

NEWS RELEASE

Luca Intersects 2.4 Metres of 12.2 g/t Gold at Santiago Deposit

Tahuehueto Mine – High-Grade Gold Mineralization Extended by Over 100 Metres Along Strike, Durango Mexico

Vancouver, British Columbia, December 19, 2025 - Luca Mining Corp. (“Luca” or the “Company”) (TSX-V: LUCA; OTCQX: LUCMF; Frankfurt: Z68) is pleased to report new underground and surface diamond drilling results from its ongoing exploration programs at the Tahuehueto gold-silver mine in Durango, Mexico.

Recent drilling at the Santiago Deposit has successfully extended high-grade gold mineralization by more than 100 metres along strike toward the west, in the direction of the producing Perdido vein, located approximately 600 metres away (See Figure 1). These results, together with ongoing underground drilling at Perdido, support Luca’s interpretation that the Santiago and Perdido veins may represent a single, continuous mineralized structure. Current drilling is designed to test the projected strike extension linking Santiago with Perdido, and while additional drilling is required to fully demonstrate continuity across this distance, results to date provide encouraging evidence along the interpreted structural trend.

Santiago Deposit – High-Grade Expansion Confirmed

Surface diamond drilling at the Santiago Deposit has returned consistent and locally high-grade gold mineralization, marking the first drilling at Santiago since 2008 (see Company press release dated September 8, 2025).

Notably, new drillhole DDH25-SGO-008 returned 2.4m of 12.2 g/t gold (14.8 g/t AuEq**) from 188.0m within a broader mineralized interval hosted within an extension of the Santiago mineralized vein system, approximately 80m west of the previous resource boundary. Subsequently, DDH25-SGO-009 intersected the same mineralized structure reporting 3.2m of 2.17 g/t Au from 259.9m. These two drillholes have combined to extend the strike length of the Santiago Deposit by over 100m and confirm the robustness and continuity of the mineralized structure in this area.

Additional new drill results at Santiago include:

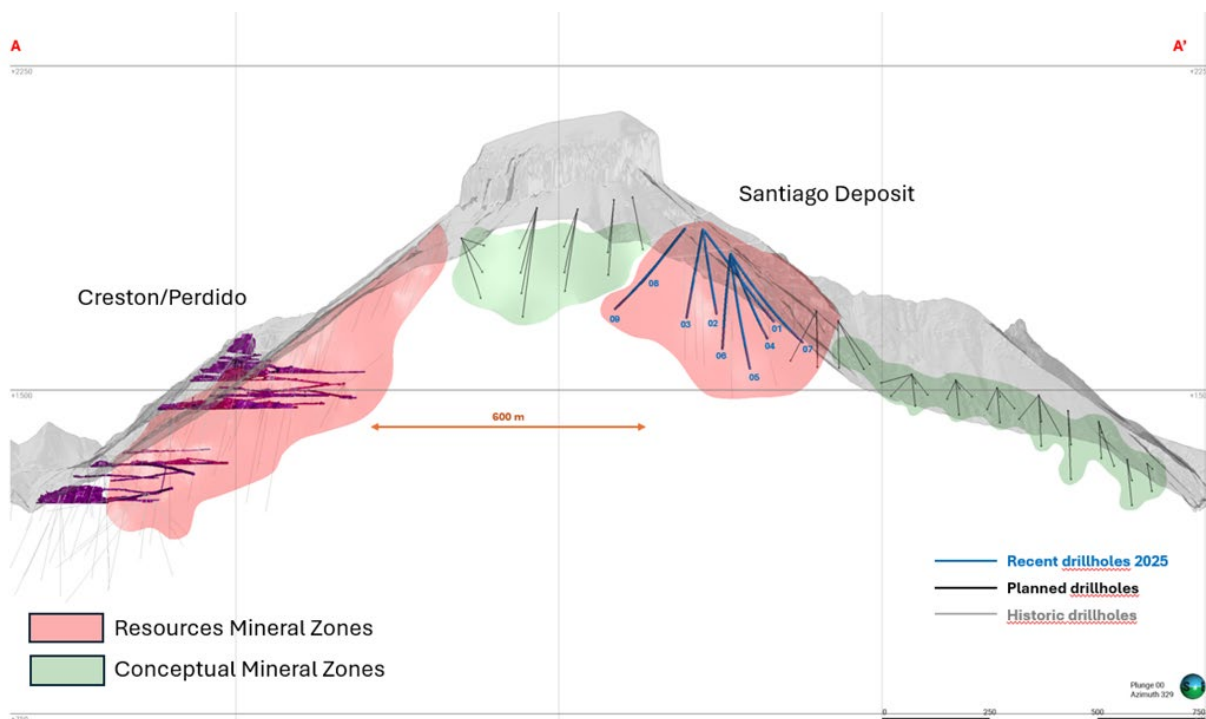
- **DDH25-SGO-006:** 5.7 m of 6.10 g/t gold (7.8 g/t AuEq)
- **DDH25-SGO-007:** 6.7 m of 3.76 g/t gold (4.62 g/t AuEq) within a broader mineralized zone

These results exceed grades modelled in the current resource estimate and demonstrate clear potential for resource growth.

