TORONTO, ONTARIO--(Marketwired - May 24, 2016) - Kirkland Lake Gold Inc., ("Kirkland Lake Gold" or the "Company") (TSX:KGI), an intermediate gold producer with operations in Ontario, Canada, is pleased to report results from underground exploration drilling programs on the South Mine Complex ("SMC") and the '04 Break. The SMC drilling was focused on the South Claims (formerly a part of the Queenston Mining Joint Venture property) which are located approximately 800 metres south of the #2 shaft at the Macassa Mine Complex, and lie immediately southwest of the HM claim and hosts a highly prospective portion of the SMC. Drilling from the 4250 foot level on the '04 Break mineralization commenced in May and is aimed at testing an area above the 3400 foot level, east of the Tegren fault to follow up on results from last year.

Underground Drilling Highlights:

102.9 g/t over 0.1 metre 42-1771 13.4 g/t Au over 0.2 metres

SMC Drilling	Zone
53-2932 76.5 g/t Au (58.6 g/t cut) over 3.1 metres	FWZ
53-2933 367.2 g/t Au (120.0 g/t cut) over 0.2 metres; and	HWZ
878.8 g/t Au (151.5 g/t cut) over 0.3 metres, including	NSZ
1,458.5 g/t Au over 0.2 metres	
53-2934 53.5 g/t Au (48.0 g/t cut) over 2.2 metres; and	HWZ
42.9 g/t Au over 0.2 metres	NSZ
53-2936 55.2 g/t Au over 0.5 metres	NSZ
53-3067 174.2 g/t Au (79.5 g/t cut) over 6.0 metres, including 174.5 g/t Au over 0.2 metres	NSZ
'04 Break Drilling	
42-1770 27 4 a/t Au over 0.6 metres, including	

Notes: All widths in this table are true widths. Higher grade assays are cut to 246.9 g/t or 120.0 g/t depending on the zone (see table below for more information).

Mr. George Ogilvie, Chief Executive Officer of the Company commented, "We are pleased to see that the SMC mineralization continues to extend giving us the opportunity to further expand the known resource and potentially increase the level of reserves as we continue to drill.

"The drilling on the '04 Break mineralization, although in its infancy, is very promising and we are pleased with these initial results. We will continue to drill this target area with a 1km strike length throughout the course of this year and into next year. Our hope is to define a zone of mineralization above the 3400L elevation ultimately with resources that could be brought into the mine plan sometime in 2017 or 2018. This would allow us to achieve an incremental increase in throughput from the Macassa Mine Complex."

The following figures, referred to elsewhere in this release, may be viewed at the Company's website at www.klgold.com.

• Figure 1 - plan view showing the latest underground exploration results relative to #3 shaft: http://media3.marketwire.com/docs/NR-24May16-SMC%20Plan%20View-Figure1.jpg

• Figure 2 - detailed plan view showing the latest drill hole intersections on the SMC: http://media3.marketwire.com/docs/NR-24May16-SMC%20Drilling-Figure2.jpg

• Figure 3 - longitudinal section showing 4250 target area relative to existing zones and infrastructure: http://media3.marketwire.com/docs/LongSection_of_04_Break_Figure3.jpg

• Figure 4 - longitudinal section showing the latest drill hole intersections on the `04 Break: http://media3.marketwire.com/docs/NR-24May16-04Break%20Drilling-Figure4.jpg

Underground Drilling Program Continues To Grow The SMC Southeast Within The South Claims

This program concentrated on expanding the SMC by testing the New South Zone ("NSZ") as well as the previously identified hanging wall ("HWZ") and footwall zones ("FWZ") to the NSZ. Drilling continued to expand the NSZ with follow up drilling conducted to verify and expand around previously released drill results (see Company press release dated November 12, 2015) 53-2891B which returned 386.7 g/t (73.4 g/t cut) over a true width of 7.5 metres. Recently completed drill hole 53-3067 intersected the NSZ 14 metres to the west and up-dip of 53-2891B and returned 174.2 g/t (79.5 g/t cut) over 6.0 metres true width. It would appear that the wide intersections in these two drill holes represent the convergence of the NSZ and a footwall system further described in this release.

Additional step out drilling on the NSZ to the west included drill hole 53-2933 which returned 878.8 g/t (151.5 g/t cut) over a true width of 0.3 metres, drill hole 53-2934 which returned 42.9 g/t over a true width of 0.2 metres and drill hole 53-2936 which returned 55.2 g/t over 0.5 metres true width. These intersections have added 43 metres of strike length and joined two previous individual resource areas.

Both FWZ and HWZ to the NSZ continue to expand with a footwall zone to the NSZ which has a lobe that extends in the down dip component based on recent drilling. Drill hole 53-2932 returned 76.5 g/t (58.6 g/t cut) over a true width of 3.1 metres and drill hole 53-2933 returned 347.3 g/t (57.9 g/t cut) over a true width of 1.7 metres, both have extended the zone 104 metres down dip. This zone appears to converge with the NSZ further down dip as described previously.

