

31 March 2017

## ASX & MEDIA ANNOUNCEMENT

### Queen Victoria Rock Project – Nickel Targets

- Two high priority off-hole DHEM<sup>1</sup> targets identified – drill testing recommended
- Two lower priority off-hole DHEM targets identified – prior to drill testing additional surveys recommended to validate targets
- Comprehensive review of diamond drilling and geophysical surveys continues to improve understanding of the Spargos ultramafic complex and its potential to host economic nickel sulphides – planning for additional diamond drill holes and DHEM surveys to test targets is in progress

Hannans Ltd (ASX:HNR) advises shareholders that a comprehensive review of recent and historic diamond drilling and all historic geophysical surveys at Hannans' 100% owned Queen Victoria Rock (QVR) nickel sulphide project located approximately 50km south-west of Coolgardie, Western Australia has now been completed (refer to Figure 1 on page 3 for a Location Map). **The most significant outcome of the review was that it confirmed existence of the highest interpreted conductor<sup>2</sup> target ever identified within the Spargos Prospect. This target is highly encouraging and must be drill tested.**

Thirteen DHEM surveys have now been reviewed by Newexco Services<sup>3</sup> - nine surveys had anomalies associated with them. Four DHEM anomalies are interpreted to be geologically encouraging and justify drill testing or additional surveys to validate potential drill targets.

The highest priority off-hole DHEM target<sup>4</sup> (**Priority 1**) has modelled a moderately high conductance plate of 13,500 Siemens (S) which is **considered consistent with a massive sulphide source** – the survey was completed within Hannans diamond drillhole QVD13 completed in December 2016. The geological logging of QVD13 suggests that stringer sulphides (mainly pyrite) coincide with this DHEM anomaly however Newexco Services believe that stringer or massive pyrite is unlikely to produce such a high conductance and that the target warrants drilling to test the modelled plate (refer to Figure 2 on page 4 for a 3D model of the target).

The second off-hole DHEM target<sup>5</sup> (**Priority 2**) is interpreted to be located below diamond hole QVD11 drilled by previous explorers in 2005. This hole went through a basal ultramafic contact at approximately 150 metres and ended in footwall mafics/sediments and granitic rocks. While this particular hole was surveyed in 2005 using an older system<sup>6</sup>, it is coincident with a strong off-hole DHEM response observed in the Hannans DHEM survey<sup>7</sup> that used a modern system<sup>8</sup>. This target also requires drill testing (refer to Figure 3 on page 5 for a 3D model of the target).

<sup>1</sup> Downhole electromagnetic (DHEM)

<sup>2</sup> DHEM

<sup>3</sup> Newexco Services Pty Ltd reviewed the historic MLEM, FLEM and VTEM surveys within the Spargos Prospect at QVR including the DHEM surveys completed by Hannans in January 2017

<sup>4</sup> QVD013\_p3

<sup>5</sup> Combination of QVD011\_p2 and QVD013\_p1

<sup>6</sup> Crone Coil dB/dt

<sup>7</sup> Completed during January 2017 within diamond hole QVD13

<sup>8</sup> (B-field) Atlantis

An additional two lower priority off-hole DHEM targets require validation with additional DHEM surveys prior to drill testing.

The third off-hole target<sup>9</sup> (**Priority 3**) generated in QVD10 with an older system is located close to a basal contact and requires surveying with a modern low frequency high powered transmitter and modern system to validate the target (refer to Figure 2 on page 4 for a 3D model of the target).

The fourth off-hole target<sup>10</sup> (**Target 4**) is distant (i.e. approximately 300 metres) from the closest drill holes<sup>11</sup>. The modelled plate generated in QVD14 is quite large (approximately 600m x 600m) and the current interpretation suggests this anomaly is spatially associated with the basal contact however there is no deep drilling in the area to confirm this. Future drill testing of the basal contact at depth in this area will therefore add to the understanding of the geometry of the Spargos ultramafic complex. Prior to undertaking this deep drilling selected historic holes require surveying with a modern low frequency high powered transmitter and modern system to validate the target (refer to Figure 4 on page 6 for a 3D model of the target).

One outcome of the review is that Newexco recommends that future DHEM surveys use a low base frequency of 1 Hertz or less and the (B-field) Atlantis system as standard. Historic DHEM survey data at QVR was acquired using the Crone Coil dB/dt system with a higher base frequency of 5 Hertz<sup>12</sup> and were probably not effective for the detection of highly conductive massive sulphide targets<sup>13</sup>.

