



News Release

# Keegan Announces Positive Pre-Feasibility Study and First Mineral Reserve Statement at Esaase Gold Project

9/22/2011

VANCOUVER, BRITISH COLUMBIA—(Marketwire - Sept. 22, 2011) - Keegan Resources Inc. ("Keegan" or the "Company") (TSX:KGN)(NYSE Amex:KGN) is pleased to announce the results of its Pre-Feasibility Study ("PFS" or "Study") for its Esaase Gold Project ("the Project") located near Kumasi, in southwestern Ghana, West Africa. All currency is in United States Dollars unless otherwise stated.

A conference call will be held Thursday, September 22nd at 8:00 a.m. (PST), 11:00 a.m. (EST) to discuss the Pre-Feasibility Study. For conference call details please see the end of this release.

Highlights of the PFS are as follows:

- 2.6 million ounces of gold produced over a 10.2 year mine life.
- Plant capacity of 7.5 million tonnes per annum, with capacity to treat 9.0 million tonnes per year in early years of production when processing 100% oxide ore.
- 330,000 oz gold produced in Year 1, with a Life Of Mine (LOM) average of 258,000 oz/yr.
- \$639 million after-tax Net Present Value ("NPV") discounted at 5% and an Internal Rate of Return ("IRR") of 32% (100% equity basis at \$1,500/oz gold revenue applied to a \$1,150/oz gold pit shell).
- Capital cost of \$506 million, utilizing a leased mining fleet. Cash costs of \$693/oz gold produced including leasing costs for mining equipment (approximately \$55/oz).

Infill drilling completed in conjunction with the PFS was used to prepare an updated Mineral Resource estimate with highlights as follows:

- Measured and Indicated Resources: 98.7 million tonnes grading 1.1 g/t gold and containing 3.64 million ounces of gold (lower cutoff grade of 0.4g/t gold).



- Inferred Resources: 45.9 million tonnes grading 1.1 g/t gold and containing 1.55 million ounces of gold (lower cutoff grade of 0.4g/t gold).

Based on the positive results of the PFS, a portion of the Measured and Indicated Mineral Resource was converted to Proven and Probable (“P&P”) Mineral Reserves with highlights as follows:

- Total P&P Reserves: 79.4 million tonnes grading 1.1 g/t gold and containing 2.88 million ounces of gold (based on \$1,150/oz gold pit shell).

Maurice Tagami, President & CEO of Keegan, commented: “We are very pleased with the results of the Study, which continue to demonstrate a robust project and significant annual gold production over a mine life of 10+ years. With our current cash reserve of \$220 million, we feel confident that we can rapidly advance the Project to production.”

Keegan is also in the process of advancing its financing strategy in conjunction with the completion of the Definitive Feasibility Study Project (DFS) that is currently underway. Due to the current strong market environment for gold, Keegan’s management feels it can negotiate accretive financing options in order to maximize shareholder value and minimize dilution.

The company is also focused on continuing to drill test the numerous prospective targets on the Essase concessions as well as others.

Mr. Tagami added, “We continue to be excited about ongoing exploration sampling and drilling on the B Zone, the Dawahodo concession and the recently acquired Sky Gold concessions.”

#### Pre-Feasibility Study

The Study was completed by Lycopodium Minerals Pty Ltd. (“Lycopodium”) and Coffey Mining Pty Ltd. (“Coffey”) both of Perth, Australia.

#### Study Summary

A life of mine study summary is outlined below based on an average gold recovery of 91.3%. The mine plan was developed using a lower cut-off grade of 0.4 g/t and a gold price of \$1,150 per ounce.