The HWZ to the NSZ has now expanded into one continuous block with the addition of three new intersections. Drill hole 53-2933 returned 367.2 g/t (120.0 g/t cut) over a true width of 0.2 metres, drill hole 53-2934 returned 53.5 g/t (48.0 g/t cut) over a true width of 2.2 metres, and drill hole 53-2936 returned 29.1 g/t over a true width of 0.5 metres. These holes have added approximately 30.5 metres of strike length to this HWZ.

The following table summarizes the latest underground drilling results in metric values:

SMC UNDERGROUND EXPLORATION (SOUTH CLAIMS) - (5300 Level)

DRILL HOLE	ZONE		AZIMUTH (degrees)		TO (m)	CORE LENGTH (m)	TRUE WIDTH (m)	ASSAY (g/t)	CUT (g/t)
53-2892A	NSZ	-38	275	218.7	219.3		0.5	42.5	-
Including				219.0	219.3	0.3	0.2	81.9, VG	-
53-2932	HWZ	-47	094	79.9	80.2	0.3	0.2	13.7	
	NSZ			136.6	145.5	8.9	3.8	17.8	-
Including				138.9	139.3	0.4	0.2	46.3	-
And				142.0	143.0	1.0	0.4	106.6	-
	FWZ			149.7	155.9	6.2	3.1	76.5	58.6**
Including				153.6	153.9	0.3	0.2	196.8, VG, Tell	-
And				154.8	155.1	0.3	0.2	175.9, VG	-
And				155.1	155.5	0.4	0.2	117.9	-
53-2933	HWZ	-43	100	88.4	88.7	0.3	0.2	367.2, VG, Tell	120.0*
	NSZ			158.8	159.6	8.0	0.3	878.8	151.5*
Including				159.1	159.6	0.5	0.2	1,458.5, VG, Tell	' -
	FWZ			166.9	170.7	3.8	1.7	347.3	57.9**
Including				166.9	167.6	0.7	0.3	1,425.3, VG, Tell	' -
And				167.6	167.9	0.3	0.2	215.7, Tell	-
And				170.1	170.7	0.6	0.3	298.6	-
53-2934	HWZ	-43	108	90.0	95.2	5.2	2.2	53.5	48.0**
Including				90.0	90.6	0.6	0.2	89.5	-
And				92.1	92.8	0.7	0.2	167.3, VG	-
And				92.8	93.4	0.6	0.2	59.7	-
And				94.8	95.2	0.4	0.2	58.6	-
	NSZ			156.1	156.4	0.3	0.2	42.9	-
	FWZ			193.5	193.8	0.3	N/C	11.0	-
53-2936	HWZ	-46	113	93.0	94.2	1.2	0.5	29.1	-
Including				93.5	93.8	0.3	0.1	54.9	-
	NSZ			147.9	149.2	1.3	0.5	55.2	-
Including				148.8	149.2	0.4	0.2	93.6	-
53-3067	NSZ	-34	260	242.8	251.8	9.0	6.0	174.2	79.5*
Including				242.8	243.1	0.3	0.2	174.5, VG	
And				243.1	243.7	0.6	0.5	395.7, VG, Tell	
And				243.7	244.4	0.7	0.4	130.6, VG	
And				244.4	244.7	0.3	0.2	92.9, VG	
And				246.2	246.5	0.3	0.2	206.1, VG	
And				248.3	248.9	0.6	0.4	235.9, VG	
And				250.9	251.3	0.4	0.2	2,311.2, VG, Tell	
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NSV = No significant value, VG = Visible Gold; Tell = Tellurides; *Cut = cut to 246.9 g/t, **Cut = cut to 120.0 g/t.

N/C = True width not calculated, will not make minimum requirements for resource definition.

The first two exploration holes drilled up dip from the new drill bay on the 4250 foot level tested the `04 Break east of the Tegren cross fault. The first hole, 42-1770, intersected the `04 Break 41 meters east from previously released drill hole 34-661 which assayed 76.5 g/t over 0.3 metres true width (see the Company press release dated February 23, 2015). Drill hole 42-1770 returned 27.4 g/t over 0.6 metres true width at the -3000 foot elevation. A new footwall zone was also intersected in drill hole 42-1770 at the -3053 foot elevation and returned 7.5 g/t over a core length of 1.2 metres (true width unknown at this time). The second completed drill hole from the -4250 level 42-1771, intersected the `04 Break at the -3173 elevation and returned 13.4 g/t over 0.2 metres true width. The `04 Break in drill holes 42-1770 and 42-1771 was strong, with associated quartz veining and visible gold observed in both drill holes.

