        | 594    | 607    | 13     | 0.27      | 0.17      | 0.02      |
|            |                |                 |        | 629    | 636    | 7      | 0.21      | 0.16      | 0.02      |
| JMP002     | 76485.81       | -3245721.27     | 505.28 | 404.36 | 432    | 27.64  | 0.33      | 0.23      | 0.03      |
|            |                |                 |        | 438    | 444    | 6      | 0.25      | 0.15      | 0.02      |
|            |                |                 |        | 449.65 | 479    | 29.35  | 0.26      | 0.20      | 0.02      |
| JMP003     | 76555.94       | -3245791.93     | 602.48 | 504.66 | 507    | 2.34   | 0.30      | 0.21      | 0.02      |
|            |                |                 |        | 510.86 | 527    | 16.14  | 0.27      | 0.17      | 0.02      |
|            |                |                 |        | 536    | 585    | 49     | 0.25      | 0.17      | 0.02      |
| JMP004     | 76223.03       | -3245571.86     | 520.28 | 339.39 | 369.44 | 30.05  | 0.25      | 0.17      | 0.02      |
| JMP005     | 76160.82       | -3245447.38     | 288.93 | 194.54 | 248.37 | 53.83  | 0.26      | 0.15      | 0.02      |
| JMP006     | 76292.29       | -3245663.24     | 508.28 | 404.5  | 450    | 45.5   | 0.23      | 0.15      | 0.02      |
| JMP007     | 76334.23       | -3245565.81     | 402.94 | 286    | 296    | 10     | 0.30      | 0.20      | 0.03      |
|            |                |                 |        | 305.54 | 383.1  | 77.56  | 0.27      | 0.19      | 0.02      |
| JMP008     | 76181.41       | -3245657.21     | 517.28 | 454    | 470    | 16     | 0.39      | 0.14      | 0.02      |
| JMP009     | 76453.35       | -3245791.04     | 664.38 | 535    | 552    | 17     | 0.37      | 0.25      | 0.02      |
|            |                |                 |        | 566    | 577    | 11     | 0.27      | 0.18      | 0.02      |



