22 September 2020

Major new 6.5km-long EM anomaly identified at Julimar

Airborne EM survey reveals extensive new anomalies north of the Gonneville PGE-Ni-Cu-Co discovery, highlighting the world-class potential of the district

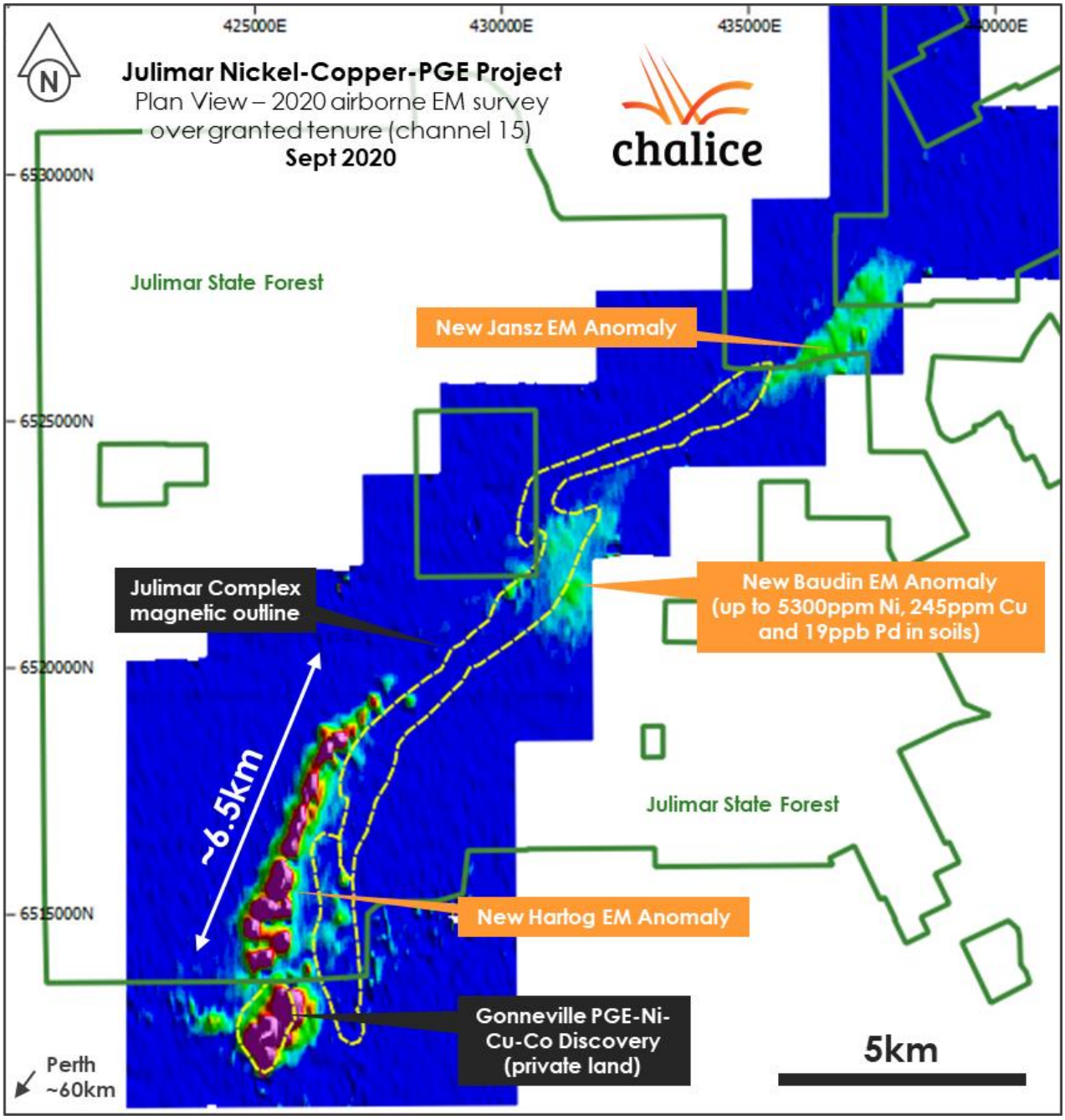


Figure 1. Julimar Complex Plan View – Airborne EM survey preliminary mid-time response.

