

# Cornerstone and Thundermin Announce a Positive Preliminary Economic Assessment for the Little Deer Copper Deposit

01.11.2011 | [Marketwired](#)

MOUNT PEARL, NEWFOUNDLAND -- ([Marketwire](#) - Nov. 1, 2011) - [Cornerstone Capital Resources Inc.](#) ("Cornerstone") (TSX VENTURE: CGP) (FRANKFURT: GWN) (BERLIN: GWN) (PINK SHEETS: CTNXF) and 50% joint venture partner Thundermin Resources Inc. ("Thundermin") (TSX-THR) announce that P&E Mining Consultants Inc. ("P&E") of Brampton, Ontario has completed an independent, positive National Instrument 43-101 ("NI 43-101") Preliminary Economic Assessment ("PEA") for the Little Deer Copper Deposit ("Deposit"). The results of the PEA demonstrate the potential technical and economic viability of establishing a new, profitable copper mine on the Little Deer property which is located approximately 10 km north of Springdale in north-central Newfoundland.

## PEA Highlights

Base Case Scenario (copper price of US\$3.75/lb and an exchange rate of US\$0.95 = C\$1.00; all dollar amounts are expressed in Canadian dollars unless otherwise stated):

- Mineral Resources: Indicated Resources of 1,911,000 t grading 2.37% Cu (99.8 million lbs of copper) and Inferred Resources of 3,748,000 t grading 2.13% Cu (175.9 million lbs of copper) and 20% mining dilution at zero grade with 90% extraction rate incorporated into the mine plan
- Mining: 1,800 t/day underground mine with ramp and shaft access using long hole stoping method
- Mine Life: 9.5 years
- Conventional milling and flotation process with 97% copper recovery to a clean 28% copper concentrate
- Initial Capital Cost: \$110 million
- Average Site Operating Cost: \$47.32 per tonne of ore mined and milled (\$1.16 per lb of copper)
- Total Revenue: \$829 million
- Pre-tax Net Cash Flow: \$237 million. After-tax Net Cash Flow: \$166 million
- Pre-tax Net Present Value at 6% Discount Rate: \$130.4 million. After-tax Net Present Value at 6% Discount Rate: \$86.7 million
- Payback of Pre-production Capital: 3.5 years
- Internal Rate of Return Pre-tax: 26.0%
- Internal Rate of Return After-tax: 21.5%

Brooke Macdonald, President of Cornerstone, said "We are extremely pleased with the encouraging results of the Little Deer PEA, which demonstrate that the Deposit has the potential to be developed into a new profitable copper mine on a standalone basis. The recently recognized potential for adding further copper resources at the Whalesback Mine, that could result in an extended mine life, simply adds to our shared optimism with Thundermin."

## Background

Cornerstone and Thundermin, operating on a 50/50 basis under the Little Deer Joint Venture ("LDJV") with Thundermin as operator, optioned the Deposit and certain adjoining lands from Weyburn Investments Limited ("Weyburn") in June 2007. Under the LDJV, Thundermin has the right to increase its interest in the Deposit and adjoining lands to 75% by completing a feasibility study and by arranging 100% of the necessary bank financing required to place the property into commercial production. Since June 2007, the LDJV has completed approximately 48,800 m of diamond drilling in 82 holes and has spent over \$7,400,000 on the property, with over \$5,000,000 having been spent on diamond drilling. The LDJV has also compiled a large amount of historical diamond drill hole data on the Deposit that was recovered from the archives of the Newfoundland and Labrador Department of Natural Resources in St. John's. This work confirmed the geological interpretation, grade and continuity of the Deposit and led to the commissioning of an updated NI 43-101 compliant Mineral Resource Estimate for the Deposit which was released on June 22, 2011 (see below). On July 12, 2011, Cornerstone and Thundermin exercised their option to earn a 100% interest in the Deposit and adjoining lands from Weyburn. The LDJV now owns a 100% interest in 276 mineral claims covering approximately 65.3 km<sup>2</sup> of favorable volcanic stratigraphy in the area, subject only to certain net

smelter returns royalties. The LDJV also has a 100% interest in the adjacent, past-producing Whalesback Copper Mine where a recent digital compilation of historical diamond drill hole data suggests that there is excellent potential for establishing additional copper resources at the Whalesback Mine below and to the west of the areas mined by British Newfoundland Exploration Company ("BRINEX") between 1965 and 1972 (see news release dated October 20, 2011). Details on the Deposit and the terms of the agreement between Cornerstone and Thundermin can be found in numerous news releases between May 1, 2007 and June 22, 2011 and on Cornerstone's and Thundermin's respective websites and on SEDAR.