| Drill hole | East<br>(LO21) | North<br>(LO21) | Depth  | From   | To     | Length | Ni<br>(%) | Cu<br>(%) | Co<br>(%) |
|------------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|-----------|
|            |                |                 |        | 587    | 611    | 24     | 0.22      | 0.17      | 0.02      |
|            |                |                 |        | 621.24 | 646    | 24.76  | 0.20      | 0.18      | 0.02      |
| JMP010     | 76400.86       | -3245663.49     | 506.16 | 394.42 | 414    | 19.58  | 0.26      | 0.21      | 0.02      |
|            |                |                 |        | 422    | 469.25 | 47.25  | 0.30      | 0.20      | 0.02      |
| JMP011     | 76592.76       | -3245712.62     | 445.28 | 349    | 354    | 5      | 0.30      | 0.16      | 0.03      |
|            |                |                 |        | 362.74 | 408    | 45.26  | 0.21      | 0.16      | 0.02      |
| JMP012     | 76125.85       | -3245524.35     | 366.83 | 307.66 | 332    | 24.34  | 0.22      | 0.15      | 0.02      |
| JMP013     | 76627.16       | -3245637.57     | 328.34 | 285    | 299    | 14     | 0.21      | 0.19      | 0.02      |
| JMP014     | 76374.38       | -3245482.09     | 249.91 | 126.11 | 149    | 22.89  | 0.48      | 0.29      | 0.03      |
|            |                |                 |        | 166    | 200.6  | 34.6   | 0.23      | 0.15      | 0.02      |
| JMP015     | 76445.92       | -3245570.16     | 286.3  | 237.7  | 241    | 3.3    | 0.24      | 0.15      | 0.02      |
|            |                |                 |        | 252    | 256    | 4      | 0.23      | 0.12      | 0.02      |
|            |                |                 |        | 262    | 267    | 5      | 0.26      | 0.18      | 0.02      |
| JMP016     | 76522.50       | -3245644.57     | 349.28 | 298    | 315    | 17     | 0.27      | 0.21      | 0.02      |
| JMP017     | 76261.93       | -3245492.91     | 279.56 | 224.45 | 250    | 25.55  | 0.24      | 0.18      | 0.02      |
|            |                |                 |        | 258    | 274    | 16     | 0.25      | 0.17      | 0.02      |
| JMP018     | 76346.90       | -3245869.10     | 757.28 | 644    | 656    | 12     | 0.26      | 0.23      | 0.02      |
|            |                |                 |        | 664    | 705    | 41     | 0.22      | 0.17      | 0.02      |
| JMP019     | 76385.00       | -3245617.10     | 463.28 | 295    | 360    | 65     | 0.24      | 0.20      | 0.02      |
| JMP020     | 76368.00       | -3245664.10     | 490.69 | 388.08 | 394    | 5.92   | 0.30      | 0.18      | 0.02      |
|            |                |                 |        | 403    | 420    | 17     | 0.24      | 0.16      | 0.02      |
|            |                |                 |        | 428    | 464.58 | 36.58  | 0.50      | 0.32      | 0.03      |
| JMP021     | 76428.50       | -3245637.60     | 403.28 | 313    | 322    | 9      | 0.28      | 0.22      | 0.02      |
|            |                |                 |        | 330    | 340    | 10     | 0.22      | 0.17      | 0.02      |
|            |                |                 |        | 342.73 | 357    | 14.27  | 0.22      | 0.18      | 0.02      |
| JMP022     | 76402.10       | -3245571.60     | 316.39 | 241.5  | 276    | 34.5   | 0.26      | 0.21      | 0.02      |
| JMP023     | 76419.20       | -3245524.70     | 292.73 | 177    | 190    | 13     | 0.28      | 0.21      | 0.02      |
|            |                |                 |        | 202    | 211    | 9      | 0.23      | 0.16      | 0.02      |
|            |                |                 |        | 233    | 257    | 24     | 0.20      | 0.03      | 0.01      |
| JMP024     | 76471.30       | -3245657.80     | 412.28 | 336.32 | 380.84 | 44.52  | 0.24      | 0.19      | 0.02      |
| JMP025     | 76273.00       | -3245694.00     | 637.05 | 500.45 | 519    | 18.55  | 0.28      | 0.19      | 0.03      |
|            |                |                 |        | 534    | 586    | 52     | 0.40      | 0.20      | 0.02      |
| JMP026     | 76388.00       | -3245450.00     | 190.28 | 89     | 94     | 5      | 0.32      | 0.20      | 0.02      |
|            |                |                 |        | 128    | 136    | 8      | 0.25      | 0.18      | 0.02      |
| JMP027     | 76354.90       | -3245549.80     | 304.28 | 229.56 | 244.4  | 14.84  | 0.27      | 0.23      | 0.02      |
|            |                |                 |        | 250    | 285.5  | 35.5   | 0.39      | 0.23      | 0.03      |
| JMP028     | 76362.70       | -3245388.40     | 133.28 | 39     | 55     | 16     | 0.25      | 0.19      | 0.02      |
| JMP029     | 76445.60       | -3245592.00     | 322.21 | 275    | 295.45 | 20.45  | 0.31      | 0.19      | 0.02      |
| JMP030     | 76328.50       | -3245482.40     | 265.26 | 120.86 | 156    | 35.14  | 0.37      | 0.27      | 0.03      |
|            |                |                 |        | 189    | 231    | 42     | 0.24      | 0.16      | 0.02      |
| JMP031     | 77060.40       | -3245932.60     | 585    | 757    | 764    | 7      | 0.25      | 0.13      | 0.03      |
|            |                |                 |        | 798    | 812.5  | 14.5   | 0.24      | 0.17      | 0.02      |
| JMP032     | 76271.30       | -3245422.10     | 217.28 | 106.5  | 181    | 74.5   | 0.21      | 0.15      | 0.02      |
| JMP033     | 76098.70       | -3245390.80     | 235.38 | 149.5  | 208    | 58.5   | 0.23      | 0.16      | 0.02      |