The Santiago Deposit is located approximately one kilometre from existing mine infrastructure, has never been mined, and lies at the northeast end of the Tahuehueto mineralized trend. Importantly, Santiago trends directly onto a recently acquired concession from Fresnillo Plc, making eastern extensions of mineralization a priority exploration target.

Based on the success of the initial surface program, Luca has expanded drilling at Santiago to further test strike extensions to the east and west.

Figure 1: Idealized Long Section Tahuehueto Mineralized Zones



Underground Drilling – Strong Continuity Near Mine Workings

Underground drilling at Tahuehueto continues to intersect mineralization in every hole drilled to date, reinforcing confidence in near-term resource additions.

Drilling north of current underground workings has identified previously untested, gold-rich breccia zones within the Creston vein system, including:

- **DDH25-236:** 5.3 m of 2.23 g/t AuEq, including a high-grade internal interval of **0.4m of 3.09 g/t Au, 84.30 g/t Ag, 0.07%, 3.14% Pb, and 21.57% Zn (9.11 g/t AuEq)** from 50.4m.

These results highlight the lateral and vertical continuity of the Creston and Perdido veins and support Luca’s strategy of adding mineable ounces close to existing development.

To date, 26 underground drillholes totaling over 6,200m with "HQ" sized diamond drill core have been completed as part of the Phase 1 and Phase 2 programs.

Geological Interpretation and Growth Potential

Surface and underground results continue to support management’s interpretation that the Santiago and Perdido veins may form part of a single, continuous mineralized structure.

The Santiago Deposit is currently defined over approximately 350m of strike length and up to 50m in width, with mineralization remaining open to the east, west, and at depth. The property hosts 18 identified mineralized veins, of which Santiago represents only one underexplored target.

Exploration Strategy

Luca's 2025 exploration program at Tahuehueto represents the first meaningful exploration campaign on the property in over 12 years. The program is designed to:

- Expand known mineral resources
- Identify high-grade breccia zones
- Add near-term mineable material
- Test multiple underexplored vein systems across the concession

With more than 11 kilometres of prospective vein structures identified, Luca sees significant upside beyond the current mineral resource footprint.

Paul D. Gray, P.Geo., Vice President Exploration at Luca Mining, commented *“Mineralized veins have been intersected in every drillhole at Santiago this drill season, with recent results extending high-grade mineralization at the Santiago Deposit by over 100 metres to the west. This confirms the expansion potential of the Santiago Deposit and supports our interpretation that it is part of the broader Perdido vein system. At the same time, underground drilling continues to validate strong continuity near current workings, reinforcing the growth potential at Tahuehueto.”*

Figures 2 through 10 present the relative locations of the reported drillholes and Tables 1 and 2 provide summary analytical results and drill collar details, respectively.

FIGURE 2

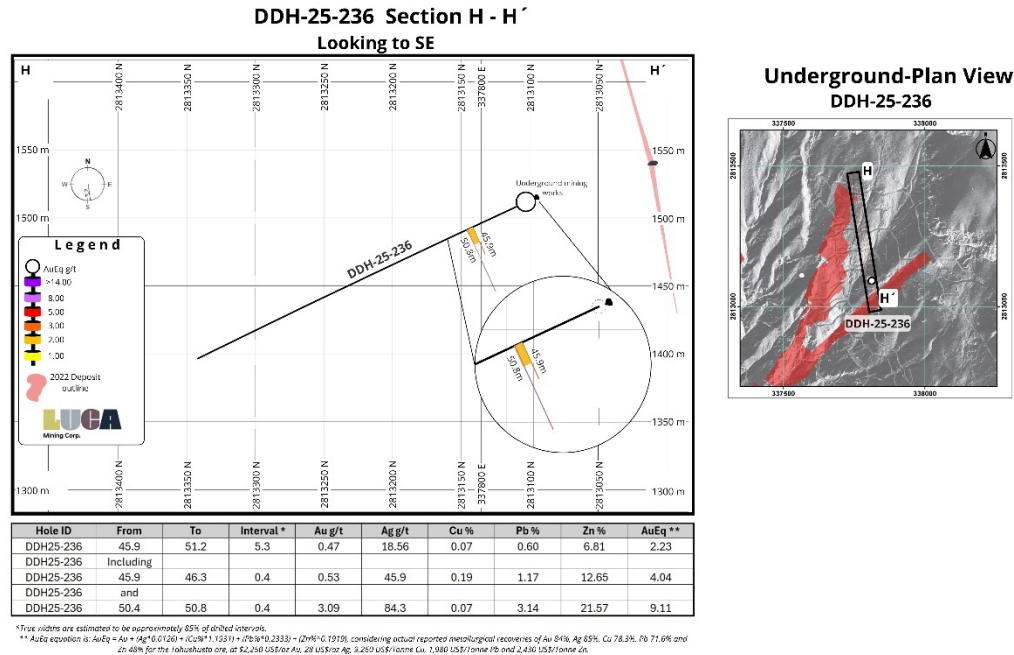
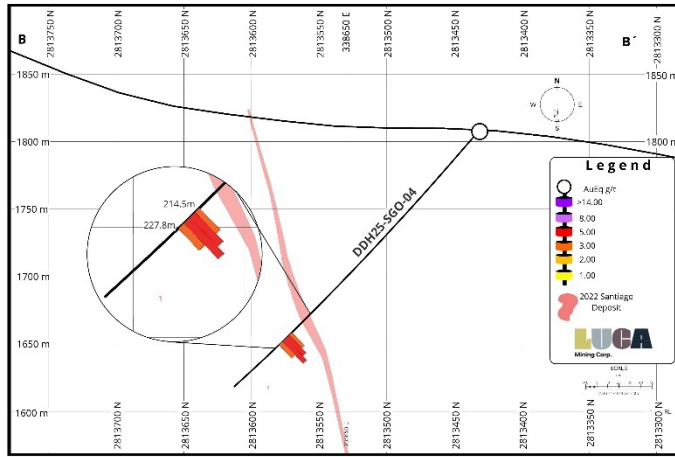


