20 April 2020

Second diamond hole intersects discovery zone at Julimar

Scissor hole JD002 intersects strongly mineralised massive-matrix sulphide discovery zone and confirms previous geological interpretation

Highlights

- Massive and matrix sulphides intersected in second diamond drill hole (JD002) at the **Julimar Nickel-Copper-PGE Project,** ~70km north-east of Perth in Western Australia.
  - JD002 was drilled as a 'scissor hole' of JD001, aiming to intersect the high-grade Ni-Cu-PGE zone in the discovery hole JRC001 at a low angle (**19m @ 8.4g/t Pd, 1.1g/t Pt, 2.6% Ni, 1.0% Cu and 0.14% Co from 48m in massive and matrix sulphides**).
- JD002 intersected the **strongly mineralised zone of massive, matrix and disseminated sulphides** in fresh rock from 34.9m to 101m downhole (not true width) including:
  - Massive sulphides over 34.9-44.7m and 48.7-68.3m (~45% of the interval); and,
  - Matrix sulphide (c. 20-40% sulphides) from 68.3-101m (~49% of the interval).
- **All assays are pending for both JD002 and JD001.**

Figure 1. Typical sulphide mineralisation intersected in JD002: hypogene massive sulphides comprising pyrrhotite-pentlandite-chalcopyrite at ~49.5m downhole (*left*) and matrix/net textured pyrrhotite-pentlandite-chalcopyrite at ~90.5m downhole (*right*). Core photos of entire zone provided in **Appendix 1**.

- The core provides key information on mineralogy, which will allow initial metallurgical work to commence.
- The result also confirms the mineralised zone is **extensive** and **dipping steeply to the west**.
- The **100%-owned** Julimar Project covers the **entire >26km long** Julimar Intrusive Complex and **~24km of the highly prospective complex is yet to be explored**.
- Chalice remains **fully funded** to continue its **systematic exploration** programs in Western Australia and Victoria, with a current working capital and investments balance of **~$25 million (~$0.09 per share).**

Chalice Gold Mines Limited ("Chalice" or "the Company", ASX: CHN | OTCQB: CGMLF) is pleased to report that its second diamond drill hole at its 100%-owned **Julimar Nickel-Copper-PGE Project**, located ~70km north-east of Perth in Western Australia, has intersected both massive and matrix sulphides over significant intervals.

The second diamond drill hole (JD002) at the Gonneville Intrusive (located at the southern end of the ~26km long Julimar Intrusive Complex) was drilled as a 'scissor hole' of JD001, designed to intersect the high-grade Ni-Cu-PGE zone intersected in the discovery hole JRC001 (19m @ 8.4g/t Pd, 1.1g/t Pt, 2.6% Ni, 1.0% Cu and 0.14% Co from 48m in massive and matrix sulphides; refer to ASX release of 23 March 2020) (**Figure 2**).

