16 February 2021

More positive results from ongoing metallurgical testwork at Julimar

Phase 2 testwork shows high Pd-Ni-Cu recoveries and ability to produce two commercially attractive concentrates using conventional flotation techniques

Highlights

- Promising results received from the ongoing Phase 2 metallurgical testwork program at Julimar.
- **Locked-cycle sulphide flotation** test on high-grade G1-G2 zone composite at 53µm grind size achieves total Platinum Group Element (PGE) recovery of **86.3% Pd** and **73.9% Pt**.
- **Two separate, commercially attractive concentrates** produced:
  - Cu-PGE Concentrate grading **24.7% Cu, 173.0g/t Pd, 22.0g/t Pt**, with metal recoveries of **80.9% Cu**, 60.2% Pd, 37.6% Pt; and,
  - Ni-PGE Concentrate grading **12.2% Ni, 24.1g/t Pd, 6.9g/t Pt**, with metal recoveries of **70.7% Ni,** 26.1% Pd, 36.3% Pt and an **Fe:MgO ratio of ~8:1** – cobalt assays pending**.**
- Locked-cycle results indicate that **good concentrate grades and metal recoveries** are likely using a conventional sequential flotation flowsheet, further work is underway to optimise.
- Initial sulphide flotation tests completed on a further six composites (JSG3, JSG5, JSG6 and yearly composites, JSMC1-4) are showing promising results, although further locked-cycle testing will be required over the coming months to confirm these results.
- Leach tests completed on oxide zone composite JOS1 (head grade **2.02g/t Pd, 0.59g/t Au**) at 26µm grind size achieved **76% Pd and 95% Au extraction** into solution.
- Additional variability testwork and optimisation of grind size, temperature and reagent use is ongoing.
- Chalice is **fully-funded** to continue its 6-rig resource drill-out and comprehensive metallurgical testwork program at Julimar with **~$132 million in cash** (as of 31 January 2021).

Chalice Mining Limited ("Chalice" or "the Company", ASX: CHN | OTCQB: CGMLF) is pleased to report significant new results from ongoing metallurgical testwork at its 100%-owned **Julimar Nickel-Copper-Platinum Group Element (PGE) Project**, located ~70km north-east of Perth in Western Australia.

Chalice Managing Director, Alex Dorsch, said: *"Our Julimar discovery hosts a significant amount of critical, clean energy metals such as palladium, platinum, nickel, copper and cobalt. In such a diverse metal deposit, the ability to produce high-value, commercially attractive concentrates using a simple processing flowsheet is critical.*

"The results from our second phase of metallurgical testwork have confirmed our hypothesis that widely-used, simple flotation concentration techniques would be applicable for the deposit. The two concentrates produced in the locked-cycle test appear to be high quality, and are therefore expected to be very commercially attractive to a range of customers – a very promising result and another important de-risking step for Julimar.

"Variability testwork continues on the other mineralisation styles found at Julimar, with promising initial results from base metal concentration. There is a lot more work do to in order to fully understand the deposit's mineralogical, metallurgical, processing and marketing outcomes, and we continue to build that understanding ahead of the maiden Mineral Resource Estimate, targeted for mid-2021."

Phase 2 metallurgical testwork program

The Phase 2 metallurgical testwork program commenced in Q4 2020, following promising initial results from flotation and leach testwork in Q3 2020 (see ASX announcement, 1 September 2020). The Phase 1 testwork demonstrated that the sulphide mineralogy was amenable to conventional flotation techniques and the oxide mineralogy was amenable to oxidative leaching techniques.

Mineralogical and metallurgical work completed to date in the Phase 2 program includes:

- Sulphide flotation testwork on seven composite samples compiled from drill samples collected from the Gonneville G1, G2, G3, and G5 sulphide zones (awaiting precious metal assay results);
- Locked-cycle sulphide flotation testwork on a composite metallurgical sample (JSG1) compiled from the Gonneville G1 and G2 sulphide zones;
- Leach testwork at different grind sizes and temperatures on two composite metallurgical samples compiled from oxide mineralisation overlying the Gonneville Intrusion, which is being undertaken to develop the optimal leach flowsheet for the oxides; and,
- QEMSCAN and laser ablation analysis of concentrates to identify the location and deportment of the platinum group minerals (awaiting results).

Given the unique nature of the mineralisation discovered at Julimar, the Company believes it will be eligible for R&D tax incentives in relation to metallurgical testwork and studies.

Diamond core samples from various mineralisation styles were combined to provide representative zonal composites. Samples were then selected from these to create additional yearly composites to better represent grades likely to be produced in a mining scenario.

RC samples from numerous holes across the deposit were selected for oxide test work. The location of the holes used in the test work are shown in **Figure 5** and full details of all composites are shown in **Table 1**.

Table 1. Metallurgical sample details for Phase 2 testwork program – Julimar Ni-Cu-PGE Project.

Composite ID	Zone	Holes selected	Mineralisation style	Head assay grades	Status
JSG1	G1-G2 Fresh (Sulphide)	JD001, JD003, JD005 – JD010	Massive-Matrix-Heavily Disseminated	3.66g/t Pd, 0.73g/t Pt, 0.15g/t Au, 0.63% Ni, 0.36% Cu, 0.04% Co	Rougher and Cleaner tests and 1 locked-cycle test completed and reported
JSG3	G3 Fresh (Sulphide)	JD006	Massive-Matrix-Heavily Disseminated	5.84g/t Pd, 1.10g/t Pt, 0.07/t Au, 0.90% Ni, 0.82% Cu, 0.07% Co	Rougher and Cleaner tests completed, base metal assays reported and other metal assays pending
JSG5	G1, G5 Fresh (Sulphide)	JD005, JD009	Massive-Matrix-Heavily Disseminated	2.15g/t Pd, 0.78g/t Pt, <0.05g/t Au, 0.19% Ni, 0.17% Cu, 0.02% Co	
JSG6	G3, G5 Fresh (Sulphide)	JD005, JD006, JD009	Massive-Matrix-Heavily Disseminated	1.27g/t Pd, 0.30g/t Pt, 0.06g/t Au, 0.15% Ni, 0.09% Cu, 0.02% Co	
JSMC1	G1-G2 Fresh (Sulphide)	Produced from above variability composites	Massive-Matrix-Heavily Disseminated	3.86g/t Pd, 0.50g/t Pt, 0.13g/t Au, 0.59% Ni, 0.33% Cu, 0.04% Co	
JSMC2	80% G1-2, 20% G3	Produced from above variability composites	Massive-Matrix-Heavily Disseminated	4.25g/t Pd, 0.75g/t Pt, 0.08g/t Au, 0.63% Ni, 0.39% Cu, 0.04% Co	
JSMC3	40% G1-2, 30% G3, 30% G5	Produced from above variability composites	Massive-Matrix-Heavily Disseminated	3.31g/t Pd, 0.66g/t Pt, 0.08g/t Au, 0.47% Ni, 0.33% Cu, 0.03% Co	

