

ASX Announcement

15 June 2016

## Chalice secures prospective copper-gold exploration opportunity in Tennant Creek Mineral Field, Northern Territory

*Farm-in with Meteoric Resources at Warrego North Project will see drilling commence in weeks*

### Highlights:

- **Farm-in agreement with Meteoric Resources (MEI) on the prospective Warrego North Copper-Gold Project gives Chalice the right to earn 70% by sole funding \$800,000 of exploration expenditure.**
- **Project located near the historical Warrego copper-gold mine, the largest deposit mined at Tennant Creek (production of 1.3Moz of gold, 90,000t of copper from 5Mt of ore at 8g/t Au and 2% Cu<sup>1</sup>).**
- **Prominent magnetic anomalies identified by aeromagnetic surveys, including the priority Parakeet anomaly, a composite circular 1km X 1km magnetic anomaly associated with a gravity anomaly.**
- **Anomalous copper, bismuth and/or gold intersected in previous drill testing.**
- **Chalice to commence initial 800m RC/diamond drilling program within 4-6 weeks, subject to obtaining approvals, to test the Parakeet targets at depth.**

Chalice Gold Mines Limited (ASX: CHN) (TSX: CXN) ("Chalice" or "the Company") is pleased to advise that it has secured a prospective copper-gold exploration opportunity adjacent to the high-grade Warrego copper-gold mine in the Tennant Creek Mineral Field of the Northern Territory after entering into a farm-in agreement with Meteoric Resources NL (ASX: MEI) ("Meteoric") at its 100%-owned Warrego North copper-gold project.

The farm-in agreement gives Chalice the right to earn up to a 70% interest in the Project by sole funding a total of \$800,000 in exploration expenditure. Chalice may earn an initial 51% by sole funding \$400,000 and there is an obligation to drill at least one diamond drill hole of at least 300m within 12 months before Chalice can withdraw.

The Project contains several high-priority exploration targets include prominent magnetic anomalies identified by aeromagnetic surveys and anomalous copper, bismuth and gold results from historical drilling. Subject to obtaining the required approvals, Chalice plans to commence an initial program of 800m of RC/diamond drilling within 4-6 weeks to test the priority Parakeet anomaly.

### Warrego North Project (EL23764)

The Warrego North Project (EL23764) is located on the western extension of the Warramunga Formation, a sequence of Palaeoproterozoic turbiditic sediments which host all of the ironstone copper-gold-bismuth deposits in the Tennant Creek Mineral Field (Figure 1).

<sup>1</sup>Historic Warrego mine production (not owned by Chalice) located about 5km from EL23764.

EL23764 contains two separate domains of Warramunga Formation, separated by the Devils Suite granite. The eastern area is situated adjacent to the historical Warrego gold-copper mine, which is the largest deposit mined in the Tennant Creek goldfield which produced 1.3Moz Au, 90,000t Cu from 5Mt ore mined at 8 g/t Au and 2% Cu.

EL23764 has been subject to historical exploration programs including aeromagnetic, ground magnetics and down-hole magnetic surveys and ground gravity with follow-up shallow reconnaissance vacuum drilling and selected RC drilling.