| Drill hole | East<br>(LO21) | North<br>(LO21) | Depth  | From   | To     | Length | Ni<br>(%) | Cu<br>(%) | Co<br>(%) |
|------------|----------------|-----------------|--------|--------|--------|--------|-----------|-----------|-----------|
| JMP034     | 76240.50       | -3235635.20     | 570.45 | 485.4  | 552.2  | 66.8   | 0.27      | 0.18      | 0.02      |
| JMP035     | 76191.40       | -3245648.30     | 634.33 | 515.91 | 589    | 73.09  | 0.28      | 0.18      | 0.02      |
| JMP036     | 76236.72       | -3245666.23     | 655.15 | 535.9  | 561    | 25.1   | 0.28      | 0.19      | 0.03      |
|            |                |                 |        | 566    | 606.21 | 40.21  | 0.29      | 0.19      | 0.02      |
| JMP037     | 76285.73       | -3245682.37     | 700.51 | 531.83 | 561    | 29.17  | 0.28      | 0.19      | 0.03      |
|            |                |                 |        | 568    | 632.42 | 64.42  | 0.30      | 0.16      | 0.02      |
| JMP038     | 76436.96       | -3245683.22     | 736.12 | 481.79 | 499    | 17.21  | 0.28      | 0.21      | 0.02      |
|            |                |                 |        | 512    | 573    | 61     | 0.39      | 0.23      | 0.03      |
|            |                |                 |        | 595.13 | 605.17 | 10.04  | 0.20      | 0.11      | 0.02      |
|            |                |                 |        | 696.14 | 703.52 | 7.38   | 0.26      | 0.04      | 0.01      |
| JMP039     | 77081.23       | -3245876.02     | 789.4  | 380.5  | 394    | 13.5   | 0.25      | 0.21      | 0.02      |
|            |                |                 |        | 400.45 | 424.38 | 23.93  | 0.21      | 0.15      | 0.01      |
|            |                |                 |        | 612.64 | 642    | 29.36  | 0.26      | 0.19      | 0.03      |
|            |                |                 |        | 745    | 757.01 | 12.01  | 0.23      | 0.15      | 0.02      |
| JMP040     | 75625.17       | -3245544.45     | 703.33 | 573.42 | 581.02 | 7.6    | 0.26      | 0.22      | 0.02      |
|            |                |                 |        | 598    | 606.57 | 8.57   | 0.25      | 0.11      | 0.01      |
|            |                |                 |        | 614    | 634    | 20     | 0.29      | 0.11      | 0.01      |
| JMP041     | 76451.05       | -3245728.18     | 700    | 554    | 653.43 | 99.43  | 0.26      | 0.21      | 0.02      |
| JMP042     | 76726.69       | -3245684.11     | 535.33 | 359    | 419    | 60     | 0.25      | 0.21      | 0.02      |
|            |                |                 |        | 428.12 | 441.59 | 13.47  | 0.21      | 0.18      | 0.02      |
|            |                |                 |        | 450    | 464    | 14     | 0.22      | 0.14      | 0.02      |
| JMP043     | 76908.97       | -3245761.97     | 698.88 | 492.3  | 504    | 11.7   | 0.29      | 0.17      | 0.03      |
|            |                |                 |        | 555    | 564    | 9      | 0.21      | 0.13      | 0.02      |
|            |                |                 |        | 608.32 | 613    | 4.68   | 0.22      | 0.16      | 0.02      |
| JMP044     | 76882.14       | -3245830.88     | 760.15 | 608.27 | 615    | 6.73   | 0.25      | 0.21      | 0.02      |
|            |                |                 |        | 687    | 698.86 | 11.86  | 0.29      | 0.26      | 0.02      |
| JMP045     | 76057.77       | -3245502.03     | 451.42 | 302    | 328.12 | 26.12  | 0.22      | 0.14      | 0.02      |
| JMP046     | 76687.15       | -3245801.26     | 766.33 | 572    | 578    | 6      | 0.31      | 0.15      | 0.02      |
|            |                |                 |        | 597    | 619    | 22     | 0.25      | 0.17      | 0.02      |
|            |                |                 |        | 625    | 630    | 5      | 0.25      | 0.31      | 0.03      |
| JMP047     | 75629.09       | -3245463.83     | 465.93 | 331.19 | 358.32 | 27.13  | 0.28      | 0.19      | 0.02      |
|            |                |                 |        | 375.37 | 396.26 | 20.89  | 0.25      | 0.21      | 0.02      |
| JMP048     | 76557.08       | -3245794.67     | 724.37 | 532.01 | 585.6  | 53.59  | 0.25      | 0.16      | 0.02      |
|            |                |                 |        | 594.72 | 615.28 | 20.56  | 0.23      | 0.18      | 0.02      |
| JMP049     | 75840.87       | -3245482.94     | 472.43 | 309    | 369    | 60     | 0.25      | 0.17      | 0.02      |
| JMP050     | 76027.65       | -3245588.21     | 559.81 | 398.98 | 461.28 | 62.3   | 0.25      | 0.18      | 0.02      |
| JMP051     | 76864.16       | -3245887.05     | 879.52 | 585    | 592.9  | 7.9    | 0.40      | 0.29      | 0.03      |
|            |                |                 |        | 729.8  | 739    | 9.2    | 0.24      | 0.21      | 0.02      |
|            |                |                 |        | 790    | 804.17 | 14.17  | 0.31      | 0.20      | 0.02      |
| JMP052     | 76078.76       | -3245698.97     | 712.38 | 543.47 | 608.2  | 64.73  | 0.24      | 0.17      | 0.02      |
| JMP053     | 76632.27       | -3245755.33     | 655.31 | 433    | 463    | 30     | 0.23      | 0.16      | 0.02      |
|            |                |                 |        | 489    | 558    | 69     | 0.25      | 0.20      | 0.02      |

