

Thesis Gold Receives Positive Metallurgical Tests Results for Lawyers-Ranch Project: Achieves Average Precious Metal Recovery of 95% for Gold and 92% for Silver

Vancouver, British Columbia--(Newsfile Corp. - June 5, 2024) - Thesis Gold Inc. (TSXV: TAU) (WKN: A3EP87) (OTCQX: THSGF) ("**Thesis**" or the "**Company**") is pleased to announce the successful completion of preliminary metallurgical testing at the Company's 100% owned Lawyers-Ranch Project. This testing aims to assess the economics of an expanded project that integrates high-grade feed from Ranch and higher-grade underground material to a processing site at Lawyers. The program was designed based on the updated Mineral Resource Estimate from May 1, 2024 ([link to news release](#)). The Project is road-accessible and forms a contiguous, 495 km² land package in the prolific Toodoggone Mining District in northern British Columbia.

The testing, completed by SGS Canada, focused on evaluation of the project's metallurgical response to a variety of flowsheets investigating gravity, flotation, and cyanidation methods. The comprehensive laboratory study concluded with the full treatment circuit evaluation including locked cycle flotation by testing of three separate master composites. These composites were from blended feed samples of known resources from both the Lawyers and Ranch properties that had variations in gold, silver, and sulphur head grade. The laboratory full circuit evaluation demonstrated a recovery range of 93% to 96% for gold and 86% to 96% for silver. This included producing a primary precious metal flotation concentrate with gold grades exceeding 160 g/t, indicating a marketable precious metal concentrate with favorable payables. The metallurgical results will be used as part of an updated preliminary economic assessment of the project, scheduled for Q3-2024.

Metallurgical Testing Highlights:

- **Process Flowsheet Development:** with gravity pretreatment, flotation, and leaching of secondary concentrate and float tails. The overall recovery range was 93% to 96% for gold and 86% to 96% for silver, demonstrating excellent extraction potential.
- **Gravity Pretreatment:** Recovery ranged from 20 to 38% for gold, and 2 to 10% of silver at grades exceeding 360 g/t Au and 1190 g/t Ag, which is suitable for onsite doré production.
- **Primary Flotation Concentrate:** Recovery ranging from 40% to 65% of gold producing a concentrate grade exceeding 160 g/t Au and 55% to 78% recovery for silver with a concentrate grade of over 5,000 g/t Ag.
- **Leaching:** of a secondary float concentrate and the float tailing, scavenged an additional 8-20% of gold and 12-24% of silver.

Dr. Ewan Webster, President and CEO, commented "The excellent metallurgical results from the combined Lawyers-Ranch project highlight not only the high recoveries of 95% for gold and 92% for silver but also the marketable concentrate grades. These findings, based on blended composites from potential mining areas, provide a strong foundation for the upcoming preliminary economic assessment. Given the strength of these results, our continued efforts will be directed towards optimizing capital costs, operating costs, and maximizing payables, rather than addressing fundamental process challenges."

Flowsheet Development

The metallurgical testing initially involved variations to gravity separation, flotation, and cyanidation

procedures for process optimization. The study concluded with a locked cycle flotation test on each of three master composites, with separate cyanidation of the scavenger concentrate. This was then combined with the leaching of the float tailing. The data compared well to open cycle float tests.

Each of the three master composites were to represent various mineral zones from both properties. This includes potential underground and open pit material from Lawyers and newly identified mineral zones at Ranch (see Table 1). Each zone composite was typically formed from 2 to 7 drill hole intervals averaging approximately 10 metres, with varying precious metal and sulphur (S) grades. These master composites therefore provide good confidence in the flowsheet response to the varying mineralogy of the project.

