

ASX: CHN | OTCQB: CGMLF

11 May 2020

# Large-scale PGE system further expanded at Julimar

More broad PGE zones near surface at Gonneville, plus several untested historical Ni-Cu-PGE anomalies located ~7-10km north-east of the discovery highlight the significant upside of the ~26km long Julimar Intrusive Complex

## Highlights

- Exciting new results received from three new reverse circulation (RC) drill holes, as well as historical data compilation at the **Julimar Nickel-Copper-PGE Project**, ~70km north-east of Perth in Western Australia.
- Assays from the wide-spaced RC holes confirm widespread PGE mineralisation near surface within the ~1.6km long x 0.7km wide Gonneville Intrusive.
  - Significant new RC intercepts include:
    - 137m @ 0.57g/t Pd, 0.14g/t Pt, 0.14% Ni, 0.10% Cu from 58m (JRC010)
    - 97m @ 0.58g/t Pd, 0.12g/t Pt, 0.13% Ni, 0.07% Cu from 201m to end-of-hole (JRC010)
    - 113m @ 0.45g/t Pd, 0.12g/t Pt, 0.17% Ni, 0.05% Cu from 29m (JRC012)
  - o All zones remain wide open and all RC holes drilled to date have intersected mineralisation.
- Recently compiled historical geochemical sampling within the Julimar State Forest, immediately north
  of Gonneville, has identified multiple Ni-Cu-PGE anomalies ~7-10km to the north-east, coincident with
  the interpreted Julimar Intrusive Complex, that have never been drill tested.
  - Approval process to access the State Forest area has commenced and remains a high priority.
- The third diamond hole (JD003) successfully drilled through the lower contact of the Gonneville Intrusive
  at ~450m below surface, broadly consistent with that inferred from the magnetic inversion model for
  the intrusive body.
- Assays are pending for all three diamond holes drilled to date.
- Other PGE assays now received for the discovery zone (JRC001), with minor rhodium (0.09g/t Rh) and gold (0.13g/t Au) reported over a **25m sulphide interval**.
- Diamond drilling and down-hole EM continues to target **high-grade Ni-Cu-PGE zones**, while the RC program has been temporarily halted to allow the SQUID EM survey to be completed.
- The 100%-owned Julimar Project covers the entire >26km long Julimar Intrusive Complex (JIC) 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 (where 2 diamond rigs are drilling), with a current working capital and investments balance of **~\$25 million**.

Chalice Gold Mines Limited ("Chalice" or "the Company", ASX: CHN | OTCQB: CGMLF) is pleased to report significant new results from exploration drilling and recently compiled historical geochemical sampling results at its 100%-owned **Julimar Nickel-Copper-PGE Project** in Western Australia.

Chalice's Managing Director, Alex Dorsch, said: "Wide-spaced RC drilling at Gonneville continues to deliver impressive PGE intersections. These new wide zones, along with the previously reported zones that



have been encountered in every hole drilled to date, point to a large-scale discovery at Gonneville and highlight the prospectivity of this fertile mafic-ultramafic complex."

"Meanwhile, recent compilation of limited historical surface sampling results has highlighted significant areas of anomalous nickel, copper and palladium approximately 7-10km north-east of the Gonneville Ni-Cu-PGE discovery, within the ~26km long Julimar Intrusive Complex. This is exciting and suggests more widespread mineralisation associated with the complex, and hints at the magnitude of the exploration opportunity in front of us.

"Given the strength of the magnetic signatures and the lack of any drill testing in these historically sampled but never drilled areas, the anomalies are considered high priority regional targets that will be followed up once access to the State Forest is granted.

"Our third diamond drill hole somewhat unintentionally turned into our first deep test at Gonneville, and has now been completed having intersected the base of the intrusive at that point at ~450m below surface. This validates the overall chonolith-type geometry inferred from the magnetic inversion model for the mineralised intrusive.

"We are looking forward to the results from the ongoing diamond drilling and the SQUID EM survey, which should provide a deeper level of investigation at Gonneville compared to the previous MLEM survey results."

#### Operational update

Following the discovery of high-grade nickel-copper-palladium mineralisation in the first drill hole at Julimar (JRC001 – refer to ASX Announcement on 23 March 2020), a total of 12 RC holes and three diamond holes have now been drilled at the Gonneville Intrusive.