FIGURE 5

DDH25-SGO-04 Section B - B'
Looking to NE



Hole ID	From	To	Interval *	Au g/t	Ag g/t	Cu %	Pb %	Zn %	AuEq **
DDH25-SGO-04	214.5	227.8	13.3	1.58	27.47	0.27	0.4	0.76	2.5
DDH25-SGO-04	Including								
DDH25-SGO-04	217.2	225	7.8	2.06	39.6	0.4	0.53	0.93	3.34
DDH25-SGO-04	Including								
DDH25-SGO-04	220.7	224.3	3.6	3.07	31.89	0.18	0.65	1.37	4.11

*True widths are estimated to be approximately 85% of drilled intervals.
 **AuEq equation is: $AuEq = Au \cdot (Ag^{0.0126}) \cdot (Cu^{0.111533}) \cdot (Pb^{0.02333}) \cdot (Zn^{0.1915})$, considering actual reported metallurgical recoveries of Au 84%, Ag 85%, Cu 78.3%, Pb 71.6% and Zn 48% for the Yahuehuac area, at \$2,250 US\$/oz Au, \$8 US\$/oz Ag, \$360 US\$/Tonne Cu, 1,980 US\$/Tonne Pb and 2,430 US\$/Tonne Zn.

Santiago-Plan View
DDH25-SGO-04

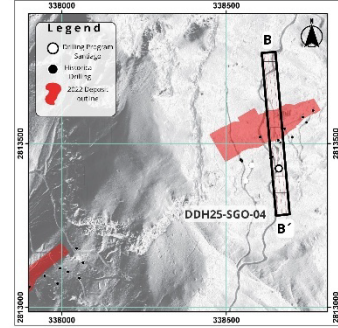
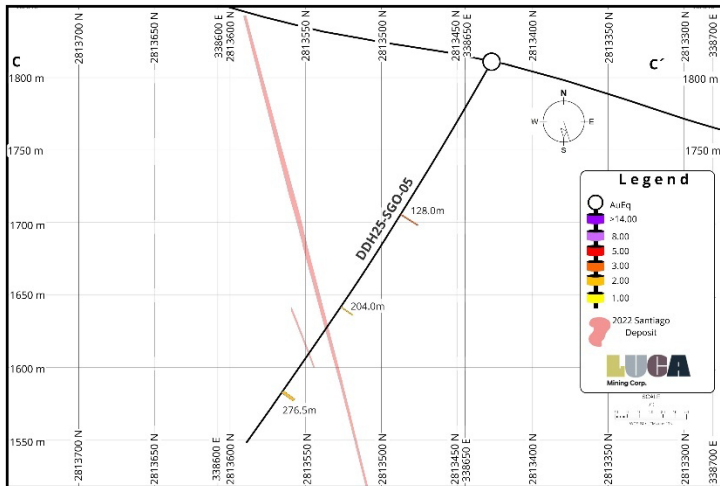


FIGURE 6

DDH25-SGO-05 Section C - C'
Looking to NE



Hole ID	From	To	Interval *	Au g/t	Ag g/t	Cu %	Pb %	Zn %	AuEq **
DDH25-SGO-05	128	128.8	0.8	2.47	4.6	0.01	0.03	0.04	2.55
DDH25-SGO-05	204	204.7	0.7	1.11	38.4	0.16	0.13	0.26	1.86
DDH25-SGO-05	274.5	276.5	2.0	0.08	32.14	0.57	1.06	2.17	1.83

*True widths are estimated to be approximately 85% of drilled intervals.
 **AuEq equation is: $AuEq = Au \cdot (Ag^{0.0126}) \cdot (Cu^{0.111533}) \cdot (Pb^{0.02333}) \cdot (Zn^{0.1915})$, considering actual reported metallurgical recoveries of Au 84%, Ag 85%, Cu 78.3%, Pb 71.6% and Zn 48% for the Yahuehuac area, at \$2,250 US\$/oz Au, \$8 US\$/oz Ag, \$360 US\$/Tonne Cu, 1,980 US\$/Tonne Pb and 2,430 US\$/Tonne Zn.

