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Cardero Receives Positive Iron Metallurgical Test Work Results, Sheini Hills Iron Project

Confirms Highly-Metallized DRI Product; 81% Metallic Iron at 89% Recovery

Vancouver, British Columbia...Cardero Resource Corp. (“Cardero” or the “Company”) (TSX: CDU, NYSE-MKT: CDY) announces that metallurgical test work on ironstone from the Sheini Hills Iron deposit in Ghana has produced positive results. Recent test work at Cardero Materials Testing Laboratory Ltd., a wholly owned subsidiary of the Company (“CMTL”), has shown that Sheini ironstone reacts extremely well to a magnetizing reduction roast process, which reduces iron in the form of hematite (Fe_2O_3), to magnetite (Fe_3O_4), and ultimately to metallic iron (Fe^0).

Sheini iron ore performs well in bench-scale tests, reducing directly to metallic iron in one step. Box-furnace tests used raw Sheini ironstone, briquetted with thermal coal, lime, and molasses to produce Direct Reduced Iron (“DRI”) at low temperatures (900° - 1100° Celsius) and with short furnace residence times (less than 30 minutes). This highly-metallized DRI product is best suited as a blast furnace (“BF”) feed. DRI feed decreases coking coal consumption and CO_2 emissions and increases iron-unit production of the BF relative to lower-grade magnetite concentrate feeds.

Testing was completed on Sheini ironstone with a head grade of 46.85% iron. Compositated Davis Tube concentrate returned **a grade of 80.98% metallic iron at 88.65% iron-unit recovery**. Total iron (Fe_{total} %) is reported from XRF analysis by ALS Global (“ALS”) and metallic iron (Fe_{met} %) is reported from a titration on the same sample by McCreath Laboratories (“McCreath”). The metallic iron titration performed by McCreath shows that the total iron in the DRI concentrate is 80.98% (Table 1).

Magnetizing Reduction Roast

The magnetizing reduction roast process produces a highly-metallized DRI product from Sheini iron ore. In detail:

1. The matrix of the ore is sufficiently porous to allow reducing gases (H_2 and CO) given-off by the thermal-coal reductant to easily reach the finely disseminated iron oxide grains and reduce the raw hematite to metallic iron at fast kinetic reaction rates (<30 minutes) and low temperatures (900° - 1100° Celsius).
2. These reduction reactions facilitate a change in crystal structure creating internal stresses within the ironstone feed, largely accommodated at grain boundaries and allowing the iron to become largely self-liberated.

3. Relatively coarse raw Sheini ironstone feedstock (minus 1/4") can be subjected to the magnetizing reduction roast treatment, turning raw hematite ironstone into metallic iron in one step. No pre-concentration step is required.
4. The resulting reduced and liberated iron is now in the form of metallic iron, and is amenable to conventional low intensity magnetic separation following a light grind.

The resulting product is a highly-metallized DRI product that can be fed directly to a BF, decreasing coke consumption and CO₂ emissions, while also increasing the productivity of the BF.

Table 1: Results of certified assays and iron recovery from the reduction roasted and composited Davis Tube concentrate and the raw Sheini iron ore head feed used in tests.

	Sheini Raw Head Grade	Sheini DRI Concentrate	Typical DRI Concentrate on Seaborne Market*
Fe_{total} %	46.85	>75.0	
Fe_{met} %	n/a	80.98	68-90
Fe Recovery %	n/a	88.65	
Al₂O₃ %	2.30	1.39	
C %	0.04	1.01	0.2-2.5
CaO %	0.34	2.09	
K₂O %	0.092	0.073	
MgO %	0.06	0.11	
Mn %	0.08	0.038	
Na₂O %	0.018	0.032	
P %	0.187	0.267	0.07-0.1
S %	0.01	0.91	0.01-0.03
SiO₂ %	28.1	10.0	
TiO₂ %	0.14	0.09	
V %	0.004	0.009	

Application to Blast Furnace Feedstock

A BF typically uses iron ore concentrate that contains 55-65% iron in the form of hematite or magnetite (in which the contained iron must still be reduced to metallic iron), with 3-6% silica (SiO₂) as gangue (waste). Reduction of roasted Sheini ironstone (already in the form of metallic iron) yields iron concentrates grading more than 80% iron contained as metallic iron, with 10% silica. The silica content in the Sheini product is deceptively high because the concentrate has already been reduced (oxygen has already been removed from the iron ore). If the Sheini product remained oxidized (e.g. as hematite) it would have an acceptable silica content of 7.4%.