Assays have now been received for all RC holes, while assays for all of the diamond holes remain pending. Other PGE assays (ruthenium, rhodium, osmium and iridium) have also been received for the high-grade discovery interval in JRC001 (see below).

A diamond drill rig is currently drilling and the initial SQUID EM survey is underway on site. Once the EM survey is complete in approximately two weeks, RC drilling will re-commence.

A second land access agreement has been executed that will allow initial exploration drilling activities immediately south of the discovery hole (JRC001) to commence in the coming weeks.

## New drilling results

Three new RC drill holes (JRC010-12) have been drilled at the northern and southern end of the Gonneville Intrusive. All three holes have intersected wide intervals of PGE mineralisation, further confirming the widespread nature of mineralisation within the intrusive (**Figure 1**).

JRC010 tested beneath a nickel-copper soil anomaly at the northern limit of current drilling (~1,100m north of the southern limit) and intersected two wide zones of PGE mineralisation associated with disseminated sulphides (trace to 3%) in serpentinite to end-of-hole (EOH) at 298m.

JRC011 and 12, which were designed as step-out holes at 80m centres to the east of JRC006, intersected shallow oxide PGE mineralisation overlying bedrock PGE mineralisation associated with disseminated sulphide (trace to 3%) in serpentinite up to 150m east of JRC006.



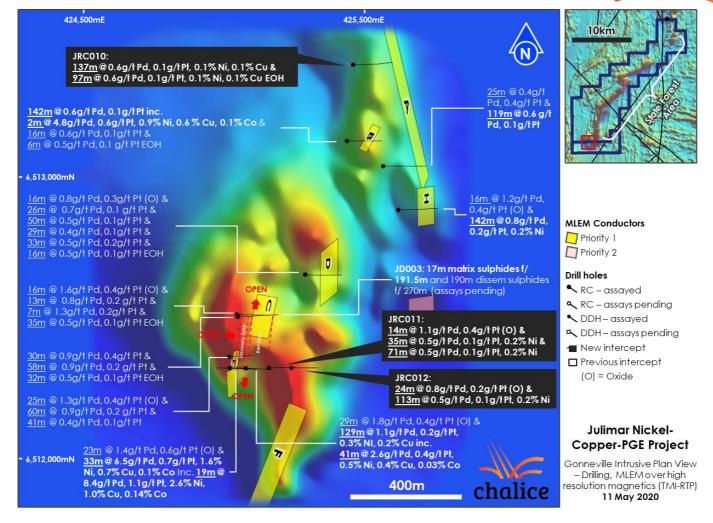


Figure 1. Gonneville Plan View – Drilling and MLEM conductors over TMI-RTP magnetics.

Drill results for JRC010-012 are similar to those reported for previous RC holes (JRC002-009), which include elevated PGE values in saprolite after serpentinite (oxide) and broad zones of PGE mineralisation associated with disseminated sulphides (trace to 3% sulphides) in serpentinite bedrock.

As reported on 5 May 2020, the third diamond drill hole at the Gonneville Intrusive (JD003) was drilled to test a strong (~10,000 Siemens) off-hole conductor located ~30m down-dip of JRC004 at a projected target depth of ~190m. A 17m interval of matrix (20-30% sulphide) and stringer massive sulphides was intersected from 191.5-208.5m.

Given the pervasive disseminated sulphide encountered below the target depth, drilling continued until the hole tested the lower contact of the Gonneville Intrusive. The lower margin of the Intrusive was cut by two late granite dykes over 460-467m and 476-500m. Strongly foliated and metamorphosed footwall metasediments were intersected over 500-528.9m with this sequence interpreted as the host succession of the Gonneville Intrusive.

The hole has broadly validated the magnetic inversion model, which predicted approximate dimensions of the large intrusive of ~1.6km x 0.7km x 0.65km. JD003 will be surveyed by DHEM in the coming weeks.

Significant new intercepts are detailed in **Table 1** and updated hole details are provided in **Table 2**.