It is evident from Hannans' recent diamond drilling<sup>14</sup> and the subsequent geological, geochemical and geophysical interpretation and 3D modelling that the most prospective basal contact has not been systematically explored and deserves additional testing. Hannans' recent diamond drilling also confirms the high MgO<sup>15</sup> ultramafic unit containing nickel, platinum and palladium within the Spargos Prospect at QVR is complex, folded and potentially faulted (refer Figure 5 on page 7 for updated geology model).

In summary the proposed ongoing exploration program<sup>16</sup> is therefore to:

1. Drill test Priority 1 and 2 Targets, log the core and assay the samples;
2. Using the new data from point 1 above, update the Spargos ultramafic model with a view to identifying prospective locations for accumulations of massive nickel sulphides;
3. 'Clean out' selected historic diamond drill holes and or drill new diamond holes to enable complete coverage of the basal contact using modern DHEM surveys; and
4. Using the new data from point 3 above, update the Spargos ultramafic model with a view to identifying prospective locations for accumulations of massive nickel sulphides.

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<sup>9</sup> QVD010\_p1

<sup>10</sup> QVD014\_p3

<sup>11</sup> DDH12 and QVD08

<sup>12</sup> Crone coil system

<sup>13</sup> This technology was considered adequate at the time (~10-15 years ago)

<sup>14</sup> Two diamond drill holes for 812m numbered QVD13 and QVD14

<sup>15</sup> Magnesium oxide (MgO) values above 32% are typical of ultramafic-hosted nickel sulphide mineralised deposits elsewhere in the Goldfields

<sup>16</sup> Despite taking additional time to complete, the comprehensive review process has added significantly to the interpretation of the Spargos ultramafic complex. The 'additional drill holes and DHEM surveys scheduled to commence early 2017' referenced in the ASX release dated 2 December 2016 have been refined as a consequence of the review and are referred to as Priority 1, 2, 3 and 4 in this ASX release. The exact collar positions of the planned holes and the order they will be drilled remains the subject of ongoing discussion by the exploration team working on the QVR nickel project.

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### About Hannans Ltd

Hannans Ltd (ASX:HNR) is an exploration company with a focus on nickel, gold and lithium in Western Australia. Hannans' major shareholder is leading Australian specialty minerals company Neometals Ltd. Hannans has a strategic relationship with West Australian based mining services company Australian Contract Mining. Since listing on the ASX in 2003 Hannans has signed agreements with Vale Inco, Rio Tinto, Anglo American, Boliden, Warwick Resources, Cullen Resources, Azure Minerals, Neometals, Tasman Metals, Grängesberg Iron AB, Lovisagruvan AB and Montezuma Mining Company Ltd. Shareholders at various times since listing have included Rio Tinto, Anglo American, OM Holdings, Craton Capital and BlackRock. For more information, please visit [www.hannansreward.com](http://www.hannansreward.com).

