

# Cardero Resource Corp. Reports NI 43-101 Resource Estimate for Zonia Copper-Oxide Deposit

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VANCOUVER, December 3, 2015 -- [Cardero Resource Corp.](#) ("Cardero" or the "Company") (TSX:CDU) (Frankfurt:CR5) reports the results of a maiden NI 43-101 resource estimate for the Zonia copper-oxide deposit in Arizona, USA. The resource estimate was completed by Tetra Tech Inc. on behalf of Cardero. Highlights include:

- Measured and Indicated Resources of 76.8 million short tons grading 0.33% copper containing 510 million pounds of copper (0.2% copper cut-off grade).
- Inferred Resources of 27.2 million short tons grading 0.28% copper containing 154.6 million pounds of copper (0.2% copper cut-off grade).
- Low strip ratio of 1:1 waste to mineralized material in base case.

The base case classified resources are outlined in detail (Table 1) and at various total copper cut-off grades (Table 2). Figure 1 is a three-dimensional (3D) view looking northwest from above, showing resource blocks greater than 0.20% copper that are constrained within the optimized pit shell.

Table 1: Base Case Classified Resources

Classification	Cut-Off Grade (% Cu)	Short Tons (x '000)	Copper (%)	Contained Copper (M lbs)
Measured	0.2	15,400	0.42	129.3
Indicated	0.2	61,400	0.31	380.6
Measured & Indicated	0.2	76,800	0.33	510.0
Inferred	0.2	27,200	0.28	154.6

Table 2: Resources at Various Cut-Off Grades

Cut-Off Grade (% Cu)	Measured & Indicated				Inferred			
	Strip Ratio	Short Tons (x '000)	Copper (%)	Contained Copper (M lbs)	Short Tons (x '000)	Copper (%)	Contained Copper (M lbs)	
0.25	1.96	54,500	0.43	312.6	16,200	0.37	63.2	
0.225	1.43	65,200	0.38	410.1	21,000	0.33	105.8	
0.20	1.01	76,800	0.33	510.0	27,200	0.28	154.6	
0.175	0.69	88,000	0.31	551.9	35,700	0.26	186.4	
0.15	0.52	96,200	0.30	578.6	41,600	0.25	205.5	

Resources are stated within a Lerch-Grossman optimized pit shell using the following parameters; a metal price of \$2.50/lb copper, mining costs of \$1.50/ton, processing costs of \$3.40/ton, general and administrative costs of \$0.45/ton, oxide recovery of 73%, transition zone recovery of 70%, and an average pit slope of 45 degrees. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted into Mineral Reserves. Inferred resources have a great deal of uncertainty as to their existence and whether they can be mined economically. It cannot be assumed that any part of the Inferred resource will ever be upgraded to Measured or Indicated categories. See "Cautionary Note to United States Investors."

Figure 1: 3-D View of the Zonia Resource Blocks Looking Northwest (constrained at 0.2% cut-off).

To view an enhanced version of Figure 1, please visit:  
[http://orders.newsfilecorp.com/files/743/18357\\_enhancedx2x1.jpg](http://orders.newsfilecorp.com/files/743/18357_enhancedx2x1.jpg)

### Estimation Methodology in Detail

The resource estimate was completed by Tetra Tech Inc. ("Tt"), Golden, Colorado. Tt completed an independent mineral resource estimate of oxide and transition zone copper in the Zonia deposit. Geostatistics and resource estimation were done with MicroModel®. Additional statistical analysis was done with Statistica®, and Excel®. Three-dimensional wireframes and model visualization was done with GemCom® software. Geologic interpretation of lithology, extent of oxidation, and mineralized zones was completed by geologic staff of Redstone Resources Inc. and checked by Tt. Interpretation was done in vertical section as the basis for wire-framing using GemCom®.

The block model is based on 50 x 50 x 20 feet (15 x 15 x 6 metres) blocks and comprises 210 rows, 100 columns, and 80 levels, with a total of 1.386 million blocks. An example cross-section through the model is included below (Figure 2). The block model incorporates geologic and assay data from 603 drillholes, totalling 163,566 feet (49,854 metres), with an average depth of 271 feet (82 metres) per drillhole. A total of 599 drillholes and channel samples were used to generate composites for estimation, comprising 96 diamond drillholes and 79 reverse circulation drillholes.