**Table 1.** Significant new drill intercepts (>0.3g/t Pd) – Julimar Ni-Cu-PGE Project.

Hole ID	From (m)	To (m)	Width* (m)	Pd (g/t)	Pt (g/t)	Pd+Pt (g/t)	NI (%)	Cu (%)	Co (%)	Geology
JRC010	58	195	137	0.57	0.14	0.71	0.14	0.10	0.02	Sulphide
JRC010	201	298 (EOH)	97	0.58	0.12	0.70	0.13	0.07	0.02	Sulphide
JRC011	8	22	14	1.07	0.38	1.45	0.19	0.17	0.06	Oxide
JRC011	22	57	35	0.54	0.13	0.67	0.17	0.07	0.02	Sulphide
JRC011	68	80	12	0.37	0.08	0.45	0.17	0.01	0.02	Sulphide
JRC011	112	183	71	0.53	0.14	0.67	0.20	0.14	0.02	Sulphide
JRC012	5	29	24	0.75	0.23	0.98	0.19	0.17	0.03	Oxide
JRC012	29	142 (partial)	113	0.45	0.12	0.57	0.17	0.05	0.02	Sulphide

<sup>\*</sup>Downhole widths reported, true widths unknown. 4m composite samples.

Table 2. Drill hole details – Julimar Ni-Cu-PGE Project

Hole ID	Туре	Easting (m)	Northing (m)	RL (m)	Azimuth	Dip (°)	Hole Depth (m)	Survey type	Assaying status
JD001	Core	424,978.0	6,512,319.2	234.6	90	-60	268.2	DGPS	Pending
JD002	Core	425,067.0	6,512,323.0	240.0	269.3	-66.9	150.8	GPS	Pending
JD003	Core	425,050.0	6,512,508.0	238.5	90	-78	528.9	GPS	Pending
JRC001	RC	425,019.0	6,512,318.3	235.5	90	-60	150	DGPS	Reported
JRC002	RC	425,567.5	6,513,038.4	254.1	90	-60	280	DGPS	Reported
JRC003	RC	425,439.3	6,513,128.1	255.9	88.2	-61.0	220	DGPS	Reported
JRC004	RC	425,048.4	6,512,501.5	238.4	90	-60	286	DGPS	Reported
JRC005	RC	425,019.7	6,512,358.6	235.6	92.9	-60.1	166	DGPS	Reported
JRC006	RC	425,077.5	6,512,318.3	237.1	93.5	-60.0	184	GPS	Reported
JRC007	RC	425,289.3	6,512,652.0	246.4	92.4	-59.8	250	DGPS	Reported
JRC008	RC	425,045.6	6,512,510.2	238.5	83.9	-79.2	136	DGPS	Reported
JRC009	RC	425,621.5	6,512,881.9	249.1	90	-58.6	250	DGPS	Reported
JRC010	RC	425,461	6,513,401	252	90	-65	298	GPS	Reported
JRC011	RC	425,160	6,512,320	240	90	-60	184	GPS	Reported
JRC012	RC	426,240	6,512,320	240	90	-60	196	GPS	Pending below 142m
JWB001	Water bore	425,052	6,512,460	240	-	-90	96	GPS	Pending

## Other PGE assays

Discovery hole JRC001 was assayed for other PGEs (iridium, osmium, rhodium and ruthenium) over the 25m high-grade PGE interval reported previous (refer ASX Announcement on 23 March 2020).

Elevated rhodium and gold were observed and the interval is restated as: 25m @ 8.50g/t Pd, 0.91g/t Pt, 0.13g/t Au, 0.02g/t Ir, 0.005g/t Os, 0.09g/t Rh, 0.02g/t Ru (9.68g/t 7E), 2.02% Ni, 0.88% Cu, 0.11% Co from 46m (new assay data in bold).



## Historical geochemical surveys

The Company recently compiled the results from two phases of historical geochemical sampling over the Julimar Intrusive Complex (JIC), including a phase of surface prospecting / geochemical sampling in the 1970s by Garrick Agnew Pty Ltd and a stream sediment survey in 2011 by Bestbet Pty Ltd.

These surveys provide important indications of prospectivity for Ni-Cu-PGEs within the yet-to-be-accessed State Forest area to the north of Gonneville (**Figure 2**).

