

ASX RELEASE 29 OCTOBER 2014

# MOD RESOURCES LIMITED (ASX: MOD) QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 30 SEPTEMBER 2014

The Board of MOD Resources Ltd ("MOD" or the Company) is pleased to announce significant progress at the Botswana Copper Project during the quarter. This follows a decision to focus on Botswana and postpone drilling at the Sams Creek Gold Project in New Zealand due to current market sentiment towards gold.

MOD is the second largest licence holder in the highly prospective Kalahari Copper Belt in Botswana. Drilling commenced at the high grade Mahumo Copper/Silver Project on 25 September 2014. Drilling completed to date and recent metallurgical test work has already produced very encouraging early results at Mahumo.

# **HIGHLIGHTS – Botswana Copper Project**

- Two high grade copper/silver deposits at Mahumo identified from previous drilling. Mahumo is MOD's first priority and one of several targets to be drilled in the current program
- A\$2.0M raised in placement announced 27 August 2014. Majority of funds intended for drilling now in progress at Mahumo and for testing other high priority targets in 2015
- All ten shallow drill holes to date at the West Zone deposit (Figure 1) intersected visible copper sulphide mineralisation. First assays are expected early November
- Second drill rig now on site testing for extensions below the West Zone (>200m depth)
- Outstanding results from initial metallurgical test work which produced concentrate grades up to 59% Cu and 1,900ppm Ag
- Conceptual mining study awaiting results from the current drilling program at Mahumo
- MOD granted two year extension for PL 686/2009 (463km<sup>2</sup>) which covers Mahumo Project
- Other targets for drilling from March quarter 2015 include Molelo Intrusion and Marthie Prospect

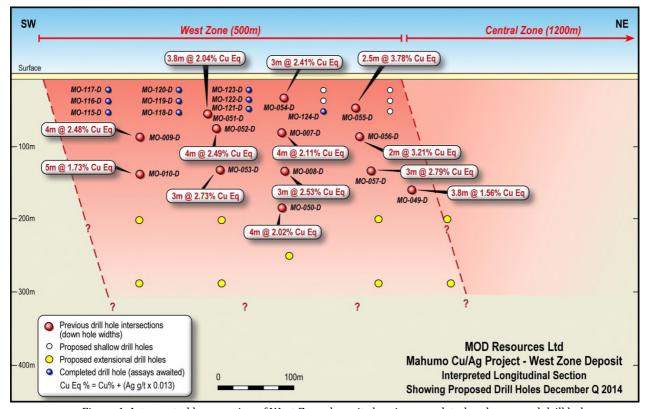


Figure 1: Interpreted long section of West Zone deposit showing completed and proposed drill holes



#### **BOTSWANA COPPER PROJECT - MAHUMO PROJECT**

Drilling at the West Zone deposit at Mahumo commenced on 25 September 2014. The current program is being conducted by Orbit Drilling using two drill rigs and drill crews sourced in Botswana. Drilling comprises shallow HQ diamond drill core holes to <50m vertical depth in the area of two conceptual pit shells (West Zone and East Zone) and deeper NQ diamond core holes >200m below the current limit of drilling at the West Zone. The first objective is to define a resource for the West Zone to approximately 400m depth.

Widely spaced drilling is then proposed to test the potential for extensions below the East Zone. Further potential exists below the 1200m long Central Zone at Mahumo (Figure 2).

The drilling at Mahumo is expected to continue during the March quarter 2015 before moving to test other targets.

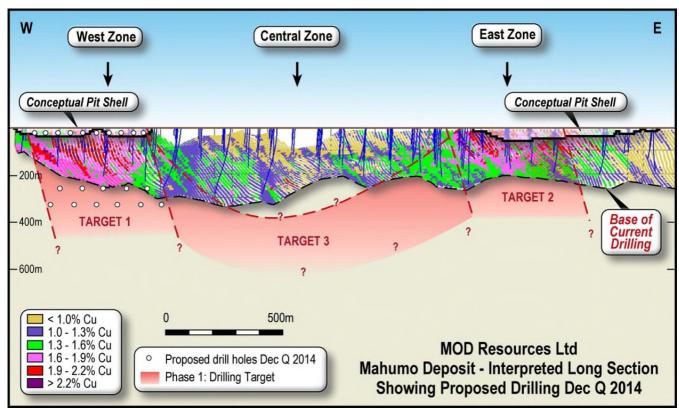


Figure 2: Preliminary interpretation of 2.5km long inclined long section at Mahumo

All shallow HQ core drill holes (Table 1) completed to the date of this report at the West Zone intersected visible copper sulphide mineralisation. Based on logging of drill core, mineralisation occurs in veins and disseminated form over intervals between 4m to 9m down hole width and includes chalcocite with minor malachite (Figure 3). Chalcocite is a high tenor copper sulphide containing ~79.9% copper. Trace chrysocolla occurs at shallow depth in fractures generally below the main sulphide intersections.

