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ASX ANNOUNCEMENT

15 August 2018

EXTENDED MINERALISED VEIN AT LEAST 1.5KM LONG IDENTIFIED AT NELLY VANADIUM MINE CONFIRMS SIGNIFICANT EXPLORATION UPSIDE

HIGHLIGHTS

- **SRK Consulting team confirm extensive mineralised vein, at least 1.5km long, through Nelly Vanadium Mine (NVM) tenure which demonstrates material exploration upside**
- **Focusing on the north-eastern part of the NVM tenure, the team discovered a second open pit (with untapped and /or partially mined mineralisation) and a tenth stockpile 400m from the historic processing plant**
- **More significantly, the team found evidence of mineralised vein outcropping 100m before and 250m after the second open pit (65m long, 2.5m wide, 3m deep) that aligns with the main open pit south-west of the historic processing plant[1]**
- **Collectively, these observations confirm the mineralised vein running through tenure is at least 50% larger than the 0.9-1km originally envisaged[2]**
    - **More significantly, other than the known open pits and small historic workings, much of the mineralised vein appears untouched and exposed at surface**
    - **Mineralisation observed in the north-east section – hematite, pyrite, copper & vanadate minerals – was consistent with the geology in the main open pit south-west of the processing plant**
- **Moreover, the timing is ideal especially with the growing perception a global supply deficit for vanadium is materialising, due to stricter reinforcing bar requirements in China and accelerating demand for vanadium redox batteries**

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Hardey Resources Executive Chairman, Terence Clee commented: *"The new discoveries in the north-east part of the tenure which confirm the likelihood of an extended mineralised vein that is largely untapped is exciting news."*

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Hardey Resources Limited's (ASX: HDY) ("HDY" or "the Company") Board has received the second field trip update report from the SRK Consulting and Condor Prospecting teams, which focuses on the north-east part of the tenure. Pleasingly, it provides incremental evidence there is significant exploration upside at Nelly Vanadium Mine (NVM).

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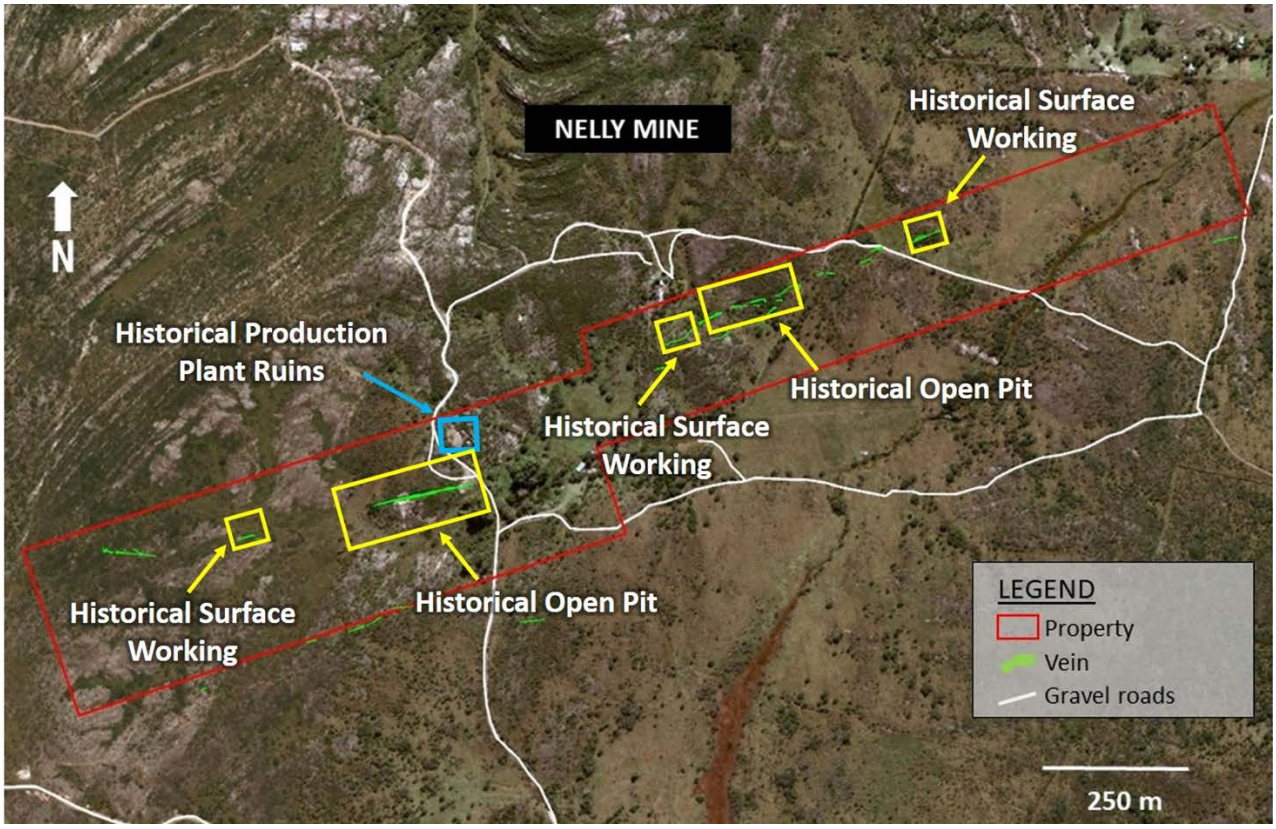
NELLY VANADIUM MINE – SITE VISIT UPDATE

