

# BROAD COPPER/GOLD MINERALIZATION CONFIRMED AT CASSENHA HILL – ANGOLA

#### **ASX/ RELEASE**

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### HIGHLIGHTS

- DIAMOND DRILLING CONFIRMS DEPTH EXTENSION OF COPPER/GOLD MINERALIZATION
- ASSAY HIGHLIGHTS FROM IINITIAL TWO HOLES:
  - CHD002 10m @ 0.29 % Cu FROM SURFACE
  - o CHD002 23m @ 0.99% Cu FROM 28m
    - INCLUDING 9m @1.7% Cu FROM 34m
  - o CHD002 5m @ 1.17% Cu FROM 54m
  - o CHD002 2m @ 1.41% Cu FROM 68m
  - CHD001 8m @ 0.23 % Cu FROM 82m
    - INCLUDING 1m WITH 1.68g/t Au
- PEAK COPPER GRADES OF 4.44 %
- ENCOURAGING GOLD AND SILVER ASSOCIATED WITH COPPER MINERALIZATION
- HOLE 3 COMPLETED SUBMITTED FOR ANALYSIS
- HOLE 4 COMPLETED PREPARED FOR SUBMISSION
- HOLE 5 UNDERWAY
- DRILLING PROGRAMME CONTINUING TO TEST UP TO 400 METRES OF STRIKE

Rift Valley Resources Limited (ASX.RVY) ("Rift Valley" or "the Company") is pleased to announce that the initial drilling results from the Company's maiden drilling campaign at the Cassenha Hill Copper - Gold Prospect in Angola have returned highly encouraging broad copper/gold mineralization.

The initial results confirm the depth extension of copper mineralisation previously delineated at surface with trenching and with channel sampling of historical underground workings (exploration adits). A concurrent trenching programme is ongoing to better delineate the mineralized structures for subsequent drilling, over the mapped 3.5km of strike (see Fig 1 & 2).

Managing Director Mr Geoff Gilmour said "We are highly encouraged with the maiden drilling programme at Cassenha Hill. The assays returned from the first two holes clearly demonstrate that there is potential for the area to host a large copper/gold mineralized system. We look forward to receiving the assay results from the remaining holes in the near future that will further enhance our understanding of the mineralization and the structural controls that govern it."

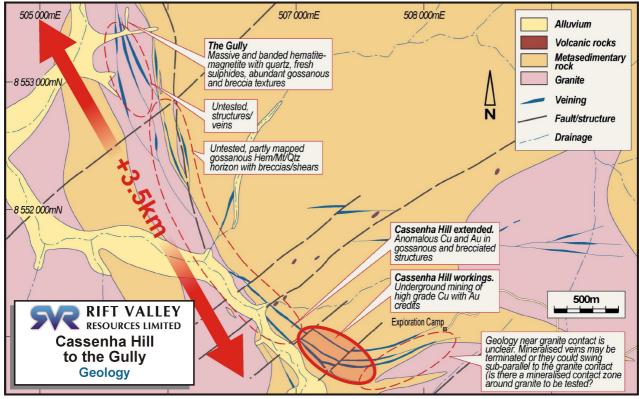


FIGURE 1 - CASSENHA HILL COPPER/GOLD PROSPECT

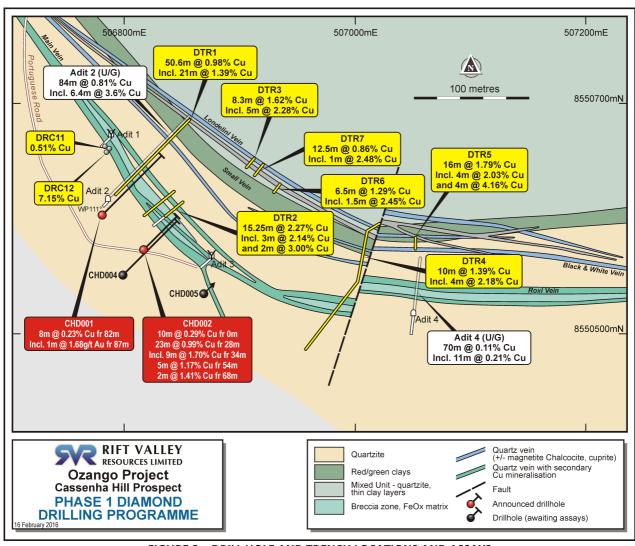


FIGURE 2 - DRILL HOLE AND TRENCH LOCATIONS AND ASSAYS



DR KAREL MALY WITH DIAMOND CORE FROM HOLE CDH002



DRILL CORE FROM HOLE CDH002 (40.9METERS TO 43.7 METERS)

#### ABOUT THE CATABOLA COPPER/GOLD PROSPECT

The Ozango Project consists of a single Exploration Licence (013/03/09/T.P/ANG-MGM/2015) that covers a large area of 3,670 square kilometres. The property extends for 100 kilometres in an east-west direction and varies between 28 to 46 kilometres in width. The northeast corner of the property comes to within 17 kilometres of Huambo

The Project area consists of Archaean/Palaeoproterozoic greenstone rocks that have been intruded by Cretaceous felsic volcanics, carbonatites and kimberlites. These rocks are considered highly prospective for REE, phosphate, copper, iron ore and gold. To date, however, this area has seen very little modern exploration.