Highlights

- **Three new large EM anomalies** identified (Hartog, Baudin and Jansz) in recent airborne EM survey at the 100%-owned **Julimar Ni-Cu-PGE Project in WA**.
- New **Hartog EM Anomaly** extends **~6.5km** beyond the northern limit of drilling at the ~1.6km x 0.8km Gonneville Intrusion, where Chalice made a significant greenfield PGE-Ni-Cu-Co discovery in March.
- Results highlight the **district-scale Ni-Cu-PGE potential of the ~26km long Julimar Complex**.
- **Four rigs** continue the resource drill-out at Gonneville, with **assay results pending for 50 holes**.
- Chalice is **fully-funded** with **~$46 million in cash** (as of 30 June 2020).

Chalice Gold Mines Limited ("Chalice" or "the Company", ASX: CHN | OTCQB: CGMLF) is pleased to report exciting preliminary results from a recently completed airborne electromagnetic (AEM) survey over granted tenure within the 100%-owned **Julimar Project** in Western Australia.

Commenting on the results, Chalice's Managing Director, Alex Dorsch, said: *"We have speculated for some time that the area north of our recent Gonneville discovery is highly prospective. We have now supported that claim with major new, laterally extensive geophysical targets from the first airborne EM survey over the Company's granted tenure, which is a very exciting and important development.*

"Airborne EM is an effective first-pass screening technique that can detect shallow conductive sources, such as nickel sulphide mineralisation. It is important to emphasise though that our experience at Gonneville to date has shown that some high-grade mineralised zones do not necessarily have a strong EM response using either airborne or ground-based techniques. Therefore, the absence of a strong late-time airborne EM response does not preclude the presence of mineralisation elsewhere within the Julimar Complex.

"We are expecting initial feedback shortly regarding access to the State Forest for the next stage of reconnaissance exploration activities. We are hopeful of being able to assess the compelling new anomalies and aim to expand Julimar into a district-scale, multi-discovery opportunity.

"Meanwhile, our resource drill-out is continuing at Gonneville, with four rigs currently drilling and numerous assay results pending."

Airborne EM survey

A helicopter-borne low frequency electro-magnetic (EM) survey was recently flown across the entirety of Chalice's granted tenure on 200m line spacing at the Julimar Project (~155km^2).

The survey was designed to test for conductors within and proximal to the Julimar State Forest. Cultural sources (houses, wires, etc) were avoided where possible in the acquisition path flown by the helicopter.

By also flying over Gonneville, the survey was able to calibrate against the known high-grade PGE-Ni-Cu-Co sulphide zones identified from ongoing drilling. The Gonneville G1 Zone hosts some of the highest-grade mineralisation within the Gonneville Intrusion and was successfully detected in the AEM survey.

The survey has outlined three new extensive EM anomalies within the Julimar State Forest – Hartog, Baudin and Jansz (**Figure 1**).

The Hartog EM Anomaly, which extends for ~6.5km directly north and along strike from Gonneville, is the highest priority target. The anomaly appears to be offset to the west of the magnetic response of the interpreted Julimar Complex. The most likely explanation for this is that, given its location directly along strike of Gonneville, it is potentially a less magnetic extension of the mafic-ultramafic Gonneville Intrusion.

The lack of outcrop in this region precludes a definitive geological interpretation, however non-magnetic mafic rock-types (gabbro) have been identified in drilling at Gonneville and therefore may occur elsewhere in the district. This suggests that less magnetic areas within the Complex may also be highly prospective – also a positive indication for EM Conductor X, currently being tested by diamond drilling immediately north-west of Gonneville.

The peak AEM response of the Hartog anomaly is significantly stronger than the peak AEM response at the high-grade G1 Zone at Gonneville, indicating a potentially shallow, large conductive body that may represent sulphide mineralisation (**Figure 2**).