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

**Section 1 Sampling Techniques and Data**

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

| Criteria                     | JORC Code explanation   | Commentary  |
|------------------------------|---|---|
| <b>Sampling techniques</b>   | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All samples used to estimate the Mineral Resource were sourced from diamond drilling.</li> <li>Drill spacing was between 40 and 150 m with approximately half the resource sampled by 75 m spaced drilling</li> <li>Half core samples were collected continuously through the mineralised zones (defined by logging) after being cut longitudinally using a diamond saw.</li> <li>Drill hole samples were taken at nominal 1 m intervals, unless there was a lithological change. Lithological contacts were honoured by the sampling (ie sampling did not composite different lithologies into the same sample)</li> <li>In the Mineral Resource area, more than two thirds of the drilling (32 holes) was conducted by African Nickel Limited (ANL) in 2011 and 2012.</li> <li>The remainder of the drilling was conducted by Anglo American Prospecting Services (AAPS) in the 1970's with a number of confirmation deflections being completed by Gold Fields of South Africa (GFSA) in 1993.</li> <li>ANL samples were submitted to the Johannesburg laboratories of Intertek Genalysis (2011 drilling) and ALS Chemex (2012 drilling) where they underwent standard preparations (drying, crushing, pulverising and splitting to obtain representative sub samples for analysis).</li> </ul> |
| <b>Drilling techniques</b>   | <ul style="list-style-type: none"> <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>   | <ul style="list-style-type: none"> <li>All drilling included in the Mineral Resource is diamond core drilling.</li> <li>Drilling was NQ cored and collared at angles of between 45° and 80°.</li> </ul>   |
| <b>Drill sample recovery</b> | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure</li> </ul>  | <ul style="list-style-type: none"> <li>Core recoveries were documented during logging of drill holes.</li> <li>Core recovery in the sill is &gt;98%. The condition of the core is excellent for the most part, with major losses largely confined to the near surface</li> </ul>  |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
|   | <p>representative nature of the samples.</p> <ul style="list-style-type: none"> <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>  | <p>weathered zones and in occasional areas of significant fracturing.</p>   |
| <b>Logging</b>  | <ul style="list-style-type: none"> <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>   | <ul style="list-style-type: none"> <li>All ANL drill holes were geologically logged by qualified geologists. The logging was of an appropriate standard for grade estimation.</li> <li>Logging completed prior to ANL was converted to the ANL standard nomenclature for the project.</li> </ul>  |
| <b>Sub-sampling techniques and sample preparation</b> | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Core was split in half with a diamond blade cutting saw. Half core was submitted for assay.</li> <li>External quality assurance of the laboratory assays for the ANL samples was monitored by the insertion of blanks, duplicates and certified reference materials (CRM).</li> <li>Sample preparation for the 2011 ANL drilling was undertaken at Intertek Genalysis' Johannesburg laboratory, an ISO accredited laboratory.</li> <li>Sample preparation for the 2012 ANL drilling was undertaken at ALS Chemex's Johannesburg laboratory, an ISO accredited laboratory.</li> <li>Both laboratories utilise industry best practise for sample preparation for analysis involving drying of samples, crushing to &lt;5mm and then pulverising so that +85% of the sample passes 75 microns.</li> <li>In addition to the field duplicates and CRMs/blanks lab supplied CRM's, blanks and replicates are analysed with each batch.</li> <li>Limited information is available for the AAPS data but based on the knowledge of practises of AAPS at the time the Competent Person believes sub sampling techniques would have been industry standard.</li> </ul> |
| <b>Quality of assay data and laboratory tests</b>     | <ul style="list-style-type: none"> <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</li> </ul>   | <ul style="list-style-type: none"> <li>Samples from the 2011 ANL drilling were submitted to Intertek Genalysis in Johannesburg. Samples were analysed for base metals using an aqua regia digest and ICP-OES. Analysis for PGE metals used lead fire assay with ICP-MS finish (25g aliquot).</li> <li>Samples from the 2012 ANL drilling were submitted to ALS Chemex in Johannesburg. Samples were analysed for base metals using a four acid digest and ICP-AES. Analysis for PGE metals used lead fire assay with ICP-AES finish (30g aliquot).</li> <li>ANL completed a bias test to confirm that the different assay</li> </ul>  |

| Criteria                                     | JORC Code explanation   | Commentary   |
|--|---|--|
|  | <i>levels of accuracy (ie lack of bias) and precision have been established.</i>  | <p>methodologies did not materially affect the results.</p> <ul style="list-style-type: none"> <li>The AAC samples were assayed by Anglo American Research Laboratories (AARL) using atomic absorption spectrometry. The techniques used by GFSA are unknown.</li> <li>External quality assurance of the laboratory assays for the ANL samples was monitored by the insertion of blanks, duplicates and certified reference materials (CRM)</li> <li>Blank samples consisting of commercially available fine grained swimming pool filter sand were most recently used, while rock chips of feldspar have been inserted in the past.</li> <li>Coarse field duplicates consisting of a split sub-sample of the original crushed sample material.</li> <li>For the 2012 drilling campaign, only one CRM (AMIS 170) was being used. In 2011, two CRMs were alternated.</li> <li>No external laboratory checks have been carried out at this stage, apart from the bias test mentioned above.</li> </ul> |
| <b>Verification of sampling and assaying</b> | <ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>             | <ul style="list-style-type: none"> <li>Three of the AAC drill holes were twinned by GFSA using deflections.</li> <li>The mineralisation has been intersected by boreholes drilled by a number of different companies all of whom reported similar results.</li> <li>The Competent Person has viewed the core from these holes, as did the consultant who completed the resource estimate.</li> </ul>   |
| <b>Location of data points</b>               | <ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>  | <ul style="list-style-type: none"> <li>All of the ANL drill hole collars have been surveyed by a qualified surveyor using a differential GPS.</li> <li>Downhole positions were surveyed for all of the ANL drill holes using an electronic multi-shot instrument.</li> <li>The AAPS holes were surveyed down the hole using acid bottle techniques.</li> </ul>   |
| <b>Data spacing and distribution</b>         | <ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul> | <ul style="list-style-type: none"> <li>Drill holes intersected the Mineral Resource between approximately 40 m and 150 m apart.</li> <li>Over half of the area was drilled at less than 75 m drill hole spacings.</li> <li>Sample lengths were composited to 1m within each domain.</li> </ul>   |
| <b>Orientation of</b>                        | <ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering</i></li> </ul>   | <ul style="list-style-type: none"> <li>Drilling was oriented perpendicular to the attitude of the sill.</li> <li>To achieve this drill holes have been collared at dips between 45° and</li> </ul>   |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
| <b>data in relation to geological structure</b> | <p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <li><i>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.</i></li> </ul> | <p>80°.</p> <ul style="list-style-type: none"> <li>As a result most holes intersect the mineralisation at an acceptable angle.</li> </ul>  |
| <b>Sample security</b>                          | <ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>  | <ul style="list-style-type: none"> <li>Core was taken directly from the drill site to a locked core yard in Putsonderwater.</li> <li>The core yard is enclosed by a security fence and is locked at all times when ANL staff are not present.</li> <li>Core is stored within locked buildings.</li> <li>Samples were transported to the laboratory using appropriate sign offs / checks to ensure all samples were transported directly to the laboratory.</li> </ul>  |
| <b>Audits or reviews</b>                        | <ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>  | <ul style="list-style-type: none"> <li>The consultant geologist who completed the resource estimate completed the following audit and review work: <ul style="list-style-type: none"> <li>A site based review of the drill hole data processes, collection protocols and QA/QC systems applied during the drilling program.</li> <li>Inspection of the ANL cores used in the mineral resource estimate.</li> <li>Database spot checks.</li> </ul> </li> <li>The consultant geologist concluded that the exploration work conducted by ANL was carried out using appropriate techniques for the style of mineralisation at Jacomynspan and that the resulting database was suitable for Mineral Resource estimation.</li> </ul> |