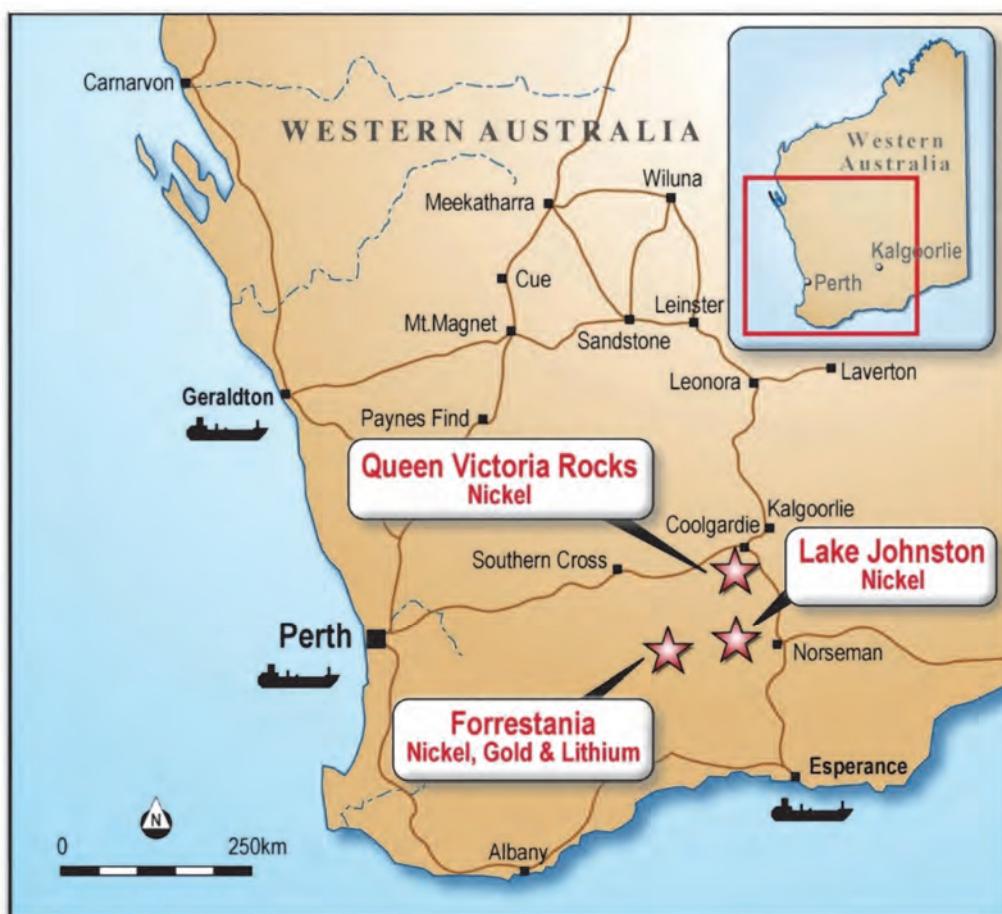


Figure 1: Location Map showing Hannans' Forrestania Project and Queen Victoria Rocks Project and Lake Johnston Joint Venture Project (Hannans free-carried)

