



## KIRKLAND LAKE GOLD REPORTS NEW HIGH-GRADE INTERSECTIONS AT MACASSA MINE, EXTENDS MINERALIZATION ALONG STRIKE AND UP AND DOWN DIP OF SOUTH MINE COMPLEX

- **Drilling intersects high-grade mineralization up to 180 metres (“m”) east of current Mineral Reserves at South Mine Complex (“SMC”)**
  - Key intercepts: 589.5 grams per tonne (“gpt”) over 2.0 m core length  
25.1 gpt over 2.0 m core length  
16.4 gpt over 2.0 m core length  
14.8 gpt over 2.0 m core length
- **Drilling to test north of current Mineral Resource intersects high-grade mineralization up to 100 m up dip and in footwall to current Mineral Resource at SMC**
  - Key intercepts: 258.1 gpt over 2.0 m core length (Up Dip)  
130.9 gpt over 2.0 m core length (Up Dip)  
28.3 gpt over 2.0 m core length (Footwall lens)  
22.6 gpt over 2.0 m core length (Up Dip)
- **Drilling along south margin of current SMC Mineral Reserves intersects high grades, extends mineralization down dip of Mineral Resources and identifies new mineralized lenses to the southeast of SMC**
  - Key intercepts: 101.7 gpt over 2.0 m core length (SE Zones)  
69.3 gpt over 2.0 m core length (SE Zones)  
9.3 gpt over 2.0 m core length (SE Zones)  
38.9 gpt over 2.0 m core length (Down Dip)

*1. True widths of drill results being reported are not known at this time.*

**Toronto, Ontario – July 6, 2021 – Kirkland Lake Gold Ltd. (“Kirkland Lake Gold” or the “Company”) (TSX:KL) (NYSE:KL) (ASX:KLA)** today reported new drill results from 54 holes (20,773 m) of underground exploration drilling from the Macassa Mine in Kirkland Lake, Ontario. Holes in the program were completed from new drill platforms located on the east side of the 5300 and 5800 levels and designed to confirm and expand Mineral Reserves and Mineral Resources in the SMC zone to the east as well as up and down dip.

Tony Makuch, President and CEO of Kirkland Lake Gold, commented: “Today’s drilling results at Macassa highlight the extensive potential that exists to add new Mineral Reserves and Mineral Resources in the SMC, with high-grade intersections being reported outside of the existing deposit, to the east, south and north, as well as up and down dip. In addition, the new results also include high-grade intersections in the area where the SMC merges with the Amalgamated Break, as well as the identification of potential new high-grade lenses to the southeast and in the footwall of the main SMC structure. Of particular interest is the fact that, based on interpretations of the latest drilling, the SMC East mineralized structure appears to be swinging to the northeast in the direction of the large corridor of high-grade mineralization that we identified along the Main Break and announced last year. The convergence of these two structures would represent an extremely attractive exploration target and evaluating the projected area of convergence will be an important priority of ours in the future. We continue to target approximately 250,000 m of total drilling at Macassa in 2021, with eight underground drills and one surface drill currently in operation.”

A total of 16 of the new holes (5,597 m) of drilling from the new program were drilled to test the potential eastward extension of Mineral Resources and Mineral Reserves in the SMC (Figure 1). Key intercepts from the drilling include: **589.5 gpt over 2.0 m, including 1,296.5 gpt over 0.9 m, from 53-4443, 25.1 gpt over 2.0 m, including 99.7 gpt over 0.5 m, from 53-4432, 16.4 gpt over 2.0 m, including 62.8 gpt over 0.5m, from 53-4431,**



**14.8 gpt over 2.0 m, including 64.2 gpt over 0.4 m, from 53-4444 and 13.0 gpt over 2.7 m, including 48.2 gpt over 0.3 m and 5.4 gpt over 2.0 m, from 53-4267.** These intercepts are from holes drilled from the two furthest east drill platforms on the 5300 Level exploration drive. The holes intersected the SMC East trend between 80 and 180 m east of current Mineral Resources and in the general vicinity of a previously released intercept from hole AB-16-02, which intersected a value of 33.3 gpt over 2.0 m (see press release dated April 22, 2020).

These intercepts are believed to be related to new high-grade lenses occurring along the east extension of the SMC East Trend, with the overall trend appearing to be swinging slightly to the northeast towards the east portion of the previously announced corridor of high-grade mineralization identified along the Main Break (see press release dated April 22, 2020). The convergence of these two structures represents a high-potential target area for future drilling as drifting on the 5300 level continues to advance eastwards.