## Financial Evaluations

Financial evaluations of the Deposit were calculated by P&E using a discounted cash flow analysis. On a 100% equity financing basis, the Base Case analysis shows that the pre-tax Internal Rate of Return ("IRR") is 26.0% and the Net Present Value ("NPV"), at a 6.0% discount rate, is \$130.4 million. The pre-tax undiscounted cash flow for the project is \$237 million and the payback of capital from the commencement of commercial production is approximately 3.5 years. The Base Case analysis shows that the after-tax IRR is 21.5% and the NPV, at a 6% discount rate, is \$86.7 million. The after-tax uncounted cash flow for the project is \$166 million. The Base Case scenario assumes initial capital costs of \$110 million to advance the project to commercial production. The average operating costs for life-of-mine is estimated to be \$47.32 per tonne of ore mined and milled. A projected 10-year average copper price of US\$3.75 and exchange rate of US\$0.95=C\$1.00 was used in the Base Case financial analysis. The Base Case also includes the payment of certain underlying NSR royalties to third parties. The sensitivity of the project to copper prices is shown in Table 1.

Table 1: Sensitivity of the Little Deer Copper Deposit to Copper Price

Copper Price (US\$/lb)	3.25	3.50	3.75 (Base Case)	4.00
Pre-tax IRR (%)	13.8	20.1	26.0	31.8
After-tax IRR (%)	11.1	16.3	21.5	26.6
Pre-tax NPV (\$ million @ 6%)	47.6	89.0	130.4	171.8
After-tax NPV (\$ million @ 6%)	27.4	57.1	86.7	116.3

## Mineral Resources

A NI 43-101 compliant Mineral Resource Estimate, which was completed by P&E, was released on June 22, 2011. P&E estimated that the Deposit contains Indicated Resources of 1,911,000 tonnes at an average grade of 2.37% Cu (99.8 million lbs of copper) and Inferred Resources of 3,748,000 tonnes at an average grade of 2.13% Cu (175.9 million lbs of copper) (see Table 2).

A Technical Report and Mineral Resource Estimate titled "Technical Report and Resource Estimate Update on the Little Deer Copper Deposit, Newfoundland, Canada, August 5, 2011" by Mr. Eugene Puritch, P. Eng., President, P&E and Dr. Wayne Ewert, P. Geo., Vice President, P&E, independent Qualified Persons ("QPs") in accordance with NI 43-101 was filed on SEDAR on August 5, 2011.

Table 2: Summary of Little Deer Mineral Resources (P&E, June 20, 2011)

Resource Classification/Zone	Tonnes	Cu %	Cu lbs (M)
Indicated Mineral Resources			
Little Deer Zone	1,911,000	2.37	99.8
Inferred Mineral Resources			
Little Deer Zone	1,240,000	1.93	52.8
Footwall Zone	1,711,000	2.04	77.0
Footwall Zone Splay	797,000	2.64	46.2
Total Inferred Resources	3,748,000	2.13	175.9

### Notes:

1. Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

2. The quantity and grade of reported Inferred Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Resources as an Indicated or Measured mineral resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured

*mineral resource category.*

*3. The mineral resources in this press release were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council.*

*4. Ordinary Kriging was used for Cu grade interpolation.*

*5. Grade capping of 15% Cu utilized on composites.*

*6. A variable bulk density based on numerous field measurements was used for tonnage calculations.*

## **Production Plan**

The PEA was undertaken using a production rate of 1,800 t/day (657,000 t/year), resulting in a 9.5 year mine life for the project. Underground access will be gained via a ramp, driven at 15%, and an 875 m production shaft. It is envisioned that production from approximately the upper 400 m of the Deposit will be via ramp and production from the lower part of the Deposit will be via the production shaft. Copper mineralization from the Deposit will be extracted using a long-hole mining method using mechanized trackless mining equipment (see Figure 1 <http://www.cornerstoneresources.com/i/pdf/NR11-35Figure1.pdf>).