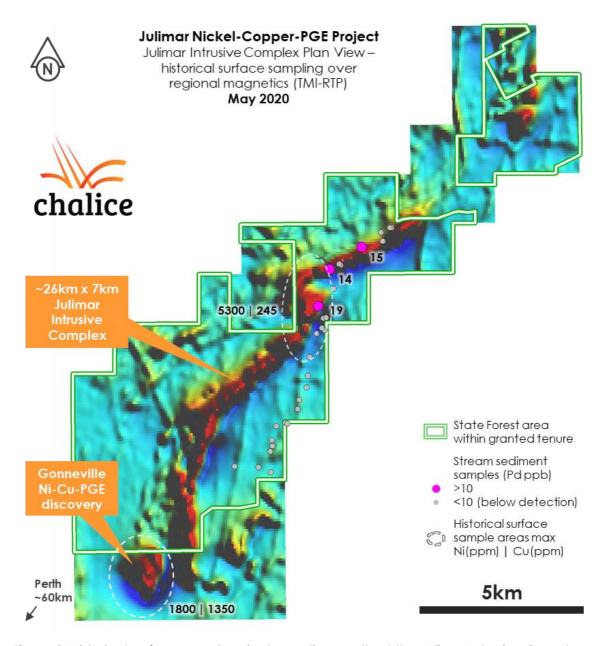


Figure 2. Historical surface geochemical sampling results at the Julimar Intrusive Complex.

Exact sample locations for the Garrick Agnew survey were not provided and are estimated based on location maps in the hard copy report.



Furthermore, no sample type, analytical methods used or QAQC data were recorded, and therefore the results can only be considered as indicative. However, the target areas correspond well with identified magnetic anomalies/trends.

The southern target area overlies Chalice's Gonneville discovery, with one sample reporting **1,800ppm Ni** and **1,350ppm Cu** which, in the context of the Company's exploration results to date, shows that this sampling was likely effective in identifying a surface expression of the bedrock mineralisation identified at Gonneville. However, at the time, it was interpreted to be surface enrichment.

A second sampling area located ~10km north-east of Gonneville, overlying the interpreted JIC, returned a peak assay result of **5,300ppm Ni** and **245ppm Cu**. This is considered anomalous and suggests the presence of ultramafic rock types in this area. Additional nickel-copper anomalies were also identified within the State Forest, however there is insufficient data to establish exact sample locations.

The 2011 stream sediment sampling survey was completed along a prominent drainage system that partially transects the JIC and drains to the south-west. Three samples returned anomalous palladium, with a peak value of **19ppb Pd**, coincident with the interpreted position of the JIC from magnetics.

Further reconnaissance work is required to confirm these historical results; however, the untested targets highlight the potential for new discoveries within the State Forest area, along the ~26km long JIC.

#### Forward plan

Ongoing and planned activities at Julimar include:

- **Diamond drilling** will continue to test key DHEM targets. The current hole, JD004, is planned as a diamond tail of JRC003, which intersected a 2m wide zone of massive sulphide but could not be cased for DHEM.
- **Down-hole EM** will continue to play a critical role in identifying potential targets for follow-up drilling and will be completed on all holes.
- Targeting at the Gonneville Intrusive:
  - A SQUID EM survey is currently underway, aiming to provide a deeper detection capacity than the previous ground MLEM survey.
  - o A detailed **auger soil sampling program has commenced** over the entire intrusive with the aim to provide new targets for follow-up drill testing.
- **RC drilling** a Phase 2 RC drill program will commence in mid-May, to provide wide-spaced sectional east-west coverage over the Gonneville Intrusive.
- **Mineralogy/Metallurgy** mineralogy and petrographic analysis is underway and a preliminary metallurgical testwork program is currently being planned.
- Access approvals the approval process to gain access to the State Forest covered areas of the
  Julimar Intrusive Complex is underway. The process is anticipated to take 4-6 months and will be
  progressed in parallel to activities at Gonneville.
- **Regional targeting** open file compilation work is underway on all of Chalice's granted and application tenure areas in the region, including at the Barrabarra and SW Nickel Projects.

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 <u>www.chalicegold.com</u> to view our latest corporate presentation, or contact:

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

The 100%-owned Julimar Nickel-Copper-PGE Project is located ~70km north-east of Perth in Western Australia on private land and State Forest. The Project was staked in early 2018 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 considered prospective for nickel, copper and platinum group elements. However, it had never been explored for these metals (**Figure 3**).