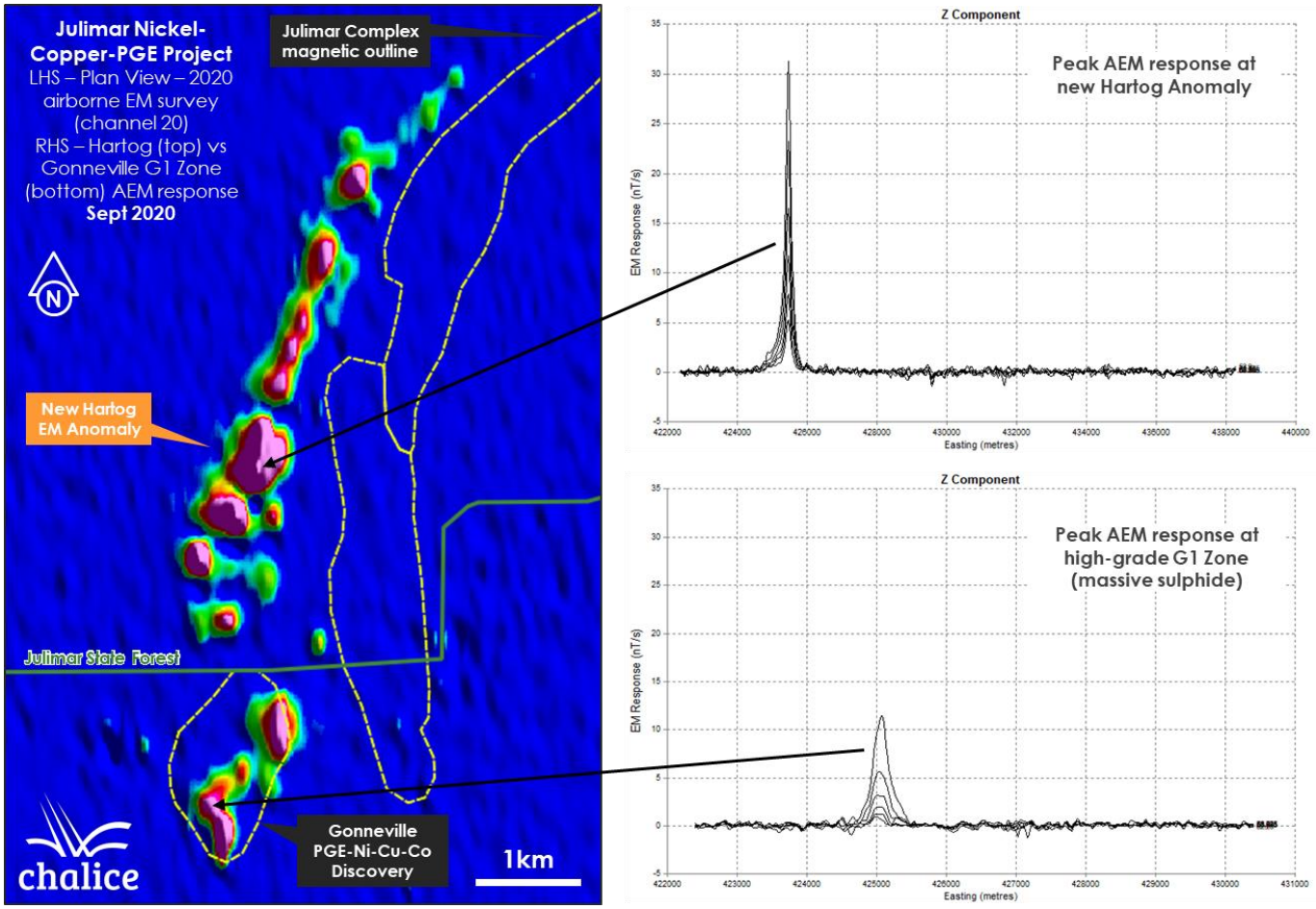


Figure 2. Hartog EM Anomaly Plan View – Airborne EM survey preliminary late-time response.

The Baudin EM Anomaly is located proximal to a discordant feature in the magnetic signature of the Julimar Complex, approximately 10km north-east of Gonneville within the State Forest. This area was previously sampled, with strongly anomalous Ni-Cu-Pd in soils identified in the area (refer to ASX announcement on 11 May 2020).

The Jansz EM Anomaly is located approximately 18km north-east of Gonneville, partly within State Forest and partly on private land. The Baudin and Jansz anomalies are discernible in the early to mid-time channels only, potentially indicating surficial responses, however further modelling and ground EM is required to confirm the prospectivity of these targets.

Final geophysical survey data is yet to be received and it is possible that additional anomalies may be identified. The final modelled anomalies will be followed up with ground-based geophysics in order to define drill targets, upon access being granted to the Julimar State Forest.

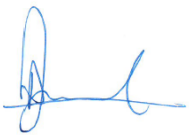
Forward plan

The Company has been actively liaising with the Department of Biodiversity, Conservation and Attractions (DBCA) and the Department of Mines, Industry, Resources and Safety (DMIRS) regarding the development of a Conservation Management Plan (CMP) for non-ground disturbing, reconnaissance exploration activities within the Julimar State Forest.

Proposed activities include ground-based geophysics as well as wide-spaced geochemical soil sampling over the entire Julimar Complex, including the three new AEM anomalies. These activities are anticipated to have negligible impact on the environment and community. Any targets generated from these activities would be drill tested, subject to a second stage CMP approval.