JON1	Gonneville North Oxide	JRC032, JRC034, JRC044	Oxidised (laterite-saprolite)	1.37g/t Pd, 0.37g/t Pt, 0.06 g/t Au	Leach tests completed and reported
JOS1	Gonneville South Oxide	JRC056, JRC070, JRC072	Oxidised (laterite-saprolite)	2.02g/t Pd, 0.68g/t Pt, 0.59g/t Au	

No testwork has been completed as yet on the G6-G11 zones, which were discovered after the Phase 2 metallurgy program commenced. Composite samples of these zones will be collected as suitable diamond intervals become available. All sulphide flotation testwork results on the G4 sulphide zone remain pending.

Locked cycle sulphide flotation testwork results

Locked cycle flotation testwork (LCT) on composite sample JSG1 at an 80% passing (P_{80}) grind size of 53µm, produced two separate base metal-PGE concentrates:

- A **Cu-PGE-Au concentrate** grading 24.7% Cu, 173g/t Pd, 22.1g/t Pt and 1.5g/t Au; and
- A **Ni-PGE concentrate** grading 12.2% Ni, 24.1g/t Pd, 6.9g/t Pt (cobalt assays pending).

Total PGE recovery into concentrates of 86.3% Pd and 73.9% Pt achieved, with optimisation work now underway to refine the flowsheet.

Concentrate grades and recoveries for the 5th cycle of the test are provided in **Table 2** and **Table 3**.

Table 2. LCT Copper concentrate results for cycle 5 for the JSG1 Composite.

Copper-PGE-Au concentrate							
Cu Grade (%)	Cu Recovery (%)	Pd Grade (g/t)	Pd Recovery (%)	Pt grade (g/t)	Pt Recovery (%)	Au grade (g/t)	Au Recovery (%)
24.7	80.9	173	60.2	22.1	37.6	1.98	90.8

Table 3. LCT Nickel concentrate results for cycle 5 for the JSG1 Composite.

Nickel-PGE concentrate							
Ni Grade (%)	Ni Recovery (%)	Pd Grade (g/t)	Pd Recovery (%)	Pt grade (g/t)	Pt Recovery (%)	Co grade (%)	Co Recovery (%)
12.2	70.7	24.1	26.1	6.9	36.3	*pending*	*pending*

The copper concentrate is considered to have sufficient copper and precious metal grades to be attractive to a diverse range of customers. The nickel concentrate is also considered to have sufficient nickel and precious metal grades to be commercially attractive. Importantly, the nickel concentrate has an Fe:MgO ratio of ~8:1, which is within industry acceptable limits.

Steady-state grade and recovery results were achieved over the 5 consecutive locked-cycle tests, which is important for stability of future processing operations.

Results for each test are shown below in **Figure 1**.