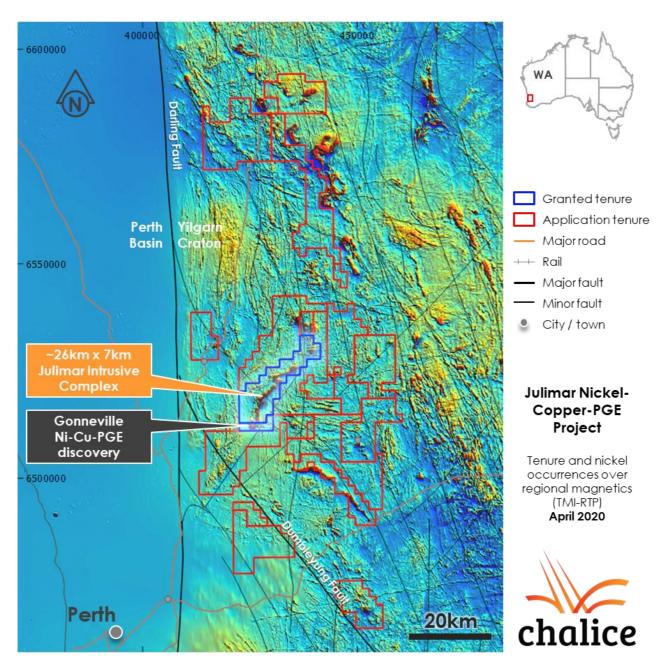


Figure 3. Julimar Project tenure over regional magnetics.



Chalice commenced a systematic, greenfield exploration program in mid-2019 in the southern portion of the Project on private land, targeting high-grade Ni-Cu-PGEs. 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  $\sim$ 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 at the newly named Gonneville Intrusive. Drilling to date has established the Gonneville Intrusive has widespread zones of PGE mineralisation as well as several wide zones of high-grade Ni-Cu-Co-PGE.

PGE mineralisation has been confirmed in 12 RC holes drilled to date over the  $\sim$ 1.6km x 0.7km Intrusive and disseminated sulphides (trace to 3% on average) have been identified up to  $\sim$ 450m below surface. Disseminated sulphide zones intersected to date have a grade range of 0.5-1.1g/t PGEs, <0.2% Ni, <0.15% Cu and <0.05% Co. In general, metal content appears to correlate well with sulphur content.

High-grade massive or matrix sulphide zones intersected to date are up to  $\sim$ 30m wide and have a grade range of 3-9g/t PGEs, 0.5-3.2% Ni, 0.5-1.2% Cu and 0.03-0.17% Co.

Weathering appears to extend down to  $\sim$ 30-40m below surface and a well-developed saprolite profile after serpentinite contains elevated PGE grades (ranging from 1.2-4.5g/t PGEs) from near surface to a depth of  $\sim$ 25m.

#### **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 very 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\$1,900/oz.

Strong demand growth (~11.5Moz in 2019) 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.

<sup>&</sup>lt;sup>1</sup> 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, 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 securities and future proceeds and timing of potential sale of O3 Mining 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.





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

Criteria	ling Techniques and Data JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (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.</li> </ul>	<ul> <li>Reverse Circulation (RC) drilling samples were collected as 1m to 4m samples. 1m samples were collected as a split from the rig cyclone using a cone splitter. Composite samples were collected from bulk samples using a PVC spear with the sample speared from top to bottom of the bag to ensure the sample is representative. Composite and 1m samples weigh approximately 3kg. Historical stream sediment samples collected in were collected and separated into 3 fractions (-5mm - +2mm, -2mm and overbank which the fraction was not specified)</li> <li>No diamond drill core sampling reported.</li> <li>All RC and historical stream sediment samples collected by Bestbet Pty Ltd were pulverised at an industry standard laboratory to nominal 85% passing 75 microns before being analysed.</li> <li>Sampling techniques for geochemical samples collected by Garrick Agnew Pty Ltd in 1971-72 are unknown</li> <li>Qualitative care was taken to ensure representative RC samples weights were consistent when sampling on a metre by metre basis.</li> </ul>
Drilling techniques	Drill type (eg. core, reverse circulation, openhole 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).	Drilling has been undertaken by Reverse circulation (RC) using a face-sampling hammer drill bit with a diameter of 5.5inches (140mm).
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Individual recoveries for RC composite samples were recorded on a qualitative basis. Sample weights were slightly lower through transported cover whereas drilling through bedrock yielded samples with more consistent weights.</li> <li>No relationships have been evident between RC sample grade and recoveries.</li> <li>No sampling results reported for diamond drilling</li> </ul>
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	All holes were logged geologically including, but not limited to; weathering, regolith, lithology, structure, texture, alteration and mineralisation. Logging was