Mining Schedule		
Fresh ore mined	58.7	Mt
Oxide ore mined	20.7	Mt
Waste mined	319.1	Mt

Total material mined	398.5	Mt
Total mill feed processed	79.4	Mt
Mine Life	10.2	years
Contained Gold	2,878	koz Au
Recovered Gold	2,629	koz Au
Average Strip Ratio	4.0	(w : o)
Average Grade	1.13	g Au / t
Average Gold Recovery	91.3	%
Average Annual Tonnes processed	7.81	Mtpa
Average Annual Production	258.3	koz Au / yr

The initial capital cost of the Project is estimated to be \$506 million in first quarter 2011 dollars. Sustaining and deferred capital over the life of mine is estimated at \$43 million and is primarily for the subsequent lifts of the tailings impoundment facility and grinding circuit additions for fresh material. Trade-off studies were conducted and it was determined that leasing the mining fleet offered the best return to the Project.

A table summarizing the capital costs is shown below:

#### Summary Capital Estimate

Main Area	Cost (\$ million)
Construction Indirects	40
Treatment Plant, Reagents & Services	203
Infrastructure	88
Mining	31
EPCM	55
Owners & Pre-production Costs	89
Initial Capital	506
Deferred & Sustaining Capital	43
Closure Costs	29
Total	578

The capital estimate includes contingency of \$53.7 million in the initial capital.

Total direct operating cash costs are estimated at \$693 per ounce (excluding royalties and refining charges).

Royalties of 5.5% have been accounted for in the economic analysis.

#### Summary Cash Costs

	Project \$ Million	\$/oz Au Recovered	\$/t Milled	\$/t Mined
Mining Cost	978	372	12.32	2.46
Processing Cost	795	302	10.01	1.99
General and Administration Cost	47	18	0.59	0.12
Community Development Fund	3	1	0.03	0.01
Total Operating Cost	1,823	693	22.95	4.58

## Economic Analysis

The economic analysis has been completed on a 100% Project basis. Keegan's interest in the Project is the maximum allowable under Ghanaian law and Keegan holds a mining lease for the Project. The lease stipulates a 10% free carried interest of the Project for the government of Ghana and a 5% royalty to the government and a 0.5% royalty to a Liquidation Committee. A corporate tax rate of 25% has been incorporated in the analysis.

A summary of the Project economic analysis post-tax at various gold prices is as follows:

Gold Price (\$/oz)	NPV (5%) (\$ millions)	IRR (%)	Payback Period (years)
\$1,800	\$1,037	45%	1.5
\$1,500	\$639	32%	2.2
\$1,300	\$373	22%	3.1
\$1,150	\$171	13%	4.7

## Mineral Resource and Reserve Estimate

Coffey prepared an updated Mineral Resource estimate which incorporated infill drilling conducted subsequent to the previous estimate dated December 2010. The updated Mineral Resource estimate was used as a basis for the Study.

A summary of the updated Mineral Resource estimate, at a 0.4g/t gold cutoff, is shown below:

### Updated Mineral Resource Estimate Summary

Mineral Resource (inclusive of Mineral Reserves)	Tonnes (millions)	Average Grade (g/t Au)	Gold Contained (‘000 ozs)
Measured	5.0	1.2	200
Indicated	93.7	1.1	3,440
Subtotal M+I	98.7	1.1	3,640
Inferred	45.9	1.1	1,550

Based on the positive outcome of the PFS, a portion of the Mineral Resource has been upgraded to Mineral Reserves. Only Measured and Indicated Mineral Resources were included in the mine plan for the Study.

The Mineral Reserves are summarized as follows:

#### Mineral Reserve Estimate Summary

	Tonnes (millions)	Average Grade (g/t Au)	Gold Contained ('000 ozs)
Mineral Reserves			
Proven	5.1	1.2	200
Probable	74.3	1.1	2,680
Total P&P Reserves	79.4	1.1	2,880

The Mineral Reserve estimate has been based on a cut-off grade of 0.4 g/t gold and a long-term gold price of \$1,150 per ounce.

The Mineral Resource and Mineral Reserve estimates have been prepared in accordance with the 2010 CIM Definition Standards for Mineral Resources and Mineral Reserves as incorporated by reference in National Instrument 43-101 of the Canadian Securities Administrators. The Coffey Qualified Persons for the estimates are Brian Wolfe, MAusIMM for Mineral Resources and Harry Warries, MAusIMM for the Mineral Reserves.