Santiago-Plan View
DDH25-SGO-05

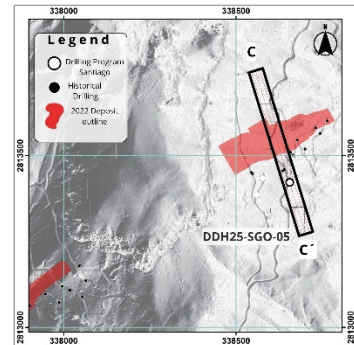
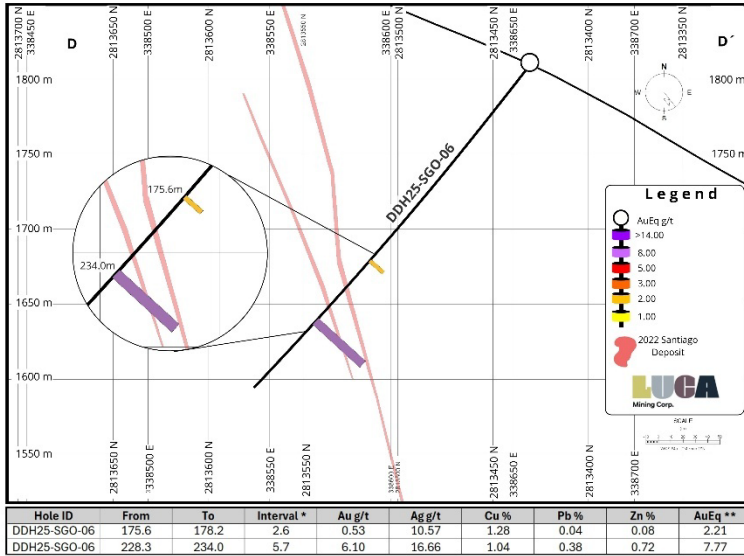


FIGURE 7

DDH25-SGO-06 Section D - D'
Looking to NE



*True widths are estimated to be approximately 65% of drilled intervals.
 ** AuEq equation is: $AuEq = Au + (Ag \times 0.0126) + (Cu \times 1.1931) + (Pb \times 0.2333) + (Zn \times 0.1919)$, considering actual reported metallurgical recoveries of Au 81%, Ag 85%, Cu 78.3%, Pb 71.6% and Zn 48% for the Toluhuasto ore, or $2,250 US\$/oz Au, 28 US\$/oz Ag, 9,260 US\$/Tonne Cu, 1,889 US\$/Tonne Pb$ and $2,430 US\$/Tonne Zn$.

Santiago-Plan View
DDH25-SGO-06

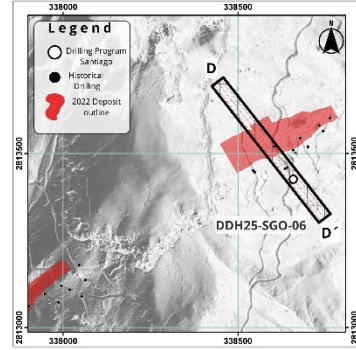
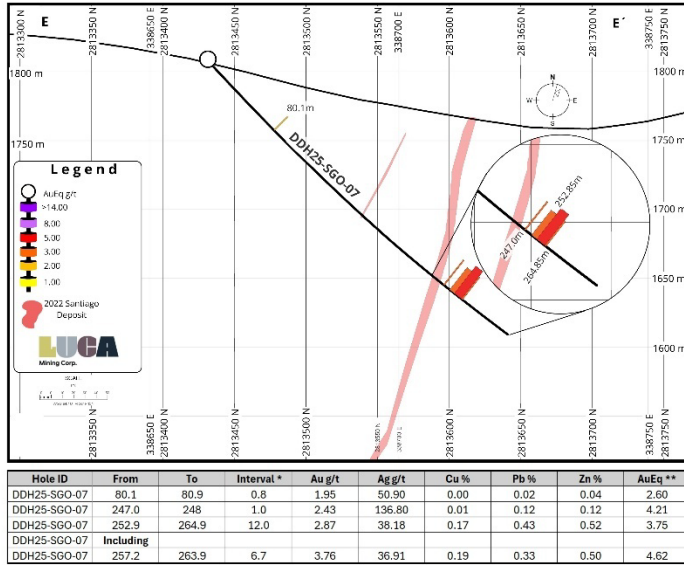


FIGURE 8

DDH25-SGO-07 Section E - E'
Looking to NW



*True widths are estimated to be approximately 65% of drilled intervals.
 ** AuEq equation is: $AuEq = Au + (Ag \times 0.0126) + (Cu \times 1.1931) + (Pb \times 0.2333) + (Zn \times 0.1919)$, considering actual reported metallurgical recoveries of Au 81%, Ag 85%, Cu 78.3%, Pb 71.6% and Zn 48% for the Toluhuasto ore, or $2,250 US\$/oz Au, 28 US\$/oz Ag, 9,260 US\$/Tonne Cu, 1,889 US\$/Tonne Pb$ and $2,430 US\$/Tonne Zn$.