## **Section 2 Reporting of Exploration Results**

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

| Criteria                                       | JORC Code explanation  | Commentary  |
|--|--|---|
| <b>Mineral tenement and land tenure status</b> | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Prospecting Rights 10937, 10938 and Mining Right application 10032 are held by Namaqua and Disawell. A map showing the area covered by these rights is included as Appendix 4.</li> <li>The Jacomynspan Project is situated near Putsonderwater, approximately 70 km east north-east of Kenhardt in the Northern Cape Province of South Africa. The Mineral Resource occurs on the farm Jacomynspan 176.</li> </ul>  |
| <b>Exploration done by other parties</b>       | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>  | <ul style="list-style-type: none"> <li>In the Mineral Resource area, more than two thirds of the drilling was conducted by African Nickel Limited (ANL) in 2011 and 2012.</li> <li>The remainder of the drilling was conducted by Anglo American Corporation (AAC) in the 1970's with a number of confirmation deflections being completed by Gold Fields of South Africa (GFSa) in 1993.</li> </ul>  |
| <b>Geology</b>                                 | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>  | <ul style="list-style-type: none"> <li>The target is Ni-Cu-PGE mineralisation hosted within mafic intrusions analogous to the Nova Ni-Cu-Co Deposit (WA), the Voiseys Bay Deposit (Canada) and the Thompsons Bay Deposit (Canada).</li> <li>The mineralisation is of primary magmatic origin, but in some cases has been sheared or tectonically remobilised.</li> <li>The mineralisation is contained in a steeply dipping (~75° south) tremolite schist sill and associated olivine rich lithologies. The harzburgite and immediately surrounding pyroxenite hosts the most extensive and better grades of mineralisation.</li> <li>The predominant sulphide mineral is pyrrhotite with subordinate chalcopyrite and pentlandite. Mineralisation is present as fine to coarse disseminations, stringers, blebs, net-textured, semi-massive, and massive sulphide zones. Massive sulphide mineralisation is present in several boreholes over the full plunge extent of the mineral resource area. This mineralisation is located towards the base of the pyroxenite sequence and occasionally within the country-rock, indicating that there is good potential for discovery of larger bodies of massive mineralisation.</li> <li>The mineralised intersections in drill core are clearly discernible as either the main tremolite sill or olivine rich units enclosed within the sill.</li> <li>The precise locations of faults have not been determined; however the</li> </ul> |

| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
|   |   | area is not heavily affected by faulting.  |
| <b>Drill hole Information</b>   | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <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> | <ul style="list-style-type: none"> <li>Ni, Cu, Co, Pt, Pd, Au assays obtained from the core of more than eighty diamond drill holes, including 53 that were drilled by ANL in 2011 and 2012, were estimated into a three dimensional block model using Ordinary Kriging.</li> <li>All Significant Intersections are tabulated in Appendix 1.</li> </ul>          |
| <b>Data aggregation methods</b>   | <ul style="list-style-type: none"> <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>   | <ul style="list-style-type: none"> <li>Significant Intersections are calculated by average of assays result &gt; 0.2%Ni weighted by sample width. No truncations have been applied at this stage. Extreme high grades over the sampling widths are uncommon.</li> </ul>  |
| <b>Relationship between mineralisation widths and intercept lengths</b> | <ul style="list-style-type: none"> <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>   | <ul style="list-style-type: none"> <li>All intersection widths are down hole widths.</li> <li>Most holes intersected the mineralisation perpendicular to the attitude of the mineralised sill.</li> <li>True widths have been calculated for certain intersections but further work is required before these can be calculated for all intersections.</li> </ul> |
| <b>Diagrams</b>   | <ul style="list-style-type: none"> <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>   | <ul style="list-style-type: none"> <li>All drilling is shown in plan view on Figure 4, with all drilling included in the SAMREC Resource shown in plan view on Figure 3. Appendix 3 shows cross section and long section views of drilling in the resource area.</li> </ul>  |
| <b>Balanced reporting</b>   | <ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades</li> </ul>   | <ul style="list-style-type: none"> <li>All drill holes are listed in Appendix 1, including those with no mineralisation.</li> </ul>  |