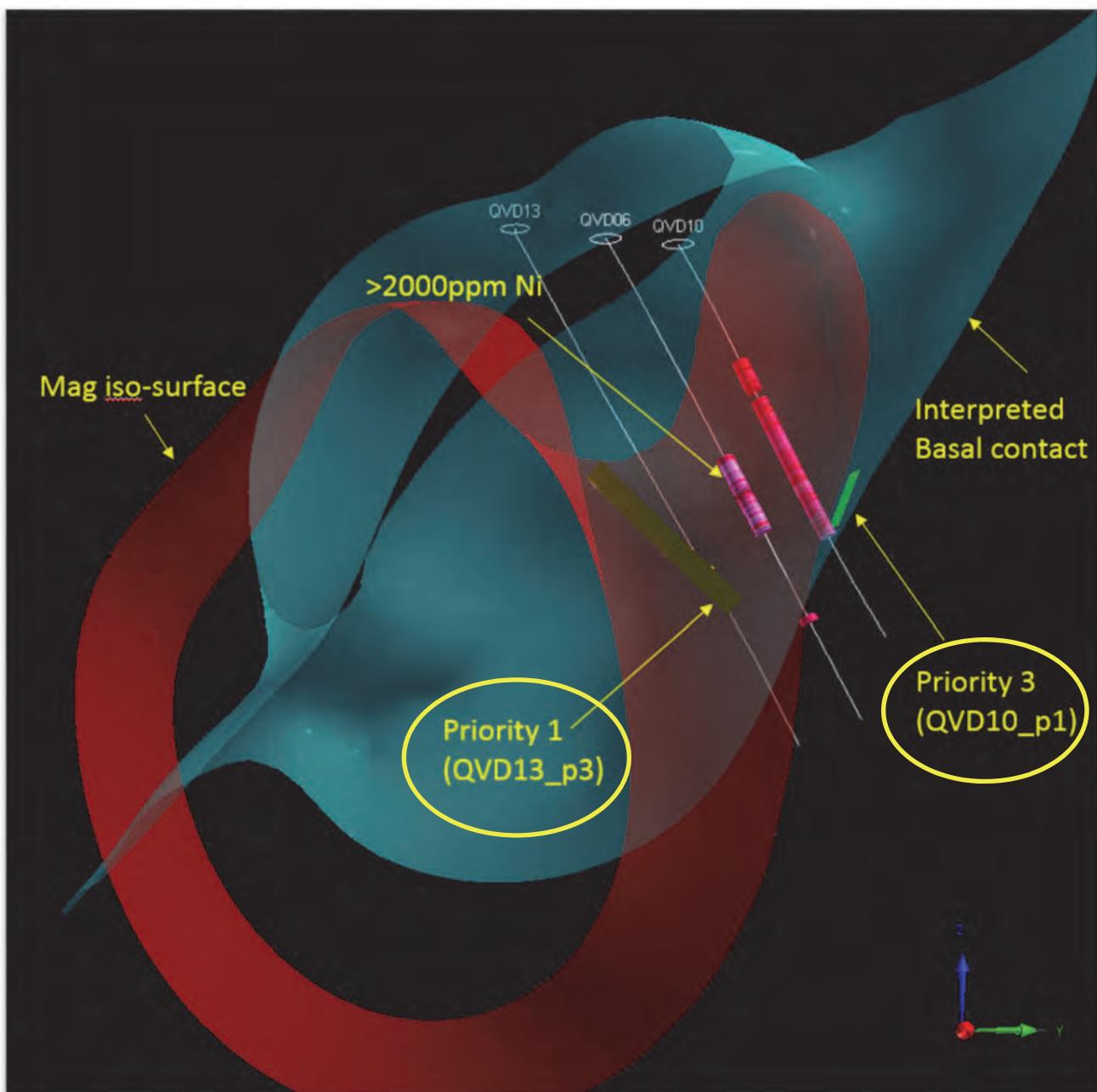


Figure 2: 3D model showing Priority 1 and 3 Targets

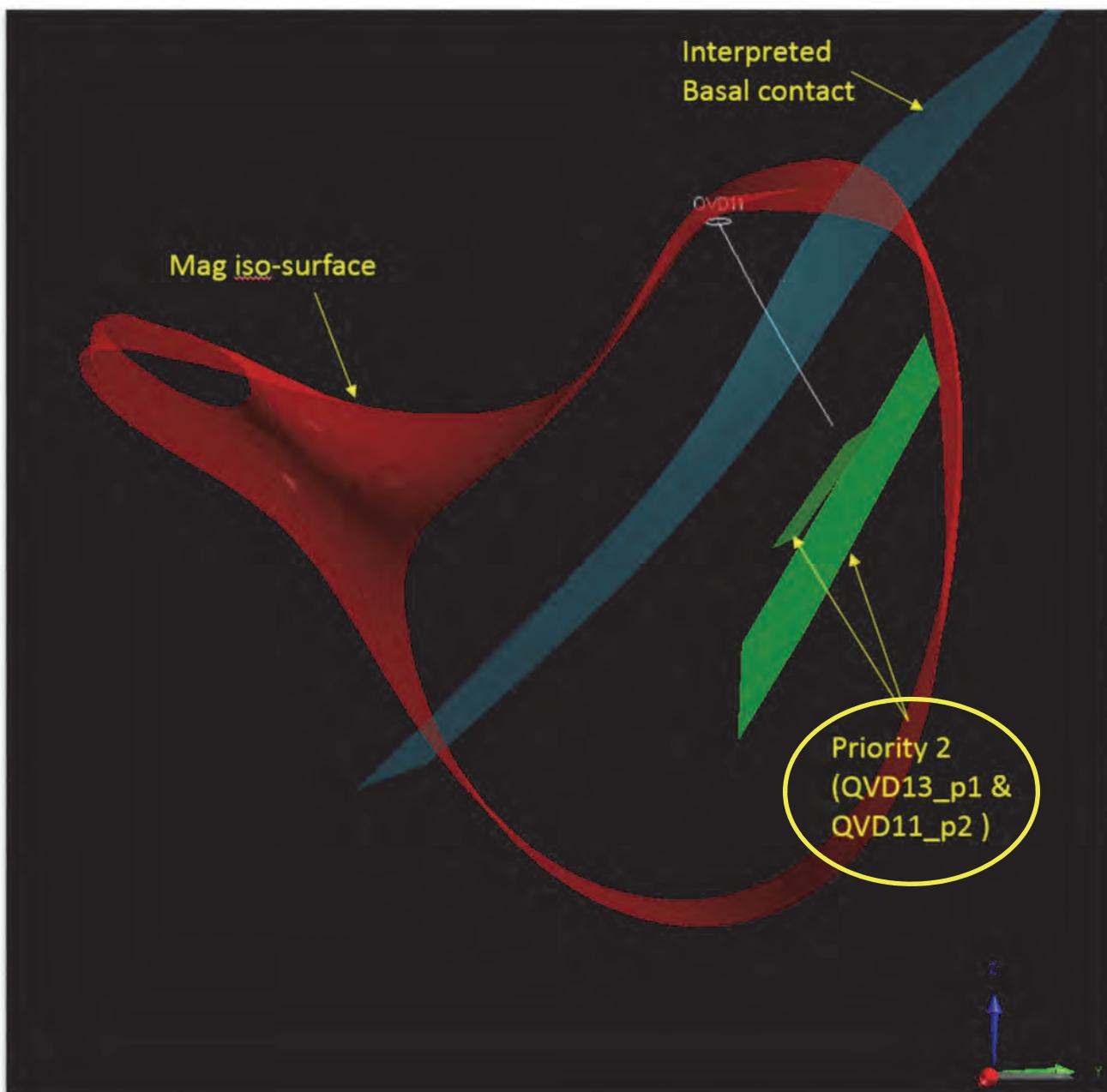