Santiago-Plan View
DDH25-SGO-07

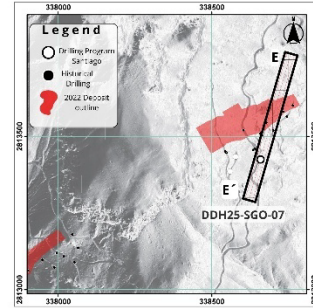
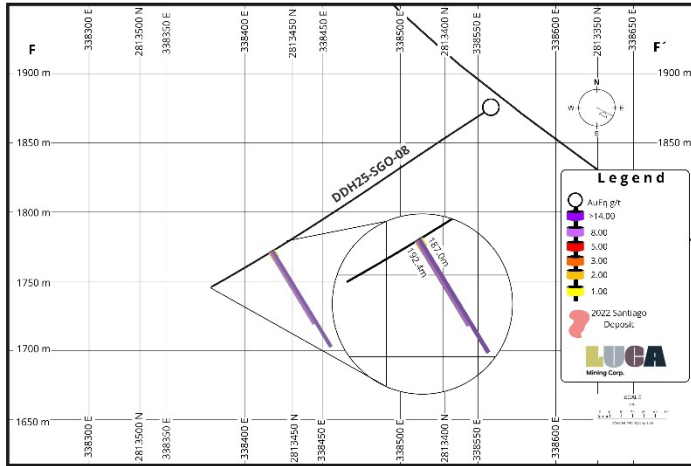


FIGURE 9

DDH25-SGO-08 Section F - F' Looking to NW



Hole ID	From	To	Interval *	Au g/t	Ag g/t	Cu %	Pb %	Zn %	AuEq **
DDH25-SGO-08	187.0	188.0	1.0	0.24	19.20	0.09	0.93	1.35	1.06
DDH25-SGO-08	188.0	192.0	4.1	8.47	172.74	0.08	0.49	0.97	11.05
DDH25-SGO-08	Including								
DDH25-SGO-08	188.0	190.3	2.4	12.20	172.32	0.11	0.61	0.61	14.76
DDH25-SGO-08	192.4	192.4	0.4	0.12	38.20	0.03	1.81	0.82	1.21

*True widths are estimated to be approximately 85% of drilled intervals.
 ** AuEq equation is: $AuEq = Au \times (Ag^{0.0126} \times Cu^{0.111913} + Pb^{0.1913} + Zn^{0.2333}) + (Zn^{0.1913})$, considering actual reported metallurgical recoveries of Au 84%, Ag 85%, Cu 78.7%, Pb 71.6% and Zn 48% for the Tohukhoeto ore, at \$2,250 US\$/oz Au, 28 US\$/oz Ag, 5,260 US\$/Tonne Cu, 1,989 US\$/Tonne Pb and 2,430 US\$/Tonne Zn.

Santiago-Plan View DDH25-SGO-08

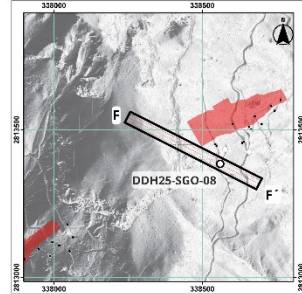
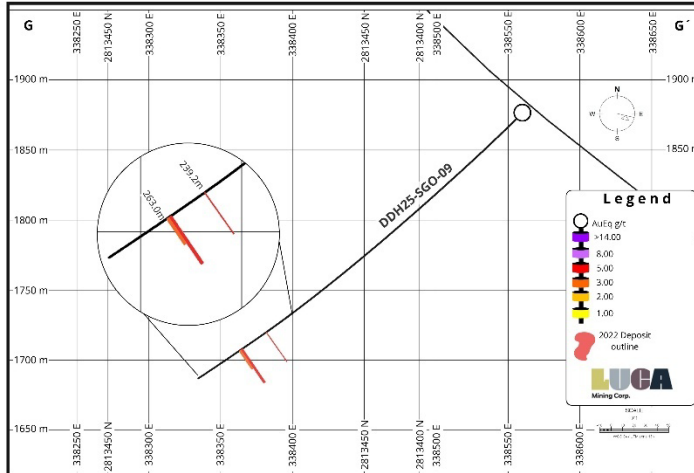