| Criteria                                  | JORC Code explanation   | Commentary  |
|---|---|---|
|   | <i>and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>  |   |
| <b>Other substantive exploration data</b> | <ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Exploration data includes geophysical surveys, percussion and diamond drilling, metallurgical test work, geotechnical appraisals, environmental studies and mine design work.</li> <li>A large proportion of this is available to the Company and has been reviewed by the Competent Person.</li> </ul>  |
| <b>Further work</b>                       | <ul style="list-style-type: none"> <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>                                       | <ul style="list-style-type: none"> <li>Orion Gold plans to target locations within the sill where massive and semi-massive accumulations may have occurred.</li> <li>Therefore substantial exploration may be carried out on areas outside the Mineral Resource.</li> <li>Exploration will integrate geophysical surveys such as airborne and ground EM, ground gravity and high resolution magnetics with historical drill results to target future drilling.</li> </ul> |

### **Section 3 Estimation and Reporting of Mineral Resources**

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

| Criteria                         | JORC Code explanation  | Commentary  |
|----------------------------------|--|---|
| <b>Database integrity</b>        | <ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>  | <ul style="list-style-type: none"> <li>Data was stored in an Excel database. The consultant geologist completed spot checks on the database and is confident that the database was an accurate representation of the original data collected.</li> <li>Simple validation processes were undertaken in Excel. The data was further validated and visually verified in GEMS by the Competent Person.</li> </ul>   |
| <b>Site visits</b>               | <ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>  | <ul style="list-style-type: none"> <li>A site visit was undertaken by the Competent Person in May 2016. Collars from the ANL drilling were observed. Drill core from several mineralised intersections was inspected.</li> </ul>  |
| <b>Geological interpretation</b> | <ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul> | <ul style="list-style-type: none"> <li>The Competent Person has confidence in the geological interpretation of the mineralised envelope. The mineralisation is of primary magmatic origin, but in some cases has been sheared or tectonically remobilised.</li> <li>The large, low grade nature of the Mineral Resource correlates to the mafic intrusive delineated by drilling. The mineralised intersections in drill core are clearly discernible as either the main tremolite sill or olivine rich units enclosed within the sill. The harzburgite and immediately surrounding pyroxenite hosts the most extensive and contain better grades of mineralisation. Qualified geologists have logged all drill holes and coded the data to standard project codes.</li> <li>The precise locations of faults have not been determined; however the area is not heavily affected by faulting. A geological loss of 5% has been applied to the model to account for any losses as a result of adverse geological features.</li> <li>Grades were estimated into either the lower grade tremolite schist domain or the higher grade olivine-rich domain. The extents of the olivine-rich domain were modelled using Indicator Kriging and post-processed to conform to the geological understanding of the deposit. Hard boundaries were used in the estimation.</li> <li>There are no reasonable alternative interpretations that can be considered.</li> <li>The nature of a magmatic hosted Ni-Cu deposit affects continuity of grade and geology.</li> <li>The Competent Person considers that the nature of the available</li> </ul> |



| Criteria                                   | JORC Code explanation   | Commentary   |
|--|---|--|
|  |   | information is sufficient to define a Mineral Resource.  |
| <b>Dimensions</b>                          | <ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>  | <ul style="list-style-type: none"> <li>The area defined as a Mineral Resource extends approximately 1.3 km along strike by 1.0 km on dip, having been constrained to a maximum depth of 900 m below surface.</li> <li>The Mineral Resource is between approximately 20 m and 80 m thick, with an average thickness of approximately 50 m.</li> <li>The Jacomynspan Sill dips approximately 75° to the South and outcrops on surface within the Jacomynspan project area.</li> <li>The Sill is oxidised to approximately 75 m, the oxidised material having been excluded from the Mineral Resource.</li> </ul>   |
| <b>Estimation and modelling techniques</b> | <ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul> | <ul style="list-style-type: none"> <li>Ni, Cu, Co, Pt, Pd, Au and density were estimated for each block using ordinary kriging. Estimation parameters were optimised using a Kriging Neighbourhood Analysis.</li> <li>A minimum number of seven 1 m composites were required for an Indicated Mineral Resource.</li> <li>Grades were extrapolated in the plane of the sill a maximum distance of 160 m from the nearest drill hole intersection, being approximately twice the Ni grade variogram range.</li> <li>Grades were estimated into either the lower grade tremolite schist domain or the higher grade olivine-rich domain. The extents of the olivine-rich domain were modelled using Indicator Kriging and post-processed to conform to the geological understanding of the deposit. Hard boundaries were used in the estimation.</li> <li>Block size was 5 mN by 25 mE by 20mRL optimised using a Kriging Neighbourhood Analysis.</li> <li>The coefficients of variation for the variables modelled were less than 1.0 for all variables, the histograms being positively skewed. Variograms were calculated in the plane of the sill, down-hole and across sill.</li> </ul> |
| <b>Moisture</b>                            | <ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>  | <ul style="list-style-type: none"> <li>For the Mineral Resource estimate, all tonnages are estimated on a dry basis.</li> </ul>  |