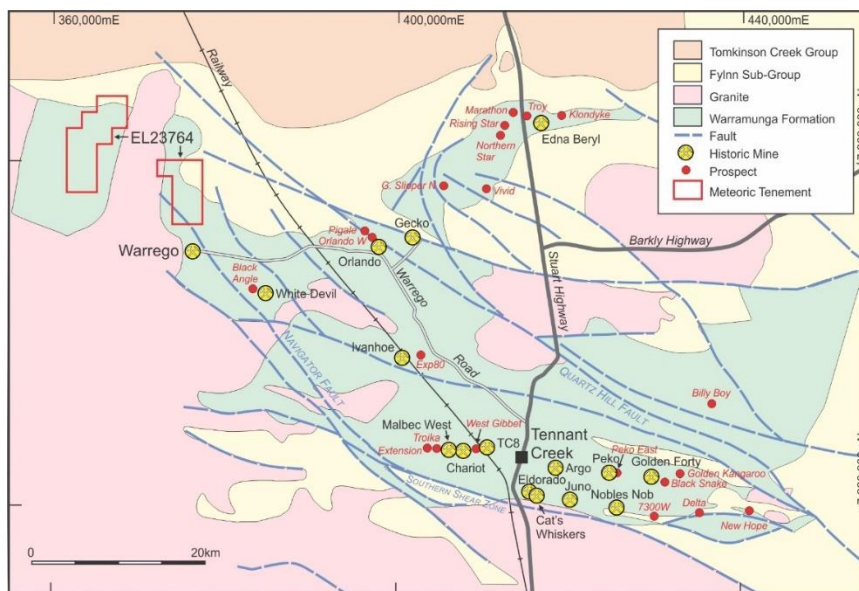


Figure 1. Location map of Warrego North Project (EL23764) in the Tennant Creek Mineral Field

Aeromagnetic surveys have identified prominent magnetic anomalies over the western and eastern project areas as shown in Figure 2 below. The most promising target is Parakeet, which is a composite circular 1km x 1km magnetic anomaly with an associated gravity anomaly.

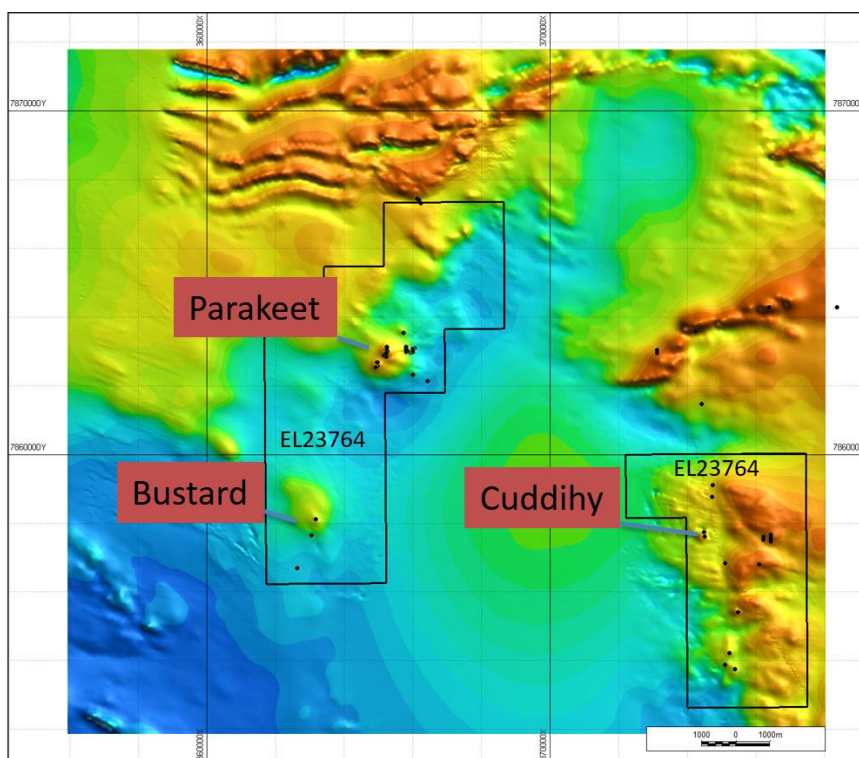


Figure 2. Total magnetic intensity image showing location of main magnetic anomalies and areas of RC drill testing.

Previous RC drilling intersected anomalous copper, bismuth and/or gold in three areas of drill testing. Modelling of the geology and mineralisation intercepts has identified a strong apparent trend of mineralisation which lies within the composite magnetic target (see Figure 3). Low-grade copper, bismuth and/or gold mineralisation is associated with magnetite/hematite alteration of the host rock metasediments.