Vein hosted mineralisation occurs immediately below a distinctive Marl unit logged in each drill hole. Drill hole intersections are approximately 15-20m apart on 100m spaced sections (Figure 1 & Table 1). **Note:** Assay results are required to confirm the grades and widths of the copper mineralisation identified by visual logging and interpretation of the Mahumo drill core.

Samples of half core from mineralised intersections for the first seven drill holes listed in Table 1 (MO-115-D to MO-121-D inclusive) have been sent for analysis with assay results expected in early November.



TABLE 1: DRILL HOLES COMPLETED TO 27 OCTOBER 2014								
Collar Location WGS 84 Datum Zone 34 South								
Hole ID	UTM East	UTM North	Elevation (m)	Azimuth ( <sup>e</sup> )	Inclination ( <sup>e</sup> )	E.O.H (m)		
MO-115-D	645171	7658621	1092	325	-60	60.9		
MO-116-D	645167	7658628	1091	325	-60	42		
MO-117-D	645163	7658635	1088	325	-60	34		
MO-118-D	645262	7658671	1091	325	-60	55.6		
MO-119-D	645257	7658679	1088	325	-60	42		
MO-120-D	645252	7658684	1088	325	-60	32		
MO-121-D	645351	7658719	1090	325	-60	56.8		
MO-122-D	645347	7658726	1090	325	-60	50.4		
MO-123-D	645342	7658732	1090	325	-60	36.9		
MO-124-D	645435	7658768	1089	325	-60	52.8		

Table 1: Drill holes completed to 27 October 2014. Assays awaited.



Figure 3: Copper mineralisation (grey) along margins of veins at 30m depth in drill hole MO-116-D

## **Metallurgical Test work**

On 29 September 2014, MOD announced results from preliminary rougher and cleaner flotation test work of high grade copper/silver mineralisation from Mahumo. This work was conducted by Independent Metallurgical Operations (IMO) on composite samples of intersections between 40-60m depth from previous drill holes at the West Zone and East Zone Deposits. This work has produced outstanding results (Table 2).

Although the results are preliminary and require confirmation test work on larger samples from the current drilling program, some initial conclusions can be made:

- Concentrate grades are exceptionally high and are consistent with observed mineralogy
- West Zone concentrate grade is 59% Cu and 1,900g/t Ag, at 87% Cu recovery
- East Zone concentrate grade is 57% Cu and 1,550g/t Ag, at 73% Cu recovery
- Further optimisation work will target higher copper recoveries



	Donath	Concentrate	Concent	rate Grade	Recovery	
Composite	Depth (m)	Mass Pull %	Cu (%)	Ag (ppm)	Cu (%)	Ag (%)
WEST Zone	40-52.5	2.7	59.0	1,900	87.2	90.0
EAST Zone	45-61	2.7	57.2	1,550	73.4	84.3

Table 2: Preliminary rougher and cleaner flotation results from West Zone and East Zone composite samples

Initial metallurgical results indicate that Mahumo has potential to produce very high grade concentrates (>45% Cu) by conventional sulphide flotation. In addition, subsequent assays of the West Zone and East Zone concentrates confirmed very low arsenic and chlorine values (around 20ppm As and 30ppm Cl) and relatively low fluorine values (175 & 220ppm F) in the concentrates. Arsenic, chlorine and fluorine are regarded as deleterious elements in concentrates if they occur at levels higher than those reported from Mahumo. Further metallurgical test work will be undertaken on mineralisation from the current drilling program to confirm early results.