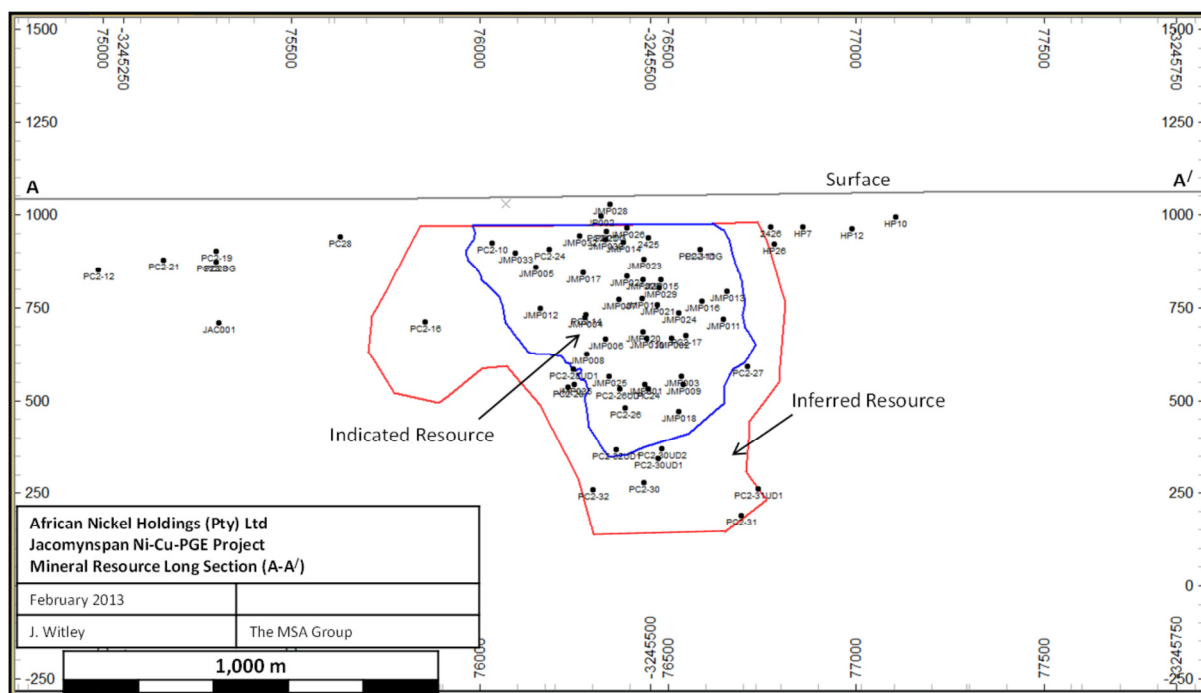
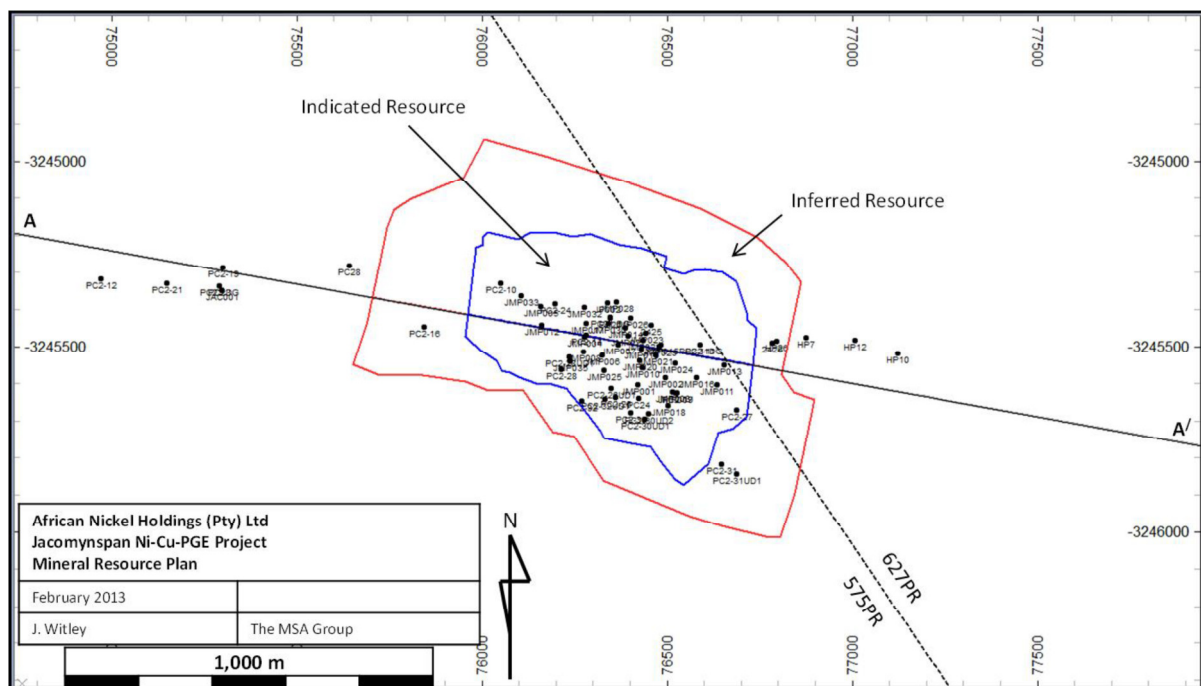
| Criteria                                    | JORC Code explanation  | Commentary   |
|---|--|--|
| <b>Cut-off parameters</b>                   | <ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>   | <ul style="list-style-type: none"> <li>The boundaries for the Mineral Resource were primarily determined based on geological boundaries. This usually corresponded to a nickel grade of 0.2% Ni.</li> <li>One Co and one PGE value were capped to the next highest value in the composite dataset based on an outlier analysis.</li> <li>One PGE sample value was cut from the database due to an extreme Pt value that was inconsistent with other metal grades in the sample.</li> </ul> |
| <b>Mining factors or assumptions</b>        | <ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>   | <ul style="list-style-type: none"> <li>No mining cuts have been applied. The considerable thickness and steep dip implies that the Mineral Resource can be extracted using established mining methods. Geotechnical reports did not identify any significant issues for consideration when completing the Mineral Resource. A 5% geological loss factor was applied to the Mineral Resource.</li> </ul>  |
| <b>Metallurgical factors or assumptions</b> | <ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>   | <ul style="list-style-type: none"> <li>Mineralisation occurs predominantly in sulphides. Test work on three core samples indicates that the mineralisation is amenable to flotation.</li> </ul>  |
| <b>Environmental factors or assumptions</b> | <ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul> | <ul style="list-style-type: none"> <li>The project site is located in a semi desert environment with low environmental sensitivity. The area surrounding the deposit has recently been the subject of environmental studies for land use as independent power producer projects. No threatened or endangered fauna or flora species are known to occur and no sensitive landforms or terrains are recorded.</li> </ul>   |
| <b>Bulk density</b>                         | <ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and</li> </ul>  | <ul style="list-style-type: none"> <li>Specific gravity determinations were made for the ANL drillhole samples using a gas pycnometer.</li> <li>Specific gravity was interpolated into the block model using Ordinary</li> </ul>   |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  | <p>representativeness of the samples.</p> <ul style="list-style-type: none"> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>  | Kriging.  |