The Catabola copper-gold target comprises an area of approximately 180km2 with two separately identified mineralized structures both trending northwest to southeast, approximately 5 kilometers apart (figure 3)

- Zone 1 Cassenha Hill Copper-Gold Prospect: Centered on historic small scale copper mining at Cassenha Hill.
- Zone 2 Cambumbula Iron Prospect: A recently discovered major zone of iron rich altered metasediment with associated weakly anomalous copper-gold values.

Importantly, both mineralized zones appear to have Iron Oxide Copper Gold (IOCG) style affinities, a style of mineralization responsible for major deposits elsewhere in the World.

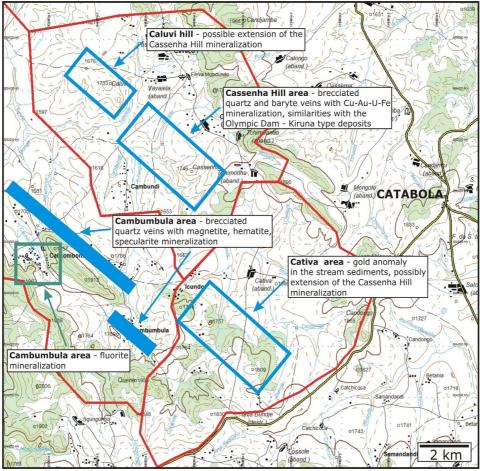


FIGURE 3 - CATABOLA COPPER/GOLD TARGET AREA

#### CASSENHA HILL COPPER-GOLD PROSPECT

During the year (2015) the Company completed site works (drill pads and access roads/tracks) at Cassenha Hill. This work included the rehabilitation of 12km's of gravel road from the town of Catabola, the Company also made ready the Cassenha Hill camp and purchased consumables and equipment for the current drilling campaign.

Copper workings at Cassenha Hill in the 1940s and 1950s included 7 shafts and some 29 adits extending over a length of 1.6 kilometers. The copper mineralisation is hosted by siliceous metasediments and occurs in brecciated and gossanous quartz-magnetite-barite veins in a major, steeply dipping and strongly altered/weathered shear zone. The zone has been traced by surface mapping and prospecting over a strike length of some 5 kilometers but may well be considerably longer.

The separate Caluvi Hill and Cativa prospects located northwest and southeast of the Cassenha Hill zone respectively may well be one and the same giving an approximately 14 kilometer long potential strike length of prospective ground. The Cassenha Hill shear structure has been described by SRK Consulting (2010) as a broad zone up to 150 meters wide within which individual copper bearing veins, typically 10-30 meters wide and several hundred meters long, occur in an enechelon pattern. Previous exploration work conducted at the Cassenha Hill prospect includes regional rock chip sampling, soil and stream sediment sampling, surface trenching and underground adit channel sampling.

The area around Cassenha Hill has been the main focus with numerous adits geologically mapped and channel sampled.

-ENDS-

#### For further information please contact:

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#### Ozango Project - Cassenha Hill Significant Intercepts Nov15 - Jan16 Drilling

	Intercepts for Au at 0.5ppm											
Project	SiteID	East	North	RL	Grid	Assays	Depth	Depth	Width	Au	Ag	Cu
						Received	From	То		ppm	ppm	pcnt
Ozango	CHD001	506781	8550603	1607	UTMWGS84_33S	Υ	87	88	1	1.68	0.41	0.333
Ozango	CHD002	506817	8550573	1594	UTMWGS84_33S	Υ	53	54	1	0.79	1.23	0.141
Ozango	CHD002						63	64	1	0.5	0.54	0.311
Ozango	CHD002						78	79	1	0.56	0.27	0.072
Ozango	CHD003	506815	8550572	1594	UTMWGS84_33S	N						
Ozango	CHD004	506799	8550551	1613	UTMWGS84_33S	N						
Ozango	CHD005	506869	8550535	1611	UTMWGS84_33S	N						

