

Detailed ASX/JSE RELEASE: 8 March 2018

# Geological Modelling Confirms Compelling Targets Surrounding the Jacomynspan Ni-Cu-Co-PGE Intrusive

- ► The Jacomynspan Intrusive Complex has important characteristics in common with major Ni-Cu occurrences such as Voisey's Bay; Kabanga and Nova-Bollinger.
- A recently completed airborne EM and magnetic survey has identified several high priority targets for follow up work.
- ▶ The geophysical targets are centred around a maiden JORC Mineral Resource of 6.8Mt containing 39,480 tonnes Ni, 22,800 tonnes Cu and 1,800 tonnes of Co at a 0.4% Ni cut-off with grades of 0.57% Ni, 0.33% Cu and 0.30% Co, drilled between 1971 and 2012.
- Detailed re-appraisal applying geochemistry and re-logging of magmatic features has made important findings in support of a compelling exploration opportunity.

Orion Minerals Limited (ASX/JSE: ORN) (Orion or the Company) is pleased to announce that a geological re-evaluation of the ultramafic intrusive hosted Jacomynspan Ni-Cu-Co-PGE deposit undertaken for the Company by expert consultant Richard Hornsey, has highlighted important findings that elevate the importance of this district as a compelling target for exploration.

The Jacomynspan intrusion is located within the Meso to Neo-Proterozoic Namaqua-Natal Belt. The belt is a complex, long-lived multi-phase orogenic assembly zone, related to the amalgamation of the Rodinia Supercontinent (Figure 1). These super-continent amalgamation episodes are associated with emplacement of mafic-ultramafic intrusions with the potential to host Ni-Cu mineralisation and are therefore of high exploration interest. The event that resulted in the emplacement of the Jacomynspan Complex is part of a global event associated with several world-class Nickel-sulphide deposits such as Voisey's Bay, Kabanga and Nova-Bollinger.

The main Jacomynspan intrusion discovered in 1973 is a mafic-ultramafic sill attaining widths of up to 80m over a strike of approximately 5km, dipping 65° to 75° to the south-east and has been folded into a curvilinear shape parallel to the possibly-faulted margin of the Jacomynspan Formation (Boven Rugzeer Structural Zone). The lithologies identified include norite, hornblende gabbro, pyroxenite, and harzburgite. Although the intrusion is locally deformed and subject to low-grade metamorphism, the intensity of deformation is significantly less than the host gneiss.

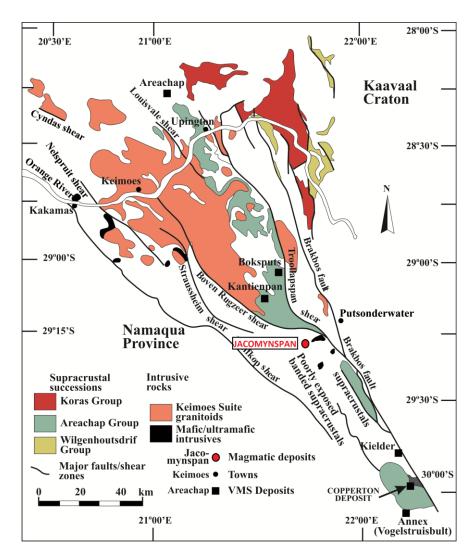


Figure 1: Simplified geological map showing the locality of the Jacomynspan Ni – Cu deposit in the Areachap Belt.

The work undertaken by Richard Hornsey has included a review of the key genetic and interpretative features of the intrusion, a dedicated litho-geochemical sampling program to characterise the intrusion which hosts the Mineral Resource and to develop a set of parameters that may inform prospectivity analysis and be used to assess and evaluate other intrusions within the terrane.

Key observations by Richard Hornsey are:

- The intrusion has a primary magmatic fractionation sequence from peridotite (harzburgite and olivine pyroxenite), to pyroxenite, and locally norite. The intrusion is not layered, nor compositionally fractionated.
   The components of the intrusion form compositionally unique discrete units that appear to have been emplaced as mono-compositional magma pulses;
- The intrusion post-dates peak metamorphism and tectonic mobilisation;
- The sulphidic harzburgite unit is the best mineralised and was emplaced at a later stage and intrudes into
  the pyroxenite. It is non-deformed and has distinct to sharp intrusive contacts, forming shallow to westerly
  plunging lenses hosted within the pyroxenite;
- The intrusion hosts sulphide mineralisation throughout its extent within almost all recorded lithologies except for a volumetrically subordinate footwall harzburgite unit. The sulphidic harzburgite unit contains higher tenor Cu Ni mineralisation than the earlier, low temperature metamorphosed pyroxenite, which it intrudes. The sulphide mineralisation has been derived from primary magmatic processes that although intimately related, reflect different conditions within the flowing magma conduit. For characterisation purposes the mineralisation is divided into three categories reflecting the genetic processes involved (Figure 2):

- Type 1 mineralisation is primary magmatic mineralisation that has frozen in-situ together with the host cumulates. This is extensively present as fine grained disseminated and net-textured sulphide mineralisation (1-30% sulphide).
- Type 2 mineralisation has been injected into previously lithified cumulates, or immediately overlies internal disconformities within the intrusion. This mineralisation may be coarsely net-textured, or forms veins, stringers, semi-massive to massive sulphide (60-80% sulphide). Although injected, this is a primary magmatic feature related to transport of sulphide liquid by the magma travelling along the conduit. The intrusion hosts stringer sulphide as cross-cutting veins that locally brecciate the host. Of these, the JMP038 intersection is the most significant due to its higher tenor, and development of loop-textured pentlandite.



Figure 2: Type 2 mineralisation hosted by all lithological units at Jacomynspan. From the top; massive sulphide stringer (JMP001) with an associated alteration halo cross-cutting the peridotite unit. Massive sulphide vein associated with pegmatitic feldspar (JMP003) cross-cutting the pyroxenite unit. Transgressive massive sulphide veins intruding and brecciating already-lithified pyroxenite unit (JMP041). Massive sulphide stringer, which is currently unique due to its higher tenor (>4% Ni), and which has coarse loop texture (red arrow) (JMP038).

o Type 3 mineralisation is massive sulphide mineralisation possibly of similar tenor as Type 2 injections, but with volumetrically larger accumulations that result from trapping of large quantities of sulphide liquid derived from the magma chamber. These are typically associated with locations of intrusion morphology change or choke-points. This style of mineralisation has not specifically been explored for outside of the original discovery site and has not yet been discovered at the main Jacomynspan intrusion, where exploration focussed on the core a large intrusive body, rather than the margin zones and other potential trap sites required to accumulate the sulphide liquid, such as those found at similar mineral deposits globally including the Voisey's Bay Deposit. This type of mineralisation should form the focus of ongoing exploration.

Geochemical "spidergram" plots (Appendix 1) have been plotted for trace elements, REE and the PGE analysis from all type lithologies and presented using standard plots. These indicate that all samples have similar profiles, therefore are part of the same magma suite and are intimately related. All samples are characterised by extreme depletion of Ti. This may be related to removal of titaniferous magnetite liquid. This liquid may have been deposited outside of the target mineralised units and may provide an associated geophysical signature that form a diagnostic parameter for Jacomynspan-suite intrusions.

Magma provenance and characterisation diagrams (Appendix 1) indicate that the magmas are crustally contaminated, tholeiitic komatiites to komatiitic basalt, related to arc magmatism, and derived from extensive, shallow mantle melting. These melts generally produce large quantities of magma that are enriched in base metals and PGE.

#### **Implications for Exploration**

The Jacomynspan intrusive complex shares many characteristics to other late-tectonic intrusions emplaced into orogenic margins globally. These include moderate to deep-seated, late-stage, post-peak deformation emplacement, complex magma emplacement history indicative of a long-lived conduit, and indications of multi-phase mineralisation history that has locally derived Type 2 mineralisation and has good potential for Type 3 accumulation of massive sulphide.

The intrusions post-date the allochthonous juxtaposition of the host Areachap and Jacomynspan Formations and it is likely that intrusions will be found in both host rock units. Importantly it should also be noted that not all intrusive bodies will outcrop and the potential for blind intrusive bodies should be anticipated in addition to those mapped from outcrop.

The Type 2 and Type 3 mineralisation, which will be the main exploration target, are best targeted using electrogeophysical techniques such as the recent SkyTEM survey conducted by Orion (refer ASX release 1 February 2018). Integration of the SkyTEM EM survey and magnetic data have outlined a number of strong conductors in the vicinity of the main Jacomynspan intrusive (Figure 3). These targets will now be followed up with ground geophysics and ground truthing, before prioritised targets are selected for drill testing.