Table 1: Master Composite Blend

Master Comp. ID	Mineral Zone Blends	Assay Head*		
		Au (g/t)	Ag (g/t)	%S
Comp. M1 (HG)	50% Ranch high S + 26% Cliff Creek (U/G) + 24% Dukes Ridge (U/G)	4.53	116	3.53
Comp. M2 (MG)	44% Ranch mid S + 56% Cliff Creek (upper)	4.06	112	1.62
Comp. M3 (LG)	22% Ranch low S + 49% Dukes Ridge (upper) + 29% AGB Zone	2.27	96	0.37

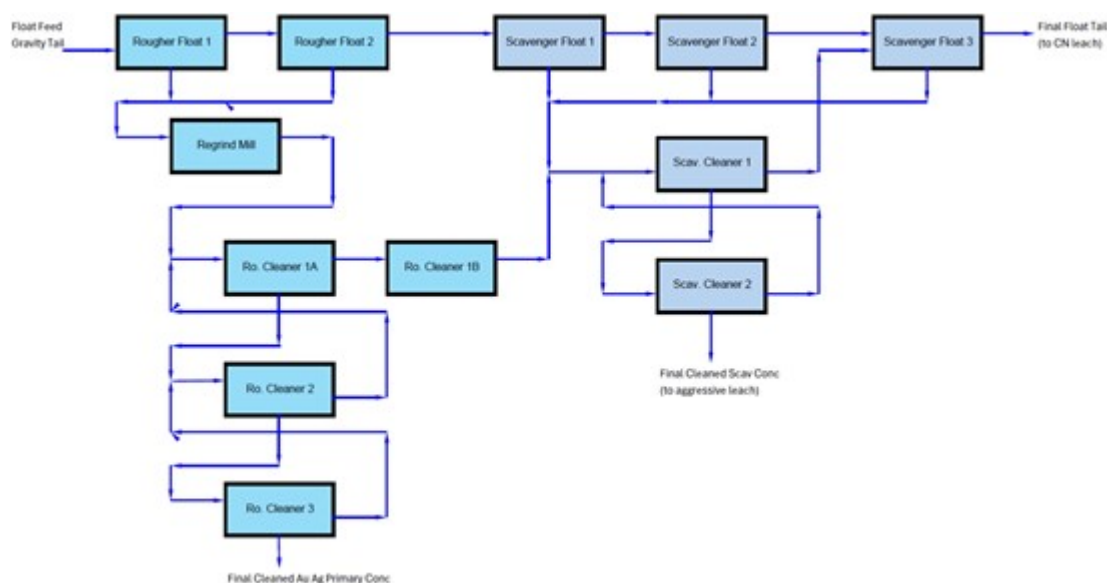
*Au and Ag assay by 500 g metallics

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The flotation flowsheet for the locked cycle tests following gravity pretreatment are illustrated in Figure 1.

Figure 1: Flotation Flowsheet



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Following laboratory test work optimization, the metallurgical response was confirmed by using locked cycle testing (see Figure 1 above) on three master composites representing blends from both Ranch and Lawyers. The test conditions consisted of grinding to an 80% particle passing size (P80) of 125 microns and subjecting the ground product to gravity treatment by centrifugal concentration. The centrifugal concentrate was cleaned by panning. Gravity tailing was sent to a differential flotation circuit with the primary (rougher) concentrate cleaned with a selective collector in three stages, while depressing pyrite with elevated slurry pH using lime. This generated a cleaned primary flotation concentrate accounting for approximately 2 wt.% of the feed mass having a high precious metal grades suitable for sale (see Table 2 below). A lower grade secondary scavenger flotation concentrate representing less than 3 wt.% of the mill throughput was pulled using a strong collector (potassium amyl xanthate). This material was then sent for aggressive leaching for 36 hours using high cyanide concentration. This residue was then combined with the flotation tailing for a final stage leach

maintaining 1 g/L NaCN for 24 hours.

Overall, the combined testing showed that gravity pretreatment yielded a gold recoveries ranging from 17% to 38%. The silver recoveries were typically lower, ranging from 2% to 10%. When considering the combined processes of gravity and primary (rougher) flotation, the gold recoveries were notably high, with 86% for Composite M1(HG), 87% for Composite M2 (MG), and 77% for Composite M3 (LG). The combined silver recoveries were also substantial, achieving 81%, 85%, and 65% for the respective composites. The gravity and flotation concentrates demonstrated high grades and efficient recovery rates, for some zones. Stability in the locked cycle tests was generally good, with consistent mass, gold, and silver recoveries observed in the final three cycles. However, adjustments may be necessary in future test work, particularly to manage the re-floating of pyrite in high pyrite composites.