Copper mineralization from the Deposit will be processed in a new, state-of-the-art, environmentally friendly mill employing differential flotation to produce a high quality copper concentrate. On October 19, 2010, excellent metallurgical results from scoping level test work on core samples from the Deposit were announced. This work, which was undertaken at SGS Lakefield Research Limited ("Lakefield") of Lakefield, Ontario, indicates that a clean, high grade copper concentrate grading over 28% copper with 97% recovery can be produced from the Deposit. The use of a simple rougher-cleaner flowsheet, a common xanthate collector, pH control with lime and a relatively coarse primary grind for copper liberation from mineralization of medium hardness suggest that the mill operating costs should fall into the low range.

Approximately 46% of the tailings from the mill will be placed underground in cemented hydraulic backfill. The remainder of the tailings are expected to be submerged in the former Whalesback tailings impoundment facility which is located approximately 1.2 km north of the Deposit.

Approximately 389,000 t of copper concentrate will be produced during the life of the mine which equates to approximately 26 million lbs of copper on an annual basis. The concentrates are expected to be trucked to one of two deep water port sites within 25 km of the property for storage and loading onto oceangoing vessels for shipment to a custom smelter.

## **Capital and Operating Costs**

The total initial capital cost to advance the project to commercial production is \$110 million. This capital includes all new hoist, head frame, equipment, mill infrastructure, ramp, upper portion of the shaft and power line and transformers. It is anticipated that the mine/mill infrastructure will require approximately 16-18 months to complete from the date that all necessary permits are received and financing for the project has been completed.

The average life-of-mine operating cost per tonne of ore mined and milled is estimated at \$47.32 which equates to approximately \$1.16 per lb of copper.

In the PEA, P&E has identified a number of opportunities to potentially further enhance the economics of the project. These include the discovery of additional resources with further drilling at depth and along strike at Little Deer, the discovery of additional resources at the adjoining Whalesback Mine, improvement in metallurgical recoveries and concentrate grade, increase in mine production rates, further reductions in capital costs through the employment of refurbished equipment, project design optimization and the potential use of existing underground infrastructure, including vent raises, ramp access and pre-developed ore which exist on the Little Deer property.

## **Project Infrastructure**

The Deposit is located on a brownfield site and is well situated to take advantage of Newfoundland's developed infrastructure. The Deposit lies approximately 16 km from the Trans-Canada Highway and is easily accessed by a 10 km network of paved and gravel roads north of Springdale, where there is an

available skilled mining workforce. The site is approximately 8 km from a major power substation and there is a plentiful supply of fresh water in the area. The former tailings impoundment facility for the Whalesback Mine, which may be able to be upgraded and used to store additional tailings, is located only 1.2 km north of the Deposit. There is also good access to several deep water ports for any future shipment of copper concentrates.

The recovery of a substantial quantity of archived data has also given Cornerstone and Thundermin a better understanding of the underground infrastructure that exists on the property. This infrastructure dates from 1966 to 1972 and 1972 to 1974 when a portion of the upper part of the Deposit was developed and mined by BRINEX and Green Bay Mining Company ("Green Bay"), respectively. BRINEX accessed the Deposit from the adjoining Whalesback Mine and Green Bay accessed the Deposit via a ramp. Three ventilation raises and substantial lateral development in unmined copper mineralization are known to exist on the property. This existing infrastructure may potentially afford substantial cost savings for access underground for future definition drilling and mining.

## Outlook

As a result of the positive PEA, Cornerstone and Thundermin intend to proceed with further evaluation of the Little Deer Project. This work will include additional drilling in the adjacent Whalesback Mine area to confirm the historical results and to possibly expand the copper resources to the west and at depth below the areas mined previously by BRINEX (see news release dated October 20, 2011). The discovery of additional economic grade copper resources at relatively shallow depths on the Whalesback property could be extremely important to an eventual decision to place the Deposit into commercial production. In addition, Cornerstone and Thundermin intend to undertake a substantial infill diamond drill program on the Deposit to upgrade existing resources from the Inferred to the Indicated Resource category prior to commencing a pre-feasibility study on the project. Details of these programs will be released in the coming weeks.

The Deposit and adjacent Whalesback Mine provide an excellent opportunity to re-establish the Springdale area of north-central Newfoundland as a significant copper producer. The general area has proven to be very prospective for volcanogenic massive sulphide deposits of the Cyprus type and the LDJV anticipates increased exploration activity on its large landholdings that may lead to additional discoveries.