By using the highly-metallized reduction roasted Sheini DRI product as feed, a BF will:

- use less coking coal (because the feed is already metallic iron)
- emit less CO₂ (green-house-gas generated during the reduction process), and
- produce more iron units (because the head feed starts with more iron-units).

Table 2 summarizes the advantages and disadvantages of feeding Sheini highly-metallized DRI to a BF. The basis for comparison is a BF feed of 100% BF-grade standard iron-oxide pellets, versus a BF feed of

70% BF-grade standard iron oxide pellets + 30% Sheini highly-metallized DRI. The BF in this analysis does not employ pulverized coal injection (PCI) or natural gas/oxygen injection for the purpose of reducing the coke charge.

Table 2: Advantages and disadvantages of feeding Sheini highly-metallized DRI to a blast furnace.

ADVANTAGE	DISADVANTAGE
Increased BF Productivity: 28.4%	Slag Increase: 17.7 kg/tonne hot metal
Coke Savings: US \$29.06/tonne hot metal	Limestone Addition: US \$2.58/tonne hot metal
CO ₂ Reduction: 274.2 kg/tonne hot metal	Phosphorus Removal: US \$3.00/tonne hot metal

The benefits of using a feed containing 30% Sheini highly-metallized DRI are significant and greatly outweigh any disadvantages. On an annual basis the benefits to a BF operator could include:

- A potential 28.4% increase in productivity for a 1 million tonne per annum (“Mtpa”) BF is 284,000 tonnes of additional hot metal. At an assumed hot metal value of \$400/tonne, this translates into \$113.6 million per year.
- A potential coke saving of \$29 per tonne hot metal for a BF, which with increased productivity is now producing 1.284 Mtpa, translates into a savings of \$37.2 million per year.
- A BF normally produces approximately 2,200 kg CO₂ per tonne hot metal. A reduction of 274.2 kg per tonne hot metal represents a reduction of approximately 12.5% in green-house-gas CO₂ emissions.
- The slag volume increases less than 20kg per tonne hot metal; an increase of less than 7.4%.
- The limestone penalty of \$2.58 per tonne hot metal translates into an increase in BF OPEX of \$3.3 million/year which is less than 10% of the benefit from coke savings.
- Removal of phosphorus will likely be required, which is common practice at many integrated steel mills. It is expected that the phosphorus content would result in a phosphorus penalty similar to the limestone penalty, of \$3 to \$5 million per annum

DRI Feed to the Blast Furnace

Feeding direct reduced iron to a BF is a well-established and proven technology that has been practiced for decades and continues to be common today due to its quantified positive benefits relative to lower grade magnetite concentrates. Fienman et al. (1999), describe the benefits of feeding DRI in great detail in the treatise “Direct Reduced Iron”:

“As the percentage of DRI pellets was increased to 85% of the burden, there was an almost linear increase of 75% in the hot metal production rate. The coke rate decreased about 23 percent for a 30 percent DRI pellet burden. For an 85 percent DRI pellet burden the decrease in coke rate was only 47 percent.” (Fienman et al., 1999)

The perfect customer-match for the Sheini highly-metallized DRI product is an integrated steel mill that is “hot metal short.” Such a facility has excess steelmaking capacity and the increase in hot metal production mitigates this problem. Alternatively, if the integrated mill is not hot metal short, then the excess hot metal from the BF can be cast into pig iron offering a secondary merchant product that would

gross about \$150 per tonne at current prices (284,000 tonnes translates to \$42.6 million in additional revenues).

Next Steps

CMTL is currently in the process of producing a sufficiently large sample of Sheini highly-metallized DRI using a rotary kiln to investigate the design of a commercial plant flow sheet. The flow sheet centers on application of the magnetizing reduction roast process for producing a high-grade, high iron-unit recovery, highly-metallized DRI product that is best-suited for value-added downstream applications. CMTL also plans to run smelting tests on the Sheini DRI to demonstrate the production of pig iron from Sheini DRI.