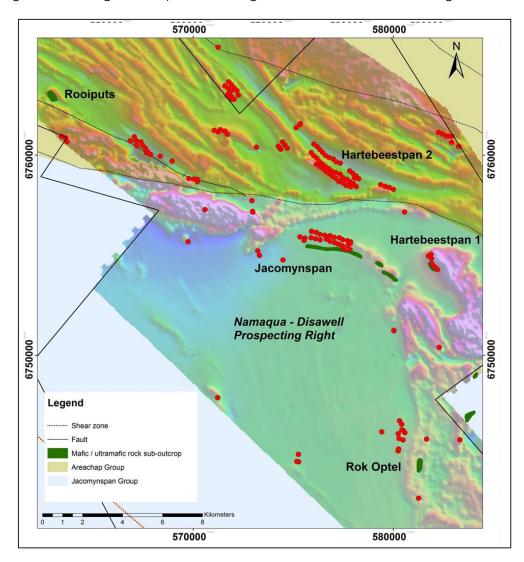


Figure 3: Interpreted conductors (red dots) from recent SkyTEM survey, interpreted as potential ultramafic intrusive Nickel Sulphide targets.

#### **Mineral Resources**

The Mineral Resources for the Jacomynspan Project were previously reported (refer ASX release 14 July 2016) in accordance with the SAMREC Code (2007) as a "qualifying foreign resource estimate" as defined in the ASX Listing Rules. The Mineral Resources have now been reassessed by the Competent Person and is stated here in compliance with the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). The historical drill data, including assay data and QA/QC protocols, were found to be consistent with the JORC Code by the Competent Person (discussed in Appendix 2) The Mineral Resources stated in Table 1 are for drilling data currently available (Figure 4). A 0.4% Ni cut-off grade was used for the Mineral Resource with the resource estimate at other cut-offs presented in Table 2.

Mineral Resource Grade-Tonnage Table for the Jacomynspan Project at a 0.40% Ni cut-off grade															
				-	Ni	(	Cu	(	Co	ı	Pt	F	<sup>2</sup> d	A	Au
Classification	Cut off % Ni	Volume (m³)	Tonnes	Grade (%)	Metal Tonnes	Grade (%)	Metal Tonnes	Grade (%)	Metal Tonnes	Grade (g/t)	Metal Ounces	Grade (g/t)	Metal Ounces	Grade (g/t)	Metal Ounces
Indicated	0.40	584 000	1 780 000	0.55	10 000	0.29	5 000	0.03	1 000	0.17	10 000	0.11	6 000	0.07	4 000
Inferred	0.40	1 647 000	5 056 000	0.58	29 000	0.35	18 000	0.03	1 000	0.19	31 000	0.13	21 000	0.07	11 000

Table 1: Indicated and Inferred Mineral Resource Statement for the Jacomynspan Project on the Namaqua Mining Right using a 0.4% Ni cut-off.

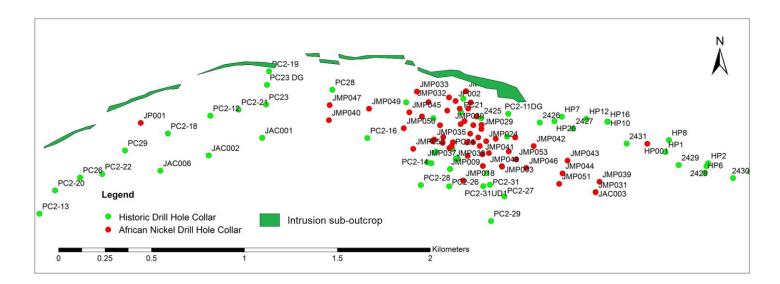


Figure 4: Plan showing mafic intrusion sub-outcrop and drilling at the Jacomynspan resource area.

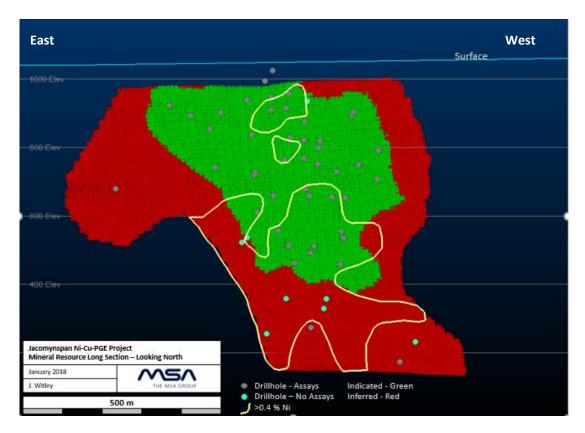


Figure 5: Longitudinal Section of the Jacomynspan Mineral Resource showing in green the Indicated and red the Inferred Resource at zero cut-off. The yellow outline indicates the resource at a 0.4% Ni cut-off (refer to Table 1).

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			N	li		Cu	c	ю	F	't	P	'd	А	١u
Cut off % Ni	Volume (m³)	Tonnes	Grade (%)	Metal Tonnes	Grade (%)	Metal Tonnes	Grade (%)	Metal Tonnes	Grade (g/t)	Metal Ounces	Grade (g/t)	Metal Ounces	Grade (g/t)	Metal Ounces
0.20	11 252 000	33 000 000	0.26	86 000	0.18	58 000	0.02	6 000	0.10	101 000	0.05	53 000	0.04	44 000
0.25	4 205 000	12 393 000	0.32	40 000	0.20	25 000	0.02	3 000	0.11	45 000	0.06	25 000	0.05	19 000
0.30	1 501 000	4 461 000	0.42	19 000	0.24	11 000	0.02	1 000	0.14	20 000	0.08	12 000	0.05	8 000
0.40	584 000	1 780 000	0.55	10 000	0.29	5 000	0.03	1 000	0.17	10 000	0.11	6 000	0.07	4 000
0.50	284 000	872 000	0.66	6,000	0.37	3 000	0.04	300	0.16	5,000	0.11	3 000	0.07	2 000

#### Inferred Mineral Resource for the Jacomynspan Project at various Ni cut-off grades Ni Cu Со Pt Pd Cut off Grade Metal Grade Metal Grade Metal Grade Metal Grade Metal Grade Metal Volume (m³) Ounces % Ni **Tonnes** (%) (%) (%) (g/t) (g/t) (g/t) **Tonnes Tonnes Tonnes** Ounces Ounces 0.20 11 022 000 32 304 000 0.29 94 000 0.20 63 000 0.02 6 000 0.10 108 000 0.06 60 000 0.04 44 000 0.25 3 974 000 11 863 000 0.42 49 000 0.26 31 000 0.02 2 000 0.15 55 000 0.09 34 000 0.05 20 000 0.30 2 303 000 7 008 000 0.52 36 000 0.31 22 000 0.02 2 000 0.19 42 000 0.12 27 000 0.06 14 000 1 647 000 5 056 000 18 000 0.03 21 000 0.40 0.58 29 000 0.35 1 000 0.19 31 000 0.13 0.07 11 000 11 0003 0.50 982 000 3 041 000 20 000 0.03 0.17 0.07

Table 2: Indicated and Inferred Mineral Resource for the Jacomynspan Project at various cut-offs.

The maiden JORC Mineral Resource for the Jacomynspan Ni-Cu-Co Project was estimated utilising the following parameters, with further supporting information located in Appendix 2:

- The Jacomynspan Mineral Resource comprises portions of a metamorphosed mafic to ultramafic intrusion containing nickel-copper sulphides (Figure 1). The sill intrusion has been partially metamorphosed on a regional scale to lower amphibolite facies and the original mafic rocks now exist as tremolite schist. Within the tremolite schist, large lenses of olivine rich rocks occur, which range from olivine-pyroxenite to harzburgite. These ultramafic zones are non-schistose and are important in the context of the Mineral Resource as they are associated with enhanced grades of mineralisation. The intrusion is enclosed within quartz-feldspar-biotite-garnet gneiss country rocks.
- > The area defined as a Mineral Resource extends approximately 1.3km along strike by 1.0km on dip, having been constrained for estimation to a maximum depth of 900m below surface. The Mineral Resource is between approximately 20m and 80m thick, with an average thickness of approximately 50m. The Jacomynspan intrusion dips approximately 75° to the south and outcrops on surface within the Namaqua Mining Right. The intrusion is oxidised to approximately 75m below surface. The oxidised material is excluded from the Mineral Resource.
- The stated Mineral Resource is based on data from historical drilling carried out by Anglo American (AAC) (1971-1977), Gold Fields (GFSA) (1993) and African Nickel Holdings Limited (ANHL) (2011-2012). A total of 52 diamond core drill holes, totalling 20,945m, were used for the resource estimation.
- > Drill holes intersected the Mineral Resource between approximately 40 m and 150 m apart along strike and down dip. Over half of the area has been drilled at less than 75 m drill hole spacing along strike.
- Diamond core samples were taken by splitting BQ and NQ core in half. Drill hole samples were taken at nominal 0.5 to 1 m intervals, unless there was a lithological change.
- AAC samples were analysed at Anglo American Research Laboratory, GFSA samples at Gold Fields Laboratories and ANHL samples at Intertek Genalysis and ALS Chemex.
- ANHL inserted CRM's, blanks and duplicates with each batch at a 5% insertion rate. No QA/QC data is available for the GFSA and AAC drilling.
- All of the ANHL drill hole collars have been surveyed by a qualified surveyor using a differential GPS. Survey methods of GFSA and AAC boreholes are unknown.
- Downhole positions were surveyed for all of the ANHL drill holes using an electronic multi-shot instrument. The AAC holes were surveyed down the hole using acid bottle techniques. GFSA survey method is unknown.
- No grade parameters were applied to the geological model, which comprises a wireframe of the tremolite schist and a number of wireframed olivine-pyroxenite bodies within the tremolite schist. The gabbro-pyroxenite lithologies were included with the olivine-pyroxenite bodies.
- Sample lengths were composited to 1m within each domain, with one Co and one PGE value capped. 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.
- > One metre composite grades were estimated into a lower grade tremolite schist domain and a higher grade olivine rich domain, using indicator kriging. Hard boundaries were used in the estimation.
- A block model with cells of 25m X by 5m Y by 20m Z was used, with sub-blocking of 12.5m X by 10m Z.
- Relative Densities (SG t/m3) determinations were made for the ANHL drill hole samples using a gas pycnometer. SG was interpolated into the block model using Ordinary Kriging.
- Poth Indicated and Inferred Resources are classified at the Jacomynspan Project. Indicated Mineral Resources are declared where block estimates are achieved with the required minimum number of samples within 1.5 times the variogram range of Ni values. Inferred resources are declared where a block estimate is located within twice the variogram range of Ni from the nearest borehole.

- The Mineral Resource is reported above a cut-off grade of 0.4% Ni.
- A geological loss of 5% has been applied to the model to account for any losses as a result of adverse geological features.

#### Orion's Managing Director and CEO, Errol Smart, commented on the results:

"The geological setting of the Jacomynspan Intrusive Complex shows strong similarities with the Fraser Range Belt in Western Australia. Orion is confident that the nickel-focussed exploration techniques that it developed during its work in the Fraser Range, including development of advanced, specialised exploration tools for intrusion hosted mineralisation, will provide a strong basis for exploration on the highly prospective Northern Cape project areas."



Managing Director and CEO

### **ENQUIRIES**

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#### **Competent Persons Statement**

The information in this report that relates to the exploration carried out at the Jacomynspan Project complies with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC Code**) and has been compiled and assessed under the supervision of Mr Errol Smart, Orion's Managing Director. Mr Smart (PrSciNat) is registered with the South African Council for Natural Scientific Professionals, a Recognised Overseas Professional Organisation (**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 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 information in this report that relates to Orion's Mineral Resource, complies with the JORC Code and has been compiled and assessed under the supervision of Mr Jeremy Witley, a Principal Resource Consultant at the MSA Group Pty Ltd. Mr Witley (Pri. Sci. Nat.) is registered with the South African Council for Natural Scientific Professionals (Registration No. 400181/05), a ROPO for JORC purposes. Mr Witley 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 JORC Code. Mr Witley is the principal author of the report detailing the Mineral Resources and consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears with reference to the disclosures detailed in Appendix 2.

#### **Disclaimer**

This release may include forward-looking statements. Such forward-looking statements may include, among other things, statements regarding targets, estimates and assumptions in respect of metal production and prices, operating costs and results, capital expenditures, mineral reserves and mineral resources and anticipated grades and recovery rates, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions. These forward-looking statements are based on management's expectations and beliefs concerning future events. Forward-looking statements inherently involve subjective judgement and analysis and are necessarily subject to risks,

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

#### Jensen Cation Plot Ti+Fe(tot) Cation % Legend Harzburgite Footwall Harzburgite High Ti Fe 'Other Olivine Pyroxenite Pyroxenite 20 ♦ 00667 <0.3% Ni ● 00665 0.3 - 0.4% Ni ■ 00666 >0.4% Ni High-Fe Tholeiitic Basal 50 Komatiitic Basalt 60 HOL - Andesite 70 THOL - Dacite THAL Rhyolin High-Mg TB Komatiite CALCALKALINE Rocks Basalt 10 Andesite Dacite Rhyolite 10 20 70

Figure 6: Jensen Cation Plot which includes primitive lithologies of komatiite or high Mg basalt composition as discrete fields. The Jacomynspan data forms a fractionation trend from komatiitic basalt to komatiite composition. The sulphide mineralised samples plot off-trend due to the sulphide Fe content.

Al Cation %

Mg Cation %

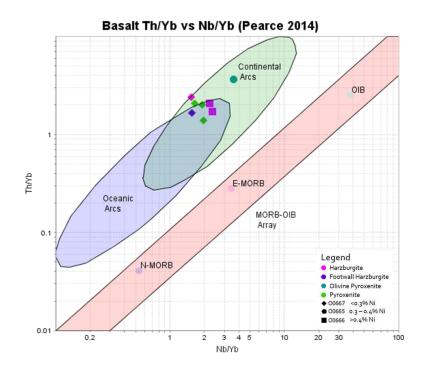


Figure 7: Tectonic setting characterisation diagram (Pearce 2014), indicating the Arc signature of the Jacomynspan intrusive lithologies.

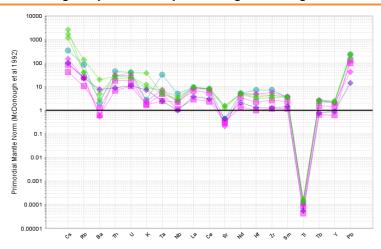


Figure 8: Trace elements normalised to Primitive Mantle (McDonough et al 1992).

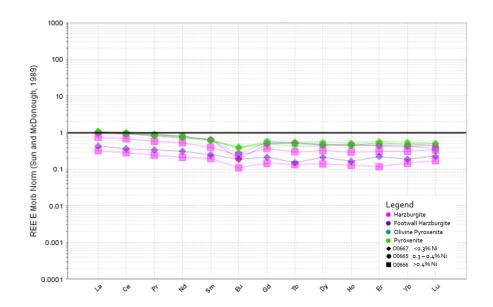


Figure 9: REE normalised to E-MORB (Sun and McDonough 1989).

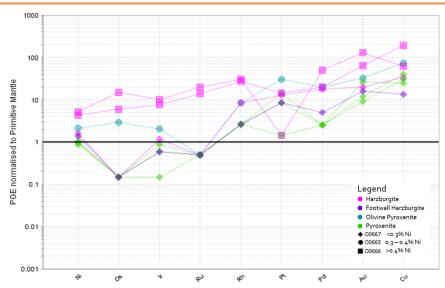


Figure 10: PGE, Ni and Cu normalised to Primitive Mantle (Barnes and Lightfoot 2005).

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

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The deposit was sampled using diamond core drilling.</li> <li>More than two thirds (32 holes) of the drilling that had useable sampling data was conducted by ANHL in 2011 and 2012. The pre-ANHL drilling was completed by Anglo American Corporation of South Africa (AAC; 14), Goldfields of South Africa (GFSA: 3) and Alenti (1)) at various times from the 1970s to 2008. Several holes had second intersections drilled from deflections. A number of holes were completed by Gencor (1990-1991) and Anglo Vaal (1970-1972). No assays were available for the Gencore and Anglo Vaal drilling, although they were of use in the geological interpretation.</li> <li>NQ size cores collected by ANHL were cut longitudinally in half and nominal 0.5 or 1 metre sample lengths were taken. These were varied to honour geological / mineralisation boundaries.</li> <li>The ANHL half core samples were crushed on-site using a jaw crusher with a 5 mm aperture. The crushed sample was riffle split. One half was sent to the laboratory and the other kept on-site. One in every 20 samples was split again to prepare a coarse duplicate.</li> <li>The riffle splitter and jaw crusher were cleaned with compressed air after each sample was processed.</li> <li>The ANHL samples were sent to accredited laboratory Intertek Genalysis in 2011 and ALS Chemex (ALS) in 2012, where they were pulverised to produce either a 25 g aliquot (Intertek Genalysis) or 30 g aliquot (ALS) for Pt, Pd and Au determination by fire assay or a smaller amount for digestion and determination of base metals. AAC samples were analysed at Anglo American Research Laboratory, and GFSA samples at Gold Fields Laboratories. No details on the analytical methods applied by the latter two laboratories is available.</li> <li>Pre-ANHL core samples were taken in irregular lengths, generally less than 1 m.</li> <li>No details are available for the preparation of the pre-ANHL half core samples.</li> <li>Geochemical Study:</li> <li>The sampling programme was undertaken to geochemically characterise</li></ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>The samples were derived from the holes drilled between 2011 and 2013 by African Nickel Holdings Limited (ANHL), which comprised NQ core that had previously been sampled and analysed for evaluation purposes. The sample of non-mineralised harzburgite from borehole JMP038 had not been previously analysed, therefore was acquired from complete core.</li> <li>The samples were acquired to be representative of the major lithologies, and mineralisation styles hosted by the intrusion.</li> <li>The samples were submitted to the accredited ALS Chemex Vancouver laboratory, where whole rock, major, and trace element analyses were undertaken to provide a full characterisation of the samples.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>All drill holes were diamond drilled, NQ cored and collared at angles of between -45° and -80°.</li> <li>In the Mineral Resource area, more than two thirds of the drilling was conducted by ANHL in 2011 and 2012. 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> <li>ANHL drilling was by wireline. Pre-ANHL drilling methods are not available.</li> <li>Drill cores were not oriented.</li> </ul>
		Geochemical Study:
		The drill holes sampled were drilled at -70° (JMP001, 020) and -80° (JMP038)  The drill holes sampled were drilled at -70° (JMP001, 020) and -80° (JMP038)
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential</li> </ul>	The drill cores were fitted together and recovered length was measured. Core recovery was found to be excellent (>98% within the mineralised ultramafics) for the ANHL holes and therefore no significant sample bias was introduced. No information is available on the core recovery of pre-ANHL drilling.
	loss/gain of fine/coarse material.	Geochemical Study:
		The samples selected for the geochemical sampling are of complete, non-altered, veined or jointed core.