#### **Licence Renewals**

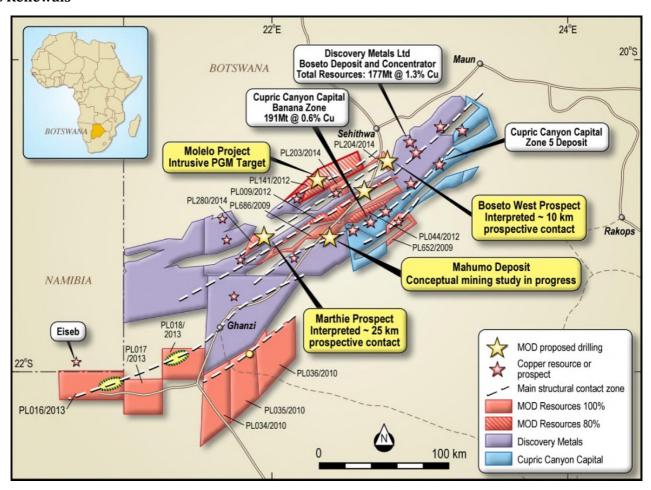


Figure 4: MOD's tenement holdings in Kalahari Copper Belt showing current drilling targets.

On 23 September 2014, MOD was granted a two year renewal extension for 100% of the area of PL 686/2009. MOD owns 100% of the prospecting rights to PL 686/2009 which covers  $463 \, \mathrm{km^2}$  in the centre of the Kalahari Copper Belt and importantly includes the Mahumo deposit.

MOD was also granted a two year extension for 50% of the area of PL 652/2009. The retained area covers 190.9km<sup>2</sup> considered prospective for copper/silver discoveries. It includes several undrilled soil copper anomalies along two interpreted prospective contacts coincident with major structures.

#### **QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 30 SEPTEMBER 2014**





During the September quarter, MOD relinquished PL's 650/2009 and 651/2009 due to their low prospectivity. As a result, MOD's holdings have been reduced to a total of approximately 6,900km<sup>2</sup>. This is consistent with MOD's strategy to reduce holdings in low priority areas and focus activities on areas which have known mineralisation or are considered to have the best potential for making new discoveries.

## **Other Drilling Targets**

In addition to Mahumo, MOD's geological team has made excellent progress on other targets where preliminary drilling is planned:

- 1. **Molelo Intrusion** ~10km long mafic intrusion with strong hematite/potassic alteration in overlying breccias, conglomerates and sediments. The intrusion is strongly veined and altered and contains elevated platinum and palladium assays in the one diamond core drill hole completed by MOD to date.
- 2. **Marthie Prospect** 25km long interpreted copper prospective contact folded around an anticline axis within a well-defined structural corridor. The area is covered by sand and the interpreted setting has geological similarities to other known copper/silver deposits in the belt.
- 3. **Boseto West Prospect** 10km long section of the interpreted copper prospective contact which appears to occur along strike from the Plutus open pit mine at Boseto, which is in production.
- 4. **PL's 009/2012 & 044/2012** untested soil copper anomalies along the northern and southern margins of a major basement anticline. Several RC drill holes planned in November 2014.

## **Recent Developments**

MOD directors Julian Hanna and Steve McGhee and General Manager Exploration (Africa) Jacques Janse van Rensburg conducted a 10 day tour of the Mahumo Project which included meetings with numerous stakeholder groups in the region. These include the Ministry of Minerals, Energy and Water Resources, Geological Survey and Botswana Power Corporation. The Botswana Government recognises the potential of the Kalahari Copper Belt and is encouraging collaboration between the various parties and government agencies to help develop the region.



Diamond drilling underway at Mahumo Project



# SAMS CREEK GOLD PROJECT (MOD 60%, OceanaGold Corporation 40%)

The mineral resource at Sams Creek which contains >1Moz gold was detailed in an ASX announcement on 9 October 2013. The resource is centred on the Main Zone deposit which comprises significant widths (up to 35m true width) of porphyry hosted gold mineralisation. The Main Zone represents only part of the  $\sim$ 7km long Sams Creek porphyry dyke and the deposit remains completely open along strike and at depth.

The resource at Main Zone includes numerous high-grade gold intersections including: **19.6m** @ **6g/t**, **16.2m** @ **5.2g/t**, **31.1m** @ **3.6g/t** and **63m** @ **2.4g/t**. (All intersections were reported as down hole widths as detailed in the ASX Announcement on 31 July 2013). It is expected that future drilling will target high grade mineralisation within the porphyry that may potentially be suited to underground mining.

In the June Quarter 2014 Activities Report, MOD Board announced a decision to postpone drilling activities at Sams Creek due to the current low market sentiment towards gold. Drilling is expected to resume when market conditions and the gold price improve.

#### **CORPORATE**

On 27 August 2014, MOD announced the raising of \$2 million in a two tranche placement to follow up encouraging results at MOD's extensive holdings in the Kalahari Copper Belt in Botswana.