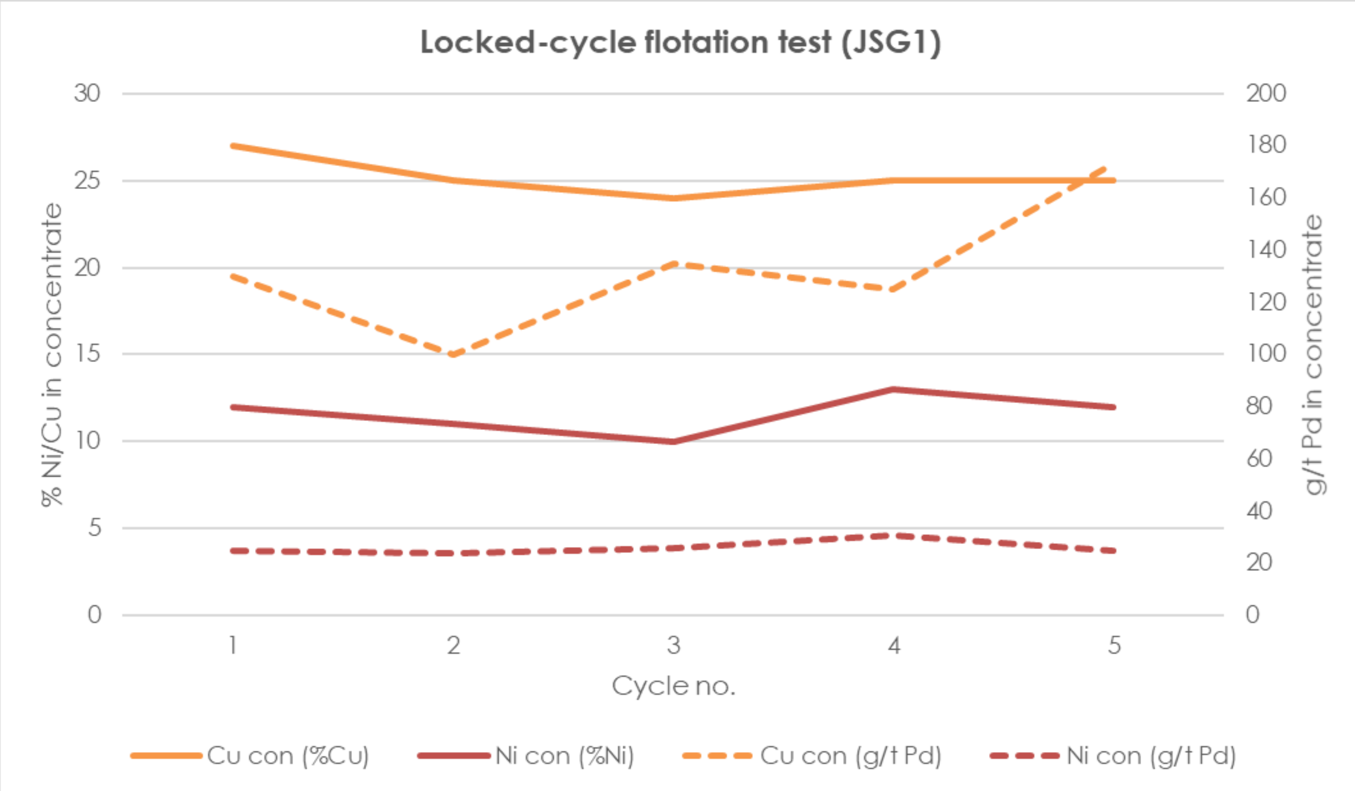

Figure 1. Locked cycle testwork results from cycles 1-5 on JSG1.

LCT is continuing on this composite to study the effects of the build in circulating loads on flotation performance and to develop the concentrate quality profile that can be expected during operations.

Further LCT has commenced on the JSG3-6 composite samples and is planned for the G6-11 Zones. It should be noted that those zones differ in mineralogy and head grade. As such, LCT results are required to assess variability across the various zones that comprise the Gonneville deposit.

Flotation tailings diagnostics completed on a single sample show additional palladium recovery may be possible with oxidative leaching. The results of the testwork on the oxide samples indicates that they are also amenable to leaching and hence further test work is planned to evaluate leach recovery in conjunction with flotation.

Assay results for any potential deleterious elements (impurities) in the concentrates (including As, Cd, Se, Te, Hg, Pb, F, Cl) are pending, however head grade assays are low for these elements.

Variability sulphide flotation testwork results

First-pass flotation variability testing of the seven sulphide zone composite samples indicated that commercially attractive concentrates may be produced even at low copper and nickel head grades. These are not locked-cycle tests and, as such, are considered preliminary results only.

Copper concentrate grades generally ranged between 13% and 27% Cu, with copper recoveries ranging from 58% to 87% (dependent on head grade). Copper concentrate grade versus recovery for the composite samples are shown in **Figure 2**.

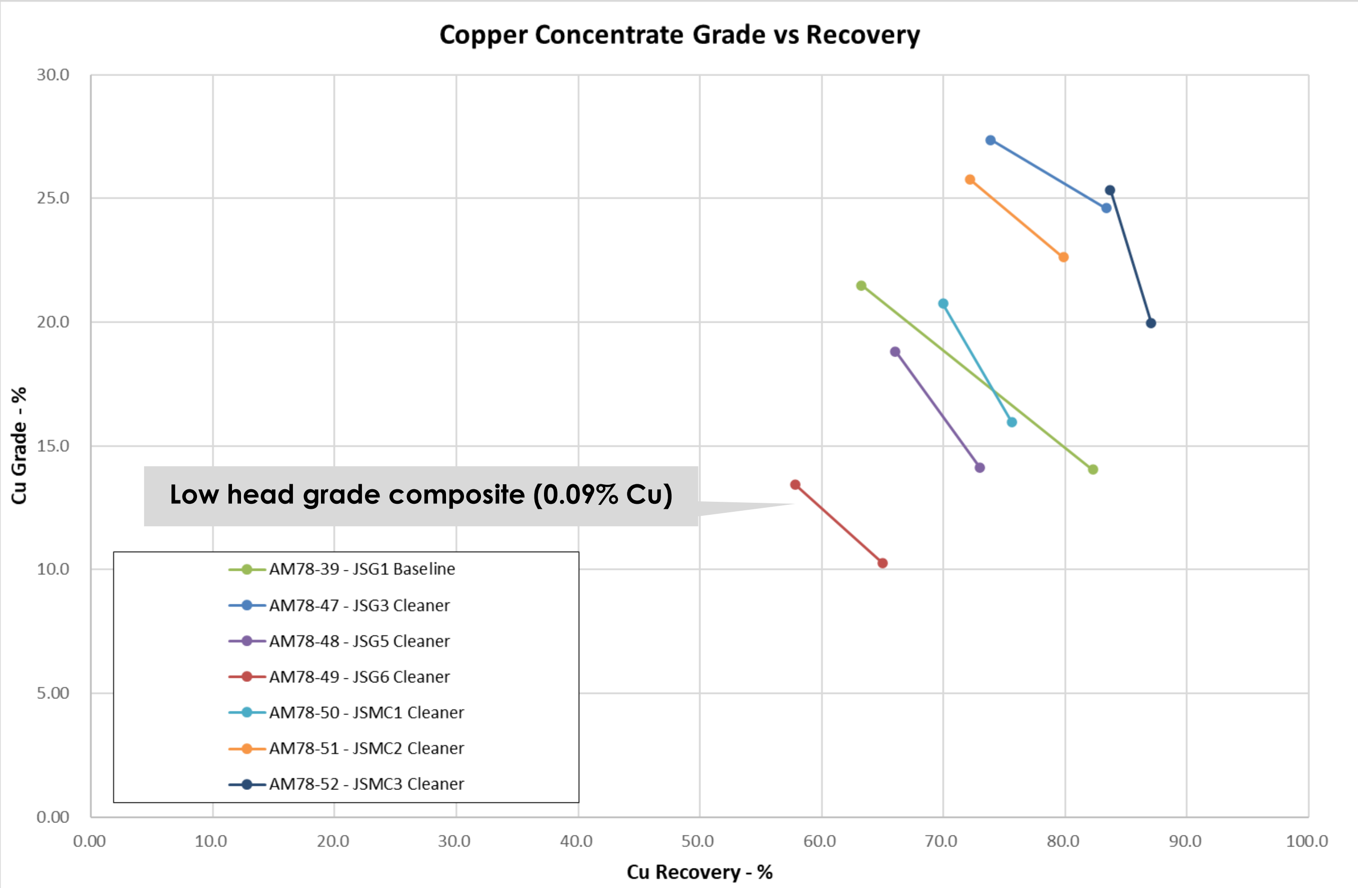

Figure 2. Copper concentrate grade versus copper recovery for seven composites.