New discoveries

Building on the initial work (refer ASX Release 7 August 2018), the teams from SRK Consulting and Condor Prospecting focused on the north-east section of the Nelly Vanadium Mine (NVM) tenure.

In a significant positive development, an old open pit, surface historical workings and mineralised veins, that have not been identified previously, were discovered. A notable point, highlighting the degree of exploration upside across NVM, was the clear visible extension of the mineralised vein at surface to the north-east across tenure up to 1.5km long. These new discoveries have been measured, evaluated and reflected in an updated tenure map to provide context and greater clarity, with the thickest observations outlined (Figure 1).

FIGURE 1: CLOSE UP SATELLITE IMAGE OF NVM



Source: HDY geology team

Highlights from the second day, which focused on the north-east part of the tenure, include:

- Around 400m north-east from historic processing plant ruins there is a mineralised vein outcropping adjacent to a small legacy working area 2m by 2m and 1.5m deep. The vein's general mineralisation trend is a south-west to north-east strike, with outcropping in portions over 6-10m distance. Notably, numerous mineralised clasts are surrounding the vein and working area.

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- A further 100m along from the small historic working area, in the same north-east direction, is the newly discovered open pit, which is in the same orientation as the pit in the south-west section of the tenure. This new pit strikes south-west to north-east and is 65m long, 2.5m wide and 3m deep.
    - Interestingly, a portion of the vein remains untouched while the mineralisation is identical to other historic working areas. In addition, there is another stockpile which brings the total across the tenure to ten in total.
    - The type of mineralisation observed in the north-west open pit is hematite, pyrite, copper minerals, green and yellow vanadate and black minerals.
- A further 250m to the north-east of the open pit another mineralised vein outcropping – over a 5m distance – was observed. Adjacent to the outcrop was a surface workings area 4m by 5m and 1.5m deep, with a small residual rock pile. Visual observations of the rocks within the pile showed hematite and veining which confirm the extension of mineralisation into this area. Specifically, the veining and minerals can be seen on within the outcrop.
- The fact the north-east vein and historic surface workings are an aligned extension from the main open pit south-west of processing plant ruins (implying at least a 1.5km mineralised vein system), illustrates the huge exploration potential still apparent within the NVN tenure.
- This is a significant discovery as further work must be carried out to determine the design of the mineralisation in place and vein dimensions. This includes detailed surface mapping and an inaugural drilling program.