Intercepts for Au at 0.5ppm

Lower Cut : 0.5ppm Upper Cut : None

Max. Contiguous Waste : 2m

	Intercepts for Cu at 0.1 %											
Project	SiteID	East	North	RL	Grid	Assays	Depth	Depth	Width	Au	Ag	Cu
						Received	From	То		ppm	ppm	pcnt
Ozango	CHD001	506781	8550603	1607	UTMWGS84_33S	Υ	82	91	9	0.227	0.26	0.91
Ozango	CHD002	506817	8550573	1594	UTMWGS84_33S	Υ	0	11	11	0.276	0.02	0.34
Ozango	CHD002						25	74	49	0.696	0.12	0.66
Ozango	CHD003	506815	8550572	1594	UTMWGS84_33S	N						
Ozango	CHD004	506799	8550551	1613	UTMWGS84_33S	N						
Ozango	CHD005	506869	8550535	1611	UTMWGS84_33S	N						

Intercepts for Cu at 0.1 %

Lower Cut : 0.1%
Upper Cut : None

Max. Contiguous Waste : 2m

	Intercepts for Cu at 0.25 %											
Project	SiteID	East	North	RL	Grid	Assays	Depth	Depth	Width	Au	Ag	Cu
						Received	From	То		ppm	ppm	pcnt
Ozango	CHD001	506781	8550603	1607	UTMWGS84_33S	Υ	82	83	1	0.340	0.13	3.35
Ozango	CHD001						84	85	1	0.260	0.01	0.66
Ozango	CHD001						87	90	3	0.268	0.87	0.28
Ozango	CHD002	506817	8550573	1594	UTMWGS84_33S	Υ	4	10	6	0.347	0.01	0.31
Ozango	CHD002						28	51	23	0.993	0.07	0.64
Ozango	CHD002						54	59	5	1.165	0.16	0.72
Ozango	CHD002						63	64	1	0.311	0.50	0.54
Ozango	CHD002						68	70	2	1.408	0.01	1.20
Ozango	CHD003	506815	8550572	1594	UTMWGS84_33S	N						
Ozango	CHD004	506799	8550551	1613	UTMWGS84_33S	N						
Ozango	CHD005	506869	8550535	1611	UTMWGS84_33S	N						

Intercepts for Cu at 0.25 %

Lower Cut : 0.25%

Upper Cut : None

Max. Contiguous Waste : 2m

Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> </ul>	Sampling was completed using diamond (DD) core drilling from surface.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Drill holes were located using a hand held GPS. Down hole surveys will occur with a down-hole system at a later date.
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> </ul>	<ul> <li>Samples assayed at a commercial laboratory for Au, Ag, Bi, Cu, U, Ba and Co.</li> </ul>
	• In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	DD was used to obtain sample over the entire length with 1 metre half core collected. The 1 metre samples were sent to a commercial laboratory, pulverized to produce a representative charge for analysis.
Drilling techniques	<ul> <li>Drill type (e.g. 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).</li> </ul>	<ul> <li>Diamond Drilling (DD) was the method used for all holes reported. Holes were collared using PQ diameter core and reduced to HQ and subsequently NQ as depth and hole conditions necessitated. The core was not oriented.</li> </ul>

#### 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.
- DD core recoveries are recorded as a percentage calculated from measured core versus drilled interval length.
- DD core recovery was routinely monitored by the supervising geologist. Any issues arising are discussed with the drilling contractor and necessary adjustment made.
- Overall DD recoveries were good. There has been no work completed to determine if any relationship exists between recovery and arade.

#### 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.
- The core was logged by the supervising geologist to industry standards. All relevant features such as lithology, structure, texture, grain-size, alteration, oxidation state, veining style and mineralisation were recorded in the geological log.
- All logging was quantitative where possible and qualitative elsewhere. All DD core was photographed.
  - All holes were logged in full

#### Sub-sampling techniques and sample preparation

- 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 the preparation sample technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.

- If core, whether cut or sawn . DD core was cut using a diamond core saw. Half core was sampled on 1 metre intervals. and whether quarter, half or
  - Report pertains to core samples only.
  - The preparation of samples follows industry practice. This involves oven drving, coarse crushing (3mm), pulverisation of total sample to 90% passing 80 micron.
  - At this stage of the exploration, field QC involves the review of laboratory supplied certified reference material, in house controls, blanks and standards. These QC results are reported by the laboratory with final assay results.
- Measures taken to ensure the sampling 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 the material of being sampled.
- No field duplicates were taken.
- The sample sizes are considered more than adequate to ensure that there are no particle size effects. Repeatability of assays was good.