FIGURE 10

DDH25-SGO-09 Section G - G' Looking to NW



Hole ID	From	To	Interval *	Au g/t	Ag g/t	Cu %	Pb %	Zn %	AuEq **
DDH25-SGO-09	239.2	239.7	0.5	2.49	70.40	0.68	0.51	2.02	4.69
DDH25-SGO-09	259.9	263.0	3.2	2.17	55.30	0.01	0.07	0.12	2.92
DDH25-SGO-09	Including								
DDH25-SGO-09	259.9	261.5	1.6	3.88	103.08	0.03	0.12	0.19	5.28

*True widths are estimated to be approximately 85% of drilled intervals.
 ** AuEq equation is: $AuEq = Au \times (Ag^{0.0126} \times Cu^{0.111913} + Pb^{0.1913} + Zn^{0.2333}) + (Zn^{0.1913})$, considering actual reported metallurgical recoveries of Au 84%, Ag 85%, Cu 78.7%, Pb 71.6% and Zn 48% for the Tohukhoeto ore, at \$2,250 US\$/oz Au, 28 US\$/oz Ag, 5,260 US\$/Tonne Cu, 1,989 US\$/Tonne Pb and 2,430 US\$/Tonne Zn.

Santiago -Plan View DDH25-SGO-09

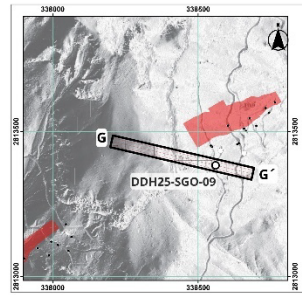


Table 1: Highlighted Diamond Drill Assay Results from DDH25-236 through DDH25-237 and DDH-25-SGO-003 and DDH-25-SGO-009

Hole	From (m)	To (m)	Interval (m)*	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	AuEq**
DDH25-236	45.9	51.2	5.3	0.47	18.56	0.07	0.60	6.81	2.23
	Including								
	45.9	46.3	0.4	0.53	45.90	0.19	1.17	12.65	4.04
	and								
	50.4	50.8	0.4	3.09	84.30	0.07	3.14	21.57	9.11
DDH25-237	83.9	87.3	3.4	0.18	47.38	0.05	0.70	3.00	1.58
	92.5	93.7	1.2	0.25	21.20	0.09	0.53	5.49	1.80
	169.4	172.6	3.2	0.45	87.04	0.30	0.03	0.04	1.92
	Including								
	171.4	172.6	1.2	0.96	166.70	0.28	0.06	0.04	3.41
DDH25-SGO-03	164.6	171.7	7.1	2.83	28.10	0.02	0.07	0.12	3.25
	Including								
	167.2	171.7	4.5	4.12	40.81	0.02	0.06	0.12	4.69
	177.2	182.5	5.3	1.24	17.67	0.05	0.14	0.13	1.58
	Including								
	177.2	178.6	1.4	1.34	20.61	0.04	0.09	0.13	1.69
	and								
	179.9	182.5	2.6	1.71	20.74	0.07	0.17	0.09	2.11
	191.5	192.5	1.0	1.50	12.10	0.01	0.07	0.12	1.70
223.2	223.7	0.5	1.33	16.40	0.15	0.09	0.06	1.75	
DDH25-SGO-04	214.5	227.8	13.3	1.58	27.47	0.27	0.40	0.76	2.50
	Including								
	217.2	225.0	7.8	2.06	39.60	0.40	0.53	0.93	3.34
	Including								
	220.7	224.3	3.6	3.07	31.89	0.18	0.65	1.37	4.11
DDH25-SGO-05	128.0	128.8	0.8	2.47	4.60	0.01	0.03	0.04	2.55
	204.0	204.7	0.7	1.11	38.40	0.16	0.13	0.26	1.86
	274.5	276.5	2.0	0.08	32.14	0.57	1.06	2.17	1.83
DDH25-SGO-06	175.6	178.2	2.6	0.53	10.57	1.28	0.04	0.08	2.21
	228.3	234.0	5.7	6.10	16.66	1.04	0.38	0.72	7.77
DDH25-SGO-07	80.1	80.9	0.8	1.95	50.90	0.00	0.02	0.04	2.60
	247.0	248.0	1.0	2.43	136.80	0.01	0.12	0.12	4.21
	252.9	264.9	12.0	2.87	38.18	0.17	0.43	0.52	3.75
	Including								
	257.2	263.9	6.7	3.76	36.91	0.19	0.33	0.50	4.62
DDH25-SGO-08	187.0	188.0	1.0	0.24	19.20	0.09	0.93	1.35	1.06
	188.0	192.0	4.1	8.47	172.74	0.08	0.49	0.97	11.05
	Including								
	188.0	190.3	2.4	12.20	172.32	0.11	0.61	0.61	14.76
	192.0	192.4	0.4	0.12	38.20	0.03	1.81	0.82	1.21
DDH25-SGO-09	239.2	239.7	0.5	2.49	70.40	0.68	0.51	2.02	4.69
	259.9	263.0	3.2	2.17	55.30	0.01	0.07	0.12	2.92
	Including								
	259.9	261.5	1.6	3.88	103.08	0.03	0.12	0.19	5.28

*True widths are estimated to be approximately 85% of drilled intervals.