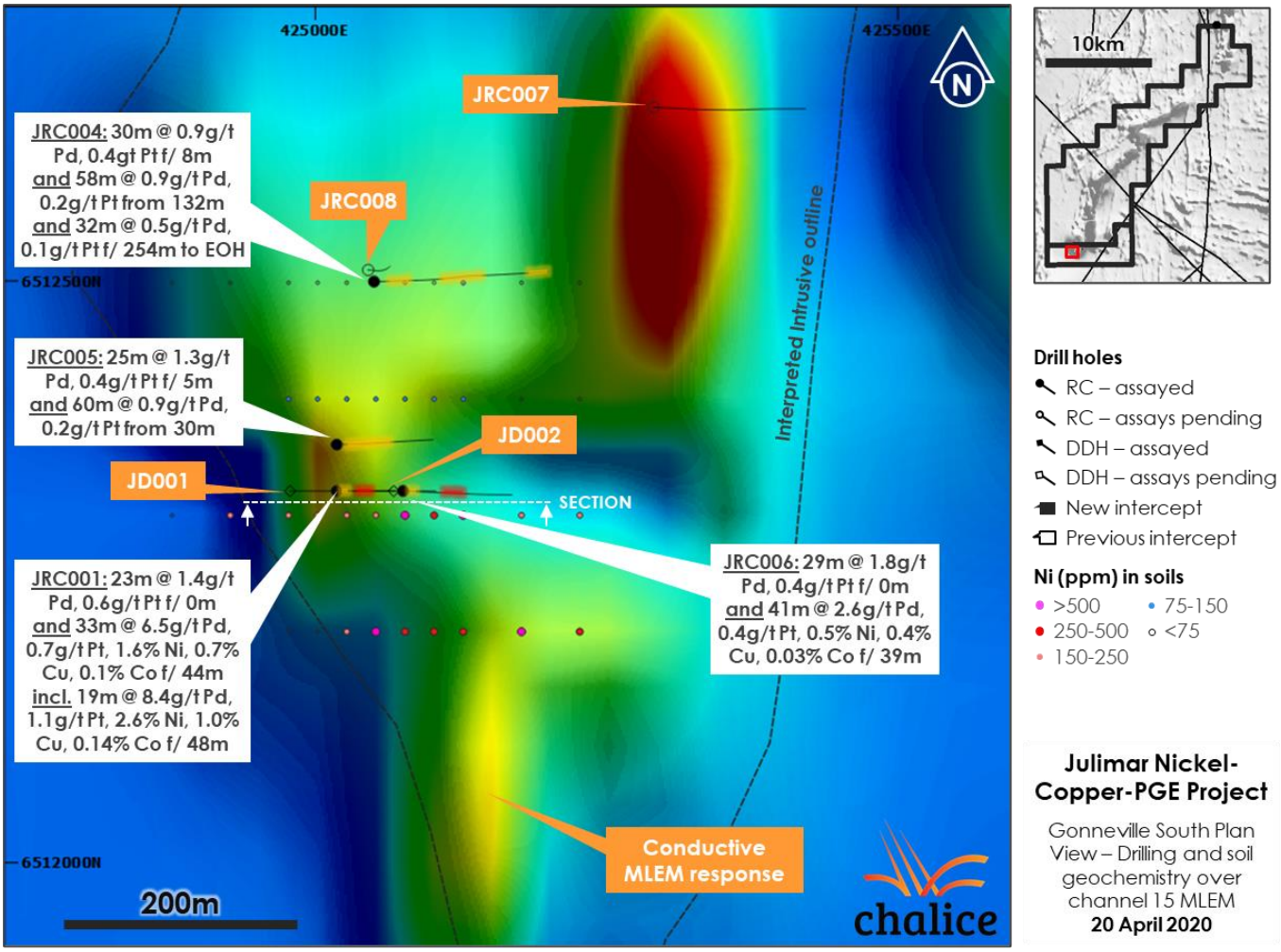


Figure 2. Gonneville South Plan View – Drilling and soil geochemistry over channel 15 MLEM.

JD002 was designed to drill at a low angle to the interpreted dip of the mineralised zone to determine the accuracy of DHEM modelling and to confirm the previous geological interpretation.

Strongly mineralised massive and matrix sulphide mineralisation was intersected in JD002 from the base of complete oxidation at 34.9m to 101m downhole, confirming the interpretation of a westerly dipping zone (**Figure 3**).