Modelling of the aeromagnetic and down-hole magnetic anomalies and ground gravity has identified potential depth extension of these anomalies below the current depth of RC drill testing (~200m depth).

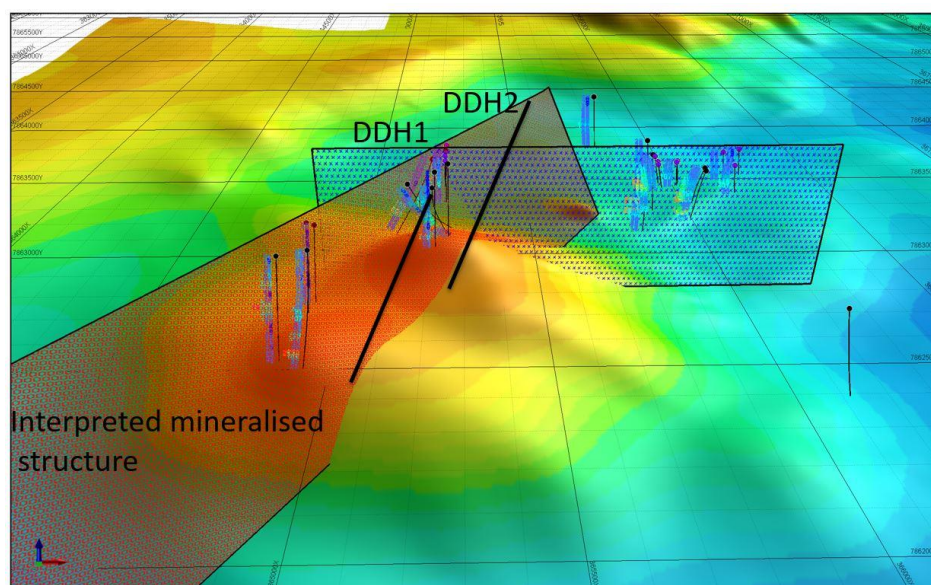


Figure 3. Parakeet target showing previous and proposed drilling and interpreted mineralised structure on a TMI image.

### Proposed work program

Chalice plans to undertake an initial 2-hole (800m) Reverse Circulation/diamond drilling program to test the Parakeet targets at depth (~300m depth) as shown in Figure 3. Drilling is targeted to test the magnetic model where it is interpreted to intersect with the apparent trend of mineralisation as defined from previous low-grade intersections of low-grade copper, bismuth and/or gold.

Chalice expects to submit a Mine Management Plan to the Northern Territory Department of Mines and Energy next week and subject to approval the Company expects to commence drilling in about 4-6 weeks.

Commenting on the farm-in agreement with Meteoric, Chalice's Managing Director Tim Goyder said: *'Warrego North fits one of Chalice's core strategies of identifying low cost and potentially high-impact advanced exploration projects. Warrego North will give the Company exposure to a potentially significant high value copper-gold discovery'*.

TIM GOYDER  
Managing Director

For further information, please contact:  
Tim Goyder, Managing Director  
Chalice Gold Mines Limited  
Telephone +618 9322 3960

15 June 2016

## **Competent Persons and Qualifying Persons Statement**

The information in this report that relates to Exploration Results in relation to the Warrego North Project is based on information compiled by Dr Kevin Frost BSc (Hons), PhD, who is a Member of the Australian Institute of Geoscientists. Dr Frost is a full-time employee of the company and has sufficient experience in the field of activity being reported 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 release of information in the form and context in which it appears here.