With the exception of the low head grade composites (JSG5 and JSG6), nickel concentrate grades ranged between 4.5% and 17.3% Ni with nickel recoveries ranging from 54% to 79% (dependent on head grade). Nickel concentrate grade versus recovery for the composite samples are shown in **Figure 3**.

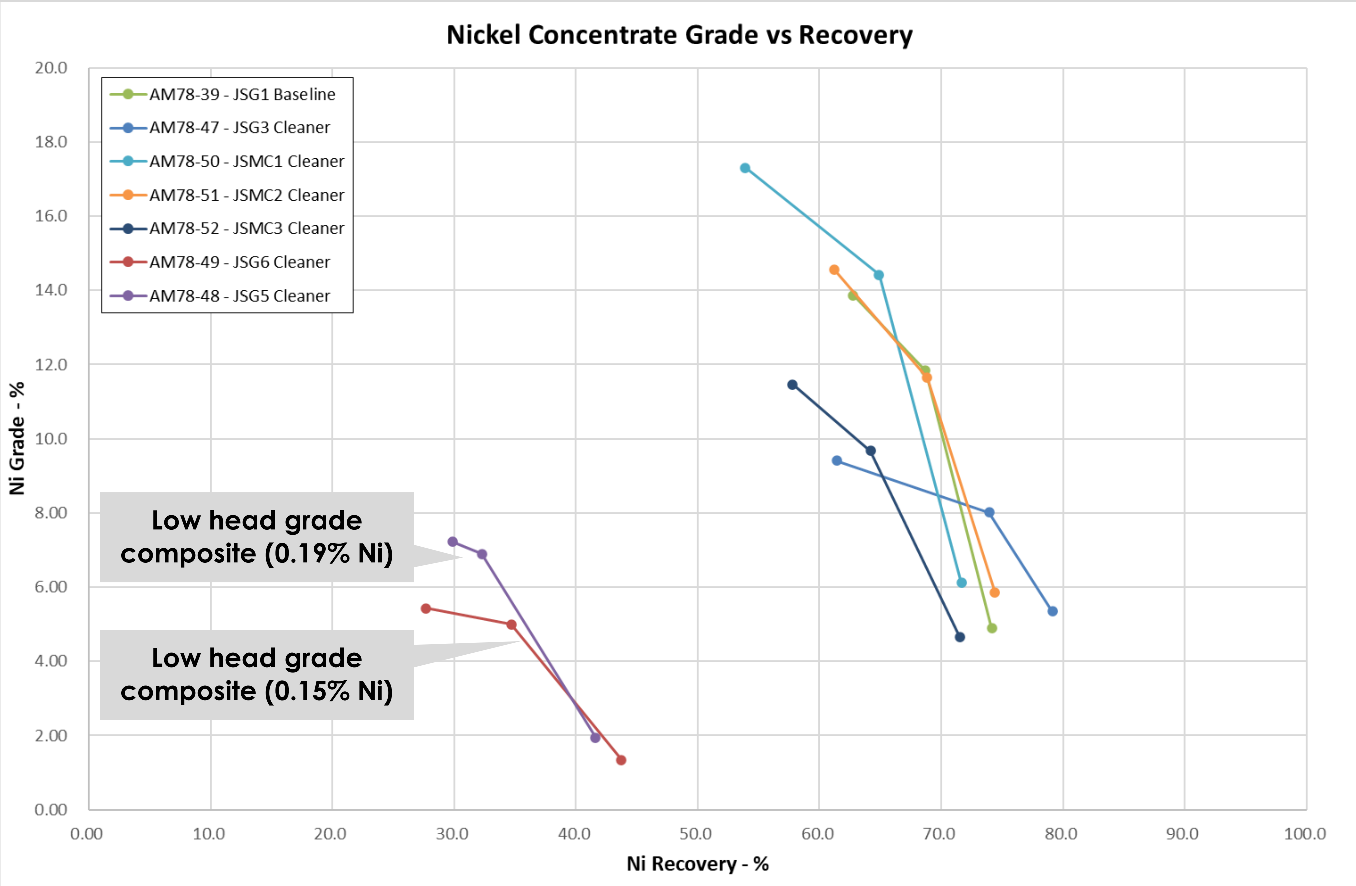

Figure 3. Nickel concentrate grade versus nickel recovery for seven composites.

All other assays (Pd, Pt and Au, as well as potential deleterious elements) in the variability concentrates are pending.

PGE sulphide mineralogy

Further QEMSCAN analysis was completed on several composites which has identified eleven PGE minerals to date: kotulskite, michenerite, stibiopalladinite, ungavaite, mertieite, palarstanide, palladoarsenide, menshikovite, paolovite, sperrylite and native platinum.

Kotulskite is the most abundant PGE mineral in the G1-3 zones, while michenerite is the most abundant PGE mineral in the G4 zone. The mineralogical analysis is being used to determine the optimal flotation parameters.

Oxide testwork results

Variability testwork on two oxide samples has indicated that palladium and gold can be extracted using a leach process. Results from the northern area JON1 (head grade 1.37g/t Pd, 0.06 g/t Au) indicated extraction of 76% Pd and 95% Au at a P_{80} grind size of 10µm.

Results from the southern area JOS1 (head grade 2.02g/t Pd, 0.59g/t Au) at a coarser grind indicated extraction of 76% Pd and 95% Au at a P_{80} grind size of 26µm. The leach results continue to demonstrate that the oxide mineralisation at Gonneville may impact overall project economics.

Platinum and other metals within the oxide zones are not amenable to the leach process, however, they would likely have minimal impact on project economics given the low grades in the oxide zone. Further testwork is currently underway to determine the effect on PGE recovery over a range of grind sizes and temperatures, as well as the optimal techniques to recover metals from solution.