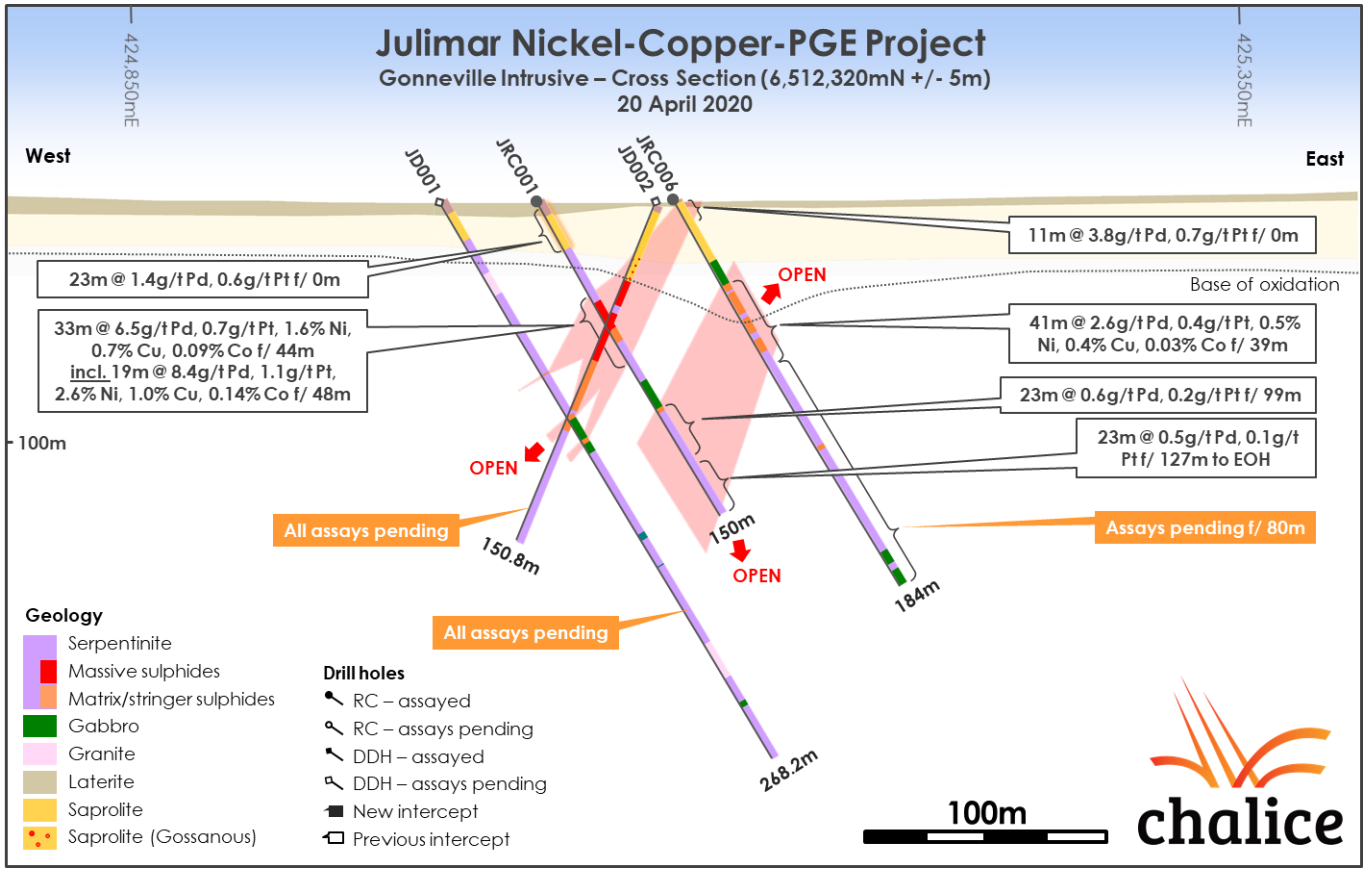


Figure 3. Gonneville Cross Section (JRC001, 006 and JD001, 002).

The uppermost massive sulphide interval (9.8m) in JD002 comprises supergene pyrite-violarite dominant assemblage from 34.9m to 37.7m (2.8m) and grades into transitional pyrrhotite-pyrite-violarite-pentlandite massive sulphides over 37.7-39m (1.3m) followed by hypogene pyrrhotite-pentlandite-chalcopyrite massive sulphides over 39-44.7m (5.7m).

A second interval of massive sulphides (19.5m) comprising hypogene pyrrhotite-pentlandite-chalcopyrite was intersected from 48.7-68.3m and is separated from the uppermost massive sulphides by ~4m wide interval of serpentinite containing 1-20% disseminated sulphides.

Matrix to interstitial hypogene sulphides with subordinate massive sulphides were intersected contiguous from the lower contact of massive sulphides at 68.3m to 101m which comprises 20-40% sulphide (pyrrhotite-pentlandite-chalcopyrite) as a matrix to ex-olivine (serpentine) and pyroxene (amphibole-chlorite) cumulate ultramafic rocks.

All widths reported above are downhole widths (which are not true widths). All assays for JD002, as well as JD001 are currently pending.

Hole details for JD002 are provided in **Table 1**. Core photos of the entire zone are provided in **Appendix 1.**

Geotechnical logging of JD002 is underway although preliminary observations, including 100% core recovery from ~37m, show that the zone of massive and matrix sulphide mineralisation is well preserved at this relatively shallow depth of drill testing.

The new diamond drill core provides valuable preliminary mineralogy and will be utilised for further mineralogy and petrographic analysis, as well as potentially preliminary metallurgical testwork.

Detailed geological logging of JD001 has now been completed and as previously reported (refer ASX announcement on 15 April 2020), only relatively minor matrix sulphide intercepts were logged at 103-105m and at 114.5-116.6m, which correspond to the projected target depth of 90-110m downhole, as modelled from DHEM of JRC001.

A possible explanation for the lack of massive sulphide in JD001 is the presence of a fine-grained mafic/gabbro intrusive logged over 105-114.5m and 116.5-121m, which has potentially stoped-out the sulphide zone at this location.

