

Provides Updated Mineral Reserve and Mineral Resource

VANCOUVER, BC --(Marketwired - September 12, 2016) - [Klondex Mines Ltd.](#) (TSX: KDX)(NYSE MKT: KLDX) ("Klondex" or the "Company") is pleased to announce a positive production decision at its underground True North Gold Mine ("True North") in Manitoba, Canada. Additionally, the Company is pleased to provide an updated Mineral Reserve and Mineral Resource for True North.

Preliminary Estimated Operating Statistics:

- Annual mill throughput of 600 - 1,000 tpd
- Initial annual production of 45,000 - 65,000 Au oz
- Average All-in Sustaining Costs of C\$950 - C\$1,050 per Au oz
- Annual capital expenditures of C\$15 - C\$25 million
- NI 43-101 Technical report will be issued within 45 days of this press release

Mineral Reserve and Mineral Resource Highlights:

- True North Proven and Probable ("P&P") Mineral Reserve is 85.5k Au oz at a grade of 0.24 Au opt contained within 352k tons
- True North Measured and Indicated ("M&I") Mineral Resource is 294k Au oz at a grade of 0.21 Au opt contained within 1,386k tons
- True North Mineral Reserve and Mineral Resource are exclusive of the results of 35 of the 50 initial drill holes completed in Q2 of this year (see press release dated June 29, 2016)
- True North year end Mineral Resource update is expected in Q1 2017

TABLE 1: True North Mineral Reserve

Category	Tons (k)	Au opt	Au g/t	Au koz
Proven	153	0.241	8.26	36.7
Probable	199	0.245	8.40	48.8
Total P&P	352	0.243	8.33	85.5

TABLE 2: True North Mineral Resource

Category	Tons (k)	Au opt	Au g/t	Au koz
Measured	455	0.232	7.95	106
Indicated	931	0.202	6.93	188
Total M&I	1,386	0.212	7.27	294
Inferred	2,793	0.165	5.66	460

Notes to Tables:

1. Mineral Resource is inclusive of Mineral Reserve.
2. Mineral Reserve is calculated at a gold price of C\$1,500 per ounce.
3. Mineral Resource is calculated at a gold price of C\$1,750 per ounce.
4. US\$:CDN\$ exchange rate is 0.80.
5. Metallurgical process recovery for gold is 94%.
6. Mineral Resource include resource modeling dilution to a minimum width of four feet or the vein width, whichever is greater.
7. Mineral Reserve includes mining dilution and is constrained to a five foot minimum mining width.
8. Cut off grade for the Resource is 0.09 opt Au.
9. Cut off grade for the Reserve is 0.13 opt Au which includes a mining cost of C\$69/ton, processing cost of C\$28/ton, G&A cost of C\$45/ton and sustaining development cost of C\$42/ton.
10. Mineral Resource and Reserve tonnage calculations used a bulk density 0.086 tons/cu. ft.
11. Mining losses of 2% have been applied to the designed mine excavations, and no additional unplanned dilution has been applied.
12. The effective date for Mineral Reserve and Resource is June 30, 2016.
13. 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, sociopolitical, marketing, or other relevant issues.
14. 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.
15. 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.

Paul Huet, President and CEO stated, "I am very pleased to have been able to deliver a positive production decision on our True North asset ahead of our initial expected timeframe. This will be our third operational mine and we believe it will deliver

significant value to our shareholders." Mr. Huet continued, "We are also pleased with the updated Mineral Reserve and Resource estimate at True North knowing that it only includes the results of 15 of our initial 50 drill holes from 2016. We are optimistic about the potential to continue to increase our Mineral Reserves and Mineral Resources in Canada."

The True North Mineral Reserve and Mineral Resource is based on 7,746 drill holes totaling 213,206 m (699,496 ft) and includes data from 15 new drill holes totaling 1,949 m (6,393 ft), completed by Klondex since May 2016. In addition to the drilling, the Mineral Reserve and Mineral Resource estimate also utilizes 28,763 channel samples provided from mining on the mineralized structures.

The updated Mineral Reserve and Mineral Resource estimates for True North were prepared by P&E Mining Consultants, Inc.

To view partial results of the Company's initial drill program at its True North Gold Mine, please see the Company's press release dated June 29, 2016.

Mineral Resource Assumptions

Classification of the Mineral Resource as Measured, Indicated or Inferred was undertaken based on the number of drill and channel sample composites used and the average distance from the block to the composites.

