



ABN 47 116 648 956

## ASX Announcement

# Promising initial assays and further sulphides at Mogoraib North

Sulphides now intersected in three target zones over a two kilometre strike length: drilling continuing

**Chalice Gold Mines Limited (ASX: CHN/TSX: CXN)** is pleased to report further encouraging results from early-stage exploration at its **Mogoraib North Copper-Zinc Project** in Eritrea, East Africa (Chalice – 60%; Eritrean National Mining Corporation (ENAMCO) – 40%).

Mogoraib North is located 10km north of the world-class Bisha Polymetallic Mine (1.1Moz gold, 1.04Mlbs copper, 35.8Moz silver and 2.68Mlbs zinc\*), along the same prospective VMS trend (*Figure 1*). Chalice's drilling is targeting potential Volcanic Hosted Massive Sulphide ("VHMS") systems similar to Bisha.

The Company has received assay results from previously reported diamond drill-hole MOGD-00021 which intersected a **10m interval** of semi-massive to massive pyritic sulphides within a broader 41m wide zone of stringer and disseminated sulphides at the **T209** cluster of VTEM anomalies (*see ASX Announcement* – 1 November 2012).

The laboratory assay results for this intersection are summarised below:

- 5m grading 0.86% Cu, 1.33% Zn, 0.1g/t Au, 7.48g/t Ag from 145m, including:
  1m at 1.03% Cu, 2.3% Zn
- 2.5m grading 0.49% Cu, 1.18% Zn, 0.28g/t Au, 8.22g/t Ag from 154.5m, including:
  1m at 1.25% Cu, 2.55% Zn

MOGD-00021 was drilled to test a VTEM conductor anomaly and coincident gravity anomaly, T209, within a linear cluster of conductor and gravity anomalies extending over a strike length of two kilometres (*see Figure 2*).

The Company has now completed a further eight wide-spaced diamond holes testing other VTEM conductors and gravity anomalies along this zone.

Pyritic sulphides ranging from disseminated and stringer to semi-massive and massive have been intersected in each of these holes together with visible chalcopyrite and sphalerite. Individual semi-massive to massive sulphide units from 0.5 to 6.5 metres in width occur within broader envelopes of disseminated and stringer sulphides, mainly pyrite and pyrrhotite, associated with intense alteration of the host volcanics.

The widespread occurrence of sulphides and the mineralogy observed in diamond drill core suggests that the intersection in MOGD-00021 may occur on the fringes of a large VHMS system. While a great deal of further drilling and exploration is required, Chalice is very encouraged by the promising results received to date.

Chalice Gold Mines Limited, Level 2, 1292 Hay Street, West Perth, Western Australia T: +618 9322 3960 F: +618 9322 5800 E: info@chalicegold.com www.chalicegold.com Drilling is planned to continue until mid-December with a further 3,000m expected to be completed before the Christmas break. Targets to be tested will include high priority regional VTEM targets as well as further holes within the T209 cluster.

In the meantime, a detailed gravity survey has now been completed over a 12 sq km zone covering the VTEM anomaly trend to refine the previous regional gravity survey data (*see Figure 3*). This has highlighted several gravity highs on the northern end of the trend as high priority targets.

The Company is currently mobilizing electromagnetic (EM) survey equipment from Australia to commence an extensive program of fixed-loop surface EM and down-hole EM surveys covering the entire prospective corridor. The equipment is expected to be in Eritrea before the end of the month with surveying to commence shortly thereafter and continuing through into 2013.

The EM surveys will provide much greater resolution than the airborne VTEM survey that has guided the drilling to date.

Chalice's Executive Chairman, Tim Goyder, said:

"The results from MOGD-00021, combined with what we have seen in follow-up drilling, have given us confidence that we are onto a significant VHMS system at Mogoraib North that previously lay totally undiscovered beneath shallow cover.