An additional 15 holes (5,987 m) of drilling from the new program were drilled to test the potential extension of mineralization up dip and into the footwall of the of current Mineral Reserves and Mineral Resources in the SMC.

The majority of this drilling was completed from the 5300 Level and focused on a 150 m strike length in the central portion of the SMC East structure. Significant results from the drilling include: **258.1 gpt over 2.0 m, including 1688.2 gpt over 0.3 m, from 53-4140; 130.9 gpt over 2.0 m, including 858.8 gpt over 0.3 m, from 53-4330, 28.3 gpt over 2.0 m, including 39.7 gpt over 1.4 m, from 53-4287, 22.6 gpt over 2.0 m, including 49.7 gpt over 0.9 m, from 53-4211, 14.6 gpt over 2.0 m, including 95.4 gpt over 0.3 m, from 53-4388 and 10.1 gpt over 2.0 m from 53-3929.** These holes extend the main target horizon up to approximately 100 m up dip and indicate the potential for new lenses of mineralization in the footwall of the main structure and continue to remain open for future expansion in both areas.

Additional drilling for this target was completed from a new drill platform on the 5800 Level located approximately 350 m to the west of the holes on the 5300 Level. Significant results include: 15.7 gpt over 2.0 m, from 58-552 and 21.5 gpt over 2.0 m, from 58-585, which tested the structure in this area up to 100 m up dip. Testing within the 350 m gap between these two new holes and others drilled on 5300 level is limited and considered to have significant potential for additional mineralization.

Another 23 holes (9,189 m) of drilling from the new program were drilled to test the exploration potential along the south margin and down-dip extension of mineralization from current Mineral Reserves and Mineral Resources in the SMC.

The majority of these holes (15 holes for 5,871 m) were from platforms in the west and central portions of the target area where the SMC East structure appears to be merging with the Amalgamated Break. Significant intercepts from this drilling include: **38.9 gpt over 2.0 m, including 153.6 gpt over 0.3 m, from 53-4396, 31.7 gpt over 2.1 m, including 110.2 gpt over 0.4 m, from 53-4398, 21.4 gpt over 2.1 m, including 70.5 gpt over 0.6 m, and 8.8 gpt over 2.4 m from 53-4281, 19.8 gpt over 2.1 m, including 104.5 gpt over 0.3 m, and 8.7 gpt over 2.3 m from 53-4380 and 16.7 gpt over 2.0 m, including 69.0 gpt over 0.5 m, 10.3 gpt over 3.2 m, including 59.4 gpt over 0.3 m, and 7.4 gpt over 3.8 m, including 38.8 gpt over 0.5 m, from 53-4282.** These holes tested the structure up to 75 m down dip from current Mineral Resources in the SMC, with the structure remaining open for further expansion.

The remaining eight holes (3,318 m) designed to test the south margin and down-dip extension of mineralization were drilled from a platform near the east limit of the 5300 Level where the SMC East Trend appears to swing to the northeast and be intersected by a northeast trending diabase dike. Significant results include: **101.7 gpt over 2.0 m, including 220.8 gpt over 0.9 m, from 53-4366, 69.3 gpt over 2.0 m, including 299.9 gpt over 0.5 m, and 11.3 gpt over 2.0 m from 53-4417, 49.3 gpt over 2.0 m, including 152.0 gpt over**



**0.6 m, from 53-4418 and 23.8 gpt over 2.0 m, including 77.5 gpt over 0.6 m, from 53-4056.** The mineralization within these holes appears to be located in a new lens of mineralization located to the south of the main SMC East Trend where there appears to have been limited past testing.

Exploration drilling at Macassa is currently continuing with eight drills underground and one drill on surface.

### **Qualified Person**

The Company's exploration programs at Macassa are conducted under the supervision of Eric Kallio, P.Geo., Senior Vice President, Exploration and Chris Evans, P.Geo, Chief Exploration Geologist at Macassa Mine. Eric Kallio and Chris Evans are the 'qualified persons' for the purpose of National Instrument 43-101, Standards of Disclosure for Mineral Projects, of the Canadian Securities Administrators, and have reviewed and approved the scientific and technical information in this news release.

### **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 best 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 certified reference standards, 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.