** AuEq equation is: $AuEq = Au + (Ag * 0.0126) + (Cu * 1.1931) + (Pb * 0.2333) + (Zn * 0.1919)$, considering actual reported metallurgical recoveries of Au 84%, Ag 85%, Cu 78.3%, Pb 71.6% and Zn 48% for the Tahuehueto, at \$2,250 US\$/oz Au, 28 US\$/oz Ag, 9,260 US\$/Tonne Cu, 1,980 US\$/Tonne Pb and 2,430 US\$/Tonne Zn.

Table 2: Drill Collar Locations and Details for Released Results

Hole ID	WGS84 Z14 Easting	WGS84 Z14 Northing	Elevation (m)	Azimuth (°)	Dip (°)	Total Depth (m)
DDH25-236	337805	2813100	1,513	350	-25	271
DDH25-237	337803	2813098	1,514	270	-60	261
DDH25-SGO-03	338577	2813434	1,873	315	-55	252
DDH25-SGO-04	338658	2813425	1,816	355	-50	273
DDH25-SGO-05	338658	2813425	1,816	340	-60	318
DDH25-SGO-06	338658	2813425	1,816	320	-52	291
DDH25-SGO-07	338658	2813425	1,816	015	-48	306
DDH25-SGO-08	338560	2813386	1,875	297	-33	240
DDH25-SGO-09	338560	2813386	1,875	282	-45	298

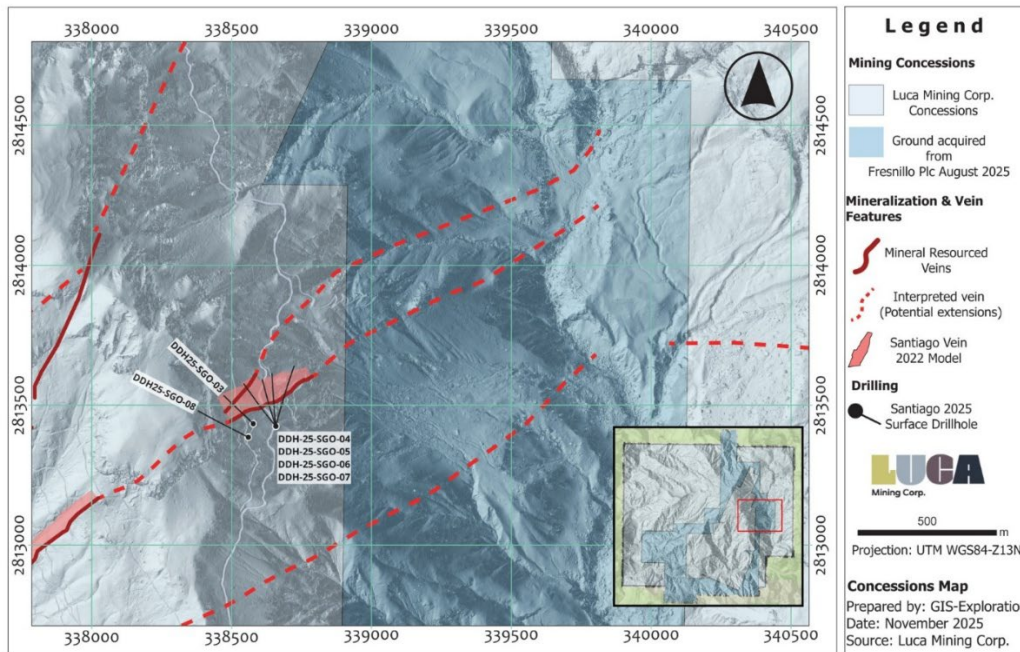
About 2025 Tahuehueto Exploration Program

The Tahuehueto property comprises a large epithermal gold-silver vein system with approximately 11 kilometres of strike length of known veins and mineralized structures. These campaigns represent the first substantive exploration drilling on the Property in over 12 years. Mineralization remains open along strike and at depth for most of the modeled Mineral Resource areas. The objective of the current campaigns will be a combination of in-fill and step-out drilling to demonstrate the vertical and lateral extent of mineralization as well as to target thick, high-grade mineralized breccia zones known to exist within the epithermal vein system. Recent mining in Level 23 encountered higher-grade mineralization averaging 3.30 g/t Au over vein widths up to 20 metres (with values up to 65.04 g/t Au) in breccia zones branching off the main Creston vein (See news release dated May 29, 2024).

In addition to the four veins that comprise the mineral resource, there are at least 14 additional prospective veins documented within the concession area that have potential to host additional epithermal Au-Ag(-Cu-Zn-Pb) mineralization. In some cases, these prospective targets may represent extensions of the currently defined Mineral Resource. The Company estimates that there are more than 11 km of prospective vein structures (measured along strike), compared to the 4.5 km of mineralized veins that support the current Mineral Resource model.

Figure 11 below shows the relative location of prospective veins (yellow) and veins modeled for resources and reserves (red) within the Company's concession area.