"The tenor of results seen in the discovery hole is consistent with mineralization often seen on the fringes of a large system like Bisha. The extent of sulphides intersected in the drilling to date gives us great confidence that we are now in a 'hot spot' with outstanding potential to discover economic concentrations of massive sulphide mineralization within the broader system.

"Exploration will now begin to focus on outlining the extent of mineralization and vectoring in on higher grade zones. Our planned surface and down-hole EM surveys will provide the detailed resolution to target ongoing drilling more effectively, providing a significantly more accurate EM model to work from than that generated by the airborne VTEM survey.

"We are excited by the opportunities unfolding at this project and we plan to intensify our exploration to follow up on the promising results achieved to date."

Tim Goyder, Executive Chairman

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\* On 24<sup>th</sup> June, 2012 Nevsun Resources Limited announced updated Probable Reserves at its Bisha Mine as tabled below. This is in addition to 2011 gold production of 379,000 ozs.

Probable Reserves						Contained Metal			
Zone	Tonnes	Copper	Zinc	Gold	Silver	Cu	Zn	Au	Ag
	('000's)	%	%	g/t	g/t	('000 lbs)	('000 lbs)	('000 Oz)	('000 Oz)
Oxide Phase	900			5.79	35	-	-	167	1,020
Supergene Phase	6,420	4.09		0.67	28	578,880	-	138	5,780
Primary Phase	19,190	1.09	6.33	0.72	47	461,540	2,679,500	441	28,950
Total						1,040,420	2,679,500	746	35,750



Figure 1: Mogoraib-Bisha regional geology showing location of T209 discovery



Figure 2: Geology of Mogoraib North tenement showing location of T209 anomaly cluster



Figure 3: Gravity and magnetic images covering the T209 cluster of anomalies and completed drill-holes.

#### **Competent Persons and Qualified Person Statement**

The information in this news release that relates to exploration results is based on information compiled by Dr Doug Jones, a full-time employee and Director of Chalice Gold Mines Limited, who is a Member of the Australasian Institute of Mining and Metallurgy and is a Chartered Professional Geologist. Dr Jones has sufficient experience in the field of activity being reported to qualify as a Competent Person as defined in the 2004 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 Jones 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, except as required by law or regulation.

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, statements with respect to the estimation of mineral reserves and mineral resources, the realization 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, 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 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 ore reserves, grade or recovery rates; accidents, labour disputes and other risks of the mining industry, 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. Although the Company has attempted to identify important factors that could cause actual 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.

### Sampling Procedures and Quality Assurance

Diamond drill core is logged and photographed prior to splitting with a core saw. One half of the core is retained on site whilst the other half is bagged and dispatched to the Africa Horn Preparation facility (a division of NATA-accredited Intertek-Genalysis Laboratories) in Asmara for crushing to -2mm and splitting. Certified reference materials (CRMs) are submitted with all sample batches at the rate of 1 per 20-25 routine samples. The CRM's inserted have values ranging from very low to high grade. The coarse reject is stored and the split sub-sample is pulverized to a nominal 95% passing -75 micron using an LM2 pulverizer.

The pulverized pulp is further split into two 100g to 150g sub-samples; a primary pulp sample is sent for analysis and a duplicate pulp sample is kept as a reference and the remaining fine (-75 micron) reject is stored. A quartz wash is pulverized between samples and is stored for random testing of preparation contamination.

The sample pulps are transported by air to NATA-accredited Intertek-Genalysis Laboratories in Perth Western Australia for assay. For drill core and RC samples used for resource analysis the majority of gold assaying is completed using a lead collection of 50g fire assay method with an atomic absorption spectroscopy (AAS) finish. Additional specified multi-element assays are carried out by ICP-OES on 25g sub-sample prepared using aqua regia digest. Bulk density determinations using water immersion method are carried out on every metre of core within expected mineralisation and every 10m within waste zones. QA/QC monitoring is applied to all drill core assays as per the protocols described above.