Cardero's technology effectively utilizes the volatile matter contained in the coal as a fuel for the pre-reduction process step thereby minimizing the need for additional energy (natural gas) for production of the highly-metallized DRI.

Furthermore, the test work reported in this release has utilized thermal coal as a reductant; additional testing in progress at CMTL utilizes grass as a reductant with favorable results. Using grass could prove to be significant in both cutting operating costs, and in decreasing the carbon footprint of the project. Perennial elephant grass is plentiful and available on-site at Sheini for use as a renewable-energy source, and as a suitable renewable-reductant alternative to thermal coal. Sheini becomes enveloped annually by elephant grass which is controlled by regular burning, thus releasing CO₂ into the atmosphere. If the grass were instead harvested and burned as an energy source and reductant to make DRI from Sheini ironstone, the magnetizing reduction roast process could have a near zero or even negative carbon footprint.

About the Sheini Hills Iron Deposit

The Sheini Hills iron deposit is located in northeastern Ghana, Africa approximately 400 kilometers north of Accra and 170 kilometers east of Tamale.

A maiden Mineral Resource Estimate was completed in January, 2013 for the Sheini deposit by SRK Consulting (UK) Limited ("SRK"), in which SRK reported a total Inferred Mineral Resource of 1.312 billion tonnes with mean grade of 33.8% iron. The resource at Sheini consists of two types of ore, being (a) Ironstone (1.045 billion tonnes @ 35.2% iron), and (b) Detrital (266.9 million tonnes @ 28.2% iron).

The inferred mineral resource was largely calculated from the 11,400 metre diamond drill core and reverse circulation drilling program that was completed over a strike length of approximately 9 kilometres during 2012. An additional 24 kilometres of strike length has been identified for future drilling following extensive airborne geophysical surveying, analysis of satellite imagery and mapping to confirm the occurrence of ironstone in the area.

For details with respect to the assumptions underlying the current resource estimate, see the technical report entitled "Mineral Resource Estimate for the Sheini Hills Iron Project, Ghana" dated January 6, 2013 and available under the Company's profile at www.sedar.com.

Qualified Person

Mr. Glen Hoffman, MMSA QP, the President & CEO of Cardero Iron Ore Company Ltd. and a qualified person as defined by National Instrument 43-101, has supervised the preparation of the scientific and technical information that forms the basis for this news release, other than with respect to the Sheini Hills mineral resource estimate, and has approved the disclosure herein. Mr. Hoffman is not independent of the

Company as he is an officer of a subsidiary and holds common shares and incentive stock options in Cardero.

Howard Baker B.Sc., M.Sc., MAusIMM (CP) a Principal Geologist (Mining Geology) with SRK, has acted as the Qualified Person, as defined in NI 43-101, for the resource estimate contained herein. Mr. Baker has 18 years practical experience in the mining industry, with the previous 10 years focussed on iron ore mining, exploration and mineral resource estimation. Mr. Baker worked as a Senior Mine Geologist at the BHP Billiton, Yarrarie Operation in the Pilbara region of Western Australia and as a Specialist Resource Geologist for Rio Tinto Iron Ore, also in Pilbara region of Western Australia. Following this, Mr. Baker has worked a Principal Geologist for SRK on numerous iron ore deposits including those in West and Central Africa, Sweden, Finland, Canada, Portugal and Armenia. Mr. Baker has also reviewed and approved the disclosure in this news release. Both Mr. Baker and SRK are independent of the Company under NI 43-101.

The metallurgical test work carried out at CMTL was designed and directly observed on site by Mr. Hoffman who is responsible for all metallurgical testing and the quality control/quality assurance.