FIGURE 11



About Luca Mining Corp.

Luca Mining (TSX-V: LUCA, OTCQX: LUCMF, Frankfurt: Z68) is a diversified Canadian mining company with two 100%-owned producing mines within the prolific Sierra Madre mineralized belt in Mexico which hosts numerous producing and historical mines along its trend. The Company produces gold, copper, zinc, silver and lead from these mines that each have considerable development and resource upside.

The Campo Morado polymetallic VMS mine is an underground operation located in Guerrero State within a 121 square kilometer land package. It produces copper-zinc-lead concentrates with precious metals credits. It is currently undergoing an optimization program which is already generating significant improvements in recoveries, grades, efficiencies, and cashflows.

The Tahuehueto Mine is a large property of over 100 square kilometres in Durango State. The project hosts epithermal gold and silver vein-style mineralization. Tahuehueto is a newly constructed underground mining operation producing primarily gold and silver. The Company has successfully commissioned its mill and is now in commercial production.

Analytical Method and Quality Assurance/Quality Control Measures

All drill core splits reported in this news release were analysed by Bureau Veritas of Durango, Mexico, utilizing the Multi-Acid digestion ICP-ES 35-element MA300 analytical package with FA-430 30-gram Fire Assay with AAS finish for gold on all samples. Au over-limits from FA-430 are re-analyzed by FA530 30-gram Fire Assay with Gravimetric finish. Ag over-limits from ICP MA300 analytical package are re-analyzed by FA530 30-gram Fire Assay with Gravimetric finish. Similarly, Cu, Pb and Zn over-limits from ICP MA300 analytical package are re-analyzed by ICP Multi-Acid digestion MA370 package. All core samples were split by core saw on-site at Luca's core processing facilities at the Tahuehueto Mine. Once split, half samples were placed back in the core boxes with the other half of split samples sealed in poly bags with one part of a three-part sample tag inserted within. Samples were collected by Bureau Veritas at the Tahuehueto Mine site and transported to Bureau Veritas' Durango Laboratory, where samples are prepared to a 250-gram pulp and analyzed for Gold by Fire assay with pulps shipped to Bureau Veritas's

Analytical laboratory in Vancouver, B.C., for final ICP chemical analysis. A robust system of standards, 1/4 core duplicates and blanks was implemented in the 2024-2025 exploration drilling program and is monitored as chemical assay data become available.

Qualified Person

The technical information contained in this news release has been reviewed and approved by Mr. Paul D. Gray, P.Geol., Vice President Exploration at Luca Mining. Mr. Gray is a Qualified Person for the Company as defined by National Instrument 43-101.

On Behalf of the Board of Directors

(signed) "Dan Barnholden"

Dan Barnholden, Chief Executive Officer

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Cautionary Note Regarding Forward-Looking Statements

It should be noted that Luca declared commercial production at Campo Morado prior to completing a feasibility study of mineral reserves demonstrating economic and technical viability. Accordingly, readers should be cautioned that Luca's production decision has been made without a comprehensive feasibility study of established reserves such that there is greater risk and uncertainty as to future economic results from the Campo Morado mine and a higher technical risk of failure than would be the case if a feasibility study were completed and relied upon to make a production decision. Luca has completed a preliminary economic assessment ("PEA") mining study on the Campo Morado mine that provides a conceptual life of mine plan and a preliminary economic analysis based on the previously identified mineral resources (see news releases dated November 8, 2017, and April 4, 2018).

Statements contained in this news release that are not historical facts are "forward-looking information" or "forward-looking statements" (collectively, "Forward-Looking Information") within the meaning of applicable Canadian securities laws. Forward Looking Information includes, but is not limited to, disclosure regarding the Financings, the anticipated timing of closing thereof and the expected use of proceeds therefrom; and other possible events, conditions or financial performance that are based on assumptions about future economic conditions and courses of action; the timing and costs of future activities on the Company's properties, such as production rates and increases; success of exploration, development and bulk sample processing activities, and timing for processing at its own mineral processing facility on the Tahuehueto project site. In certain cases, Forward-Looking Information can be identified using words and phrases such as "plans," "expects," "scheduled," "estimates," "forecasts," "intends," "anticipates" or variations of such words and phrases. In preparing the Forward-Looking Information in this news release, the Company has applied several material assumptions, including, but not limited to, that all requisite approvals in respect of the Financings will be received, and all conditions precedent to completion of the Financings will be satisfied, in a timely manner; the Company will be able to raise additional capital as necessary; the current exploration, development, environmental and other objectives concerning the Campo Morado Mine and the Tahuehueto Project can be achieved; the program to improve mining operations at Campo Morado will proceed as planned; the continuity of the price of gold and other metals, economic and political conditions, and operations. Forward-Looking Information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the Forward-Looking Information. There can be no assurance that Forward-Looking Information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on

Forward-Looking Information. Except as required by law, the Company does not assume any obligation to release publicly any revisions to Forward-Looking Information contained in this news release to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

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.