| <b>Classification</b>                              | <ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>  | <ul style="list-style-type: none"> <li>The Mineral Resource was classified as either Indicated or Inferred. A plan and long section showing the classification in relation to the drilling is shown in Appendix 3.</li> <li>Indicated Mineral Resources were declared if block estimates were achieved with the required minimum number of samples within 1.5 times the variogram range of Ni.</li> <li>Inferred Resources were classified where a block estimate was located within twice the variogram range of Ni from the nearest borehole.</li> <li>Appropriate account has been taken of all relevant factors for the definition of the Mineral Resource.</li> <li>The results appropriately reflect the Competent Person's view of the deposit.</li> </ul> |
| <b>Audits or reviews</b>                           | <ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>   | <ul style="list-style-type: none"> <li>The Competent Person has independently reviewed the Mineral Resource estimate, which was carried out by a consultant geologist to ANL.</li> </ul>  |
| <b>Discussion of relative accuracy/ confidence</b> | <ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul> | <ul style="list-style-type: none"> <li>The Competent Person considers that the relevant accuracy and confidence level is sufficient for the estimate of the Mineral Resource.</li> <li>The Competent Person notes that he has not yet completed sufficient review on the resource estimate to classify it in accordance with the JORC Code at this time and consequently it is uncertain that, following evaluation and/or further exploration work, that the foreign resource estimate will be able to be reported as a Mineral Resource in accordance with the JORC Code. The Company plans to carry out further assessment and due diligence possibly including drilling on the Mineral Resource.</li> </ul>   |

**Figure A3.2:** Long section of drilling at Jacomynspan along with mineralisation zone as interpreted for the resource estimate.

**Figure A3.3:** Cross section of drilling at Jacomynspan along with mineralisation zone as interpreted for the resource estimate.





**Figure A3.4:** Plan (top) and long section (bottom) showing classification of Jacomynspan resource along with drill hole locations.



Appendix 4: Plan showing Prospecting Rights and Mining Right Application.