Furthermore, preliminary logging of JD002 has revealed no evidence of this mafic intrusive unit (or any significant faults), which supports the interpretation that the mafic intrusive is orientated oblique to the drill section and is therefore unlikely to have a significant effect on continuity of sulphide mineralisation in the broader target area.

Forward plan

The RC rig will continue to step-out around known zones of mineralisation and the diamond rig will continue to test key DHEM targets, including a recently identified off-hole conductor on JRC004 that is interpreted to be sourced from massive sulphides. DHEM will continue to be critical in identifying potential targets for follow-up drilling and will be completed on all holes.

Chalice will continue to monitor the current advice from the Government and health authorities with regards to restrictions imposed due to the COVID-19 pandemic, and to ensure the ongoing health and well-being of its employees and contractors.

Authorised for release on behalf of the Company by:

Alex Dorsch
Managing Director

For further information, please visit www.chalicegold.com to view our latest corporate presentation, or contact:

Corporate Enquiries
Alex Dorsch
Managing Director
Chalice Gold Mines Limited
+61 8 9322 3960
info@chalicegold.com

Media Enquiries
Nicholas Read
Principal and Managing Director
Read Corporate Investor Relations
+61 8 9388 1474
info@readcorporate.com.au

Follow our communications:
LinkedIn: https://au.linkedin.com/company/chalice-gold-mines
Twitter: https://twitter.com/chalicegold
Facebook: https://www.facebook.com/Chalice-Gold-Mines-323740744933099/

About the Julimar Nickel-Copper-PGE Project, Western Australia

The 100%-owned Julimar Nickel-Copper-PGE Project was staked in early 2018 and is located ~70km north-east of Perth in Western Australia on private land and State Forest. The Project was staked as part of Chalice's global search for high-potential nickel sulphide exploration opportunities.

*Chalice interpreted the possible presence of a mafic-ultramafic layered intrusive complex at Julimar based on high resolution regional magnetics. The large complex is interpreted to be ~26km long and ~7km wide and is considered highly prospective for nickel, copper and platinum group elements. However, it had never been explored for these metals (**Figure 4**).*