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Basic geotechnical measurements were made on the ANHL cores. These include RQD for each metre, description of fractures from 20 m above the mineralisation to the base and unconfined (uniaxial) compressive stress measurements.</li> <li>All ANHL cores were photographed before and after sampling.</li> <li>Core of the entire hole length was geologically logged by qualified geologists.</li> <li>Geological logging was qualitative and was carried out using a standard sheet with a set of standard codes to describe lithology, structure and mineralisation. The logging sheet allows for free-form description to note any unusual features.</li> <li>No details on the pre-ANHL geotechnical logging are available.</li> <li>The pre-ANHL geological logs were re-captured electronically and converted to the ANHL standard summary logging codes.</li> <li>Geochemical Study:</li> <li>The geochemical samples were not specifically logged, as this information is available within the comprehensive ANHL database.</li> <li>Brief sample descriptions were noted and appended to the sample description spreadsheet.</li> <li>Contact relationships between lithological units were specifically</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>examined and categorised.</li> <li>The ANHL diamond drill hole cores were split longitudinally in half using a diamond saw and were continuously sampled in nominal 0.5 or 1 m intervals. The sample interval was adjusted in order to honour geological contacts. Pre-ANHL core samples were taken in irregular lengths, generally less than 1 m. Sample sizes are appropriate for the grain size of mineralisation at Jacomynspan.</li> <li>The ANHL half core samples were crushed on-site using a jaw crusher with a 5 mm aperture. The crushed sample was riffle split. One half was sent to the laboratory and the other kept on-site. The crushed samples were finely pulverised at the laboratories. The sample preparation technique is appropriate for the style of mineralisation at Jacomynspan.</li> <li>One in every 20 samples was split again to prepare a coarse duplicate.</li> <li>The base metal assays for crushed core duplicate samples were mostly within 10% of the original sample indicating that sub-samples are representative. Poorer precision was noted for the precious metal assays, which is expected given the generally low values.</li> <li>The pre-ANHL samples were also half core. No information is available on the quality control for these sample assays.</li> <li>Geochemical Study:</li> <li>The geochemical samples were sub sampled from within original sample</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>intervals, but excluding areas with jointing, alteration or variable lithology. The geochemical samples are therefore over shorter intervals than the original sample. The remaining half core was longitudinally saw cut and quarter core samples taken for analysis.</li> <li>For the non-mineralised harzburgite, derived from JMP038, no previous sampling had been undertaken, therefore a sample of half core was acquired.</li> <li>The samples were bagged and labelled on site and despatched to ALS Chemex.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Intertek Genalysis (Johannesburg) completed the 2011 assays and ALS completed the 2012 assays. For base metals, Genalysis used an aqua regia digest with ICP-OES finish and ALS used a four-acid digest with ICP-AES finish. A bias test was carried out that indicated that the different dissolution did not materially affect the assay results between the two drilling campaigns. For both laboratories, the method used for PGE analysis was lead fire assay. Genalysis used a 25 g aliquot and the concentrations were read with an ICP-MS, which provides a lower detection limit of 1 ppb. ALS used a 30 g aliquot with ICP-AES finish, which provides for 1 ppb lower detection limit for Pd and Au and 5 ppb for Pt.</li> <li>External quality assurance of the laboratory assays for the ANL samples was monitored by the insertion of:         <ul> <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>Certified reference materials: For the 2012 drilling campaign, only one CRM (AMIS 170) was being used. In 2011, two CRMs were alternated.</li> </ul> </li> <li>The AAC samples were assayed by Anglo American Research Laboratories (AARL) using atomic absorption spectrometry. The techniques used by GFSA are unknown.</li> </ul>
		Geochemical Study:  ALS Chemex undertook the lithogeochemical characterisation using a standard series of analyses, the technical details for which are outlined
		on their corporate website (https://www.alsglobal.com/services-and-products/geochemistry/geochemistry-testing-and-analysis/whole-rock-analysis-and-lithogeochemistry). Sample preparation was undertaken at the ALS Chemex Edenvale Laboratory, Johannesburg, South Africa. The chemical analyses were undertaken at ALS Chemex Vancouver Laboratory, Canada. The full-suite Platinum Group Metals analyses were

Criteria	JORC Code explanation	Commentary
		<ul> <li>undertaken at Becquerel Laboratories Inc, Mississauga, Ontario, Canada.</li> <li>The suite of analyses included:</li> <li>Receipt and initial sample processing (crush, pulverise, internal QC of crush and pulverising efficiency); ALS Codes CRU-21, PUL-21, CRU-QC, PUL-QC;</li> <li>Whole rock analysis, (instrumentation - ICP-AES); ALS Code ME-ICP06;</li> <li>Loss on Ignition, and Total Calculation for whole rock analysis, (WST-SEQ, ICP-AES); ALS Codes OA-GRA05, TOT-ICP06;</li> <li>Total carbon (LECO analyser); ALS Code C-IR07;</li> <li>Total sulphur (LECO analyser); ALS Code S-IR08;</li> <li>Trace elements (ICP-MS); ALS Code ME-MS8;</li> <li>Trace elements (ICP-MS); ALS Code ME-MS8;</li> <li>Ore grade elements by 4-acid digest, (ICP-AES); ALS Code ME-4ACD81;</li> <li>Ore grade Ni by 4-acid digest, (ICP-AES); ALS Code ME-MS062;</li> <li>Platinum Group Metals by Ni-sulphide collection and NAA analysis, (NAA); ALS Code PGM-NAA26.</li> <li>No external quality control samples were specifically inserted for this sampling exercise.</li> <li>At ALS Chemex, the whole-rock characterisation package outlined above provides multiple analyses for various elements using different instruments. This provides an internal QC check. The most precise data derived from the most appropriate analysis is reported. The comparative data are utilised for QC purposes when required.</li> <li>The analytical data for Ti were queried, and ALS Chemex used the comparative database to verify the analyses are correct.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Three of the AAC drill holes were twinned by GFSA using deflections. The mineralisation has been intersected by holes drilled by several different companies all of whom reported similar results. MSA observed the mineralisation in the core and compared it with the assay results, although no check assaying was completed by MSA.</li> <li>Data were stored in a Microsoft Excel database. MSA completed spot checks on the database and is confident that the database was an accurate representation of the original data collected.</li> </ul>
		<ul> <li>Geochemical Study:</li> <li>It was found that the sample numbering sequence of one interval was incorrect, and this was corrected.</li> </ul>