Forward plan

Chalice is continuing its approach of simultaneously exploring and evaluating the zones of high-grade PGE-Ni-Cu-Co+/-Au mineralisation and the extensive PGE-Ni-Cu-Co+/-Au zones associated with disseminated sulphides within the ~1.6km x >0.8km Gonneville Intrusion. Early stage metallurgical and mining study work is continuing in parallel with exploration activities.

Ongoing and planned activities at Julimar include:

- **Resource definition drilling** – a ~160,000m RC/diamond drill program is underway with three RC and three diamond rigs. Drilling is initially being undertaken on a 40m x 40m spaced grid over the high-grade areas. This 40m spacing is expected to be sufficient to define mineral resources in the indicated category.
- **Down-hole EM Geophysics** – DHEM continues to play a key role in identifying potential high-grade targets for follow-up drilling and will be completed on selected holes and in areas of wide-spaced drilling. It is important to note that the lack of an EM target does not necessarily preclude the presence of high-grade mineralisation, based on drill results received to date.
- **Metallurgical testwork** – The Phase 2 testwork program continues, with additional sulphide composites currently under locked-cycle flotation tests and optimisation work continuing on the oxide leach process. Laser ablation mineralogical analysis is also underway to determine PGE association and potential deportment. Drilling subsequent to the commencement of the Phase 2 testwork program has identified a number of new, high-grade mineralised zones. As such, further testwork is required on these new zones to determine potential metallurgical outcomes for each.
- **Geochemistry and Geochronology** – the Company has engaged the Geological Survey of WA (GSWA) and a specialist consultant to conduct initial geochemical analysis and metallogenesis studies. This work aims to improve our geological and mineralogical understanding of the discovery and enhance our targeting capability as we search for similar discoveries across our large land holding in the West Yilgarn Ni-Cu-PGE Province.
- **Reconnaissance activities within the Julimar State Forest** – initial wide-spaced soil sampling and Moving Loop EM programs have commenced at the Hartog EM Anomaly. Reconnaissance activities will continue over the next 1-2 months. The results of this work will assist in determining whether Julimar has the potential to host multiple Ni-Cu-PGE mineralised systems.

Authorised for release on behalf of the Company by:

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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 on private farmland and State Forest. The Project has direct access to major highway, rail, power and port infrastructure in one of the world's most attractive mining jurisdictions – Western Australia.

The Project was staked in 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 (the 'Julimar Complex') based on high-resolution airborne magnetics. The Julimar Complex is interpreted to extend over ~26km of strike and is confirmed to be highly prospective for nickel, copper and platinum group elements (**Figure 4**).

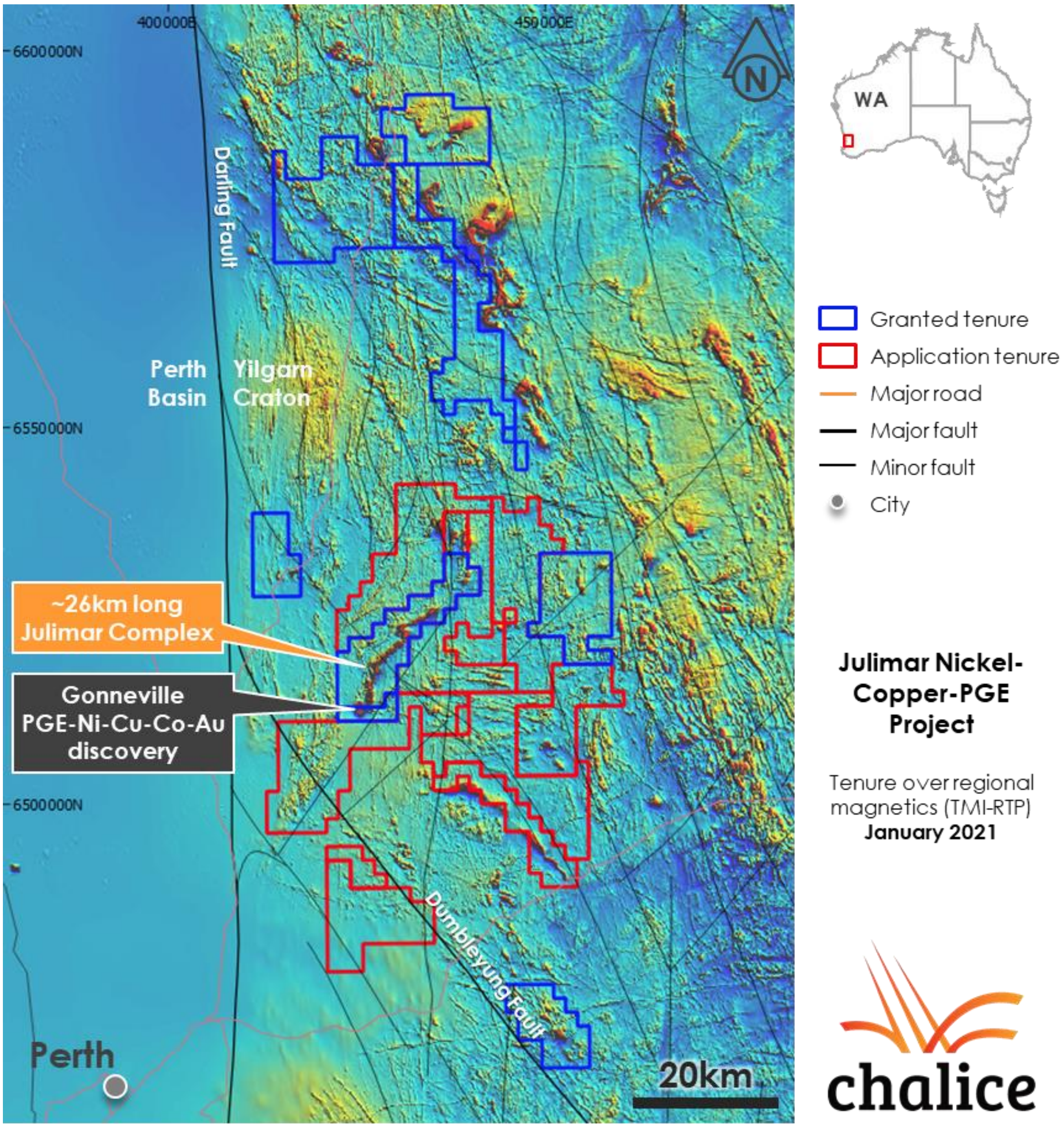

Figure 4. Julimar Project tenure over regional magnetics.