## Qualified Persons

The PEA was prepared under the supervision of Mr. Eugene J. Puritch, P. Eng., President of P&E. Mr. Puritch is an independent Q.P. in accordance with NI 43-101 and has reviewed and approved the contents of this news release. A NI 43-101 compliant PEA Technical Report is currently being prepared by P&E and will be filed on SEDAR by Cornerstone and Thundermin within 45 days of this news release.

Mr. Andrew Hussey, P.Geo., Project Geologist and Lands Manager, Cornerstone Resources Inc. and Q.P. has also reviewed and approved the contents of this news release.

## About Cornerstone

Cornerstone Capital Resources Inc. is a mineral exploration company based in Mount Pearl, Newfoundland and Labrador, Canada, with a diversified portfolio of projects in Ecuador, Chile, and Atlantic Canada, and a strong technical team that has proven its ability to identify, acquire and advance properties of merit. The company's business model is based on generating exploration projects whose subsequent development is funded primarily through joint venture partnerships. The company is well funded and commitments from JV partners constitute significant validation of the strength of Cornerstone's projects. Further information is available on Cornerstone's website: [www.cornerstoneresources.com](http://www.cornerstoneresources.com).

Investors can access and join the following Cornerstone social media channels:

Facebook (<http://www.facebook.com/cornerstoneresourcesinc>)

Twitter ([http://twitter.com/Cornerstone\\_cgp](http://twitter.com/Cornerstone_cgp))

YouTube channel (<http://www.youtube.com/user/CornerstoneResource>)

Flickr (<http://www.flickr.com/photos/cornerstoneresources>)

The link to a recent Corporate presentation is:

[http://www.cornerstoneresources.com/i/pdf/Presentations\\_0711\\_CRICorporate.pdf](http://www.cornerstoneresources.com/i/pdf/Presentations_0711_CRICorporate.pdf)

The link to a virtual tour of drilling at the Gama prospect, Shyri concession in Ecuador is:

<http://www.youtube.com/watch?v=Ne8XSfgLwIM>

### **Cautionary Notice:**

This news release may contain 'Forward-Looking Statements' that involve risks and uncertainties, such as statements of Cornerstone's plans, objectives, strategies, intentions and expectations. The words "potential," "anticipate," "forecast," "believe," "estimate," "expect," "may," "project," "plan," and similar expressions are intended to be among the statements that identify 'Forward-Looking Statements.' Although Cornerstone believes that its expectations reflected in these 'Forward-Looking Statements' are reasonable, such statements may involve unknown risks, uncertainties and other factors disclosed in our regulatory filings, viewed on the SEDAR website at [www.sedar.com](http://www.sedar.com). For us, uncertainties arise from the behaviour of financial and metals markets, predicting natural geological phenomena and from numerous other matters of national, regional, and global scale, including those of an environmental, climatic, natural, political, economic, business, competitive, or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our Forward-Looking Statements. Although Cornerstone believes the facts and information contained in this news release to be as correct and current as possible, Cornerstone does not warrant or make any representation as to the accuracy, validity or completeness of any facts or information contained herein and these statements should not be relied upon as representing its views subsequent to the date of this news release. While Cornerstone anticipates that subsequent events may cause its views to change, it expressly disclaims any obligation to update the Forward-Looking Statements contained herein except where outcomes have varied materially from the original statements.

On Behalf of the Board,

Brooke Macdonald  
President

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

### **Contact Information**

Cornerstone Capital Resources Inc.  
Investor Relations  
North America toll-free: 1 (877) 277-8377

Cornerstone Capital Resources Inc.  
Martti Kangas  
Direct Line: 1 (647) 521-9261

Cornerstone Capital Resources Inc.  
Paul Benwell / Pat Cairns  
Direct Line: 1 (514) 904-1333  
[communications@crigold.com](mailto:communications@crigold.com)  
[www.cornerstoneresources.com](http://www.cornerstoneresources.com)

---

Dieser Artikel stammt von [Rohstoff-Welt.de](http://Rohstoff-Welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/116930--Cornerstone-and-Thundermin-Announce-a-Positive-Preliminary-Economic-Assessment-for-the-Little-Deer-Copper->

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!  
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).