Figure 3: 3D model showing Priority 2 Target

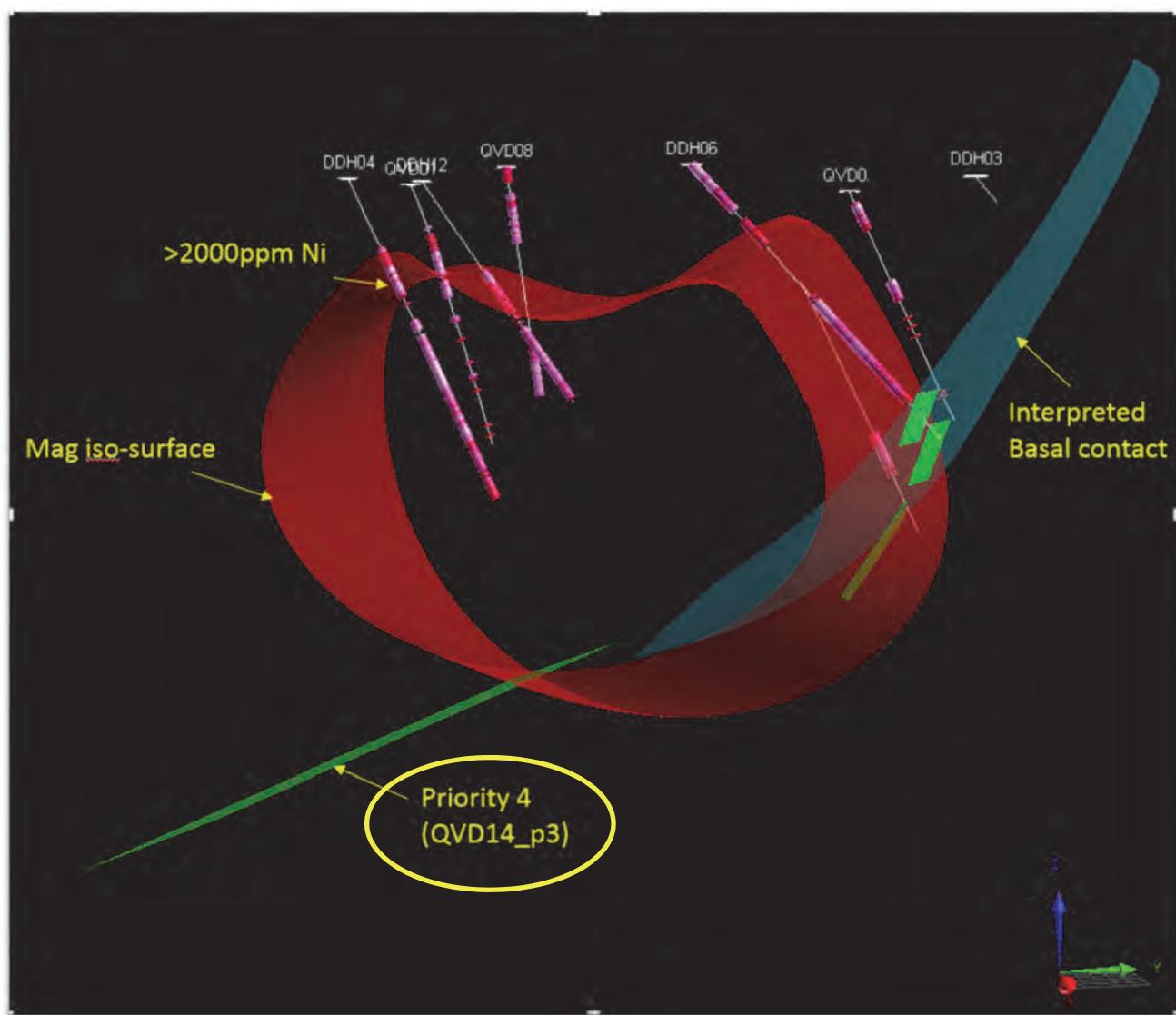


Figure 4: 3D model showing Priority 4 Target