Blue Ocean Equities Pty Ltd was lead manager to the placement which involved the issue of 143.125 million new ordinary shares at an issue price of \$0.008 per share pursuant to tranche one and 106.875 million new ordinary shares at an issue price of \$0.008 per share pursuant to tranche 2. The issue of securities under tranche two was approved by shareholders at the general meeting held on 20 October 2014.

During the period 45 million unlisted \$0.20 options expired without being exercised.

For further information, please contact:

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#### **Competent Person's Statements**

The information in this announcement that relates to Geological Data and Exploration Results at the Sams Creek Gold Project is based on and fairly represents information compiled by Mr Paul Angus, Project Manager of Sams Creek and a Director of MOD Resources Ltd's subsidiary, Sams Creek Gold Ltd. Mr Angus is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the December 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Angus consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

The information in this announcement that relates to Geological Data and Exploration Results at the Botswana Copper Project is reviewed and approved by Jacques Janse van Rensburg, BSc (Hons), General Manager Exploration (Africa) for MOD Resources Ltd. He is registered as a Professional Natural Scientist with the South African Council for Natural Scientific Professions (SACNASP) No. 400101/05 and has reviewed the technical information in this report. Mr Janse van Rensburg has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity which it is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves. Mr Janse van Rensburg consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

Information in this announcement relates to previously released exploration data disclosed under the JORC Code 2004. It has not been updated to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported and is based on and fairly represents information reviewed and approved by Jacques Janse van Rensburg and Paul Angus.

#### **Forward Looking Statements and Disclaimer**

This announcement contains certain statements which constitute "forward looking statements".

Examples of forward looking statements in this release are: "Majority of funds intended for drilling now in progress at Mahumo and for testing other high priority targets in 2015", and: "All ten shallow drill holes to date at the West Zone deposit (Figure 1) intersected visible copper sulphide mineralisation", and: "The first objective is to define a resource for the West Zone to approximately 400m depth", and: "Mahumo has potential to produce very high grade concentrates (>45% Cu) by conventional sulphide flotation", and: "Widely spaced drilling is then proposed to test the potential for extensions below the East Zone. Further potential exists below the 1200m long Central Zone at Mahumo", and: "MOD's strategy to reduce holdings in low priority areas and focus activities on areas which have known mineralisation or are considered to have the best potential for making new discoveries", and: "Marthie Prospect – 25km long interpreted copper prospective contact folded around an anticline axis within a well-defined structural corridor. The area is covered by sand and the interpreted setting has geological similarities to other known copper/silver deposits in the belt ", and: "postpone drilling activities at Sams Creek due to the current low market sentiment towards gold. Drilling is expected to resume when market conditions and the gold price improve."

Such forward looking statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward-looking statement. No representation or warranty, expressed or implied, is made by MOD Resources Ltd that material contained in this announcement will be achieved or proved correct.

This announcement does not include reference to all available information on MOD Resources Limited or the Sams Creek Gold Project or the Botswana Copper Project and should not be used in isolation as a basis to invest in the Company. Potential investors should refer to MOD Resources Limited's other public releases and consult professional advisers before investing in the Company.

#### **Exploration Targets and Results**

This announcement refers to Exploration Targets as defined under Sections 18 and 19 of the 2012 JORC Code.

The Exploration Targets quantity and quality referred to in this release are conceptual in nature. There has been insufficient exploration to define a mineral resource and it is uncertain if further exploration will result in the Exploration Targets being delineated as a mineral resource.

This release includes no reference to new assay results or drilling intersections or Mineral Resources which haven't already been announced by MOD Resources Ltd previously.

#### **QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDED 30 SEPTEMBER 2014**





#### **PROJECT BACKGROUND**

#### 1. <u>Botswana Copper Project</u>

MOD's Botswana Copper Project comprises a strategically located tenement holding of  $\sim$ 6,918km² at the centre and western part of the Kalahari Copper Belt in Botswana.

Several of MOD's Botswana licences adjoin exploration licences held by ASX-listed Discovery Metals Ltd and Canadian-based Hana Mining Ltd, which was taken over by Cupric Canyon Capital in February 2013. The Kalahari Copper Belt became Africa's newest copper-silver mining province during 2012 when Discovery Metals commissioned its Boseto mine.