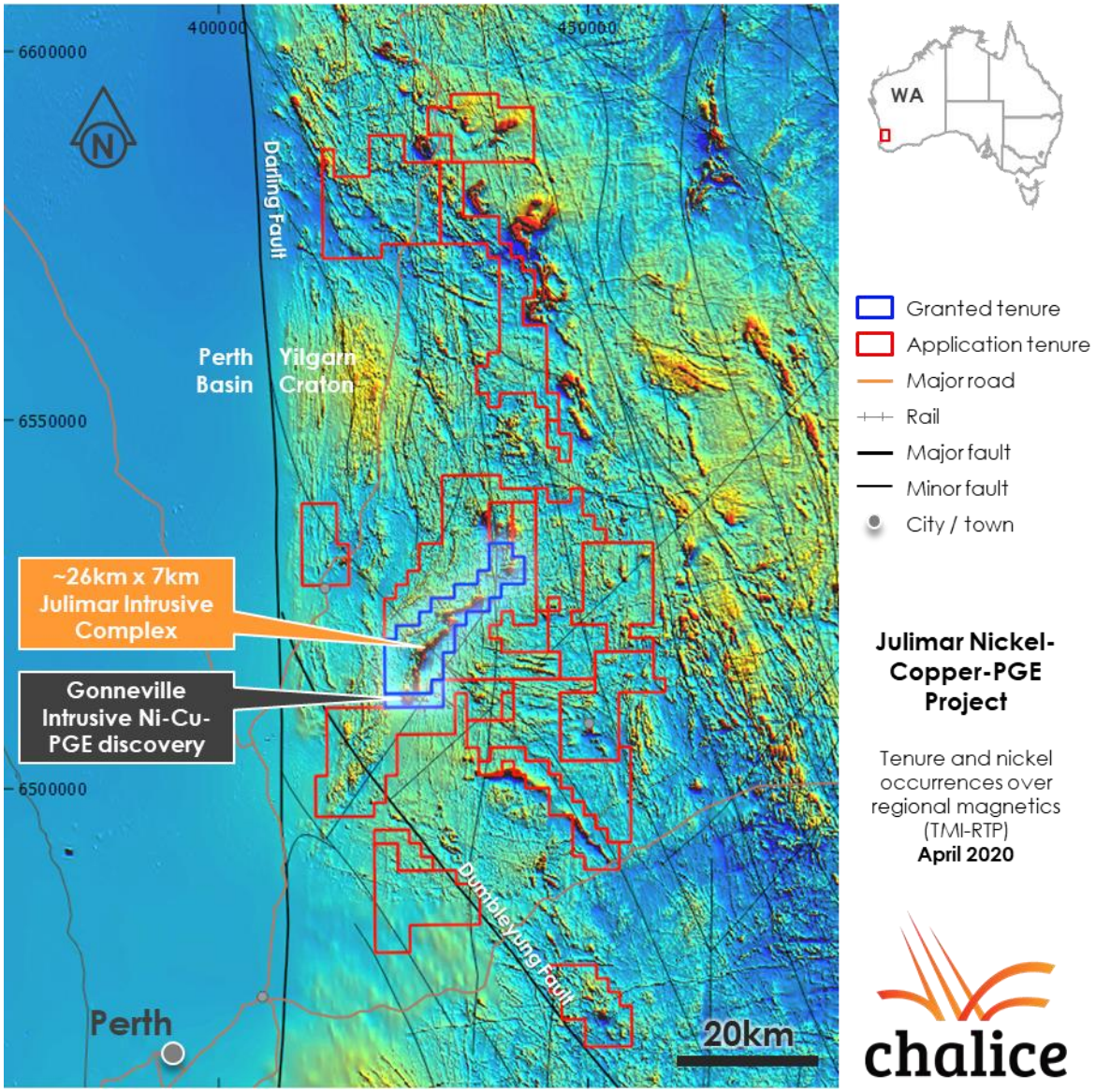


***Figure 4.** Julimar Project tenure and nickel occurrences over regional magnetics.*

Chalice is targeting high-grade nickel-copper-PGE discoveries and commenced a systematic, regional-scale greenfield exploration program in mid-2019 upon gaining access, initially in the southern portion of the Project on private land. This included 200m-spaced Moving Loop Electromagnetic (MLEM) with

selective 100m infill lines, targeted soil geochemistry over high-priority MLEM conductors, and geological mapping which failed to identify any bedrock exposures over the area of interest.

Two MLEM conductors were shown to be associated with anomalous nickel-in-soils and preferentially located along the margins of a ~2km x 0.5km discrete magnetic anomaly interpreted as a potential feeder zone located near the southern extent of the intrusive complex. An initial RC drill program commenced in Q1 2020 and resulted in the discovery of high-grade nickel-copper-cobalt-PGE mineralisation.

About Platinum Group Elements and Palladium

The Platinum Group Elements (PGEs) are a group of six precious metals clustered together on the periodic table: platinum (Pt), palladium (Pd), iridium (Ir), osmium (Os), rhodium (Rh) and ruthenium (Ru).

PGEs have many desirable properties and as such have a wide variety of applications. Most notably, they are used as auto-catalysts (pollution control devices for vehicles), but are also used in jewellery, electronics and hydrogen fuel cells.

Palladium is exceptionally rare and is currently one of the most valuable precious metals, with an acute supply shortage driving prices to a recent record high of US$2,856/oz in February 2020. The current spot price is ~US$2,100/oz.

Strong demand growth (~11.5Moz in 2019[1]) is being driven by regulations requiring increased use of the metal, particularly as an auto-catalyst in gasoline and gasoline-hybrid vehicles. The total palladium market supply from all sources in 2019 was ~10.8Moz, and >75% is sourced from mines in Russia and South Africa[1].

[1] *Source: S&P Global Market Intelligence*

Competent Persons and Qualifying Persons Statement

The information in this announcement that relates to Exploration Results in relation to the Julimar Nickel-Copper-PGE Project is based on information compiled by Dr. Kevin Frost BSc (Hons), PhD, a Competent Person, who is a Member of the Australian Institute of Geoscientists. Dr. Frost is a full-time employee of the company and has sufficient experience that is relevant 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, Minerals Resources and Ore Reserves, and is a Qualified Person under National Instrument 43-101 – 'Standards of Disclosure for Mineral Projects'. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Dr. Frost consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This report may contain forward-looking information within the meaning of Canadian securities legislation and forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 (collectively, forward-looking statements). These forward-looking statements are made as of the date of this report and Chalice Gold Mines Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements.

Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to, the Company's strategy, the price of O3 Mining securities and Ramelius Resources Limited securities, receipt of tax credits and the value of future tax credits, the estimation of mineral reserve and mineral resources, the realisation of mineral resource estimates, the likelihood of exploration success at the Company's projects, the prospectivity of the Company's exploration projects, the timing of future exploration activities on the Company's exploration projects, planned expenditures and budgets and the execution thereof, the timing and availability of drill results, potential sites for additional drilling, the timing and amount of estimated future production, costs of production, capital expenditures, success of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage.