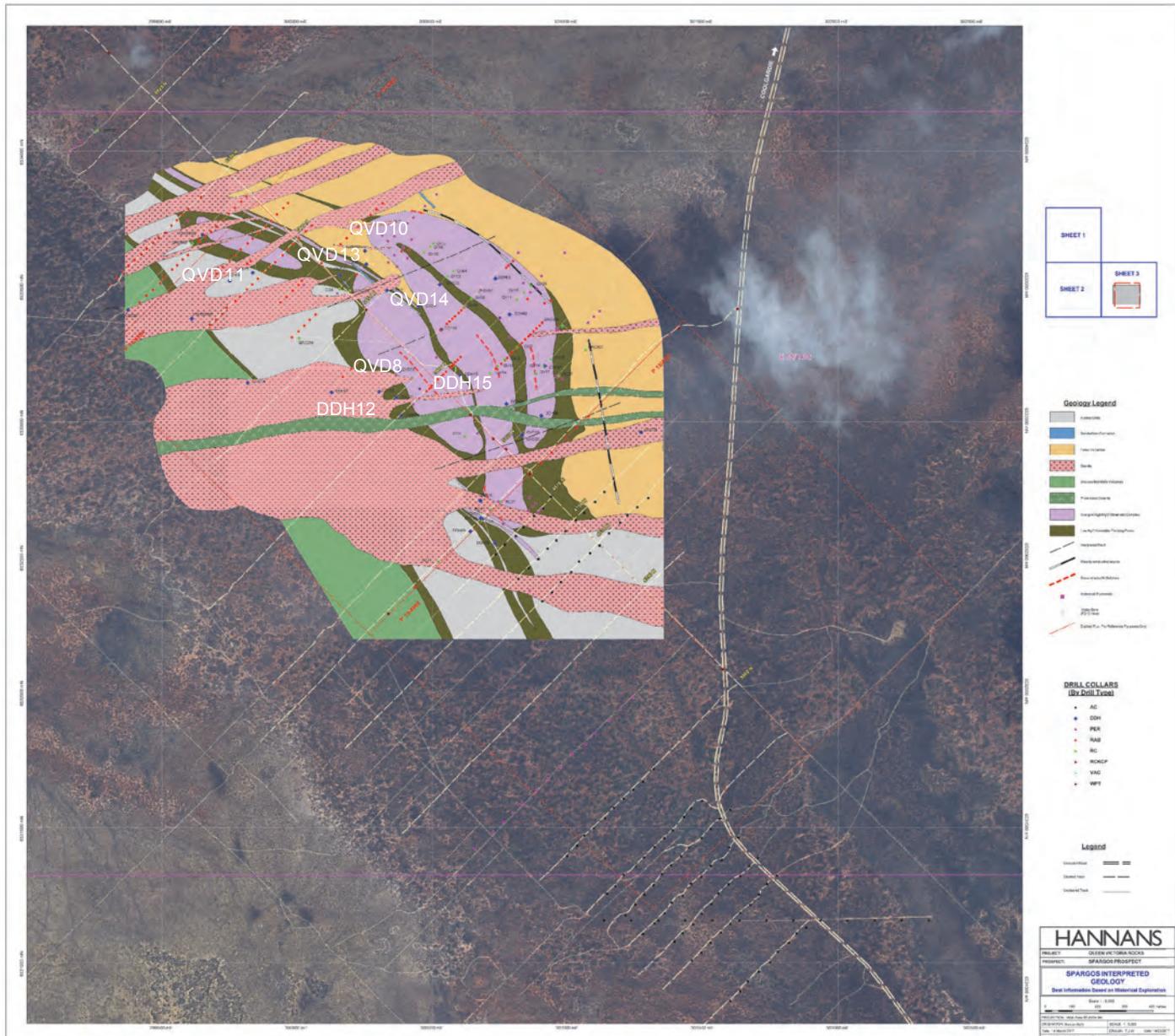


Figure 5: Spargos Interpreted Geology (Updated by G. Kelly March 2017)