Chalice will continue to work co-operatively with regulatory agencies regarding environmental approvals for future exploration.

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 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 is confirmed to be highly prospective for nickel, copper and platinum group elements.

Prior to Chalice's exploration, the Julimar Complex had never been explored for these metals (**Figure 3**).

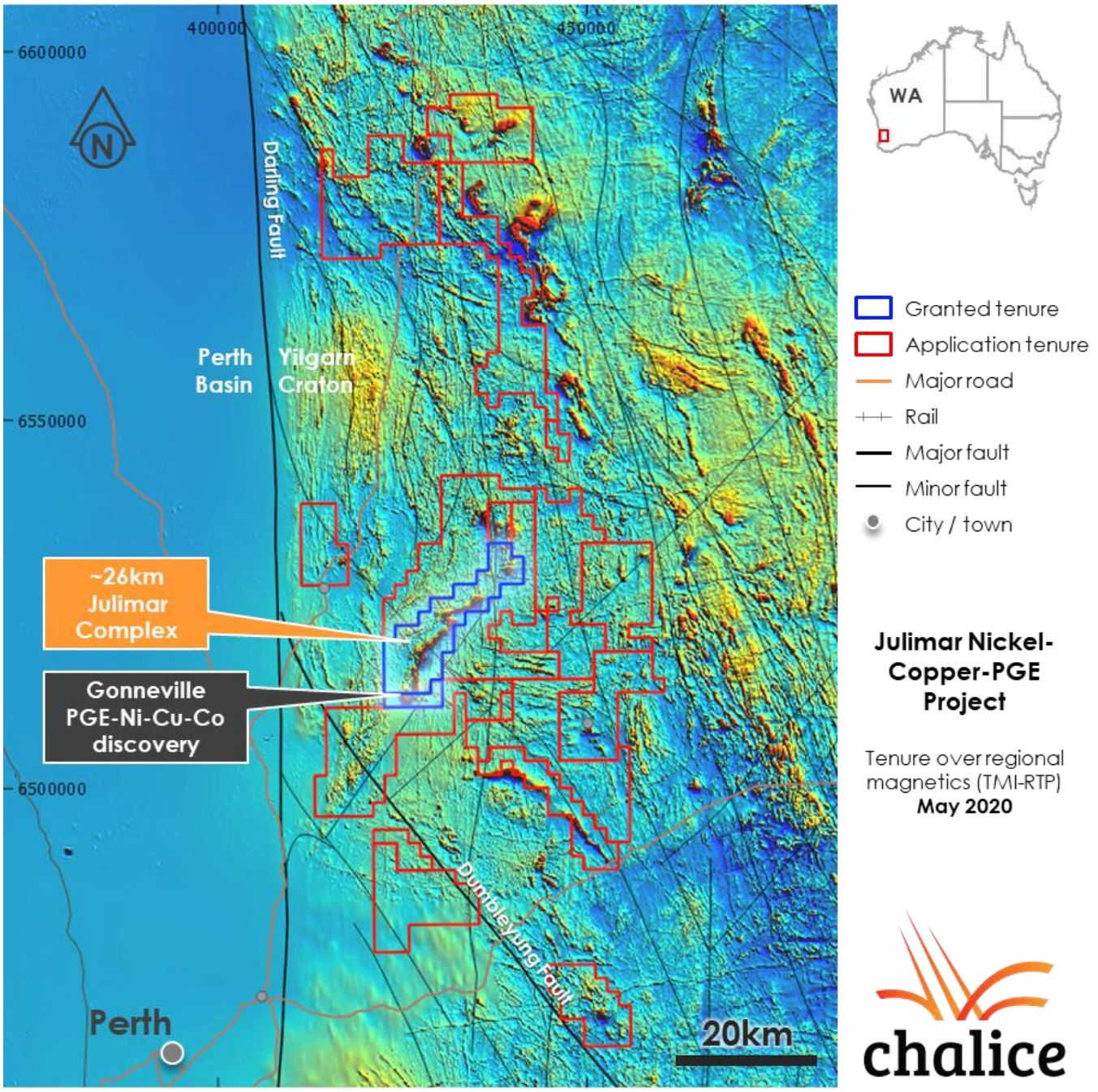

Figure 3. Julimar Project tenure over regional magnetics.

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.