In certain cases, forward-looking statements can be identified by the use of words such as "plans", "planning" "expects" or "does not expect", "is expected", "will", "may", "would", "potential", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", "believes", "occur", "impending", "likely" or "be achieved" or variations of such words and phrases or statements that certain actions, events or results may, could, would, might or will be taken, occur or be achieved or the negative of these terms or comparable terminology. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Such factors may include, among others, risks related to actual results of current or planned exploration activities; changes in project parameters as plans continue to be refined; changes in exploration programs based upon the results of exploration; future prices of mineral resources; possible variations in mineral resources or ore reserves, grade or recovery rates; accidents, labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; movements in the share price of O3 Mining and Ramelius Resources securities and future proceeds and timing of potential sale of O3 Mining and Ramelius Resources securities, as well as those factors detailed from time to time in the Company's interim and annual financial statements, all of which are filed and available for review on SEDAR at sedar.com, ASX at asx.com.au and OTC Markets at otcmarkets.com.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

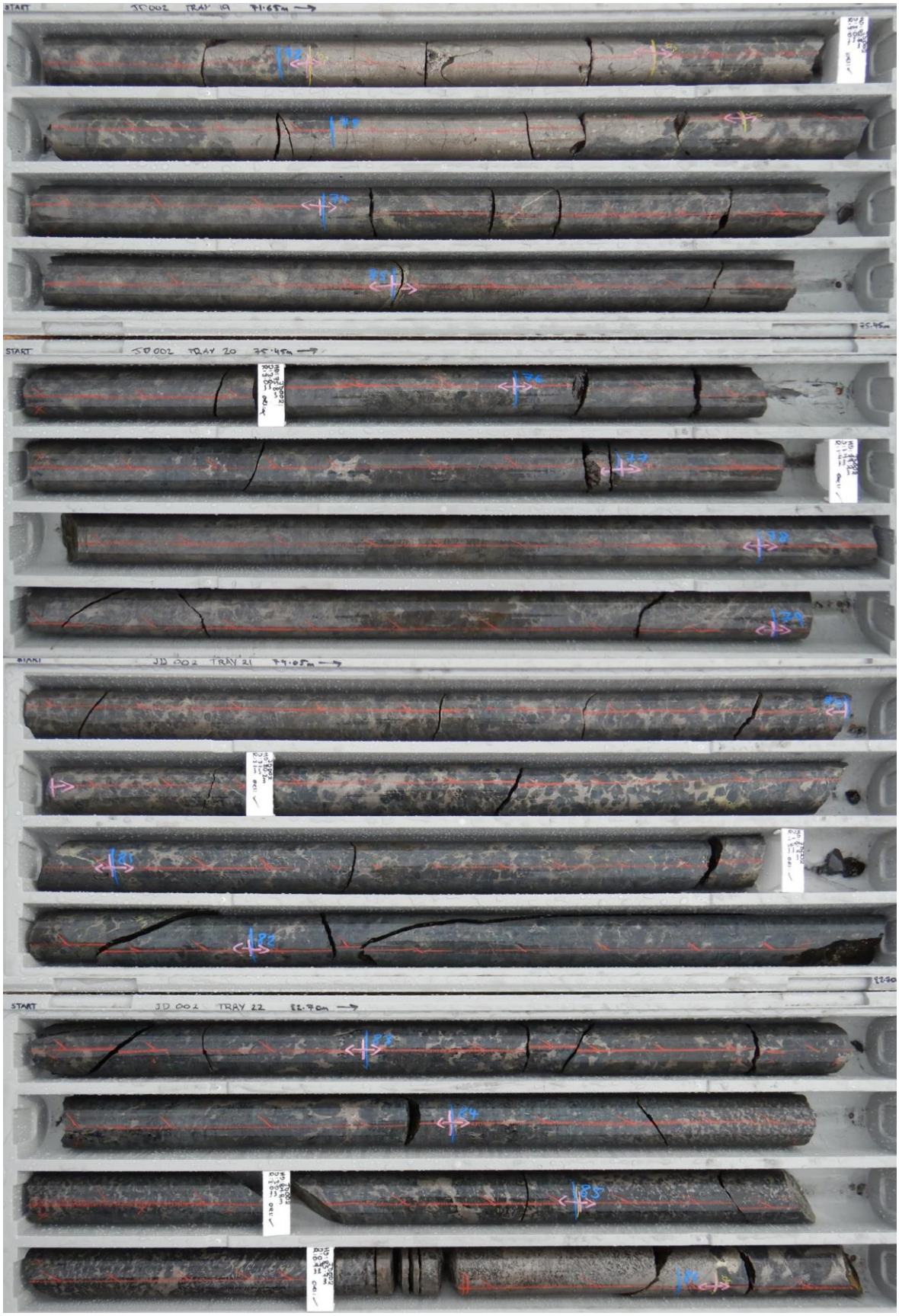
Table 1. New drill hole details – Julimar Ni-Cu-PGE Project.