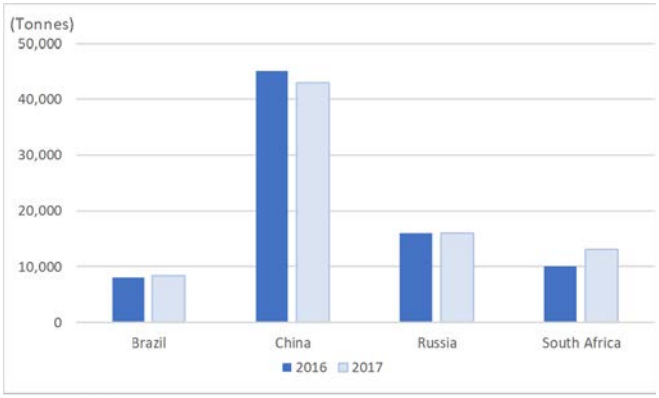
Final stages of due diligence underway

The reporting to date on NVM has been deemed sufficient to complete most of the Board's due diligence. A key factor swaying the Board's decision is the favourable outlook for vanadium demand. The Board has studied the fundamentals driving forward demand for vanadium, namely stricter reinforcing bar requirements in China and accelerating demand for Vanadium Redox Batteries, then reconciled this with prevailing global supply dynamics. The conclusion was that with China shutting polluting mines, there would be a potential supply vacuum which could not be adequately compensated by other major global producers: Russia and South Africa.

As can be seen in Figure 2, slight upticks in production by Brazil / Russia and 20% by South Africa (against China's 5% reduction), only resulted in a 2% increase in global output to 80,400t in 2017. Clearly, the market views this as inadequate to meet forward demand, given the vanadium price has reached a near-decade high (Figure 3).

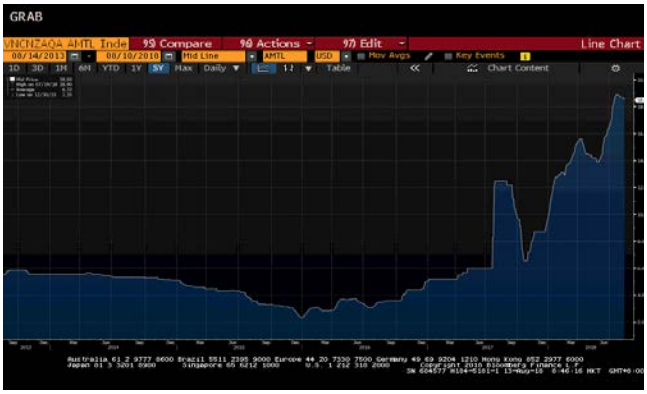
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FIGURE 2: TOP 4 VANADIUM PRODUCERS



Source: USGS

FIGURE 3: V2O5 PRICE CHART



Source: Bloomberg

Looking out over the next few years, the Board believes this emerging vacuum opens-up the opportunity for new supply chains from Argentina and Australia to be evolved. In particular, Nelly Vanadium Mine1 may meet this objective, given it can be re-opened relatively quickly and the legacy stockpiles potentially monetised as a direct shipping ore vanadium product.

DESCRIPTIVE PHOTO GALLERY

The following discussion highlights photos from site and value-added commentary from the geology team on their observations in the north-east section of the NVM tenure. Note, all photographs are taken within the Nelly Vanadium Mine project area in San Luis Province in Argentina.

Photos 1 & 2 show 6-10m of outcropping vein (with oxidation and veining) that is located 400m north-east from the historic processing plant. It is along the same strike as the main pit vein observed in the south-west section. To the right of the outcrop (not in the pictures), there is a surface working made by the previous miners which is where the clasts of mineralised rock likely originated.

PHOTO 1 & 2: MINERALISED OUTCROPPING 400M N-E FROM PROCESSING PLANT





Source: HDY geology team

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Photo 3, which is a close up of the outcropping rock from Photos 1 & 2, shows (top left) some open spaces with oxidation and black minerals. This vein is made of quartz with intense veining of minerals which probably carry vanadium, lead, iron and other elements of the suite that characterise the system.

PHOTO 3: ZOOMING IN ON OUTCROPPING ROCKS



Source: HDY geology team

Photo 4 shows the open pit north-east of the historic processing plant. On the left side it shows part of the vein left untouched, while the host rock is on the right side. This open pit has the same orientation as the main pit located in the south west section.