Criteria	JORC Code explanation	Commentary
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All the ANHL drill hole collars have been surveyed by a qualified surveyor using a differential GPS. Downhole positions were surveyed for all the ANHL drill holes using an electronic multi-shot instrument. The AACS holes were surveyed down the hole using acid bottle techniques. Drill hole collars were recorded with a handheld Garmin GPS with better than 10 m accuracy. Drill hole positions were laid out using tape and compass.</li> <li>The down-hole survey data for some of the older pre-ANL data is not available and therefore the locations of the older drill holes were mostly gleaned from plans and sections.</li> <li>The topographic surface was based on contours from the government survey plan, with additional data from the surveyed drill hole collars. The terrain in this area is gently sloping to the west with an elevation difference of approximately 10 m from the west of the Mineral Resource area to the east and therefore the accuracy of the topographic model is considered fit for Mineral Resource estimation. The contour data were converted into a digital terrain model (DTM) that was used to constrain the top of the block model.</li> <li>Coordinates are relative to the WGS84-LO21 datum.</li> </ul>
		Geochemical Study:
		This is not specifically relevant to this specialised sampling programme.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill holes intersected the Mineral Resource between approximately 40 m and 150 m apart. Over half of the area was drilled at less than 75 m drill hole spacing.</li> <li>In the Competent Persons (CP) opinion, the spacing is sufficient to establish geological and grade continuity consistent with Inferred Mineral Resources and in some areas Indicated Mineral Resources.</li> <li>Samples were composited to 1 m intervals for grade estimation.</li> </ul>
		<ul> <li>Geochemical Study:</li> <li>The samples are derived from drill holes spaced approximately 80m apart within the central part of the Jacomynspan intrusion. This spacing is considered appropriate for this particular sampling objective, which is to acquire representative data for geochemical characterisation and provide a benchmark dataset for comparison with other intrusions within this terrane.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a</li> </ul>	<ul> <li>Drilling was inclined at between -45 and -80 degrees to the north in order to intersect the steep southerly dipping mafic sill at reasonable angles.</li> <li>No material sampling bias due to drilling direction is considered to exist.</li> <li>Geochemical Study:</li> </ul>

Criteria	JORC Code explanation	Commentary
	sampling bias, this should be assessed and reported if material.	The samples are derived from representative intersections of the Jacomynspan intrusion.
Sample security	The measures taken to ensure sample security.	The sample bags were effectively sealed with cable ties and combined into larger bags for laboratory dispatch. The set of samples from each hole forms a single batch.
		Geochemical Study:
		<ul> <li>The sample bags were effectively sealed with cable ties and combined into larger bags for laboratory dispatch. This set of samples formed a single batch.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The sampling techniques and data management processes were reviewed by the CP during the site visit.</li> <li>The CP considers that the exploration work conducted by ANHL was carried out using appropriate techniques for the style of mineralisation at Jacomynspan, and that the resulting database is suitable for Mineral Resource estimation.</li> </ul>
		Geochemical Study:
		<ul> <li>The data was reviewed following receipt by the external consulting geologist to Disawell. Other than the sample labelling error, no issues of concern were identified.</li> <li>The data was intensively scrutinised and benchmarked using standard geochemical evaluation techniques.</li> </ul>
		The analytical results for Ti were questioned and verified by the laboratory.

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

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>Jacomynspan has overlapping rights (in respect of differing minerals) held by two companies.</li> <li>Namaqua Nickel Mining (Pty) Ltd holds a mining right NC 10032MR (over Die Plaas No. 387: Whole Farm Hartebeest Pan 175: RE, Portion 5 Jacomyns Pan 176: RE, Portion 1, Rok Optel 261: RE, Portion 1, Portion 2, Portion 3) for the mining of Nickel, Copper, Cobalt, PGM, Gold. This right was granted on 19 September 2016 subject to certain conditions, which include local community participation and financial guarantees, but is not yet notarially executed.</li> <li>Disawell (Pty) Ltd holds two prospecting rights namely NC</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>30/5/1/1/2/11010 PR (over Jacomyns Pan 176: RE, Portion 1, Portion 2 Rok Optel 261: RE, Portion 1, Portion 2, Portion 3, Portion 4) and NC 30/5/1/1/2/10938 PR (over Hartebeest Pan 175: RE, Portion 3, Portion 4, Portion 5 Farm 387: RE), each for the exploration of Zinc, Lead, Sulphur.</li> <li>Disawell and Namaqua entered into an earn-in agreement with Orion Minerals, in terms of which Orion (through its subsidiary, Area Metals Holdings No. 3 (Pty) Ltd) is granted the right to invest in these companies and achieve an 80% interest (Orion 59.2%).</li> <li>Extensive environmental studies and social and labour assessments have been undertaken as part of the Mining Right application obligations.</li> <li>Geochemical Study:</li> <li>As above.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>AAC (1971-1973 and 1982), Anglo Vaal (1970-1972), Gencor (1990-1991) and Alenti (2008) have all conducted exploration drilling programmes in the Jacomynspan project area.</li> <li>Gold Fields of South Africa (GFSA) drilled three deflections from AAC holes in 1993.</li> <li>Where the original sample assay intervals are available, the pre-ANHL drill hole assays have been used to estimate the grade of the mineralisation. If no assay information, or only long composite data are available, the drill hole lithology data has been used in geological modelling, but the grade data were not used.</li> <li>Geochemical Study:</li> <li>AAC (1971-1973 and 1982), Anglo Vaal (1970-1972), Gencor (1990-1991) and Alenti (2008) have all conducted exploration drilling programmes in the Jacomynspan project area.</li> </ul>
		<ul> <li>Gold Fields of South Africa (GFSA) drilled three deflections from AAC holes in 1993.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The Jacomynspan mineralisation is contained within portions of a steeply dipping metamorphosed mafic to ultramafic intrusion several tens of metres thick containing nickel-copper sulphides. The dyke-like intrusion has been metamorphosed on a regional scale to amphibolite facies and the original mafic rocks now exist as tremolite schist. Within the tremolite schist, large lenses of olivine-rich rocks occur, which range from olivine-pyroxenite to harzburgite. These ultramafic zones are non-schistose and are important in the context of the Mineral Resource as they are associated with enhanced grades of mineralisation. The intrusion is enclosed within quartz-feldspar-biotite-garnet gneiss country rocks.

Criteria	JORC Code explanation	Commentary
		Geochemical Study:
		As above.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>Refer table 3, appendix 3.</li> <li>Geochemical Study:</li> <li>N/A.</li> <li>The relevant sampling and analytical programme is aimed at geochemically characterising the Jacomynspan Intrusive and not for evaluation of the mineralisation.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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><li>N/A.</li><li>Geochemical Study:</li><li>N/A.</li></ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>No relationship between mineralisation width and metal grade was found.</li> <li>Drilling was inclined at between -45 and -80 degrees to the north in order to intersect the mafic sill that dips approximately 75 degrees to the south, with the steeper holes being the deepest.</li> <li>Geochemical Study:</li> <li>N/A.</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>See Figures 1, 2, 3 and 4 and Tables 1 and 2</li> <li>Geochemical Study:</li> <li>N/A.</li> </ul>
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul><li>N/A.</li><li>Geochemical Study:</li><li>N/A.</li></ul>

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	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.	<ul> <li>Historic metallurgical test work shows that the Jacomynspan sulphide mineralisation is amenable to recovery to a high grade concentrate using standard froth flotation.</li> <li>Initial test work shows that samples of elevated grade sulphidic harzburgite achieved recoveries of &gt;82% to bulk sulphide concentrate with simple froth flotation.</li> <li>Non optimised re-cleaning test work showed potential to produce concentrate of &gt;7.5% Ni with a recovery of about 70% is achievable</li> <li>A low-grade sample of 0.25% Ni yielded a concentrate of 2.31% Ni with a recovery of 72%.</li> <li>Cu, Co and PGE were shown to be intimately associated with the Ni sulphides and are recovered to the Ni concentrate although further test work is required to optimise these recoveries.</li> <li>Geotechnical studies show that the rock mass at Jacomynspan will generally comprise strong rock that will not pose major stability problems for mining.</li> <li>There do not appear to be any major aquifers in the foot or hanging wall of the mineralised zone.</li> <li>Airborne EM surveys revealed a number of conductors that could lead to new discoveries.</li> <li>Geochemical Study:</li> <li>N/A.</li> </ul>
Further work	<ol> <li>The nature and scale of planned further work (e.g. 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> </ol>	<ul> <li>Orion has completed a helicopter borne magnetic and Electro Magnetic survey (AEM or SkyTEM) over the Disawell prospecting right area on 24 January 2018 (refer ASX release 1 February 2018). A strong conductor was detected over the Jacomynspan Ni-Cu deposit and several other conductors along strike of the mineralisation indicate the exploration potential for additional resources.</li> <li>Geochemical Study:</li> <li>N/A.</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
Database integrity	Measures taken to ensure that data has not been corrupted by, for	The grade data were carefully checked by the Chief Geologist (ANHL).