### **About Kirkland Lake Gold Ltd.**

Kirkland Lake Gold Ltd. is a senior gold producer operating in Canada and Australia that is targeting 1,300,000 – 1,400,000 ounces of production in 2021. The production profile of the Company is anchored by three high-quality operations, including the Macassa Mine and Detour Lake Mine, both located in Northern Ontario, and the Fosterville Mine located in the state of Victoria, Australia. Kirkland Lake Gold's solid base of quality assets is complemented by district scale exploration potential, supported by a strong financial position with extensive management expertise.

For further information on Kirkland Lake Gold and to receive news releases by email, visit the website at [www.klgold.com](http://www.klgold.com).

### ***Cautionary Note Regarding Forward-Looking Information***

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 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 Amalgamated Break mineralization, the timing and results thereof; the ability to continue to expand the SMC and Amalgamated Break and to increase levels of resources and reserves as a result of such exploration programs and the anticipated timing thereof; the potential to increase the level of resources and reserves and potential conversion of mineral resources; the anticipated completion date of the #4 shaft and potential impact and benefits thereof; the amount of future production over any period; the anticipated overall impact of the



Company's COVID 19 response plans including measures taken by the Company to reduce the spread of COVID 19; and assumptions made relating to operating cash costs based on forecasts and projections. 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, the impact of COVID-19, 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, 2020 and its filings for the quarterly period ended March 31, 2021, filed with the securities regulatory authorities in certain provinces of Canada and available at [www.sedar.com](http://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.

### ***Cautionary Note to U.S. Investors - Mineral Reserve and Resource Estimates***

This press release has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ in certain material respects from the disclosure requirements of United States securities laws. The terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with Canadian National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum (the "CIM") – CIM Definition Standards on Mineral Resources and Mineral Reserves, adopted by the CIM Council, as amended (the "CIM Standards"). These definitions differ significantly from the definitions in the disclosure requirements promulgated by the Securities and Exchange Commission (the "SEC") applicable to domestic reporting companies. Investors are cautioned that information contained in this Annual Information Form may not be comparable to similar information made public by United States companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations of the SEC thereunder.

### **FOR FURTHER INFORMATION PLEASE CONTACT**

Anthony Makuch, President, Chief Executive Officer & Director

Phone: +1 416-840-7884

E-mail: [tmakuch@kl.gold](mailto:tmakuch@kl.gold)

Mark Utting, Senior Vice President, Investor Relations

Phone: +1 416-840-7884

E-mail: [mutting@kl.gold](mailto:mutting@kl.gold)



Macassa Exploration - SMC EAST

Drill Hole	Zone	COLLARS - UTM NAD 83		Direction		End Depth (m)	Core Interval			Results
		Easting	Northing	Azimuth (°)	Dip		From (m)	To (m)	Length (m)	
AB-16-02**	EAST EXTENSION	570344	5331755	358	-74	2628	1727.1	1729.1	2.0	33.3
Including							1727.3	1727.6	0.3	203.7
AB-16-02**	MAIN BREAK						2045.7	2047.7	2.0	17.4
Including							2046.9	2047.2	0.3	86.5
53-3887	SMC FOOTWALL	567358	5332445	6	-41	732	583.8	585.8	2.0	6.8
Including							584.1	584.5	0.3	33.0
53-3929*	UP-DIP EXTENSION	567358	5332446	351	-33	747	325.6	327.7	2.0	10.1
53-3929*	SMC FOOTWALL						418.5	420.5	2.0	18.5
53-4056	DOWN-DIP EAST	567355	5332445	34	-54	610	373.1	375.1	2.0	23.8
Including							373.1	373.7	0.6	77.5
53-4089	DOWN-DIP CENTRAL	567357	5332447	27	-51	396	NSV			
53-4091	DOWN-DIP EAST	567357	5332447	36	-45	472	354.2	356.3	2.0	9.1
Including							354.2	354.5	0.3	28.3
53-4091							378.0	381.1	3.1	7.3
53-4140	UP-DIP EXTENSION	567358	5332445	347	-52	398	278.6	281.3	2.7	76.1
Including							278.6	279.2	0.6	293.4
53-4140							285.6	287.6	2.0	9.8
53-4140							290.5	292.5	2.0	7.5
Including							291.7	292.2	0.4	25.9
53-4140							306.8	308.8	2.0	258.1
Including							307.1	307.4	0.3	1688.2
53-4145	DOWN-DIP CENTRAL	567358	5332445	4	-59	427	297.8	299.9	2.1	15.2
Including							299.3	299.9	0.6	48.0
53-4148	DOWN-DIP CENTRAL	567358	5332445	7	-57	457	NSV			
53-4158	EAST EXTENSION	570297	5332023	5	-62	411	NSV			
53-4159	EAST EXTENSION	570297	5332023	350	-51	396	NSV			
53-4188	DOWN-DIP EAST	570297	5332023	57	-86	381	256.6	258.8	2.1	9.0
53-4207	EAST EXTENSION	567352	5332629	2	-43	326	NSV			
53-4208	DOWN-DIP EAST	567337	5332698	331	-80	366	254.2	256.2	2.0	11.2
Including							255.0	255.3	0.3	72.0
53-4209	EAST EXTENSION	570297	5332022	343	-70	335	NSV			
53-4210	EAST EXTENSION	570296	5332023	349	-36	320	NSV			
53-4211	UP-DIP EXTENSION	570168	5331804	356	-29	390	297.2	299.3	2.0	22.6
Including							298.2	299.1	0.9	49.7
53-4211							338.1	340.1	2.0	6.3