QA/QC

The work program at CMTL is supervised by Glenn Hoffman, S. Jayson Ripke (Cardero Iron Ore) and Christopher White (Cardero Resource Corp.), who, together, are responsible for all aspects of the work, including the quality assurance/quality control program. On-site personnel at the laboratory perform bench-scale testing to strict protocol, rigorously collecting and tracking samples which are prepared, security sealed, and shipped to a variety of accredited and ISO certified laboratories for additional sample preparation and analysis. Quality control is assured by the use of international and in-house standards. The specific laboratories used for the analyses reported in this news release are ALS Global in Reno, Nevada, and Andrew S. McCreath & Son, Inc. in Harrisburg, Pennsylvania. ALS's quality system complies with the requirements for the International Standards ISO 9001:2000 and ISO 17025: 1999. Andrew S. McCreath & Son, Inc. is accredited to ISO 17025 by the American Association of Laboratory Accreditation (A2LA) as a commercial chemical laboratory.

Total iron was measured by ALS Global through x-ray fluorescence (XRF) analysis. In XRF analysis a material is bombarded with gamma rays causing inner orbital electrons of an atom to be expelled and outer orbital electrons to fill, or fall into the empty spaces. As this happens energy is released and can be measured to determine the elemental make-up of the material. Metallic iron was measured by Andrew S. McCreath & Son, Inc. through metallic iron titration. In a titration a reagent or "titrant" is prepared in solution and reacted with a solution of the "titrand," or analyte in question to determine the concentration of the analyte.

About Cardero Resource Corp.

The common shares of the Company are currently listed on the Toronto Stock Exchange (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), Canadian regulatory filings on SEDAR at www.sedar.com and United States regulatory filings on EDGAR at www.sec.gov.

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

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

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Cautionary Note Regarding Forward-Looking Statements

This press release contains forward-looking statements and forward-looking information (collectively, “forward-looking statements”) within the meaning of applicable Canadian and US securities legislation. All statements, other than statements of historical fact, included herein including, without limitation, statements regarding the discovery and delineation of mineral deposits/resources/reserves, the potential for the expansion of the current estimated resource at Sheini, the potential for the economic exploitation of any of the mineral deposits at Sheini, the potential for bench-scale test results to be replicated in larger scale testing and in any commercial process, the potential for the use of Sheini DRI to reduce costs and increase production in an BF, the potential for the use of Sheini DRI to provide significant benefits to BF operators, including reduced costs and increased production, the potential for the utilization of elephant or other grass at Sheini as part of the procession of Sheini mineralization, the potential for the production of pig iron from Sheini mineralization, the potential for the Company to define improved metallurgical processing techniques, the likely makeup of the final treatment process for Sheini mineralization, business and financing plans and business trends, are forward-looking statements. Information concerning mineral resource/reserve estimates may also be deemed to be forward-looking statements in that it reflects a prediction of the mineralization that would be encountered if a mineral deposit were developed and mined. Although the Company believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate and similar expressions, or are those, which, by their nature, refer to future events. The Company cautions investors that any forward-looking statements by the Company are not guarantees of future results or performance, and that actual results may differ materially from those in forward looking statements as a result of various factors, including, but not limited to, material changes in the assumptions underlying the maiden inferred resource estimate required as a result of changing market conditions or new data, variations in the nature, quality and quantity of any mineral deposits that may be located, variations in the market for, and pricing of, any mineral products the Company may produce or plan to produce, significant increases in any of the machinery, equipment or supplies required to develop and operate a mine at Sheini, the failure of appropriate infrastructure to be available to support the construction of a mine and the transportation of any product the Company may produce or plan to produce; a significant change in the availability or cost of the labor force required to operate a mine at Sheini, significant increases in the cost of transportation for the Company’s products, the Company’s inability to obtain any necessary permits, consents or authorizations required for its activities, the Company’s inability to produce minerals from its properties successfully or profitably, to continue its projected growth, to raise the necessary capital or to be fully able to implement its business strategies, and other risks and uncertainties disclosed in the Company’s 2012 Annual Information Form filed with certain securities commissions in Canada and the Company’s annual report on Form 40-F filed with the United States Securities and Exchange Commission (the “SEC”), and other information released by the Company and filed with the appropriate regulatory agencies. All of the Company’s Canadian public disclosure filings may be accessed via www.sedar.com and its United States public disclosure filings may be accessed via www.sec.gov, and readers are urged to review these materials, including the technical reports filed with respect to the Company’s mineral properties.

Cautionary Note 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 reported 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. 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.

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.