## **Forward Looking Statements**

This document 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 document 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 estimation of mineral reserve and mineral resources, the realisation of mineral reserve estimates, the likelihood of exploration success, 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, expects or does not expect, is expected, will, may would, budget, scheduled, estimates, forecasts, intends, anticipates or does not anticipate, or believes, 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 exploration activities; changes in project parameters as plans continue to be refined; 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; 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](http://sedar.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 – Warrego North Project - JORC Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>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.</i>	No sampling completed by Chalice to date
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Not applicable
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	
	<i>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.</i>	
<b>Drilling techniques</b>	<i>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).</i>	No drilling completed by Chalice
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Not applicable
	<i>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.</i>	Not applicable
<b>Logging</b>	<i>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.</i>	Not applicable
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Not applicable
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Not applicable
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Not applicable

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	Not applicable
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Not applicable
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Not applicable
	<i>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.</i>	Not applicable
	<i>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</i>	Not applicable
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable
	<i>The use of twinned holes.</i>	Not applicable
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Not applicable
	<i>Discuss any adjustment to assay data.</i>	Not applicable
<b>Location of data points</b>	<i>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.</i>	Not applicable
	<i>Specification of the grid system used</i>	Not applicable
	<i>Quality and adequacy of topographic control.</i>	Not applicable
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Not applicable
	<i>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.</i>	Not applicable
	<i>Whether sample compositing has been applied.</i>	None taken
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Not applicable
	<i>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.</i>	Not applicable
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Not applicable
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	None completed

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>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.</i>	<p>The Warrego North Project comprises 1 granted exploration licences (EL23764) which covers a total area of ~94km<sup>2</sup> located ~60km NW of Tennant Creek in the Northern Territory.</p> <p>The tenement is owned 100% by Meteoric Resources NL</p> <p>Chalice has executed a farm-in agreement with Meteoric Resources whereby Chalice can earn-in in two stages with a minimum commitment of 1 diamond drill hole (300m depth):</p> <ol style="list-style-type: none"> <li>1. Earn-in 51% interest by spending \$400,000 within 36 months, and;</li> <li>2. Earn-in 70% by spending A\$800,000 within 60 months of the execution date of the Agreement.</li> </ol> <p>There are no other material issues affecting the tenement</p>
	<i>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.</i>	Tenement is in good standing.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>There has been periods of modern exploration work including prospecting with rock-chip sampling, aeromagnetic, ground magnetic, ground gravity surveying, shallow vacuum drilling, and reverse circulation (RC) drilling.</p> <p>Historic exploration reports have been reviewed and results summarised; however, Chalice has not yet completed digital capture and compilation of data collected by previous explorers.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Warrego North Project is located in the western part of the Palaeoproterozoic Warramunga Formation where it comprises a sequence of turbiditic sediments which are weakly to strongly deformed and intruded by granite and/or porphyry. Tennant Creek hosts numerous ironstone-hosted Tennant Creek-style copper-gold-bismuth deposits, the largest of which have been mined since the 1960's. The deposits have been emplaced as hydrothermal pipe-like bodies which have a strong association with magnetite-haematite ironstones. The deposits show a strong alignment parallel to province-wide structural trends.</p> <p>Tennant Creek-style ironstone-hosted copper-bismuth-gold deposit vary in size from a few tens of tons to the largest deposits which are up to 5Mt with average gold grades of 19 g/t Au and variable copper grades up to 2% Cu.</p>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	Previous exploration drilling has been undertaken on EL23764 prior to Chalice. Drilling is reported as shallow vacuum and reverse circulation drilling. Chalice has not verified the location or details of previous drill holes.
<b>Data aggregation methods</b>	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.	Not verified
	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.	Not verified
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not verified.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	Not verified.
<b>Diagrams</b>	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.	See Figures in body of report
<b>Balanced reporting</b>	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 results reported by Chalice.
<b>Other substantive exploration data</b>	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.	Previous exploration programs on the project include aeromagnetic surveys, ground magnetic surveys, ground gravity survey, downhole magnetic surveys.
<b>Further work</b>	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul style="list-style-type: none"> <li>• Capture and compilation of historic data into a digital database;</li> <li>• RC/Diamond drilling to test geophysical targets which are interpreted to occur below the level of current drill testing.</li> </ul>