Including							338.7	339.0	0.3	40.9
53-4211							346.5	348.6	2.1	6.2
Including							346.5	347.0	0.5	20.3
53-4239	EAST EXTENSION	570297	5332023	350	-16	343	NSV			
53-4240	EAST EXTENSION	567338	5332698	335	-31	329	NSV			
53-4241	EAST EXTENSION	567338	5332698	335	-22	338	281.5	284.6	3.1	5.0
Including							282.5	282.9	0.3	25.6
53-4248	UP-DIP EXTENSION	567357	5332444	335	-36	420	NSV			
53-4267	EAST EXTENSION	570296	5332024	359	-20	335	239.3	242.0	2.7	13.0
Including							240.2	240.5	0.3	45.0
Including							241.7	242.0	0.3	48.2
53-4267							277.8	279.8	2.0	5.4
Including							278.8	279.2	0.4	24.5
53-4279	UP-DIP EXTENSION	570167	5331805	332	-32	411	NSV			
53-4281	DOWN-DIP CENTRAL	570169	5331802	337	-61	457	275.1	277.1	2.1	21.4
Including							276.1	276.6	0.6	70.5
53-4281							389.4	391.8	2.4	8.8
53-4282	DOWN-DIP CENTRAL	570168	5331803	345	-71	411	324.0	326.0	2.0	5.1
Including							324.8	325.2	0.5	19.9
53-4282							332.2	334.2	2.0	16.7
Including							333.3	333.8	0.5	69.0
53-4282							350.7	353.9	3.2	10.3
Including							350.7	351.0	0.3	59.4
53-4282							359.7	363.5	3.8	7.4
Including							361.8	362.3	0.5	38.8
53-4282							367.9	369.9	2.0	7.2
53-4286	UP-DIP EXTENSION	570295	5332022	316	-36	366	286.3	288.3	2.0	9.0
Including							287.1	287.7	0.6	22.7
53-4287	UP-DIP EXTENSION	570297	5332022	326	-35	396	266.2	268.2	2.0	28.3
Including							266.4	267.9	1.4	39.7
53-4309	DOWN-DIP CENTRAL	570169	5331802	342	-67	404	299.0	301.0	2.0	8.6
Including							299.5	300.1	0.6	28.3
53-4330	UP-DIP EXTENSION	570296	5332022	324	-27	421	367.0	369.0	2.0	130.9
Including							367.9	368.2	0.3	858.8
53-4331	EAST EXTENSION	570296	5332023	343	-23	351	NSV			
53-4333	EAST EXTENSION	570253	5331968	356	-41	366	245.5	247.8	2.3	11.6
Including							246.9	247.5	0.6	37.1
53-4333							253.9	256.0	2.1	14.6
Including							253.9	254.2	0.3	28.8
Including							255.7	256.0	0.3	72.9