Prior to Chalice's major discovery, the Julimar Complex had never been explored for Ni-Cu-PGE mineralisation, and the lack of any bedrock geology exposures and widespread development of laterite and transported cover in the region hindered the confirmation of the conceptual geological model.

Exploration activities to date have been confined to the ~1.6km x >0.8km Gonneville Intrusion on largely Chalice owned private land only, while the access approval to the remainder of the Complex within the Julimar State Forest was pending.

Chalice commenced a systematic greenfield exploration program over the Gonneville Intrusion in mid-2019. The initial drill program commenced in Q1 2020 and resulted in the discovery of shallow high-grade PGE-nickel-copper-cobalt mineralisation. The first drill hole (JRC001) intersected 19m @ 8.4g/t Pd, 1.1g/t Pt, 2.6% Ni, 1.0% Cu and 0.14% Co from 48m. The major greenfield Gonneville discovery defined the new West Yilgarn Ni-Cu-PGE Province.

The Intrusion is interpreted to be a layered mafic-ultramafic 'sill', with a moderate westerly dip and gentle northerly plunge. The potential 'feeder' for the system, a highly prospective area for high-grade mineralisation, is yet to be discovered. PGE-Ni-Cu-Co +/- Au sulphide mineralisation is widespread throughout the Intrusion and has been intersected down to ~850m below surface to date. The intrusion is open to the north into the Julimar State Forest and its depth extent is still unknown.

Eleven high-grade massive / matrix / heavily disseminated sulphide zones (G1-11) have been defined to date over the Intrusion. The discrete high-grade PGE-Ni-Cu-Co +/- Au zones comprise sulphide-rich accumulations (10-100% sulphide, defined by >1g/t Pd cut-off) and typically have a grade range of 1-15g/t PGE+Au, 0.5-3.3% Ni, 0.4-4.5% Cu and 0.03-0.27% Co.

The Intrusion also hosts widespread disseminated PGE-Ni-Cu-Co mineralisation (trace to 3% on average) surrounding the high-grade zones, which typically has a grade range of 0.5-2.0g/t PGE, 0.1-0.2% Ni, 0.05-0.15% Cu and 0.01-0.03% Co.

Weathering at Gonneville extends down to ~30-40m below surface and a well-developed saprolite (oxide) profile after serpentinite contains elevated PGE-Au grades (typically ranging from 1.2-4.5g/t PGE+Au) from near surface to a depth of ~25m.

Early stage metallurgical testwork completed to date on selected high-grade and disseminated sulphide mineralisation samples from Gonneville has returned promising flotation results, giving initial encouragement that the sulphide-hosted mineralisation at Gonneville will be amenable to conventional flotation under standard conditions.

Tests completed on a composite of oxide mineralisation samples has also returned promising results, with the extraction of palladium and gold achieved through oxidative leaching under standard conditions.

An airborne electromagnetic (EM) survey was completed in September 2020 over the entire Julimar Complex. Three new large EM anomalies were identified – Hartog, Baudin and Jansz. The Hartog EM Anomaly extends ~6.5km directly north of the Gonneville Intrusion into the Julimar State Forest.

About Platinum Group Elements

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, hydrogen production / purification and in 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 approximately US$2,400/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 Metallurgical Testwork Results in relation to the Julimar Nickel-Copper-PGE Project is based on and fairly represents information and supporting documentation compiled by Mr Rod Lawry BSc (Metallurgy), a Competent Person, who is a Member of the Australian Institute of Mining and Metallurgy. Mr Lawry is a consultant to 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 a Qualified Person under National Instrument 43-101 – 'Standards of Disclosure for Mineral Projects'. Mr Lawry has verified the data disclosed in this release, including sampling, analytical and test data underlying the information contained in this release. Mr Lawry consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The Information in this announcement that relates to prior exploration results for the Julimar Project is extracted from the following ASX announcements:

- "Chalice discovers new high-grade PGE-Cu-Au zone at Julimar", 9 July 2020
- "Significant extension of high-grade PGE-Ni-Cu-Co zones at Julimar", 17 August 2020
- "Positive preliminary metallurgical results at Julimar", 1 September 2020
- "Major new 6.5km-long EM anomaly identified at Julimar", 22 September 2020
- "Significant new PGE-copper-gold horizon defined at Julimar", 6 October 2020
- "Significant high-grade PGE-Cu-Au extensions at Julimar", 18 November 2020
- "Four new high-grade zones defined as Julimar continues to grow", 27 January 2021

The above announcements are available to view on the Company's website at www.chalicemining.com. The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in the relevant original market announcements. The Company confirms that the form and context in which the Competent Person and Qualified Person's findings are presented have not been materially modified from the relevant original market announcements.

Forward Looking Statements

This report may contain forward-looking information, including 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 Mining 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 fair value of investments ultimately realised, the estimation of mineral reserve and mineral resources, the realisation of mineral resource estimates, estimation of metallurgical recoveries, the forecast timing of the estimation of mineral resources, the likelihood of exploration success at the Company's projects, the prospectivity of the Company's exploration projects, the existence of additional EM anomalies within the project, 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 "expected", "believes", "considered", "will", "interpreted", "likely", "may", "potential", "highly", "plan" or "planned", "prospective", "promising", "targeted", "attractive", 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; assay results of visually interpreted mineralised intersections; whether geophysical anomalies are related to economic mineralisation or some other feature; obtaining access to undertake additional exploration work on EM anomalies located in the Julimar State Forrest; the results from testing EM anomalies; results of planned metallurgical test work Including results from other zones not tested yet, scaling up to commercial operations; 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; 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 investments and the timing and proceeds realised on future disposals of investments, the impact of the COVID 19 epidemic 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 . The Company also refers to the "Key Risks" section of its investor presentation released to the ASX on 1 December 2020.