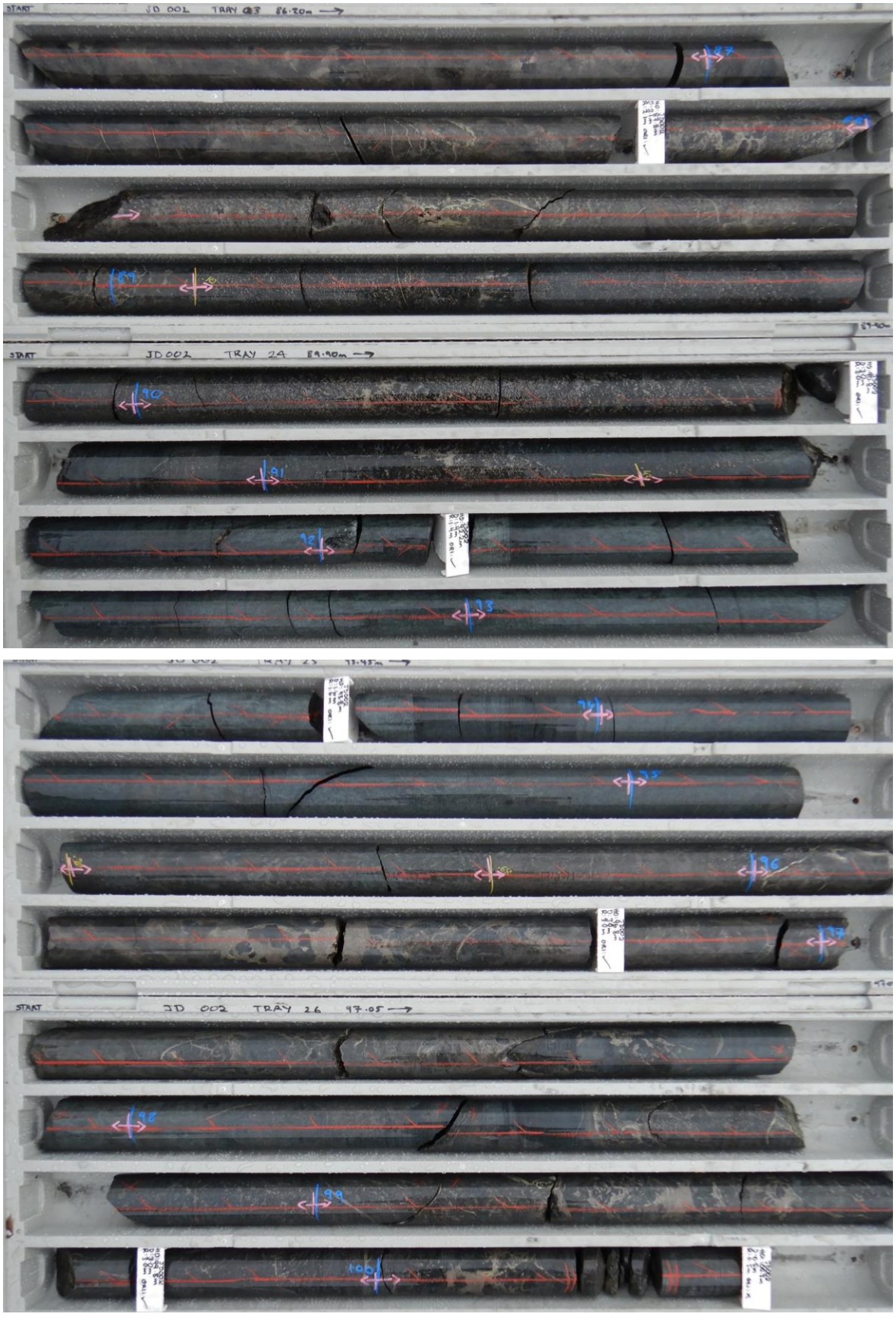
Hole ID	Easting (mE)	Northing (mN)	RL (m)	Azimuth (°)	Dip (°)	Total depth (m)
JD002	424,067	6,512,323	240	270	-67	150.8m