Criteria	JORC Code explanation	Commentary				
	example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.  • Data validation procedures used.	The data validation process used during Mineral Resource estimation consisted of:  Examination of the sample assay, collar survey, down-hole survey and geology data to ensure that the data were complete for all the drill holes,  Examination of the de-surveyed data in three dimensions to check for spatial errors,  Examination of the assay data in order to ascertain whether they were within expected ranges,  Checks for "FROM-TO" errors, to ensure that the sample data did not overlap one another or that there were no unexplained gaps between samples.				
Site visits	<ul> <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>	The CP conducted a site inspection in November 2012 in order to inspect the cores, review the exploration processes and further his understanding of the Jacomynspan mineralisation. The CP considers that the exploration work conducted by ANHL was carried out using appropriate techniques for the style of mineralisation.				
Geological interpretation	<ul> <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. 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> <li>The quantity and spacing of drilling is sufficient to define the shape an extents of the tremolite schist intrusion to a high level of confidence.</li> <li>The olivine-rich zones contained within the tremolite schist are less continuous. These contain variable and higher-grade mineralisation a as a result the confidence in the high-grade zones is less than in the tremolite schist.</li> <li>Wireframes of the higher-grade olivine-rich zones and lower-grade tremolite schist sill were constructed and the grades and density of the two zones were separately estimated into a three-dimensional block model using ordinary kriging.</li> <li>No alternative geological models are likely.</li> </ul>				
Dimensions	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.	The area defined as a Mineral Resource extends approximately 1.3 km along strike by 1.0km on dip and is limited by data extents to a maximum depth of 900m below surface. The Mineral Resource is between approximately 20m and 80m thick, with an average thickness of approximately 50m. The Jacomynspan sill dips approximately 75° to the south and outcrops on surface within the Jacomynspan project area. The sill is oxidised from surface to a depth of approximately 75m, the oxidised material having been excluded from the Mineral Resource.				
Estimation and modelling techniques	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	<ul> <li>Datamine Studio 3 was used to model the volumes and estimate grades.</li> <li>Samples were composited to 1 m intervals using length weighting.</li> <li>The geological wireframes were filled with blocks of 5 mN by 25mE by 20 mRL and coded according to the geological zone.</li> </ul>				

Criteria	JORC Code explanation	Commentary
	estimation method was chosen include a description of computer software and parameters used.  The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.  The assumptions made regarding recovery of by-products.  Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterisation).  In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.  Any assumptions behind modelling of selective mining units.  Any assumptions about correlation between variables.  Description of how the geological interpretation was used to control the resource estimates.  Discussion of basis for using or not using grade cutting or capping.  The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	<ul> <li>The parent block size is approximately half of the drill hole spacing in the well drilled area.</li> <li>The blocks were sub-celled to a minimum of 12.5 mE by 10 mRL with precise filling across strike in order to accurately fill the geological model.</li> <li>The olivine-rich zone was estimated separately to the tremolite schist using hard boundaries due to distinct nickel grade differences between the two rock types.</li> <li>Top-cuts were applied to the 1 m composites during estimation. No top-cuts were considered necessary for the olivine-rich domain. Within the tremolite schist domain, a top cut of 0.079 % Co, 0.86 g/t Pt, 0.49 g/t Pd and 0.44 g/t Au was applied. The top cuts affected two composites for Co and one composite for Pt, Pd and Au.</li> <li>The grades were estimated using ordinary kriging.</li> <li>Search ellipses were based on the range of the variogram models.</li> <li>Block size and number of sample composites was guided by a kriging neighbourhood analysis (KNA).</li> <li>The search ellipse was aligned in the plane of the tremolite schist sill and a dynamic anisotropy approach was used that varies the direction of the ellipse with the orientation of the sill hangingwall and footwall contacts. A search distance of 78 m in the plane of mineralisation and 10 m across plane was used for base metals, 145 m in the plane of mineralisation and 30m across plane was used for Pt, Pd and Au and 120m in the plane of mineralisation and 30m across plane of mercalisation and 30m across plane of mineralisation and 30m across plane of was used for density. Between 8 and 36 composites were used to estimate a block. Should enough samples not be collected in the first search then the search was expanded 1.5 times and finally 20 times to ensure all model blocks were estimated.</li> <li>Extrapolation of Inferred Mineral Resources away from data is less than 200m in any direction.</li> <li>No bi-products or deleterious elements were estimated.</li> <li>A recoverable resource estimate was not carried out.</li></ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>A cut-off grade of 0.4% Ni has been applied. This is based on the following:         <ul> <li>Ni 15,000 USD/t, Cu 7,300 USD/t, Co 80,000 USD/t</li> <li>Au 1,500 USD/oz, Pt 1,200 USD/oz, Pd 1,000 USD/oz</li> <li>Concentrator recovery 90%,</li> <li>Smelter payment 75% of Ni, Cu and Co, 40% of Pt, Pd and Au,</li> <li>Mining costs USD40/t, concentrator costs USD8/t, G&amp;A USD5/t,</li> <li>Transport to China total costs of USD20/t concentrate.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul> <li>The parameters used in the assessment of Reasonable Prospects for Eventual Economic Extraction (RPEEE) are not definitive and should not be misconstrued as an attempt to estimate an Ore Reserve for which economic viability would be required to be demonstrated.</li> <li>RPEEE could improve should further exploration be successful in expanding the higher-grade portions of the Jacomynspan Mineral Resource or if Jacomynspan could form part of a larger operation should any future exploration be successful in identifying another deposit in the area.</li> </ul>
Mining factors or assumptions	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.	It is assumed that the Mineral Resource will be extracted using underground mining with bulk low-cost mining methods suitable for steeply dipping deposits such as long-hole open stoping. This would target the higher-grade olivine-rich zones that predominantly occur at depth.
Metallurgical factors or assumptions	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.	<ul> <li>The top 75 m of the mineralisation is oxidised, and it is expected that metals contained in this material will not be extracted by conventional flotation and it was therefore not included in the Mineral Resource.</li> <li>Metallurgical test work by historical owners show that the Jacomynspan sulphide mineralisation is amenable to recovery by froth flotation.</li> <li>Initial test work shows that a high-grade Ni concentrate of &gt;7.5% Ni with a recovery of about 70% is achievable on samples with Ni grades above 0.39%.</li> <li>A low-grade sample of 0.25% Ni yielded a concentrate of 2.31% Ni with a recovery of 72%.</li> </ul>
Environmental factors or assumptions	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.	Comprehensive Environmental Impact Assessment and Environmental Management Programme in which the main impacts and mitigation measures were identified was undertaken by the previous owners as part of the Mining Right Application.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry,	The specific gravity of each sample was measured at the laboratory using a gas pycnometer. Density data were not available for pre-ANHL

Criteria	JORC Code explanation	Commentary				
	<ul> <li>the frequency of the measurements, the nature, size and representativeness of the samples.</li> <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>	<ul> <li>data and determinations were on ANHL samples only.</li> <li>Drill hole cores were split longitudinally in half using a diamond saw and were continuously sampled in nominal 0.5 or 1 m intervals. The sample interval was adjusted in order to honour geological contacts.</li> <li>The half core samples were crushed on-site using a jaw crusher with a 5 mm aperture. The crushed sample was riffle split. One half was sent to the laboratory and the other kept on-site. The crushed samples were finely pulverised at the laboratories.</li> <li>Pycnometer measurements were done on the sample pulps.</li> <li>The rocks are not porous, and the gas pycnometer readings are considered to represent bulk density.</li> <li>2,651 density measurements were made on the drill hole cores.</li> <li>Density was estimated into the block model by ordinary kriging.</li> </ul>				
Classification	<ul> <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, i.e. 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> <li>Most of the data that informs the grade estimate was derived from recent (ANHL) drill holes. In the CP's opinion, these data have been collected using industry acceptable practices and are reliable. Historical data have been collected by well-known South African mining companies, however some of the details of the data are unknown. Historical data was used for grade estimation where the assays for the original sample intervals were available.</li> <li>The Mineral Resource was classified as either Indicated or Inferred. Indicated Mineral Resources were declared if block estimates were achieved with the required minimum number of samples within 1.5 times the variogram range for Ni. Inferred Resources were declared should a block estimate be located within twice the variogram range of Ni from the nearest drill hole. The higher-grade olivine-rich zones are less well drilled than the lower-grade tremolite schist and the higher risk in these zones was considered in the classification.</li> <li>The classification reflects the Competent Persons view of the deposit.</li> </ul>				
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>The following audit and review work was completed by MSA:         <ul> <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 ANHL cores used in the Mineral Resource estimate.</li> <li>Database spot checks.</li> </ul> </li> </ul>				
Discussion of relative accuracy/confidence	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	<ul> <li>Quantification of relative accuracy was not carried out.</li> <li>Higher-grade mineralisation associated with olivine-rich zones is less continuous than the lower-grade tremolite schist mineralisation and estimates of higher-grade mineralisation will be less accurate than lower-grade.</li> </ul>				

Criteria	JORC Code explanation	Commentary
	<ul> <li>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> <li>Caution should be placed on the Inferred estimates as they are based on limited data and are not suitable to support technical and economic studies at a Pre-Feasibility level.</li> <li>Recoverable resource estimates were not carried out.</li> <li>No production data are available as the deposit has not been mined.</li> </ul>

Appendix 3: Drill Hole information for Jacomynspan Project as referred to in the text.

