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ASX ANNOUNCEMENT 30 October 2018

BURRAGA PROJECT UPDATE: LATEST DRILLING CAMPAIGN COMPLETED

HIGHLIGHTS

- **Two reverse circulation drill-holes completed, amounting to 740m overall, at the Lloyds Copper Mine (LCM) extension within the Burraga Project in NSW – HDY's primary copper asset**
- **The geology team's objective from this campaign was to garner a greater understanding of the ore body and test if it extends at depth and further to the east than previously understood**
- **All drilling samples have been sent to the laboratory for further analysis, as the results will determine the next component of the drilling program**
- **Currently, depending on the assay results, the geology team believe incremental infill drilling is necessary to test the size and continuity of the known ore body**
- **Meanwhile, the Board notes the price of vanadium pentoxide has reached a five-year high[1], reflective of growing demand from China primarily due to more stringent rebar standards which come into effect on 1 November 2018[2]:**
    - **HDY's geology teams in Australia and Argentina have continued developing the newly acquired vanadium projects; progress reports will be released shortly**
- **Lastly, the Board and legal advisors are continuing to work proactively with the ASX to resolve the current inquiry – shareholders will be kept up to date with progress**

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Hardey Resources Director, Robert McCauley commented: "It is pleasing to have concluded this latest drilling round at our core copper project. The Board looks forward to reviewing the assay results as this will determine the next phase of the drilling program at the Burraga project. Further, our geology teams are ramping up development work on the vanadium projects, given favourable global demand-supply dynamics have propelled the V_2O_5 price to 5-year highs."

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Hardey Resources Limited's (ASX: HDY) ("HDY" or "the Company") Board is pleased to announce it has completed drilling two exploration drill-holes as part of the LCM extension program at the Burraga Project in New South Wales.

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LATEST DRILL PROGRAM AT BURRAGA PROJECT

The recent drilling program at the LCM extension within the Burraga Project in NSW comprised of two RC drill-holes, with an aggregate target depth of 740m.

The geology team designed the drill-holes to test high priority targets generated from previous modelling which indicated that lodes remain open at depth and to the east of known mineralisation.

The geology team drilled two scissor style drill-holes which are briefly described below and the location shown in Figure 1:

- **EYMRC034** was collared towards 210° dipping at -80° with the total depth of 400m, which is the deepest RC drill-hole ever undertaken at the LCM extension site; and

- **EYMRC035** was drilled towards 30° dipping at -80° to a total depth of 340m, with the objective to test for mineralisation at depth and to the north-east of the known ore body at the LCM deposit.

FIGURE 1: LOCATION OF TWO DRILL-HOLES & TEAM IN ACTION AT BURRAGA PROJECT



Location: 6,239,200mN; 734,300mE

Source: HDY geology team

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The drill-holes collar location and summary detail information can be found in Table 1, below:

TABLE 1: COLLAR LOCATIONS AND SUMMARY DETAILS (GDA94 ZONE 55)

Hole ID	East (m)	North (m)	Elevation (m)	Azimuth (degrees)	Dip (degrees)	Hole Depth (m)
EYMRC034	734344	6239226	980.5	210	-80	400
EYMRC035	734347	6239231	980.6	30	-80	340

Source: HDY geology team

Samples have now been processed and dispatched to the laboratory for follow up analysis, with results likely available in the next few weeks.

Next Steps

Once the assay results have been reviewed, further drilling is likely to be proposed to test potential extensions to the known ore body to the east.

In addition, the Board intends to provide shareholders with updated progress reports on Nelly Vanadium Mine and six vanadium assets in the Northern Territory and Queensland.

For and on behalf of the Board

Sarah Smith
Company Secretary

References

1) Vanadium Pentoxide price – Bloomberg
2) "Vanadium price leaps to near-record high" by Frik Els – 15 Oct 2018 <www.mining.com>

COMPETENT PERSON'S STATEMENT:

The information in this announcement that relates to Mineral Resources and exploration results is based on information reviewed or compiled by Kerrin Allwood (M.Sc., CP Geol), a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Allwood is employed by Geomodelling Ltd. Mr. Allwood has sufficient experience that is relevant to the styles of mineralisation and types 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 Mineral Resources and Ore Reserves". Mr. Allwood consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

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APPENDIX A: JORC CODE, 2012 EDITION – TABLE 1 REPORT TEMPLATE

The following table provides explanations required under JORC 2012 pertaining to the Lloyds Mine and areas in the immediate vicinity.