## **COMPLIANCE STATEMENTS**

The information in this document that relates to exploration results is based on information compiled by Mr Gordon Kelly, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Kelly is a consultant to Hannans Ltd and its subsidiary companies. Mr Kelly has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Kelly consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary		
Sampling techniques	<ul style="list-style-type: none"> <li>⑥ 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>⑥ Include reference to measures taken to ensure representative samples and the appropriate calibration of any measurement tools or systems used.</li> <li>⑥ Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>⑥ 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>	<b>GEOLOGICAL EXPLORATION</b>		
		<b>Diamond Drilling</b>		
		Hole Depth m.	404.10	408.40
		Mag Azimuth	045	045
		Collar Dip	-60	-60
		MGA_N Zone 51	6533541	6533428
		MGA_E Zone 51	300159	300449
		Hole No.	QVD13	QVD14
		<b>Down-Hole Electromagnetic (DHEM) Surveys</b>		
		DHEM surveys were contracted to Gap Geophysics Australia Pty Ltd and designed/managed by Precision Geophysics Pty Ltd. Survey parameters include:		
		<ul style="list-style-type: none"> <li>⑥ 500x500m transmitter loop (150A current)</li> <li>⑥ Gap GeoPak HPTX-80 high powered transmitter</li> <li>⑥ EMIT DigiAtlantis 3-component fluxgate probe</li> <li>⑥ EMIT SMARTem24 receiver</li> <li>⑥ Base frequency 2.083Hz</li> <li>⑥ Stacks 3x128</li> <li>⑥ Sampling interval 5m</li> </ul>		