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: Metallurgical sample details – Julimar Ni-Cu-PGE Project.

Hole ID	Type	Easting (m)	Northing (m)	RL (m)	Azi (°)	Dip (°)	Composite ID	Zone
JD001	Diamond	424,978	6,512,319	235	090	-60.0	JSG1	G1
JD003	Diamond	425,049	6,512,507	239	089.5	-78.1	JSG1	G2
JD005	Diamond	424,975	6,512,359	235	090.9	-71.4	JSG6, JSG5, JSG1	G3, G5, G1
JD006	Diamond	425,020	6,512,429	236	090.1	-79.9	JSG3, JSG6, JSG1	G3, G5, G2
JD007	Diamond	425,071	6,512,429	238	090.9	-60.3	JSG1	G2
JD008	Diamond	424,964	6,512,591	245	088.4	-60.4	JSG1	G1
JD009	Diamond	425,049	6,512,590	243	091.4	-60.6	JSG6, JSG5, JSG1	G5, G1, G2
JD010	Diamond	424,992	6,512,315	235	123.9	-50.1	JSG1	G2
JRC032	RC	425,529	6,513,523	249	087.7	-60.8	JON1	Oxide (north)
JRC034	RC	425,450	6,513,522	250	090.7	-60.0	JON1	Oxide (north)
JRC044	RC	425,531	6,513,320	247	089.7	-60.3	JON1	Oxide (north)
JRC056	RC	425,365	6,512,107	236	095.4	-58.6	JOS1	Oxide (south)
JRC070	RC	425,193	6,512,193	232	089.1	-60.0	JOS1	Oxide (south)
JRC072	RC	425,343	6,512,010	233	091.4	-60.8	JOS1	Oxide (south)

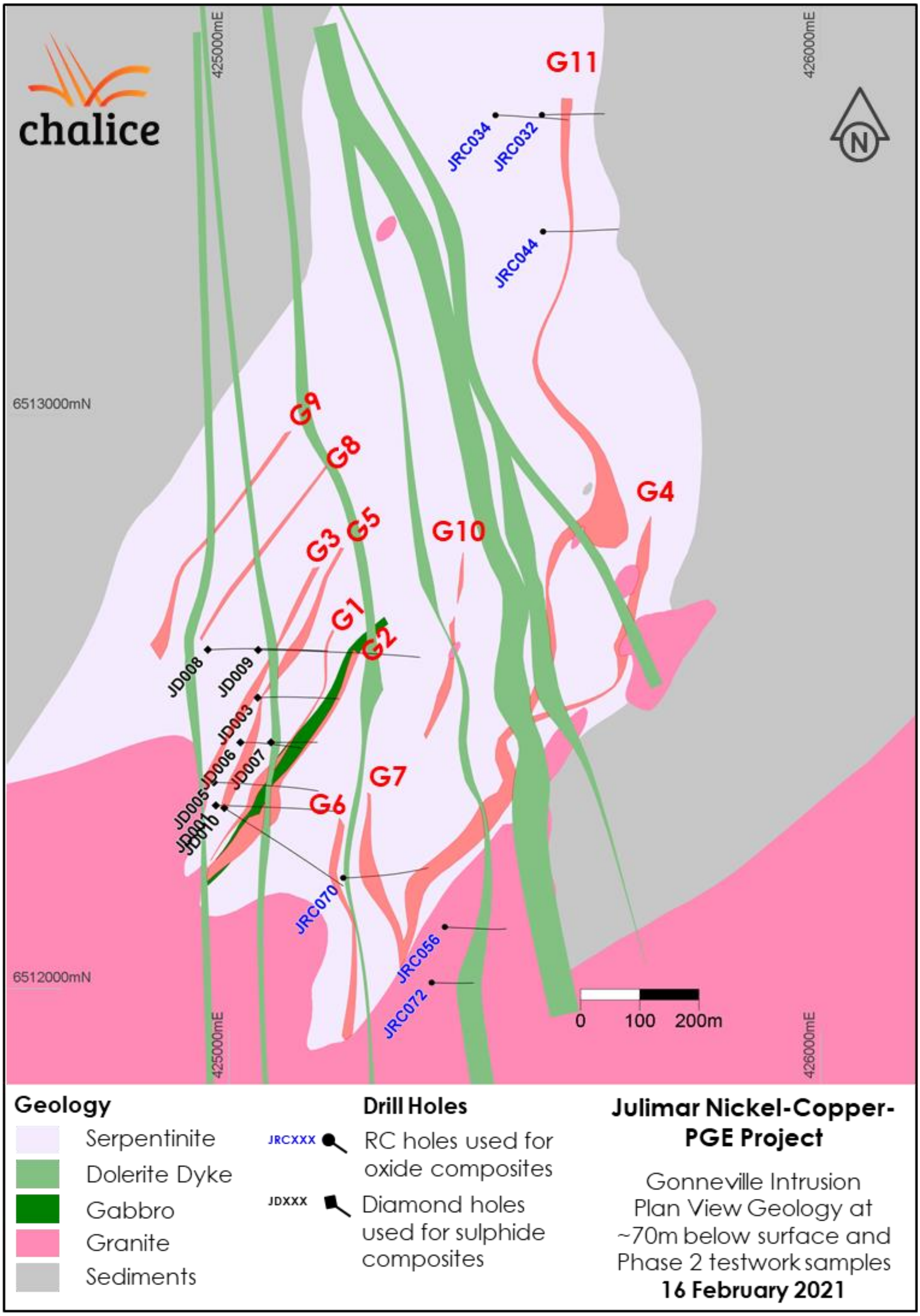

Figure 5. Location of drill holes selected for Phase 2 metallurgical testwork program.