Criteria	JORC Code explanation	Commentary
	<ul> <li>metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>at an appropriate quantitative standard for reconnaissance exploration.</li> <li>Logging is considered qualitative in nature.</li> <li>All holes were geologically logged in full.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>1m RC samples were collected as 1m splits from the rig cyclone via a cone splitter. The cone splitter was horizontal to ensure sample representivity. Composite samples were collected from bulk samples using a PVC spear with the bulk sample speared from top to bottom of the bag to ensure the sample is as representative as possible. The majority of samples were dry. Wet or damp samples were noted in the sample logging sheet.</li> <li>Field duplicates were collected from selected sulphide zones as a second 1m split directly from the cone splitter.</li> <li>Sample sizes are considered appropriate for the style of mineralisation sought and the initial reconnaissance nature of the drilling program.</li> <li>No sampling results reported for diamond drill core</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.</li> </ul>	<ul> <li>All RC samples underwent sample preparation and geochemical analysis by ALS Perth. Au-Pt-Pd was analysed by 50g fire assay fusion with an ICP-AES finish (ALS Method code PGM-ICP24). A 48-element suite was analysed by ICP-MS following a four-acid digest (ALS method code ME-MS61) including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr. Additional ore-grade analysis was performed as required for elements reporting out of range for Ni, Cr, Cu (ALS method code ME-OG-62).</li> <li>Historical stream sediment samples collected by Bestbet Pty Ltd underwent sample preparation at Genalysis Laboratories Perth and assayed for 63 elements (Au, Ca, Fe, Ag, As, Bi, Mo, Te, Cu, Ni, Pb, Zn, Cd, Sb, In, Re, Se, Tl, Co, Pd, Pt, Hg, S, P, Ba, Ga, Al, K, Mg, Mn, Na, Be, Li, Rb, Cs, Nb, Sn, Sr, Ta, Th, U, Sc, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, V, Cr, Ti, W, Y, Zr) by 25g aqua regia digest (AR25/MS, AR25/OE) with OES or MS finish.</li> <li>Certified analytical standards and blanks were inserted at appropriate intervals for RC drill samples. Approximately 5% of samples submitted for analysis comprised</li> </ul>



Critoria	IOPC Code explanation	Commontain
Criteria	JORC Code explanation	Commentary
		<ul> <li>QAQC control samples. QAQC for the stream sediment samples was not reported and is therefore unknown.</li> <li>The analytical methods and the QAQC for the geochemical samples collected by Garrick Agnew Pty Ltd in 1971-72 are not reported and are therefore unknown</li> <li>No sampling results reported for diamond drill core</li> </ul>
Verification of	The verification of significant intersections by	Significant intersections are checked by
verification of sampling and assaying	<ul> <li>Ine verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Significant intersections are checked by the project Geologist and then by the General Manager Exploration. Significant intersections are cross-checked with the logged geology and drill chips after final assays are received.</li> <li>No twin holes have been drilled for comparative purposes. The target is still considered to be at an early exploration stage.</li> <li>Primary drill data was collected as hard copy records in the field and digitised at the Chalice Perth office where the data is validated and entered into the master database.</li> <li>No adjustments have been made to the assay data received.</li> <li>No sampling results reported for diamond drill core.</li> <li>The primary data including sample locations for the geochemical samples collected by Garrick Agnew Pty Ltd in 1971-72 are not reported</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>RC hole collar locations are initially recorded by Chalice employees using a handheld GPS with a +/- 3m margin of error. Stream sediment samples were recorded with a handheld GPS with unknown accuracy.</li> <li>DGPS collar pick-ups replaces handheld GPS collar pick-ups and has &lt;1m margin of error.</li> <li>The grid system used for the location of all drill holes is GDA94 - MGA (Zone 50). The grid system used for stream sediment samples was WGS84 (UTM).</li> <li>RLs were assigned either from 1 sec (30m) satellite data or DGPS pick-up.</li> <li>The individual sample location information for the geochemical samples collected by Garrick Agnew Pty Ltd in 1971-72 are not reported</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve</li> </ul>	<ul> <li>RC and diamond drill holes are positioned to drill at high angle to the interpreted dip and strike of the mineralised zone.</li> <li>Results from the drilling to date are not considered sufficient to assume any geological or grade continuity.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul><li>estimation procedure(s) and classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	Samples have been composited to a maximum of 4m based on consistent geology.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>The orientation of the mineralisation is interpreted to be mostly orthogonal to the drill hole.</li> <li>No sampling results reported for diamond drilling</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples are collected in polyweave bags and delivered by Chalice employees to ALS laboratories in Wangara, Perth
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No review has been carried out to date.