Total-copper within the block model was estimated using ordinary kriging. Mineral resources have been constrained to a Lerch-Grossman pit optimization run on measured, indicated, and inferred blocks using the parameters shown in Table 3. Blocks that fall within the optimized shell have been reported using a base-case block cut-off grade of 0.2% Total Cu.

Table 3: Lerch-Grossman Pit-Optimization Parameters

Input	Value	Unit
Mining Cost	1.5	\$/ton
Process Cost	3.4	\$/ton
G&A	0.45	\$/ton
Recovery Oxide	73	%
Recovery Transition	70	%
Recovery Primary Sulfide	0	%
Pit Slope	45	Degrees
Cu Price	2.5	\$/lbs

Figure 2: Cross Section Through Zonia Block Model (located at local grid northing +800N)

To view an enhanced version of Figure 2, please visit:  
[http://orders.newsfilecorp.com/files/743/18357\\_enhancedx3x1.jpg](http://orders.newsfilecorp.com/files/743/18357_enhancedx3x1.jpg)

### Zonia Copper-Oxide Project Details

Cardero's flagship Zonia copper-oxide deposit in Arizona is held under an option agreement whereby Cardero has the right to acquire a 100% interest in the Zonia project. In order to exercise the option, Cardero must pay the underlying owners \$2,225,000 (\$201,350 paid) and issue 16,500,000 common shares of [Cardero Resource Corp.](#) to Redstone (1,000,000 issued).

Historically, the Zonia Copper Oxide Project has been held under private ownership for almost 100 years and has undergone comprehensive exploration, metallurgical studies and mine development planning. The

majority of the existing open pit was pre-stripped during previous operations at Zonia in 1966. This reduced the strip ratio to 1:1, as 17 million tons were mined with 7 million tons stacked on heap leach pads, producing cement copper up till 1975. The property has been drill tested with almost 700 drill holes (60,000 meters).

The US is a stable political environment for mining and the state of Arizona is a substantial producer of copper, producing 65% of US copper consumption annually. Explorers and developers can experience bottlenecks or delays when dealing with federal agencies with respect to permit applications. Zonia is a unique resource among peers in that the entire resource as currently defined is located on private land. While US permitting regulations are stringent, the removal of federal agencies from the permitting process should significantly reduce permit processing time for Zonia.

Mine roads access the site together with an existing electrical transmission line and associated right of way. There is a 33-KVA substation located 8km from the site. Water, which is a valuable commodity in this arid environment, is available on the mine site.

The Zonia copper oxide deposit is thought to be amenable to truck and shovel open-pit mining, with processing via heap leaching and SX-EW. As such it will potentially utilize some of the least expensive and most tried and tested mining technologies in the world. Metallurgical testing has indicated an average 73% oxide copper recovery.

#### Next Steps

Cardero intends to publish a preliminary economic assessment ("PEA") before the end of Q1 2016. Tendering for the PEA will begin in the coming weeks. No additional on-site data collection is required before completing the PEA.

#### Qualified Person

Dr. Rex C. Bryan, of Tetra Tech Inc. and a Registered (QP) member of the Society for Mining, Metallurgy and Exploration Inc., and a qualified person as defined by National Instrument 43-101, is responsible for Sections 1 to 12, 14, and 23 to 28 of the technical report that forms the basis of this news release and has reviewed and approved the scientific and technical information contained in this news release.

D. Eric Spiller, of Tetra Tech Inc. and a Qualified Professional (QP) member of the Mining and Metallurgical Society of America and a Registered (QP) member of the Society for Mining, Metallurgy and Exploration Inc., and a qualified person as defined by National Instrument 43-101, is responsible for Sections 13 of the technical report that forms the basis of this news release and has reviewed and approved the scientific and technical information contained in this news release.

Dr. Bryan and Mr. Spiller are independent of [Cardero Resource Corp.](#) as defined by Section 1.5 of the Instrument.

#### ABOUT CARDERO RESOURCE CORP.

The common shares of the Company are currently listed on the TSX (symbol CDU), the NYSE-MKT (symbol CDY) and the Frankfurt Stock Exchange (symbol CR5). For further details on the Company readers are referred to the Company's web site ([www.cardero.com](http://www.cardero.com)), Canadian regulatory filings on SEDAR at [www.sedar.com](http://www.sedar.com) and United States regulatory filings on EDGAR at [www.sec.gov](http://www.sec.gov).