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 Intrusion. Drilling to date has established the ~1.6km x 0.8km Intrusion has widespread zones of PGE mineralisation as well as several wide zones of high-grade PGE-Ni-Cu-Co +/- Au. The significant discovery established the new West Yilgarn Ni-Cu-PGE Province.

Four high-grade massive / matrix / heavily disseminated sulphide zones have been intersected to date, which are up to ~30m wide and have been defined over a ~400m x ~350m area. The zones typically have a grade range of 3-15g/t PGEs, 0-1.2g/t Au, 0.5-3.3% Ni, 0.4-4.5% Cu and 0.03-0.27% Co.

Broad intervals of PGE mineralisation have been confirmed in all holes drilled to date at the Intrusion and disseminated sulphides (trace to 3% on average) have been identified down to ~450m below surface.

Disseminated sulphide zones intersected to date typically have a grade range of 0.5-2.0g/t PGEs, 0.1-0.2% Ni, 0.05-0.15% Cu and 0.01-0.03% Co. In general, metal content appears to show a positive correlation with sulphur content and levels of potentially deleterious elements (arsenic, cadmium, selenium) are all low.

Weathering appears to extend down to ~30-40m below surface and a well-developed saprolite profile after serpentinite contains elevated PGE grades (typically ranging from 1.2-4.5g/t PGEs) from near surface to a depth of ~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 approximately US$2,300/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.

The information that is presented in this report on previously reported exploration results for the Julimar Nickel-Copper -PGE Project is extracted from the following ASX announcement:

- "Large-scale PGE system further expanded at Julimar", 11th May 2020

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

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, 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 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 "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", "indicative" 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; 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 testwork; 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, 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.

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

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	• An airborne time domain Electromagnetic (EM) survey was undertaken by CGG Aviation (Australia) Pty Ltd, an independent geophysical contractor. • The airborne EM survey employed the following equipment specifications and data sampling techniques: • System: CGG Helitem • Base frequency: 6.25Hz • Waveform: Square wave, 50% duty -cycle • Tx Current: 148A • Tx loop diameter: 35m • Tx dipole moment: 570,726 Am² • Rx Components: Z, X (preliminary dB/dt) • Off-time gates: 25 channels • Line spacing: 200m • Line direction: E-W • Nominal Tx height: 60m.
Drilling techniques	• *Drill type (eg. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable to a geophysical survey.
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.*	• Not applicable to a geophysical survey.
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.*	• Not applicable to a geophysical survey.
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*	• Not applicable to a geophysical survey.

Criteria	JORC Code explanation	Commentary
	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.*	
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.*	• The survey was undertaken by CGG Aviation (Australia) Pty Ltd, an independent geophysical service provider using the CGG Helitem² system on E-W lines with a line spacing of 200 m and a nominal Tx height of 60 m. • The base frequency for the survey was 6.25Hz and consisted of a Tx current of 148 A, a Tx dipole moment of 570,726 Am² and utilised a Tx loop diameter of 35 m. • The waveform for the survey is a square wave, 50% duty -cycle with Rx Components: Z, X (preliminary dB/dt) and off-time gates of 25 channels.
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.*	• Not applicable to a geophysical survey
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.*	• The grid system used for the survey data points is GDA94 - MGA (Zone 50).
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The survey was undertaken on E-W lines with a line spacing of 200m and a nominal Tx height of 60m
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 flight lines were orientated E-W to be close to orthogonal to the interpreted strike of the bedrock geology

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• Not applicable to geophysical survey
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• All digital data was subjected to review and vetting by the independent geophysical contractor and Armada Exploration Services

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.*	• The airborne EM survey was conducted over E70/5118 and E70/5119. • Tenure is held by CGM (WA) Pty Ltd, a wholly owned subsidiary of Chalice Gold Mines Limited with no known encumbrances. • Access for on-ground exploration in the Julimar State Forest requires Ministerial approval which has not yet been obtained. • The Company 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. • 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 V2O5, 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 Gonneville. No elevated Ni-Cu-PGE assays were reported. • Bestbet Pty Ltd undertook 27 stream

Criteria	JORC Code explanation	Commentary
		sediment samples within E70/5119. • 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.*	• Not applicable to a geophysical survey • No material information has been excluded.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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 drilling results have been reported in this release
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*	• No drilling results have been reported in this release

Criteria	JORC Code explanation	Commentary
	hole length, true width not known').	
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 drilling results have been reported in this release
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.*	• No other exploration data is relevant with regards to the geophysical survey
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• A resource drill-out is ongoing utilising 4 drill rigs over the Gonneville Intrusion