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 (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.* • *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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized 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.*	• All sampling reported on here was from by reverse circulation (RC) drilling using a face sampling hammer. • Reverse Circulation (RC) samples were collected by cyclone and bagged at 1 m intervals. • Samples collected and bagged directly from cyclone via cone splitter at 1m intervals. • Not applicable as no assays are reported. • The 1 m RC sample bags were sub-sampled using a cone splitter mounted to the cyclone to gather approximately 2kg of material, these were submitted to the laboratory as either 1m individual samples. • Sample preparation and analytical methods are not applicable as no assay results are reported in the current announcement.
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*	• All sampling reported on here was from by reverse circulation (RC) drilling using a face sample hammer.

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Criteria	JORC Code explanation	Commentary
	oriented and if so, by what method, etc).	
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.*	• Visual inspection of the sample volume indicates sample recovery is better than 90%. Poor sample recovery or condition is noted in the logs. • RC samples are visually checked for recovery, moisture and contamination. Air is used at the beginning of each drill rod to remove excess water and maintain dry samples where possible. • Ground conditions are conducive for RC drilling and drilling returned consistent sized samples. RC recoveries are high enough to preclude the potential for sample bias.
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.*	• Logging of RC drilling identifies all aspects of lithology, colour, weathering, texture, alteration and mineralization including percentage estimates of sulphide content (subject to verification by full assay results). • During logging, part of the RC sample was sieved, logged and placed in RC chip trays which is also photographed and included with the logging. • The logging includes references to wet samples if present, voids and other information important to the resource estimation process. • Logging is qualitative. Chip trays are stored for reference and photos are included in the logs. All drilling is logged over the full length of the hole.
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.*	• No diamond drilling completed during this program. • Sampling was dry off the cyclone using cone splitter. • The sample preparation techniques are appropriate to the style, grade and grain size of mineralisation.

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Criteria	JORC Code explanation	Commentary
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Blanks and standards were introduced at a rate of 1 standard or 1 blank per 50m and submitted to the laboratory. • Sub-sampling is done with a riffle splitter in the laboratory until the sample has been reduced to a pulp. Grinding performance (% of sample below grind size) are reported by the laboratory for every 20th sample • Blanks and standards were introduced at a rate of 1 standard or 1 blank per 50m and submitted to the laboratory. • Samples sizes are appropriate to the grain size, mineralogy and grade of the mineralisation.
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 assay results are reported in the current announcement, assay results will be released pending completion of laboratory assay program. • Downhole Geophysical tools were not used. • In addition to the internal laboratory checks the Company submits standards and blanks on a 1: 50m ratio.
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.*	• No assay results are reported in the current announcement, assay results will be released pending completion of laboratory assay program. • No twinning of holes was carried out as it is an exploration program, to test the extension of mineralisation. • Data is stored as both hard copy and entered into a

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Criteria	JORC Code explanation	Commentary
	• *Discuss any adjustment to assay data.*	database. • Validation checks (overlaps, gaps, out of range data) are performed on import into the database • No adjustments were made to the data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Collar locations are determined by DGPS. • Down-hole surveys are gyroscopic readings at 30m intervals. • Borehole Collars Co-ordinates are in GDA94, Zone 55. • Topographic surface in areas of likely development is from closely spaced (<10m) DGPS traverses in a grid pattern and on ridges and gullies. Elsewhere a DTM obtained from airborne geophysical surveys was used.
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 results reported on are from scout drilling into geological targets, as such drill spacing is only intended to roughly outline the extent of mineralisation. • The drilling reported here is adjacent to the existing Lloyds Mine mineral resource. • It is unlikely that the drilling here is of sufficient density to provide an indication of the extent of mineralisation. • Future drilling would be required in order to geologically model, estimate and report with confidence a mineral resource to be estimated in this area. • No composite sampling occurred, all RC samples were dispatched to the laboratory as 1m sampled increments.
Orientation of data in relation to geological	• *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*	• No bias significant mineralization bias is suspected, The current Exploration results are close to perpendicular or sub-perpendicular, due to the nature of the scout style

Criteria	JORC Code explanation	Commentary
structure	*orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	drilling to text the extent of the mineralisation. •
Sample security	• *The measures taken to ensure sample security.*	• All samples prior to submission are under the supervision of the Geologist. • Following submission to the laboratory (by Company personnel), reference samples are stored at the Company's warehouse in Orange.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No formal audits or reviews have been completed on the sampling techniques or data (including the database). • Due care has been taken to collate and assemble the data into the database.