On Behalf of the Board of Directors of CARDERO RESOURCE CORP.

"Henk van Alphen" (signed)  
Henk van Alphen, CEO and President

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***Cautionary Note Regarding Forward-Looking Statements***

*Forward Looking Information: This news release includes certain information that may be deemed "forward looking information". Forward-looking information can generally be identified by the use of forward-looking terminology such as "may", "will", "expect", "intend", "estimate", "anticipate", "believe", "continue", "plans" or similar terminology. All information in this release, other than information of historical facts, including, without limitation, the potential of Zonia general future plans and objectives for the Zonia project, the completion of the Plan and receipt of shareholder and regulatory approval therefore, the likelihood of receipt of value from the Retained Right, the availability of financing to the Company and the Company's plan in relation to its listing review are forward-looking information that involve various risks and uncertainties. Although the Company believes that the expectations expressed in such forward-looking information are based on reasonable assumptions, such expectations are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking information. Forward-looking information is based on a number of material factors and assumptions. Factors that could cause actual results to differ materially from the forward-looking information include changes in project parameters as plans continue to be refined, future metal prices, availability of capital and financing on acceptable terms, general economic, market or business conditions, regulatory changes, delays in receiving approvals, and other risks detailed herein and from time to time in the filings made by the Company with securities regulatory authorities in Canada. Mineral exploration and development of mines is an inherently risky business. Accordingly, actual events may differ materially from those projected in the forward-looking information. For more information on the Company and the risks and challenges of our business, investors should review our continuous disclosure filings which are available at [www.sedar.com](http://www.sedar.com). Readers are cautioned not to place undue reliance on forward-looking information. The Company does not undertake to update any forward looking information, except in accordance with applicable securities laws.*

*This press release is not, and is not to be construed in any way as, an offer to buy or sell securities in the United States.*

***Cautionary Note to US Investors Regarding References to Resources and Reserves***

*National Instrument 43 101 - Standards of Disclosure for Mineral Projects ("NI 43-101") is a rule developed by the Canadian Securities Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Unless otherwise indicated, all resource estimates contained in or incorporated by reference in this press release have been prepared in accordance with NI 43-101 and the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") Standards on Mineral Resource and Mineral Reserves, adopted by the CIM Council on November 14, 2004 (the "CIM Standards") as they may be amended from time to time by the CIM.*

*United States shareholders are cautioned that the requirements and terminology of NI 43-101 and the CIM Standards differ significantly from the requirements and terminology of the SEC set forth in the SEC's Industry Guide 7 ("SEC Industry Guide 7"). Accordingly, the Company's disclosures regarding mineralization may not be comparable to similar information disclosed by companies subject to SEC Industry Guide 7. Without limiting the foregoing, while the terms "mineral resources", "inferred mineral resources", "indicated mineral resources" and "measured mineral resources" are recognized and required by NI 43-101 and the CIM Standards, they are not recognized by the SEC and are not permitted to be used in documents filed with the SEC by companies subject to SEC Industry Guide 7. Mineral resources which are not mineral reserves do not have demonstrated economic viability, and US investors are cautioned not to assume that all or any part of a mineral resource will ever be converted into reserves. Further, inferred resources have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher resource category. Under Canadian rules, estimates of inferred mineral resources may not form the basis of a feasibility study or prefeasibility study, except in rare cases. The SEC normally only permits issuers to report mineralization that does not constitute SEC Industry Guide 7 compliant "reserves" as in-place tonnage and*

*grade without reference to unit amounts. The term "contained ounces" is not permitted under the rules of SEC Industry Guide 7. In addition, the NI 43-101 and CIM Standards definition of a "reserve" differs from the definition in SEC Industry Guide 7. In SEC Industry Guide 7, a mineral reserve is defined as a part of a mineral deposit which could be economically and legally extracted or produced at the time the mineral reserve determination is made, and a "final" or "bankable" feasibility study is required to report reserves, the three-year historical price is used in any reserve or cash flow analysis of designated reserves and the primary environmental analysis or report must be filed with the appropriate governmental authority.*

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