As this is a first statement of Mineral Reserves for the Project, Keegan plans on filing a NI 43-101 compliant technical report outlining the Mineral Resource and Reserve Estimate and the results of the PFS. The report will be available on [www.sedar.com](http://www.sedar.com) within 45 days of the date of this press release.

The NI 43-101 technical report will be authored by Brian Wolfe, MAusIMM and Harry Warries, MAusIMM, of Coffey and Chris Waller, MAusIMM of Lycopodium. These independent Qualified Persons have verified the data in this news release. Andrea Zaradic, P. Eng., Keegan's Vice President Project Development and a "qualified person" within the definition of that term in NI 43-101, has supervised the preparation of the technical information contained in this news release.

#### Conference Call Details

The conference call will be held at 8:00 a.m. (PST), 11:00 a.m. (EST), participants may join the call by dialing toll free 888-789-9572 or 416-695-7806 for calls within Canada and the U.S. International callers may join the call by dialing toll free 800-6578-9818. The participant pass code number is 7302438. A recorded playback of the call will be available until October 6th, 2011 by dialing 800-408-3053 or 905-694-9451 for calls within Canada and the US. International callers dial toll free 800-3366-3052. Conference ID#: 7345011.

A live and archived webcast will also be available at [www.keeganresources.com](http://www.keeganresources.com) or please visit <http://www.gowebcasting.com/2864>.

On Behalf of the Board of Directors,

Shawn Wallace, Executive Chairman

About Keegan Resources Inc.

Keegan is a junior gold company offering investors the opportunity to share ownership in the rapid development and ongoing exploration of high quality pure gold assets. The Company is focused on its wholly owned flagship Esaase Gold project located in Ghana, West Africa, a highly favourable and prospective jurisdiction. Managed by experienced, skilled and successful technical and financial professionals, Keegan is well financed with no debt. Keegan is also strongly committed to the highest standards for environmental management, social responsibility, and health and safety for its employees and neighbouring communities. Keegan trades on the TSX and the NYSE AMEX under the symbol KGN.

More information about Keegan is available at [www.keeganresources.com](http://www.keeganresources.com).

Forward Looking and other Cautionary Information

This release includes certain statements that may be deemed “forward-looking statements”. All statements in this release, other than statements of historical facts, that address estimated resource quantities, grades and contained metals, possible future mining, exploration and development activities, are forward-looking statements. In particular, Preliminary Economic Assessments are preliminary in nature, including Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the findings of the Preliminary Assessment will be realized. Although the Company believes the expectations expressed in the Preliminary Economic Assessment and other forward-looking statements are based on reasonable assumptions, such statements should not be in any way construed as guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices for metals, the conclusions of detailed feasibility and technical analyses, lower than expected grades and quantities of resources, mining rates and recovery rates and the lack of availability of necessary capital, which may not be available to the Company on terms acceptable to it or at all. The Company is subject to the specific risks inherent in the mining business as well as general economic and business conditions. For more information on the Company, Investors should review the Company’s annual Form 20-F filing with the United States Securities Commission and its home

jurisdiction filings that are available at [www.sedar.com](http://www.sedar.com).

#### Information Concerning Estimates of Measured, Indicated and Inferred Resources

This news release also uses the terms , “measured resources”, ‘indicated resources’ and ‘inferred resources’. Keegan Resources Inc. advises investors that although these terms are recognized and required by Canadian regulations (under National Instrument 43-101 Standards of Disclosure for Mineral Projects), the U.S. Securities and Exchange Commission (SEC) does not recognize them. Investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves as defined by SEC standards. In addition, ‘inferred resources’ have a great amount of uncertainty as to their existence, and economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or pre-feasibility studies, or economic studies except for Preliminary Assessment as defined under 43-101. Investors are cautioned not to assume that part or all of an inferred resource exists, or is economically or legally mineable.

Neither TSX Exchange nor the Investment Industry Regulatory Organization of Canada accepts responsibility for the adequacy or accuracy of this release.

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