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.*	• Diamond drill core samples were taken over selective intervals ranging from 0.2m to 1.2m (typically 1.0m). Qualitative care taken when sampling diamond drill core to sample the same half of the drill core. • Reverse Circulation (RC) drilling samples were collected as 1m samples. Two 1m assay samples were collected as a split from the rig cyclone using a cone splitter and are typically 3kg in weight. • Samples selected for metallurgical test work were composited to provide representative samples for variability tests
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).*	• Drilling has been undertaken by diamond and Reverse Circulation (RC) techniques. • Diamond drill core is HQ size (63.5mm diameter) with triple tube used from surface and standard tube in competent bedrock. • Core orientation is by an ACT Reflex (ACT II RD) tool • RC Drilling uses a face-sampling hammer drill bit with a diameter of 5.5 inches (140mm).
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.*	• Individual recoveries of diamond drill core samples were recorded on a qualitative basis. Generally sample weights are comparable, and any bias is considered negligible. • 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. • No relationships have been evident between diamond core, RC sample grade and recoveries.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a*	• All drill holes were logged geologically including, but not limited to; weathering,

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	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.*	regolith, lithology, structure, texture, alteration and mineralisation. Logging was at an appropriate quantitative standard for resource estimation and mining studies. • Logging is considered qualitative in nature. • All holes were geologically logged in full. • Diamond drill core is photographed wet before cutting.
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.*	• Diamond core was sawn in half and one-half quartered and selectively sampled over 0.2-1.2m intervals (mostly 1m). • Diamond drill core field duplicates collected as ¼ core. • RC assay samples were collected as two 1m splits from the rig cyclone via a cone splitter. The cone splitter was horizontal to ensure sample representivity. Wet or damp samples were noted in the sample logging sheet and a majority of samples were dry. • Sample preparation is industry standard and comprises oven drying, jaw crushing and pulverising to -75 microns (80% pass). • Field duplicates were collected from selected sulphide zones as a second 1m split directly from the cone splitter. • Drill sample sizes are considered appropriate for the style of mineralisation sought and the nature of the drilling program. • Metallurgical samples for sulphide test work were sampled as ½ core samples and composited to produce 7 composite samples considered to be representative of the various mineralised zones. • Metallurgical samples for oxide test work were sampled as a 1m split from the rig cyclone via a cone splitter and composited to produce 2 composite samples considered to be representative of the oxide mineralised zone. • Sulphide flotation testwork was completed on the sulphide metallurgical samples and cyanide leach testwork was completed on the oxide metallurgical samples
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,*	• Diamond drill core and 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,

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	external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.	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) and Pd, Pt (ALS method code PGM-ICP27). • Certified analytical standards and blanks were inserted at appropriate intervals for diamond, RC drill samples and auger soil samples • Approximately 5% of samples submitted for analysis comprised QAQC control samples. •
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.*	• Significant drill 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 core after final assays are received. • Two RC holes have been twinned with a diamond hole to provide a comparison between grade/thickness variations over a 5m separation between drill holes. • Primary drill data was collected digitally using OCRIS software before being transferred to the master SQL database. • Metallurgical results have been reviewed and checked by the supervising metallurgist
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.*	• Diamond and RC drill hole collar locations are initially recorded by Chalice employees using a handheld GPS with a +/- 3m margin of error. • DGPS collar pick-ups replace handheld GPS collar pick-ups and have +/-20 mm margin of error. • The grid system used for the location of all drill holes is GDA94 - MGA (Zone 50). • RLs were assigned either from 1 sec (30m) satellite data or DGPS pick-ups.
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.*	• Drill hole spacing varies from between 80m x 40 m in the south to 200m x 80m in the north. • Results from the drilling to date are not considered sufficient to assume any geological or grade continuity appropriate for Mineral Resource estimation procedure(s) and classifications. • Diamond drill core and RC samples were composited to provide representative metallurgical samples for testwork.
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*	• RC and Diamond drill holes were typically oriented within 15° of orthogonal to the interpreted dip and strike of the known zone of mineralisation. However, drill holes JD012, JD026, JRC60 JRC078 and JRC081 were drilled at less optimal azimuths due

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	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	to site access constraints. • The orientation of the drilling is not considered to have introduced sampling bias
Sample security	• *The measures taken to ensure sample security.*	• Samples are collected in polyweave bags and delivered directly from site to ALS laboratories in Wangara, Perth by a Chalice contractor • Samples selected for metallurgical test work were sampled and then refrigerated until being shipped to the metallurgical laboratory to minimise oxidation
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

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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.*	• Exploration activities are ongoing over E70/5118 and 5119 on private property. CGM (WA) Pty Ltd is a wholly owned subsidiary of Chalice Mining Limited with no known encumbrances. • Current drilling is on private land only, however granted tenure covers both private land and State Forest. • Access for non-ground disturbing exploration in the Julimar State Forest requires Ministerial approval which has been obtained. • The Company has submitted a Conservation Management Plan (CMP) to the Department of Biodiversity, Conservation and Attractions (DBCA). The CMP details Chalice's planned non-ground disturbing reconnaissance exploration activities across the Julimar Complex. • Access for ground disturbing exploration (including drilling) in the Julimar State Forest requires an additional approval which has not yet been obtained. • E70/5119 partially overlaps ML1SA, a State Agreement covering Bauxite mineral rights only.
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 three genuine explorers in the area, all primarily targeting Fe-Ti-V mineralisation. • 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_2O_5, Ni, Cu, Cr, Pb and Zn, results of which are referred to in this announcement. • 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 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

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		fraction results. • 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 target deposit type is a magmatic Ni-Cu-PGE sulphide deposit, 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:* 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.*	• 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 exploration results have been reported. Assays for the composite metallurgical samples are the head assay taken from the composite sample
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').*	• All widths are quoted down-hole. • All drill holes were orientated to be as close as possible to orthogonal to the interpreted strike and/or dip of the mineralised zone(s) and/or targets except for JD010 due to access constraints.

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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.*	• No exploration results have been reported. Metallurgical test work is reported for results received to date. Further test work is ongoing and will be reported when it is finalised.
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.*	• Metallurgical test results are given in the body of the text. No other results are applicable for this report.
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 targets including EM conductors. 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 diamond and selective RC drill holes to test for off-hole conductors. Subsequent holes will undergo down-hole EM if required. • Further metallurgical testwork is in progress including variability testwork on newly identified zones