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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	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• NSW Mineral Tenure: EL6463 • ~60km South of Oberon in NSW. • HDY through a subsidiary holds 100% of EL6463 • There are no agreements over the tenement other than the usual conditions imposed by the NSW government • Tenement is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	Various operators have held tenure over the area; the following companies have recorded work in the area to varying capacities: • CRA Ltd • General Resources Ltd • Pacific Copper Ltd • Southern Ventures Ltd • Telminex N.L. • Michelago Resources • Marlborough Resources • Getty Oil • Dominion Mining • Republic Gold N.L. The final three in the list have carried out the majority of the recent work and upon which HDY has based its exploration programs.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• At Lloyds Copper Mine mineralisation occurs as quartz – sulphide veins, and as a halo of disseminated mineralisation in the wall rocks. The predominant sulphide mineral is chalcopyrite with sphalerite on the vein walls and pyrrhotite disseminated in the wall rocks. Galena and

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Criteria	JORC Code explanation	Commentary
		tetrahedrite have also been reported, but not at economically important levels. The mineralisation varied in width from 0.3m to 10 m, striking roughly east - west and dipping moderately north. The mined mineralisation had a strike extent of 180m, terminating in faults at both ends. The intersection of the terminating faults with the mineralisation results in the ore plunging to the northeast.
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 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.*	• Borehole Information regarding the two boreholes can be found in the main body of the ASX Announcement, refer to TABLE 2 for a summary of the borehole collar information. • The borehole collars are shown in a manner suitable for the reporting of exploration scout drilling in Figure 1 of the main body of the ASX Announcement.
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 assay grades were reported in the current announcement, assay results will be released pending the completion of laboratory assay program. • No metal equivalents are reported.

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Criteria	JORC Code explanation	Commentary
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 are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• There is no known relationship between width and grade. Mineralisation generally occurs as a narrow (1m – 3m) high grade (>1.0% Cu) vein within a variable width (1m – 20m) low grade (0.2% Cu – 1.0% Cu) halo to the vein. • The current Exploration results are close to perpendicular or sub-perpendicular, due to the nature of the scout style drilling to text the extent of the mineralisation. • Based on the nature of the scout exploration drilling completed to date additional drilling would be required to quantify the true thickness of the mineralised zones, tentative the true thickness is anticipated to be within the range of the mineralisation at the nearby Lloyd's mineral resource. As indicated additional drilling would be required to provide geological confidence for the geological modelling of the deposits and subsequent estimation of any mineral resource to extend the Lloyd's mineral resource to the current drilling location.
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.*	• To the extent relevant, maps are included in the main body of the report.
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.*	• All known material results are reported, no assay grades were reported in the current announcement, assay results will be released pending the completion of laboratory assay program.
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;*	• Such results have been previously reported; see announcements to ASX, these include but are not limited to: • https://www.asx.com.au/asxpdf/20170914/pdf/43m9wphzkw8jlp.pdf • https://www.asx.com.au/asxpdf/20170807/pdf/43l6dnt40t56dn.pdf

Criteria	JORC Code explanation	Commentary
	potential deleterious or contaminating substances.	• https://www.asx.com.au/asxpdf/20170727/pdf/43kx02cv8p16zw.pdf • https://www.hardeyresources.com.au/images/pdfs/Lloyds-resource-final-report-20150612.pdf
Further work	• *The nature and scale of planned further work (e.g. 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 this information is not commercially sensitive.*	• Additional infill drilling to confirm the size and continuity of mineralisation would allow an update of the present Lloyds Resource Estimate • Further exploration drilling to determine the extent and potential continuity of mineralisation to the east. • To the extent relevant, maps are included in the main body of the report. • Assay grade results will be reported once the testing laboratory has finalized the assay results and QA/QC has been completed on the finalized assay results.

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