	of Exploration Results	
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul> <li>RC holes were drilled on E70/5118 and 5119 on private property. The licences are 100% owned by CGM (WA) Pty Ltd, a wholly owned subsidiary of Chalice Gold Mines Limited with no known encumbrances.</li> <li>Stream sediment samples were taken on E70/5119 by previous tenement holder Best Bet Pty Ltd within the Julimar State Forest</li> <li>Current drilling is on private land and granted tenure covers both private land and State Forest.</li> <li>Access for exploration in the State Forest requires Ministerial approval which has not yet been obtained.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Limited exploration has been completed by other exploration parties in the vicinity of the targets identified by Chalice to date.</li> <li>Chalice has compiled historical records dating back to the early 1960's which indicate only three genuine explorers in the area, all primarily targeting Fe-Ti-V mineralisation.</li> <li>Over 1971-1972, Garrick Agnew Pty Ltd undertook reconnaissance surface sampling over prominent aeromagnetic anomalies in a search for 'Coates deposit style' vanadium mineralisation. Surface sampling methodology is not described in detail, nor were analytical methods specified, with samples analysed for V<sub>2</sub>O<sub>5</sub>, Ni, Cu, Cr, Pb and Zn, results of which are referred to in this announcement.</li> </ul>



Criteria	JORC Code explanation	<ul> <li>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.</li> <li>Bestbet Pty Ltd undertook 27 stream sediment samples within E70/5119. Elevated levels of palladium were noted in the coarse fraction (-5mm+2mm) are reported in this release. Finer fraction samples did not replicate the coarse fraction results.</li> <li>A local AMAG survey was flown in 1996 by Alcoa using 200m line spacing which has been used by Chalice for targeting purposes.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	The deposit type being explored for is magmatic Ni-Cu-PGE sulphide 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:  a 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	<ul> <li>Provided in body of text</li> <li>No material information has been excluded.</li> </ul>
	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	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	<ul> <li>Significant intercepts are reported using a &gt;0.3g/t Pd cut off. A maximum of 4m internal dilution has been. No top cuts were applied.</li> <li>Metal equivalent values are not reported</li> <li>No sampling results reported for diamond drill core</li> </ul>



Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').</li> </ul>	All widths are quoted down-hole. The orientation of the mineralisation is unknown due to insufficient drilling. However, drill holes were orientated to be as close as possible to orthogonal to the interpreted dip of the mineralised zone(s) and/or targets.
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 grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	<ul> <li>All significant intercepts have been reported</li> <li>Finer fraction stream sediment samples (-2mm) did not replicate the anomalous levels of palladium seen in the coarse fraction (-5mm +2mm) results.</li> </ul>
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	<ul> <li>The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Diamond and RC drilling will continue to test high-priority EM conductors, soil geochemical targets. Further drilling along strike and down dip may occur at these and other targets depending on results.</li> <li>Down-hole EM surveying will be carried out on the majority of drill holes to test for off-hole conductors. Subsequent holes will undergo down-hole EM if required.</li> <li>Any potential extensions to mineralisation are shown in the figures in the body of the text.</li> </ul>