53-4366	DOWN-DIP EAST	570254	5331967	351	-78	381	313.3	315.3	2.0	101.7
Including							313.9	314.9	0.9	220.8
53-4371	DOWN-DIP CENTRAL	570169	5331802	345	-69	408	313.0	315.2	2.1	13.3
Including							313.9	314.9	0.9	23.5
53-4380	DOWN-DIP CENTRAL	570026	5331722	347	-75	366	259.0	261.1	2.1	19.8
Including							260.1	260.5	0.3	104.5
53-4380							281.9	284.2	2.3	8.7
Including							281.9	283.0	1.1	15.2
53-4380							284.2	286.2	2.0	6.2
53-4381	DOWN-DIP CENTRAL	570027	5331722	7	-62	366	269.8	272.0	2.2	8.4
Including							270.8	271.4	0.5	23.2
53-4382	DOWN-DIP CENTRAL	570027	5331722	19	-75	351	215.2	217.7	2.6	14.6
Including							215.2	216.4	1.2	20.7
53-4382							226.2	228.2	2.0	5.0
Including							227.2	227.6	0.3	23.8
53-4388	UP-DIP EXTENSION	570169	5331804	1	-25	411	400.5	402.5	2.0	14.6
Including							401.1	401.4	0.3	95.4
53-4389	UP-DIP EXTENSION	570169	5331804	8	-26	427	339.5	341.8	2.2	5.0
53-4389							405.9	407.9	2.0	8.8
Including							407.0	407.3	0.3	56.8
53-4396	DOWN-DIP CENTRAL	570027	5331721	303	-62	366	267.3	269.3	2.0	38.9
Including							268.2	268.5	0.3	153.6
53-4397	DOWN-DIP CENTRAL	570027	5331721	312	-69	351	271.4	273.9	2.5	14.7
Including							272.9	273.3	0.4	78.3
53-4398	DOWN-DIP CENTRAL	570026	5331721	325	-69	351	254.3	256.4	2.1	31.7
Including							254.3	254.7	0.4	110.2
53-4399	UP-DIP EXTENSION	570169	5331804	352	-29	411	341.4	343.4	2.0	5.2
Including							342.8	343.1	0.3	30.1
53-4407	DOWN-DIP CENTRAL	570025	5331720	296	-60	396	268.4	270.4	2.0	9.8
Including							268.4	268.9	0.5	33.6
53-4413	EAST EXTENSION	570351	5332070	347	-10	366	268.2	270.4	2.1	8.5
Including							269.2	269.7	0.5	21.5
53-4413							270.4	272.5	2.1	7.2
Including							271.1	271.9	0.8	15.9
53-4416	DOWN-DIP EAST	570352	5332069	347	-67	346	216.4	218.4	2.0	6.1
Including							217.0	217.3	0.3	29.5
53-4417	DOWN-DIP EAST	570352	5332069	347	-75	366	222.5	224.5	2.0	11.3



Including							222.7	223.9	1.2	17.8
53-4417							242.4	244.4	2.0	69.3
Including							242.6	243.1	0.5	299.9
53-4418	DOWN-DIP EAST	570352	5332069	347	-83	396	189.7	191.7	2.0	49.3
Including							191.1	191.7	0.6	152.0
53-4431	EAST EXTENSION	570351	5332070	343	-17	366	239.9	241.9	2.0	16.4
Including							241.2	241.7	0.5	62.8
53-4432	EAST EXTENSION	570351	5332070	343	-25	327	223.4	225.4	2.0	25.1
Including							224.0	224.5	0.5	99.7
53-4439	DOWN-DIP CENTRAL	570027	5331721	304	-67	366	308.8	318.5	9.8	9.9
Including							313.0	313.6	0.6	16.1
53-4439							334.1	336.5	2.4	5.7
53-4443	EAST EXTENSION	570352	5332070	2	-16	352	235.2	237.2	2.0	589.5
Including							235.7	236.6	0.9	1296.5
53-4444	EAST EXTENSION	570352	5332068	2	-26	335	208.1	210.2	2.0	14.8
Including							209.8	210.2	0.4	64.2
58-552	UP-DIP EXTENSION	569563	5332002	168	32	305	200.7	202.7	2.0	15.7
Including							201.7	202.1	0.4	85.0
58-554	UP-DIP EXTENSION	569565	5331999	176	39	305	NSV			
58-583	UP-DIP EXTENSION	569564	5332000	171	50	274	NSV			
58-585	UP-DIP EXTENSION	569564	5332000	171	19	320	267.6	269.6	2.0	21.5
Including							269.0	269.3	0.3	139.1

Notes:

1. True widths are not known at this time.

\* Previously reported Intercept

\*\*Previously unreported Intercept



### Figure 1. Plan View – Macassa Mine