Hole ID	Easting_LO21	Northing_LO21	RL	Hole length (m)	Dip	Azimuth	Drill Type	Company
JP002	76306.37	-3245441.45	1043	120	-45	30	Diamond drilling	Alenti
JMP001	76371.46	-3245737.03	1045	667	-75	17	Diamond drilling	African Nickel Holdings Limited
JMP002	76485.81	-3245721.27	1046	505	-71	5	Diamond drilling	African Nickel Holdings Limited
JMP003	76555.94	-3245791.93	1047	602	-71	345	Diamond drilling	African Nickel Holdings Limited
JMP004	76223.03	-3245571.86	1043	520	-71	34	Diamond drilling	African Nickel Holdings Limited
JMP005	76160.82	-3245447.38	1042	289	-74	0	Diamond drilling	African Nickel Holdings Limited
JMP006	76292.29	-3245663.24	1044	508	-69	15	Diamond drilling	African Nickel Holdings Limited
JMP007	76334.23	-3245565.81	1044	403	-74	32	Diamond drilling	African Nickel Holdings Limited
JMP008	76181.41	-3245657.21	1042	517	-68	33	Diamond drilling	African Nickel Holdings Limited
JMP009	76453.35	-3245791.04	1046	664	-71	25	Diamond drilling	African Nickel Holdings Limited
JMP010	76400.86	-3245663.49	1045	506	-74	19	Diamond drilling	African Nickel Holdings Limited
JMP011	76592.76	-3245712.62	1047	445	-71	25	Diamond drilling	African Nickel Holdings Limited
JMP012	76125.85	-3245524.35	1042	367	-74	24	Diamond drilling	African Nickel Holdings Limited
JMP013	76627.16	-3245637.57	1047	328	-71	17	Diamond drilling	African Nickel Holdings Limited
JMP014	76374.38	-3245482.09	1044	250	-74	26	Diamond drilling	African Nickel Holdings Limited
JMP015	76445.92	-3245570.16	1045	286	-70	28	Diamond drilling	African Nickel Holdings Limited
JMP016	76522.5	-3245644.57	1046	349	-75	45	Diamond drilling	African Nickel Holdings Limited
JMP017	76261.93	-3245492.91	1043	280	-74	18	Diamond drilling	African Nickel Holdings Limited
JMP018	76346.9	-3245869.1	1049	757	-68	31	Diamond drilling	African Nickel Holdings Limited
JMP019	76385	-3245617.1	1049	463	-68	20	Diamond drilling	African Nickel Holdings Limited
JMP020	76368	-3245664.1	1049	491	-69	22	Diamond drilling	African Nickel Holdings Limited
JMP021	76428.5	-3245637.6	1050	403	-69	16	Diamond drilling	African Nickel Holdings Limited
JMP022	76402.1	-3245571.6	1049	316	-69	16	Diamond drilling	African Nickel Holdings Limited
JMP023	76419.2	-3245524.7	1048	293	-69	22	Diamond drilling	African Nickel Holdings Limited
JMP024	76471.3	-3245657.8	1051	412	-69	21	Diamond drilling	African Nickel Holdings Limited
JMP025	76273	-3245694	1044	637	-74	13	Diamond drilling	African Nickel Holdings Limited
JMP026	76388	-3245450	1046	190	-69	25	Diamond drilling	African Nickel Holdings Limited
JMP027	76354.9	-3245549.8	1048	304	-69	20	Diamond drilling	African Nickel Holdings Limited

Hole ID	Easting_LO21	Northing_LO21	RL	Hole length (m)	Dip	Azimuth	Drill Type	Company
JMP028	76362.7	-3245388.4	1046	133	-68	17	Diamond drilling	African Nickel Holdings Limited
JMP029	76445.6	-3245592	1050	322	-70	17	Diamond drilling	African Nickel Holdings Limited
JMP030	76328.5	-3245482.4	1047	265	-70	20	Diamond drilling	African Nickel Holdings Limited
JMP032	76271.3	-3245422.1	1044	217	-78	25	Diamond drilling	African Nickel Holdings Limited
JMP033	76098.7	-3245390.8	1045	235	-75	20	Diamond drilling	African Nickel Holdings Limited
PC21	76335.46	-3245501.29	1047	256	-51	7	Diamond drilling	Anglo American Corporation
PC23	75286.74	-3245460.12	1035	298	-51	5	Diamond drilling	Anglo American Corporation
PC24	76289.74	-3245699.87	1044	669	-85	105	Diamond drilling	Anglo American Corporation
PC21 DG	76348.41	-3245428.79	958	76	-48	11	Diamond drilling	Anglo American Corporation
PC23 DG	75291.84	-3245354.57	889	55	-48	5	Diamond drilling	Anglo American Corporation
PC2-10	76040.67	-3245448.96	1041	256	-45	1	Diamond drilling	Anglo American Corporation
PC2-11	76583.51	-3245632.94	1047	308	-47	2	Diamond drilling	Anglo American Corporation
PC2-12	74986.54	-3245520.67	1034	341	-44	359	Diamond drilling	Anglo American Corporation
PC2-14	76175.95	-3245776.06	1043	530	-62	359	Diamond drilling	Anglo American Corporation
PC2-16	75831.84	-3245640.57	1041	490	-60	5	Diamond drilling	Anglo American Corporation
PC2-17	76473.6	-3245829	1047	519	-62	359	Diamond drilling	Anglo American Corporation
PC2-21	75138.38	-3245487.55	1034	280	-45	5	Diamond drilling	Anglo American Corporation
PC2-24	76186.88	-3245534.13	1043	300	-47	359	Diamond drilling	Anglo American Corporation
PC2-26	76272.06	-3245900.51	1044	801	-79	345	Diamond drilling	Anglo American Corporation
PC2-26UD1	76276.77	-3245807.46	742	396	-66	26	Diamond drilling	Anglo American Corporation
PC2-30	76318.46	-3245751.83	1048	954	-88	83	Diamond drilling	Anglo American Corporation
PC2-31	76491.3	-3245892.16	1051	1035	-89	79	Diamond drilling	Anglo American Corporation
PC2-11D1	76583.51	-3245632.94	1047	257	-47	2	Diamond drilling	Anglo American Corporation
PC2-11DG	76590.25	-3245510.27	915	77	-44	6	Diamond drilling	Anglo American Corporation

Table 3: Drill hole information used for the Jacomynspan Mineral Resource

 Table 3 Foot Note:
 Coordinate system WGS84 / LO21.

Hole	Down hole	e Depth	Intersection	NI: 07	C 97	C - 97	D1 ( (1)	D-1 ( (4)	Αυ	NI a villa i sa as	Farakin a	DI.
Number	FROM	TO	width (m)	Ni %	Cu %	Co %	Pt (g/t)	Pd (g/t)	(g/t)	Northing	Easting	RL
JMP001	523.00	577.08	54.08	0.49	0.28	0.03	0.16	0.11	0.07	76425.24	-	515.36
JMP001	577.08	644.04	66.96	0.19	0.14	0.02	0.07	0.04	0.04	76432.44	-	457.20
JMP002	404.30	405.89	1.59	0.33	0.24	0.02	0.15	0.08	0.04	76497.75	-	664.80
JMP002	405.89	412.63	6.74	0.46	0.30	0.03	0.32	0.12	0.10	76497.88	-	660.88
JMP002	412.63	479.56	66.93	0.24	0.18	0.02	0.10	0.04	0.04	76498.91	-	626.21
JMP003	513.35	586.02	72.67	0.25	0.17	0.02	0.09	0.04	0.04	76514.81	-	528.93
JMP004	339.40	367.38	27.98	0.23	0.16	0.02	0.08	0.04	0.03	76281.88	-	709.05
JMP004	367.38	369.27	1.89	0.53	0.23	0.03	0.16	0.08	0.02	76284.28	-	694.97
JMP004	369.27	371.77	2.50	0.23	0.12	0.02	0.09	0.07	0.04	76284.63	-	692.90
JMP005	192.38	195.27	2.89	0.22	0.07	0.01	0.15	0.09	0.04	76161.04	-	855.46
JMP005	195.27	200.64	5.37	0.27	0.11	0.01	0.19	0.11	0.04	76161.06	-	851.49
JMP005	200.64	250.11	49.47	0.25	0.15	0.02	0.11	0.06	0.06	76161.23	-	825.13
JMP006	404.48	461.84	57.36	0.20	0.14	0.02	0.09	0.04	0.04	76329.33	-	638.10
JMP007	284.79	385.31	100.52	0.26	0.18	0.02	0.07	0.04	0.04	76376.37	-	721.22
JMP008	453.28	466.96	13.68	0.42	0.14	0.02	0.13	0.14	0.08	76278.51	-	615.83
JMP008	466.96	484.96	18.00	0.12	0.10	0.01	0.03	0.03	0.02	76282.03	-	601.14
JMP009	534.96	541.60	6.64	0.40	0.27	0.02	0.12	0.13	0.03	76524.03	-	538.42
JMP009	541.60	564.93	23.33	0.22	0.13	0.01	0.18	0.07	0.07	76526.25	-	524.32
JMP009	564.93	646.67	81.74	0.20	0.16	0.02	0.07	0.03	0.03	76534.25	-	474.93
JMP010	394.38	452.24	57.86	0.26	0.19	0.02	0.07	0.04	0.04	76436.21	-	638.20
JMP010	452.24	455.32	3.08	0.72	0.42	0.05	0.14	0.07	0.04	76438.75	-	608.90
JMP010	455.32	469.25	13.93	0.23	0.18	0.02	0.08	0.04	0.03	76439.46	-	600.73
JMP011	348.52	410.96	62.44	0.20	0.15	0.02	0.09	0.04	0.03	76640.95	-	688.62
JMP012	307.66	336.11	28.45	0.21	0.14	0.02	0.08	0.04	0.04	76166.09	-	733.21
JMP013	271.50	299.62	28.12	0.17	0.16	0.02	0.06	0.04	0.04	76657.13	-	777.82
JMP014	126.10	129.10	3.00	0.85	0.30	0.05	0.19	0.09	0.04	76389.52	-	921.63
JMP014	129.10	131.26	2.16	1.19	0.36	0.07	0.13	0.24	0.10	76389.83	-	919.15
JMP014	131.26	200.60	69.34	0.24	0.18	0.02	0.08	0.04	0.04	76394.08	-	884.78
JMP015	237.70	268.00	30.30	0.19	0.14	0.02	0.04	0.03	0.03	76487.30	-	807.92
JMP016	294.35	326.04	31.69	0.20	0.16	0.02	0.06	0.04	0.03	76585.66	-	748.94
JMP017	209.50	212.34	2.84	0.11	0.03	0.01	0.06	0.06	0.04	76282.55	-	840.33