PHOTO 4: NORTH-EAST OPEN PIT



Source: HDY geology team

A close up (Photo 5) of the vein in the open pit shows intense veining. The green and yellow minerals are from the vanadates family, while the veining is made of oxidised material. These

features are the same as the ones described in the vein that has been mined in the main open pit.

PHOTO 5: CLOSE UP OF VEIN IN OPEN PIT



Source: HDY geology team

The tenth stock pile (Photo 6) located on the south border of the open pit. The rocks in the pile have copper, black, greenish/yellowish minerals (probably vanadium) and evidence of intense veining present.

PHOTO 6: TENTH STOCKPILE



Source: HDY geology team

Photo 7 shows another picture of the vein 750m north-east of the processing plant (circa 100m from the open pit). Moreover, it is 1km along strike from the main pit and at least 1.5km from

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the furthest outcropping in the south-west section. Collectively, this suggests the mineralised system has a known extension of at least 1.5 km within the NVM tenure but could extend up to the border.

PHOTO 7: VEIN OUTCROPPING 750M N-E FROM PROCESSING PLANT



Source: HDY geology team

Next steps

Receiving final NVM report from SRK Consulting, planning next phase of exploration strategy and expediting seeking approval to reactivate the mine.

For and on behalf of the Board

Terence Clee

Executive Chairman

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References

1) HDY ASX Release 7 August 2018
2) HDY ASX Release 3 July 2018
3) USGS

COMPETENT PERSON'S STATEMENT:

The information in this report that relates to Geological Interpretation, Historical Exploration Results, or Historical Mineral Resources is based on information compiled by Nicholas Ryan, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Ryan has been a Member of the Australian Institute of Mining and Metallurgy for 12 years and is a Chartered Professional (Geology). Mr Ryan is employed by Xplore Resources Pty Ltd. Mr Ryan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Ryan consents to the inclusion in the report of the matters based on his information and the form and context in which it appears.

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JORC Code, 2012 Edition – Table 1 report template

Formally the historical vanadium mine is referred to in Spanish as the 'La Nelly', the Table 1 will substitute 'Nelly Vanadium Mine' for 'La Nelly'

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Drilling	• *Drill type (eg core, reverse circulation, open-hole*	• No Sampling, Assay results or Drilling had been reported in

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Criteria	JORC Code explanation	Commentary
techniques	*hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	the current Hardey Resources Limited ASX Announcement.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.

Criteria	JORC Code explanation	Commentary
	sampling stages to maximise representivity of samples. • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches,*	• The lowest level of the historical underground workings of the Nelly Mine were not accessible due to the workings

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Criteria	JORC Code explanation	Commentary
	mine workings and other locations used in Mineral Resource estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	having been flooded. • The measurements derived from the surface geology and exposed areas of the pits are biased to accessible portions of the historical workings of the Nelly Vanadium Mine, the mineralisation type, and structural interpretation are indicative of elevated vanadium in a polymetallic vein setting. Therefore, measurements are distributed along the strike of the exposed mineralized veins and geological structures. • The mineralized veins are taken to have a vertical or near vertical dip, for the measurements taken and presented in the current Hardey Resources Limited ASX Announcement. • It is anticipated that future exploration methods, such as geophysical survey techniques and/or drilling in order to quantify the volume and grade of the mineralized veins. • No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The lowest level of the historical underground workings of the Nelly Mine were not accessible due to the workings having been flooded. • The measurements derived from the surface geology and exposed areas of the pits are biased to accessible portions of the historical workings of the Nelly Vanadium Mine, the mineralisation type, and structural interpretation are indicative of elevated vanadium in a polymetallic vein setting. Therefore, measurements are distributed along the strike of the exposed mineralized veins and geological structures. • The mineralized veins are taken to have a vertical or near vertical dip, for the measurements taken and presented in the current Hardey Resources Limited ASX Announcement. • It is anticipated that future exploration methods, such as geophysical survey techniques and/or drilling in order to quantify the volume and grade of the mineralized veins.