Cyanidation of the secondary flotation product further enhanced recovery. The circuit for leaching of the concentrate is small due to low mass pull, allowing for aggressive procedures in the first stage. The second stage leach is performed by recombining with float tailing, providing the overall leach response. For Composite M2 (MG), the mid grade blend cyanidation recovered an additional 9% of gold and 12% of silver. For Composite M1 (HG), the higher-grade blend recovered 8% of gold and 14% of silver, while for Composite M3 (LG), the lowest grade blend, an additional 19% of gold and 21% of silver were recovered from the overall leach circuit.

The combined metallurgical performance achieved excellent total recoveries of gold and silver. Composite M2 (MG) showed a total gold recovery of 96.3% and silver recovery of 96.4%. Composite M1 (HG) achieved 93.9% gold recovery and 94.4% silver recovery, while Composite M3 (LG) demonstrated 96.5% gold recovery and 86.3% silver recovery. These results underscore the effectiveness of the combined gravity, flotation, and cyanidation processes in maximizing precious metal recoveries. Summary of the results are available in Table 2.

Table 2: Master Composite Zone Blends and Head Assay

Master Composite ID	Gold Grades (g/t)			Gold Recovery (%)				
	Calc Head	Prim.Flt. Conc	Final Tail*	Gravity Rec	Prim.Flt. Conc	Scav. Conc. Leach	Flt Tail Leach	Total Recovery
Comp. M1 (HG)	4.47	161	0.28	20.4	65.4	3.6	4.5	93.9
Comp. M2 (MG)	3.70	169	0.13	37.3	50.3	2.9	5.8	96.3
Comp. M3 (LG)	2.07	182	0.07	37.0	40.5	3.3	15.7	96.5
	Silver Grades (g/t)			Silver Recovery (%)				
Comp. M1 (HG)	122	5,261	7.9	2.4	78.5	5.5	8.0	94.4
Comp. M2 (MG)	114	7,965	4.3	8.0	76.9	4.4	7.1	96.4
Comp. M3 (LG)	94	11,379	9.8	9.8	55.7	3.8	17.1	86.4

* Calculated from combined Leach Residue from Scavenger Concentrate Leach & Float Tailing Leach

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The preliminary findings indicate no issues with the flowsheet in terms of mass balance or recovery, affirming the project's robustness as it progresses.

Quality Assurance and Control

Original mineral samples that were selected for metallurgical evaluation were analyzed at ALS Global Laboratories (Geochemistry Division) in Vancouver, Canada (an ISO/IEC 17025:2017 accredited facility). The geological sampling program was undertaken by Company personnel under the direction of Rob L'Heureux, P.Geol. Metallurgical testing was primarily performed by SGS Canada Inc. at their laboratory located in Burnaby BC. SGS is globally recognized in the mining industry and accredited with International Standards Organization (ISO) 9001 for quality assurance, and ISO/IEC 17025 for general requirements of laboratory competence in testing and calibration. A secure chain of custody is maintained in transporting and storing of all samples.

The technical content of this news release has been reviewed and approved by Frank Wright, P.Eng., independent metallurgical consultant and qualified person as defined by National Instrument 43-101.

On behalf of the Board of Directors
Thesis Gold Inc.

"Ewan Webster"

Ewan Webster Ph.D., P.Geo.
President, CEO, and Director

About Thesis Gold Inc.

Thesis Gold is unlocking the combined potential of the Lawyers-Ranch Gold-Silver Project in the Toodoggone mining district of north central British Columbia, Canada. A 2022 Preliminary Economic Assessment for the Lawyers project alone projected an open-pit mining operation yielding an average of 163,000 gold equivalent ounces annually over a 12-year span¹. By integrating the Ranch Project, the Company aims to enhance the economics and bolster the overall project's potential. Central to this ambition was the expansive 2023 drill program, which continues to define a high-grade out-of-pit Mineral Resource at Lawyers and augment the near-surface high-grade deposits at Ranch. The project now boasts a combined Measured & Indicated Mineral Resource of 4.0 Moz and an Inferred Mineral Resource of 727 koz, at respective grades of 1.51 and 1.82 g/t AuEq. The Company roadmap includes, new metallurgical work (now delivered), a robust 2024 exploration and drill program and a combined updated Preliminary Economic Assessment slated for Q3 2024. Through these strategic moves, Thesis Gold intends to elevate the Ranch-Lawyers Project to the forefront of global precious metals ventures.

¹Preliminary Economic Assessment: Lawyers Gold & Silver Project (2022). JDS Energy & Mining.

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