Appendix 1: JD002 core photos (30.4-100.3m downhole)


Specimen sample
48.7m massive sulphide
Specimen sample


68.3m matrix sulphides


START
JD002 TRAY 19
START
JD002 TRAY 20
JD002 TRAY 21
START
JD002 TRAY 22


START
JD 001 TRAY @3 86.20m
START
JD 002 TRAY 24 89.90m
START
JD 002 TRAY 26 97.05

Appendix 2: JORC Table 1 – Julimar Ni-Cu-PGE Project

Section 1 Sampling Techniques and Data

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 drill sampling results reported
Drilling techniques	• *Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Diamond drilling techniques used including HQ3 and HQ sized drill core
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.*	• HQ3 coring technique used throughout weathered zone to maximise core recovery. Core recovery noted • No sampling results reported
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.*	• All holes were logged geologically including, but not limited to; weathering, regolith, lithology, structure, texture, alteration and mineralisation. Logging was at an appropriate quantitative standard for reconnaissance exploration. • Logging is considered qualitative in nature. • All holes were geologically logged in full.

Criteria	JORC Code explanation	Commentary
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-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.*	• No sampling results reported
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 results reported
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 results reported
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.*	• Hole collar locations have been recorded by Chalice employees using a handheld GPS with a +/- 3m margin of error. • The grid system used for the location of all drill holes is GDA94 - MGA (Zone 50). • RLs were assigned from 1 sec (30m) satellite data.
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*	• Diamond drill hole JD002 was positioned to drill at a low angle to interpreted dip of mineralised zone. • Results from the drilling to date are not considered sufficient to assume any geological or grade continuity of the results intersected.

Criteria	JORC Code explanation	Commentary
	applied.	
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 orientation of the mineralisation is interpreted to be subparallel to the drill hole. • No sampling results reported
Sample security	• *The measures taken to ensure sample security.*	• No sampling results reported
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No review has been carried out to date.

Section 2 Reporting of Exploration Results

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.*	• Diamond drill hole JD002 was drilled on E70/5119 on private property. The licence is 100% owned by CGM (WA) Pty Ltd, a wholly owned subsidiary of Chalice Gold Mines Limited with no known encumbrances. • Current drilling is on private land and granted tenure covers both private land and State Forest. • Access for exploration in the State Forest requires Ministerial approval which has not yet been obtained.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Limited exploration has been completed by other exploration parties in the vicinity of the targets identified by Chalice to date. • Chalice has compiled historical records dating back to the early 1960's which indicate only two genuine explorers in the area, both primarily targeting Fe-Ti-V mineralisation. • Three diamond holes were completed by Bestbet Pty Ltd targeting Fe-Ti-V situated approximately 3km NE of JRC001. No elevated Ni-Cu-PGE assays were reported. • Bestbet Pty Ltd completed 27 stream sediment samples within E70/5119. No significant Ni-Cu-PGE anomalism was reported. • A local AMAG survey was flown in 1996 by Alcoa using 200m line spacing which has been used by Chalice for targeting purposes.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The deposit type being explored for is magmatic Ni-Cu-PGE sulphide

Criteria	JORC Code explanation	Commentary
		deposits within the Yilgarn Craton. The style of sulphide mineralisation intersected consists of massive, matrix, stringer and disseminated sulphides typical of metamorphosed and structurally overprinted magmatic Ni sulphide deposits.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *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.*
		• Provided in body of text
		
		• No material information has been excluded.

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 results reported
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').*	• JD002 was drilled at a low angle to the interpreted dip of the mineralised zone and therefore the intersection width is not representative of the true width of the mineralisation.
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.*	• Refer to figures in the body of text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high*	• No sampling results reported

Criteria	JORC Code explanation	Commentary
	grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	
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.*	• Not Applicable.
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 this information is not commercially sensitive.*	• Diamond and RC drilling will continue to test high-priority EM conductors and soil geochemical targets. Further drilling along strike and down dip may occur at these and other targets depending on results. • Down-hole EM surveying will be carried out on the majority of the drill holes to test for off-hole conductors. Subsequent holes will undergo down-hole EM if required. • Any potential extensions to mineralisation are shown in the figures in the body of the text.