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Criteria	JORC Code explanation	Commentary
		• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The lowest level of the historical underground workings of the Nelly Mine were not accessible due to the workings having been flooded. • The measurements derived from the surface geology and exposed areas of the pits are biased to accessible portions of the historical workings of the Nelly Vanadium Mine, the mineralisation type, and structural interpretation are indicative of elevated vanadium in a polymetallic vein setting. Therefore, measurements are distributed along the strike of the exposed mineralized veins and geological structures. • The mineralized veins are taken to have a vertical or near vertical dip, for the measurements taken and presented in the current Hardey Resources Limited ASX Announcement. • It is anticipated that future exploration methods, such as geophysical survey techniques and/or drilling in order to quantify the volume and grade of the mineralized veins. • No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Sample security	• *The measures taken to ensure sample security.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.

- Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral	• *Type, reference name/number, location and*	• The Nelly Vanadium Mine is a site that holds historical

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Criteria	JORC Code explanation	Commentary
tenement and land tenure status	*ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	workings and a smattering of ruins related to the mine workings. • The mining tenure identifier applied for reactivation is 953-L-2003. • A material agreement exists, that once all conditions are met, will result in the transfer 100% of the holding company for the mining tenure to Hardy Resources Limited (ASX: HDY). The holding company has rights to 95% of the Nelly Vanadium Mine, with an in-country shareholder holding 5% of the rights, in line with how many foreign entities operate in Argentina.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration completed by other parties is referred to in a recent Hardey Resources Limited ASX Announcement on the 03/07/2018.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The historical Nelly Vanadium Mine is located in the San Luis province of Argentina, in the Las Aguadas district, in the San Luis province, Argentina. The historical Nelly Vanadium Mine is located approximately 170 km from San Luis' capital city, the city shares the same name as the province it resides in. • The Regional Geology is dominated by precambrian-cambrian high to low grade metamorphic rocks with pre, syn and post-orogenic granitic intrusions of variable dimensions. • The historical Nelly Vanadium Mine is located in las Aguadas Pb - V mining district. Is part of many historical mines with Pb and V historical production. • The regional target mineral is Vanadinite, a lead chlorovanadate, Pb5(VO4)3Cl, that is by weight 73.15% Pb and 10.79% V. At the historical Nelly Vanadium Mine, Vanadinite occurs as yellow staining on the Quartz Mineralised veins.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.

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Criteria	JORC Code explanation	Commentary
	Material drill holes: o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths*	• The measurements derived from the surface geology and exposed areas of the pits are biased to accessible portions of the historical workings of the Nelly Vanadium Mine, the mineralisation type, and structural interpretation are indicative of elevated vanadium in a polymetallic vein setting. Therefore, measurements are distributed along the strike of the exposed mineralized veins and geological

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Criteria	JORC Code explanation	Commentary
	are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	structures. • The mineralized veins are taken to have a vertical or near vertical dip, for the measurements taken and presented in the current Hardey Resources Limited ASX Announcement. • It is anticipated that future exploration methods, such as geophysical survey techniques and/or drilling in order to quantify the volume and grade of the mineralized veins. • No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
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.*	• Representative diagrams of the vein ore bodies and/or mine working are shown in the body of the current Hardey Resources Limited ASX Announcement and in a recent Hardey Resources Limited ASX Announcement on the 03/07/2018.
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.*	• No Sampling, Assay results or Drilling had been reported in the current Hardey Resources Limited ASX Announcement.
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.*	• Nil at the time of writing this announcement. It is anticipated that the future planned Desktop Study (refer to sub-section 'Further-work', Section 2 of the current Table 1) has the potential to uncover additional information as the records kept by the mining departments of each state in Argentina are hard copy documents.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided*	• The Exploration Strategy is to execute upon grant of the mining tenure the following stages: ➢ Desktop Study; ➢ Field Reconnaissance; ➢ Implement an appropriate to be selected Geophysical Survey; ➢ Plan and implement a staged drilling program; and

Criteria	JORC Code explanation	Commentary
	this information is not commercially sensitive.	➢ Geological modelling and/or Resource Estimation • The Desktop Study will compile the existing information for the project areas from a range of sources into a tenement data package and a report that summarizes the dataset.

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