Hole	Down hole	Depth	Intersection	NI OT	O . W	O - W	DI ( (I)	D-1 ( (1)	Αυ	NIII- '	F P	DI.
Number	FROM	TO	width (m)	Ni %	Cu %	Co %	Pt (g/t)	Pd (g/t)	(g/t)	Northing	Easting	RL
JMP017	212.34	217.36	5.02	0.14	0.02	0.01	0.07	0.08	0.08	76282.96	-	836.56
JMP017	217.36	273.87	56.51	0.19	0.15	0.02	0.07	0.06	0.05	76286.21	-	807.07
JMP018	633.10	637.46	4.36	0.02	0.01	0.00	0.00	0.01	0.01	76504.54	-	465.82
JMP018	637.46	641.46	4.00	0.13	0.02	0.01	0.06	0.07	0.05	76505.74	-	462.08
JMP018	641.46	712.48	71.02	0.20	0.17	0.02	0.08	0.04	0.04	76516.57	-	428.54
JMP019	295.25	360.08	64.83	0.24	0.20	0.02	0.09	0.04	0.04	76438.03	-	743.60
JMP020	386.77	435.29	48.52	0.21	0.15	0.02	0.07	0.05	0.06	76432.25	-	660.50
JMP020	435.29	458.96	23.67	0.62	0.38	0.03	0.23	0.15	0.08	76438.67	-	626.92
JMP020	458.96	460.62	1.66	0.46	0.17	0.02	0.62	0.30	0.36	76440.95	-	615.15
JMP021	311.74	363.88	52.14	0.20	0.16	0.02	0.07	0.04	0.04	76474.91	-	732.54
JMP022	241.39	271.02	29.63	0.26	0.22	0.02	0.06	0.04	0.03	76439.96	-	809.51
JMP023	179.81	215.30	35.49	0.23	0.20	0.02	0.05	0.04	0.04	76447.95	-	861.24
JMP024	336.32	380.84	44.52	0.24	0.19	0.02	0.10	0.05	0.04	76529.30	-	712.54
JMP025	500.44	539.60	39.16	0.23	0.16	0.02	0.06	0.03	0.04	76334.93	-	545.43
JMP025	539.60	581.00	41.40	0.43	0.20	0.02	0.21	0.12	0.07	76342.72	-	507.39
JMP025	581.00	585.75	4.75	0.32	0.19	0.01	0.32	0.23	0.15	76347.37	-	485.65
JMP026	89.05	136.00	46.95	0.21	0.15	0.02	0.09	0.03	0.02	76407.59	-	939.78
JMP027	229.52	275.34	45.82	0.33	0.23	0.02	0.08	0.05	0.04	76400.70	-	811.29
JMP028	20.68	56.34	35.66	0.20	0.16	0.02	0.06	0.02	0.03	76367.81	-	1007.84
JMP029	264.10	295.46	31.36	0.28	0.18	0.02	0.09	0.04	0.04	76483.00	-	785.94
JMP030	120.86	138.88	18.02	0.45	0.31	0.03	0.15	0.08	0.05	76344.42	-	923.70
JMP030	138.88	233.22	94.34	0.18	0.13	0.01	0.07	0.04	0.04	76351.68	-	872.05
JMP032	105.86	174.50	68.64	0.21	0.15	0.02	0.07	0.04	0.03	76282.71	-	908.16
JMP033	148.30	202.20	53.90	0.23	0.16	0.02	0.07	0.03	0.02	76111.35	-	869.14
JP002	84.00	99.00	15.00	0.24	0.14	0.02	-	-	-	76343.88	-	989.59
PC21	121.76	207.89	86.13	0.29	0.16	0.02	1	-	-	76354.56	-	921.71
PC21 DG	7.39	75.90	68.51	0.29	0.16	-	0.16	0.07	0.05	76353.70	-	928.10
PC2-10	168.00	207.89	39.89	0.20	0.11	0.02	-	-	=	76055.08	-	911.58
PC2-11	195.51	279.58	84.07	0.24	0.18	0.02	-	-	-	76597.33	-	881.68
PC2-11D1	236.85	256.73	19.88	0.31	0.22	0.02	-	-	-	76598.50	-	877.75
PC2-11DG	16.47	76.73	60.26	0.22	0.15	-	0.06	0.04	0.04	76595.58	-	887.31
PC2-14	459.16	503.18	44.02	0.24	0.14	0.02	-	-	-	76291.68	-	716.55

Hole	Down hole Depth		Intersection	NI: 07	C 97	C - 97	D1 ( ~ /1)	Dd (~ /!)	Αυ	Morthing	Eastina	DI
Number	FROM	TO	width (m)	Ni %	Cu %	Co %	Pt (g/t)	Pd (g/t)	(g/t)	Northing	Easting	RL
PC2-17	430.10	470.12	40.02	0.26	0.18	0.02	-	-	-	76534.30	-	658.04
PC2-24	202.38	243.15	40.77	0.25	0.17	0.02	-	-	-	76202.28	-	893.34
PC2-26	637.72	640.67	2.95	0.33	0.18	0.00	-	-	-	76362.78	-	478.05
PC2-26	640.67	644.36	3.69	0.31	0.20	0.00	-	-	-	76363.56	-	475.62
PC2-26	644.36	683.44	39.08	0.26	0.17	0.00	-	-	-	76368.61	-	459.74
PC2-26	683.44	687.67	4.23	0.63	0.58	0.00	-	-	-	76373.73	-	443.69
PC2-26	687.67	697.50	9.83	0.26	0.11	0.00	-	-	-	76375.47	-	438.69
PC2-26UD1	298.81	348.29	49.48	0.27	0.18	0.00	-	-	-	76358.91	-	517.72
PC23 DG	24.12	51.58	27.46	0.20	0.14	-	0.10	0.03	0.06	75294.10	-	862.19
PC2-30	791.58	863.48	71.90	0.24	0.18	0.02	-	-	-	76417.08	-	244.66
PC2-31	904.45	906.71	2.26	ı	-	-	-	-	-	76648.88	-	185.65
PC2-31	906.71	950.21	43.50	0.14	0.09	0.02	-	-	-	76663.39	-	168.83
PC2-31	950.21	995.23	45.02	0.11	0.10	0.01	-	-	-	76692.40	-	137.15
PC24	540.83	560.54	19.71	0.28	0.16	0.01	-	-	-	76428.62	-	521.23
PC24	560.54	591.96	31.42	0.87	0.43	0.05	-	-	-	76437.79	-	499.40
PC24	591.96	646.09	54.13	0.23	0.17	0.02	-	-	-	76452.89	-	463.60

Table 4: Drill hole intersections used for the Jacomynspan Mineral Resource.

#### Table 4 Foot Note:

1. Intersections are based on mineralised geological units.