Criteria	JORC Code explanation	Commentary
	<i>other type, whether core is oriented and if so, by what method, etc.).</i>	processing.
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>⑥ <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>⑥ <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>⑥ <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>⑥ Drill core types and details are standard mining industry types. Both HQ core and NQ2 core was recovered.</li> <li>⑥ All 2 drill holes were roller-cone or drag bit drilled from surface, with all muds and weathered rock material being lost to standard drill sumps.</li> <li>⑥ After refusal, the drill crew from Westralian Diamond Drillers started coring with HQ bits, and demarcated each drill run with wooden blocks, upon which they wrote run-to depth, run-metres drilled and core recovery, in metres.</li> <li>⑥ After driller decisions on technical merits, the crew changed to NQ2 bits when the "ground" became more stable and intact.</li> <li>⑥ Sample runs, core drilled and recovery lengths continued on each block, to end of hole in NQ2 core size.</li> <li>⑥ All core was washed at rig and placed neatly on the core trays for transport to the core yard in Kalgoorlie. Hannans arranged transport from Kalgoorlie to Perth.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>⑥ <i>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.</i></li> <li>⑥ <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>⑥ <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>⑥ All geological drilling has been logged by Gordon Kelly, up to the standard established by Kambalda Nickel Operations and subsequent academic break throughs in the understanding of komatiite volcanism and its alteration. This is accepted by all workers as being industry best practice and is quantitative in nature, more than sufficient to qualify for any appropriate Mineral Resource estimations and ongoing mining feasibility studies.</li> <li>⑥ All core trays have been digitally photographed by core tray numbers and the imagery stored in appropriate files within the REX database systems.</li> <li>⑥ The entire recovered core was geologically logged and selected zones marked-up for quarter core cutting at Intertek laboratories.</li> <li>⑥ Briefly, this meant all of the ultramafic rock types were marked up, selected sulphide-bearing zones within the footwall stratigraphy marked up and any quartz veins and pegmatite units. The latter were selected for a complementary study on the potential for lithium-bearing pegmatites.</li> </ul>
<i>Sub-sampling techniques</i>	<ul style="list-style-type: none"> <li>⑥ <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>⑥ <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>⑥ <i>For all sample types, the nature, quality and appropriateness of the</i></li> </ul>	<ul style="list-style-type: none"> <li>⑥ All quarter core diamond cut samples with sample intervals were geologically defined by rock type and any mineralisation therein distribution. Sample lengths rarely exceed 100cm and are usually less than 100cm where mineralisation was tested. Rare cutting lengths in excess of 100cm were due to preservation of the core, for example,</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>and sample preparation</i>	<p>sample preparation technique.</p> <ul style="list-style-type: none"> <li>o Quality control procedures adopted for all sub-sampling stages to maximise representative sampling.</li> <li>o 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>o Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>intense fracturing of a rock type selected from start to finish of the fracturing.</p> <ul style="list-style-type: none"> <li>o Total sample weight varies from 50g to 3000g.</li> <li>o Sample preparation would consist of diamond saw quarter core cutting, then crushing and total pulverisation by LM5 disk mill prior to subsampling for fire assay and wet chemistry techniques. All procedures demanded manual control and no robotic processing was permitted.</li> <li>o Sample processing specifics are defined by Intertek Laboratories protocols for fresh rock material total analyses by fire assay and 4-acid digest routes; which are accepted industry-wide as being best possible, with adequate QA/QC controls inserted.</li> <li>o Intertek laboratories specify random duplicate selection of samples, taken from the pulp stage. There were no replicate sampling of the core, for example, another quarter core taken from the trays.</li> <li>o This replication can, of course, be done at some future date from the archived core trays at REX core farm.</li> <li>o The sample size of the quarter core, the weight and the very fine grain size of serpentinites ensure that the analyses will be at a standard appropriate to all possible ore reserve calculations.</li> <li>o Grain size of the rare pyritic sulphides intersected in the footwall mafic stratigraphy was coarse, but pulverisation removed that possible bias by taking the whole mineralised length as one sample.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>o The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>o 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>o 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 style="list-style-type: none"> <li>o All geological samples/core was submitted to Intertek Laboratories, 15 Davison Street, Maddington WA for processing. The pathways that Intertek take are no-compromise industry-standard ones on quality, reproducibility and highest precision possible at present.</li> <li>o The geochemical samples were pulverised, subsampled and the aliquot digested in aqua regia that combines high digestibility for weathered regolith material and reasonable cost and throughput. The element suite selected was low level Au_ppb, Pd_ppb, Pt_ppb, Co_ppm, Cr_ppm, Cu_ppm, Ni_ppm &amp; Zn_ppm. The ICPMS instrument was used for all determinations, reported as ARU codes.</li> <li>o The geological samples (mainly from quarter core intervals) were crushed in a low-Cr steel crusher, pulverised and an aliquot taken for the PbO fire assay pathway, with ICPMS finish, reported as FA25/MS codes, for Au_ppb, Pd_ppb &amp; Pt_ppb..</li> <li>o The second aliquot was digested in 4 acids and determined by ICPOES or ICPMS instrumentation; reported as 4A/OE or 4A/MS codes. The suite determined was Ag_ppm, Al_ppm, As_ppm, Ba_ppm, Bi_ppm,</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Ca_ppm, Co_ppm, Cr_ppm, Cu_ppm, Fe_ppm, K_ppm, Li_ppm, Mg_ppm, Mn_ppm, Mo_ppm, Ni_ppm, Pb_ppm, Rb_ppm, S_ppm, Sb_ppm, Se_ppm, Sn_ppm, Sr_ppm, Te_ppm, Ti_ppm, V_ppm, W_ppm &amp; Zn_ppm.</p> <ul style="list-style-type: none"> <li>o Check samples' analyses and sample blanks were compiled at the end of the sample strings.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>o The verification of significant intersections by either independent or alternative company personnel.</li> <li>o The use of twinned holes.</li> <li>o Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>o Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>o Nil significant intersections sampled, no validation required.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>o 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>o Specification of the grid system used.</li> <li>o Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>o MGA coordinates based on GDA '94 datum in Zone 50.</li> <li>o Pick-up of completed drill hole collars will employ same GPS parameters, with extended reading times to average out precision drift. More accurate drill collar pick-ups may be justified in the event of successful results and succeeding programs.</li> <li>o Topography is assumed flat at this stage, for this greenfields exploration. Profile pick-ups may be required for ore body definition.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>o Data spacing for reporting of Exploration Results.</li> <li>o 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>o Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>o The spacing and data recording specifics are considered appropriate for the advanced nature of this survey and have been applied by a well-recognised industry provider (GAP).</li> <li>o Depth penetration and sampling interval specifics are considered appropriate for the nature of these DHEM surveys.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>o 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>o If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>o The diamond drilling was targeted on geophysical and geological anomalies and concepts.</li> <li>o This validates the initial -60 degrees eastwards dip of stratigraphy, at least where it has been intersected by the 2 drill holes.</li> <li>o The dip does not remove any possibilities of thrust offsets to stratigraphy and hence an apparent flatter dip between contact points from hole to hole.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>o The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>o Security for diamond drilling at QVR will be maintained at the same level, with all core transported to Perth at earliest convenience.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>o The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>o Nil audits were applicable.</li> </ul>