A Measured Mineral Resource grade model block must have incorporated four composites within a distance of 50 feet. For an Indicated Mineral Resource, a grade model block must have incorporated four composites within 100 feet, and an Inferred Mineral Resource must have incorporated four composites within 500 feet. The search orientation ellipse was maintained approximately parallel to the strike and dip of each vein. Only Gold values were estimated at True North.

Drill interval assays for True North were performed by TSL Laboratories Inc. of Saskatoon, Saskatchewan (independent laboratory). Channel sample assays were performed by Klondex's in-house laboratory at True North, using fire assaying with gravimetric finish and check samples were sent to TSL Laboratories Inc. of Saskatoon, Saskatchewan.

Drill samples cited in this news release for True North were acquired by independent drilling contractors under the direction of Klondex staff. Standards and blanks were inserted every 20 samples or at least one per hole in the case where there are less than 20 samples in a hole. Duplicates are generated by the lab and re-assayed internally. QA/QC samples are tracked and if a result plots outside of pre-determined QA/QC gate limits, the batch is re-assayed and the new results replace the previous values.

Qualified Person

Scientific and technical information in this press release has been reviewed and approved by Eugene Puritch, P.Eng. (PEO Lic#100014010), a "Qualified Person" within the meaning of NI 43-101.

About Klondex Mines Ltd. (www.klondexmines.com)

Klondex is a well-capitalized, junior-tier gold and silver mining company focused on exploration, development, and production in a safe, environmentally responsible, and cost-effective manner. The Company has 100% interests in two producing mineral properties: the Fire Creek Mine and the Midas Mine and ore processing facility, both of which are located in the state of Nevada, USA, as well as the recently acquired True North Gold mine and ore processing facility in Manitoba, Canada. The Company is in the process of acquiring the Hollister Mine and Esmeralda mill, located in northern Nevada, USA.

Cautionary Note Regarding Technical Information and Forward-looking Information

This news release contains certain information that may constitute forward-looking information or forward-looking statements under applicable Canadian and United States securities legislation (collectively, "forward-looking information"), including but not limited to information about the magnitude and the quality of the True North Gold mine and milling facility, the success and completion of exploration and development activities at the True North mine and milling facility, the accuracy of current interpretation of drill and other exploration results, the Company's intention and ability to complete additional drilling, the Company's intention and ability to monetize mineralized material, the Company's intention and ability to commence production at True North, project development and related permitting, cash flows, budgeting and the financial condition of the Company. This forward-looking information entails various risks and uncertainties that are based on current expectations, and actual results may differ materially from those contained in such information. These uncertainties and risks include, but are not limited to, the strength of the global economy; the price of gold; operational, funding and liquidity risks; the degree to which mineral resource estimates are reflective of actual mineral resources; the degree to which factors which would make a mineral deposit commercially viable are present; the risks and hazards associated with underground operations; and the ability of Klondex to fund its substantial capital requirements and operations. Risks and uncertainties about the Company's business are more fully discussed in the Company's disclosure materials filed with the securities regulatory authorities in Canada and United States available at www.sedar.com and www.sec.gov, respectively. Readers are urged to read these materials. Klondex assumes no obligation to update any forward-looking information or to update the reasons why actual results could differ from such information unless required by law.

Cautionary Note to U.S. Investors Regarding the Use of Mining Terms

This news release has been prepared in accordance with the requirements of the securities laws in effect in Canada, which

differ from the requirements of U.S. securities laws. All Mineral Reserve and Mineral Resource estimates included or referred to in this news release have been prepared in accordance with National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"). NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. These standards differ significantly from the Mineral Reserve disclosure requirements of the U.S. Securities and Exchange Commission (the "SEC") set out in Industry Guide 7. Consequently, Mineral Reserve and Mineral Resource information contained in this news release is not comparable to similar information that would generally be disclosed by U.S. companies in accordance with the rules of the SEC.

In particular, the SEC's Industry Guide 7 applies different standards in order to classify mineralization as a reserve. As a result, the definitions of Proven and Probable reserves used in NI 43-101 differ from the definitions in SEC Industry Guide 7. Under SEC standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. Under SEC Industry Guide 7 standards, a "final" or "Bankable" Feasibility Study is required to report reserves, the three-year historical average price is used in any reserve or cash flow analysis to designate reserves and all necessary permits and government approvals must be filed with the appropriate governmental authority. Accordingly, Mineral Reserve estimates contained in this news release may not qualify as "reserves" under SEC standards.

The SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. Investors are cautioned not to assume that any part or all of mineral deposits in these categories will ever be converted into reserves. U.S. investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their 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.

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More Information

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