## 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 the analysis determining 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 analysis was carried out by accredited independent assay laboratory. The analytical technique for gold was fire assay with an AAS finish. All other elements were determined by ICPMS after a multi-acid
- Laboratory No geophysical or portable analysis tools were used to determine assay values stored in the database.
- Certified reference materials (CRM's) standards and blanks - were submitted with the core samples on a 1 in 20 (5%) basis, as well as the laboratory's standard QA QC procedures.

#### Verification of sampling and assaying

- The verification of significant intersections either by 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.

- Results have been verified by company management.
- No twin holes undertaken.
- Field data was logged directly into an Ocris logging package and uploaded to the main, secure, database in Perth once complete. All field data and assay data was verified and validated upon receipt.
- No adjustments to the assay data have been made.

#### Location of data points

- Accuracy and quality surveys used to locate drill holes (collar and down-hole surveys), trenches, workings and other locations used in Mineral Resource estimation.
- Specification of the system used.
- grid •
- Quality and adequacy of topographic control.

- All sample locations were surveyed using a hand held GPS, accurate to within 3-5m.
- The grid system used is WGS84 Zone 338. All reported coordinates are referenced to this grid.
- Topography is a hill grading from grid south to north with a variation of approximately 80m.

#### Data spacing and distribution

- Data spacing for reporting of Exploration Results.
- Drill hole spacing varies to accommodate the terrain. Planning was done on a nominal 80m line spacing.
- 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
- Exploration results only being reported.

classifications applied.

Whether sample compositing • No. has been applied.

#### Orientation of Whether the orientation of • The orientation of the target is reasonably data in well understood and the drilling orientation is sampling achieves unbiased relation to sampling of possible considered near perpendicular to the geological structures and the extent to mineralisation. structure which this is known. considering the deposit type. No sampling bias is considered to have been • If the relationship between the introduced by the drilling orientation. 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. Sample The Sample security is managed by measures taken security ensure sample security. Company. After collection in the field the samples were transported by the Company directly to the assay laboratory. The assay laboratory audits the samples on arrival and reports any discrepancies back to the Company. No such discrepancies occurred. Audits or The results of any audits or No review of the sampling techniques has reviews of been carried out. The database is compiled reviews sampling by an independent contractor and is techniques and data. considered by the Company to be of sufficient quality to support the results reported. In addition, from time to time, the Company carries out its own internal data audits.

#### **Section 2 Reporting of Exploration Results**

Criteria	ed in the preceding section also app JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>The security of the tenure         held at the time of reporting         along with any known         impediments to obtaining a         licence to operate in the</li> </ul>	<ul> <li>Prospecting License 013/03/09T.P/ANG-M.G.M/2015</li> <li>The concession is in good standing and no known impediments exist.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Previous workers in the area include Black Fire Minerals and Cityview Corporation LTD to NI43-101 standards.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	The Catablola project has copper and gold anomalies located along the margin of Neoproterozoic granite and within a broad

Criteria	JORC Code explanation	Commentary
		zone of magnetite altered metasedimentary rocks. The identified mineralisation forms within zones of heamatite – magnetite alteration and breccia units.
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:  a easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  dip and azimuth of the hole  down hole length and interception depth  hole length.  If the exclusion of this	<ul> <li>Refer to Appendix 1.</li> <li>No material information was excluded.</li> </ul>
	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.	
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.	A cut-off grade of 0.25% Cu was used with a maximum off 2 meters of internal dilution.
	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.	No weighting has been used.
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No metal equivalent values have been used for the reporting of these exploration results.
Relationship between mineralisation widths and	These relationships are particularly important in the reporting of Exploration Results.	The orientation of mineralisation is inferred from surface trenching and historical exploration adits.
intercept lengths	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	Geometry of the mineralisation to drill hole intercepts is at a high angle.
	If it is not known and only the	

down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').

 The down hole widths have been clearly specified where used.

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.	An appropriate plan and section have been included in this release.
Balanced reporting	<ul> <li>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.</li> </ul>	Refer to table in the body of the text.
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.	Previously reported activities on the Cassenha Hill prospect include trenching, mapping and underground adit sampling. Refer to previous ASX announcements for details.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-	Drilling is continuing in 2016 to determine the extents of mineralisation.
	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.	Appropriate diagrams accompany this release.

#### **COMPETENT PERSON STATEMENT**

We advise in accordance with Australian Stock Exchange Limited Listing Rules 5(6) that the exploration results contained within this report is based on information compiled by Mr. Greg Cunnold who is a member of the Australian Institute of Mining and Metallurgy. Mr Cunnold is a Director of Rift Valley Resources Ltd and has consented in writing to the inclusion in this ASX Release of matter based on the information so compiled by him in the form and context in which it appears. Mr Cunnold has sufficient experience relevant to the style of mineralisation and type of deposit under consideration to be qualified as a Competent Person as defined by the 2012 Edition of the "Australian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".