MOD discovered high grade copper-silver mineralisation at the Corner K prospect (on Prospecting Licence 686) with its initial drilling program in 2011. In September 2012, MOD announced a maiden JORC 2004 compliant Indicated and Inferred Mineral Resource of 9.5Mt grading 1.14% copper equivalent along a 4.5km strike length at Corner K (See ASX announcement 24 September 2012). The resource has not been updated to comply with the JORC Code 2012 on the basis the information for the existing resource has not materially changed since it was last reported in an announcement to ASX on 24 September 2012.

A separate mineral resource for the Mahumo Deposit (which represents the high grade western half of the existing Corner K mineral resource) will be estimated on completion of the current drilling program described in this report.

### 2. <u>Sams Creek Gold Project</u>

The Sams Creek Gold Project is located 100km north of the Reefton gold field in the South Island of New Zealand.

MOD Resources Limited (ASX: MOD), through subsidiary Sams Creek Gold Ltd, owns 60% of Sams Creek Gold Project. MOD can earn up to 80% of Sams Creek from OceanaGold Corporation, which is MOD's third largest shareholder and New Zealand's largest gold producer.

Sams Creek has an existing JORC 2004 compliant Inferred and Indicated Mineral Resource containing approximately 1.0Moz gold (Refer MOD ASX announcement dated 9 October 2013). The resource has not been updated to comply with the JORC Code 2012 on the basis the information has not materially changed since it was last reported in an announcement to ASX on 9 October 2013.

The known gold mineralisation at Sams Creek is contained within a porphyry dyke with an average thickness of 30-35m in the Main Zone deposit. The dyke can be traced 6km along strike within the Sams Creek permit area and extends into the 100% owned Barrons Flat permit area which directly adjoins Sams Creek.

The current Mineral Resource at Sams Creek (Stage 2 Resource) is contained within a 1km section of the host porphyry, highlighting the potential for an increase in the known gold resource elsewhere along the porphyry dyke. This potential is supported by zones of highly anomalous gold mineralisation confirmed by surface sampling and limited drilling of the porphyry on either side of the Main Zone deposit. These results have been announced previously.

 $It should be noted that the Sams \ Creek porphyry \ dyke \ does \ not \ always \ contain \ gold \ mineralisation.$ 



# **TABLE 3 - SCHEDULE OF EXPLORATION LICENCES**

# **Sams Creek Gold Project**

PERMIT/LICENCE NUMBER	SIZE (KM²)	HOLDING	TITLE HOLDER	LICENCE COMMENCEMENT DATE	RENEWAL DATE
EP40338 EP54454 PP 55645	30.6 32.0 39.2	60% 100% 100%	Sams Creek Gold Limited Sams Creek Gold Limited Sams Creek Gold Limited	27-Mar-98 25-Sep-12 28-Feb-14	27-Mar-17 25-Sep-17 28-Feb-16
TOTAL	101.8			•	

# **Botswana Copper Project**

LICENCE NUMBER	SIZE (KM²)	HOLDING	TITLE HOLDER	LICENCE	RENEWAL
				COMMENCEMENT DATE	DATE
Northern Licences					
PL652/2009	190.9	100%	MOD Resources Botswana (Pty) Ltd	1-0ct-14	30-Sep-16
PL686/2009	463.0	100%	MOD Resources Botswana (Pty) Ltd	1-0ct-14	30-Sep-16
PL203/2014	77.7	100%	MOD Resources Botswana (Pty) Ltd	1-Apr-14	31-Mar-17
PL204/2014	70.8	100%	MOD Resources Botswana (Pty) Ltd	1-Apr-14	31-Mar-17
PL280/2014	116.0	100%	MOD Resources Botswana (Pty) Ltd	1-Jul-14	30-Jun-17
Southern Licences					
PL016/2013	934.3	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-15
PL017/2013	670.8	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-15
PL018/2013	638.9	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-15
PL034/2010	921.0	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-14
PL035/2010	789.0	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-14
PL036/2010	941.0	100%	MOD Resources Botswana (Pty) Ltd	1-Jan-13	31-Dec-14
JV Licences					
PL009/2012	310.4	80%	GGZ Investments (Pty) Ltd	1-Jan-12	31-Dec-14
PL141/2012	643.4	80%	Mokgweetsi Mining (Pty) Ltd	1-Apr-12	31-Mar-15
PL044/2012	151.1	80%	Mokgweetsi Mining (Pty) Ltd	1-Jan-12	31-Dec-14
TOTAL	6,918.30			1	l