The following table summarizes the latest underground drilling results in metric values:

`04 BREAK UNDERGROUND EXPLORATION - (4250 Level)

DRILL HOLE	ZONE	DIP (degrees)	AZIMUTH (degrees)			CORE LENGTH (m)	TRUE WIDTH (m)	ASSAY (g/t)	CUT (g/t)
42-1770	FWZ	+74	218	365.9	367.1	1.2	??	7.5	-
	`04 BRK			379.5	381.2	1.7	0.6	27.4	-
Including	,			379.5	379.8	0.3	0.1	102.9, VG	-
42-1771	`04 BRK	+70	209	336.0	336.5	0.5	0.2	13.4, VG	-

NSV = No significant value, VG = Visible Gold; Tell = Tellurides; *Cut = cut to 246.9 g/t, **Cut = cut to 120.0 g/t.

N/C = True width not calculated, will not make minimum requirements for resource definition.

QA/QC Controls

The Company has implemented a quality assurance and control (QA/QC) program to ensure sampling and analysis of all exploration work is conducted in accordance with the best possible practices. The drill core is sawn in half with one half of the core samples shipped to Swastika Laboratories in Swastika, Ontario. The other half of the core is retained for future assay verification. Other QA/QC includes the insertion of blanks, and the regular re-assaying of pulps and rejects at alternate certified labs. Gold analysis is conducted by fire assay using atomic absorption or gravimetric finish. The laboratory re-assays at least 10% of all samples and additional checks may be run on anomalous values.

Qualified Person

The Company's exploration programs are under the supervision of Doug Cater, P.Geo., Vice President of Exploration. Mr. Cater is the 'qualified person' for the purpose of National Instrument 43-101, *Standards of Disclosure for Mineral Projects*, of the Canadian Securities Administrators, and has reviewed and approved this news release. As the Vice President of Exploration, Mr. Cater is not considered independent.

About the Company

<u>Kirkland Lake Gold Inc.</u> is a Canadian focused, intermediate gold producer with assets in the historic Kirkland Lake gold camp, and east of the Timmins gold camp along the Porcupine-Destor Fault Zone, both in northeastern Ontario. The Company is currently targeting annual gold production of between 270,000 to 290,000 ounces from its cornerstone asset, the Macassa Mine Complex and the recently acquired East Timmins Operations.

The Company is committed to building a sustainable mining company that is recognized as a safe and responsible gold producer with quality assets in safe mining jurisdictions.

The Toronto Stock Exchange has neither reviewed nor accepts responsibility for the adequacy or accuracy of this news release.

Cautionary Note Regarding Forward Looking Statements

This Press Release contains statements which constitute "forward-looking statements" within the meaning of applicable securities laws, including statements regarding the plans, intentions, beliefs and current expectations of the Company with respect to the future business activities and operating performance of the Company. The words "may", "would", "could", "should", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" and similar expressions, as they relate to the Company, are intended to identify such forward-looking statements. Investors are cautioned that forward-looking statements are

^{?? =} True width unknown at this time

based on the opinions, assumptions and estimates of management considered reasonable at the date the statements are made such as, without limitation, opinion, assumptions and estimates of management regarding the Company's business, including but not limited to; the continued exploration programs on the SMC and the '04 Break mineralization, the timing and results thereof; the ability to continue to expand the SMC and to increase its level of resources and the timing thereof; and the ability to define a new resource on the '04 Break above the 3400 foot level, the potential to increase the level of reserves, and the timing and results thereof. Such opinions, assumptions and estimates, are inherently subject to a variety of risks and uncertainties and other known and unknown factors that could cause actual events or results to differ materially from those projected in the forward-looking statements.

These factors include the Company's expectations in connection with the projects and exploration programs being met, the impact of general business and economic conditions, global liquidity and credit availability on the timing of cash flows and the values of assets and liabilities based on projected future conditions, fluctuating gold prices, currency exchange rates (such as the Canadian dollar versus the United States Dollar), possible variations in ore grade or recovery rates, changes in accounting policies, changes in the Company's corporate mineral reserves and resources, changes in project parameters as plans continue to be refined, changes in project development, construction, production and commissioning time frames, the possibility of project cost overruns or unanticipated costs and expenses, higher prices for fuel, power, labour and other consumables contributing to higher costs and general risks of the mining industry, failure of plant, equipment or processes to operate as anticipated, unexpected changes in mine life, seasonality and unanticipated weather changes, costs and timing of the development of new deposits, success of exploration activities, permitting time lines, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims, and limitations on insurance, as well as those risk factors discussed or referred to in the Company's annual Management's Discussion and Analysis and Annual Information Form for the year ended December 31, 2015, filed with the securities regulatory authorities in certain provinces of Canada and available at www.sedar.com.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results may vary materially from those described herein as intended, planned, anticipated, believed, estimated or expected. Although the Company has attempted to identify important risks, uncertainties and factors which could cause actual results to differ materially, there may be others that cause results not to be as anticipated, estimated or intended. The Company does not intend, and does not assume any obligation, to update these forward-looking statements except as otherwise required by applicable law.

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