

Banyan Metallurgy Update with 93% Recovery from Powerline, AurMac Project, Mayo, Yukon

September 16, 2024

VANCOUVER, B.C., Vancouver, B.C., September 16, 2024 – Banyan Gold Corp. (the "Company" or "Banyan") (TSX-V: BYN) (OTCQB: BYAGF) is pleased to provide an update on ongoing metallurgical test program work for the Company's AurMac Project in the Yukon Territory. Test work is being conducted on the AurMac Project's Powerline Deposit ("Powerline") and Airstrip Deposit ("Airstrip") which host the Project's 7.0 million ounce ("Moz") gold inferred Mineral Resource Estimate ("MRE"). Results from the metallurgical test program utilizing bulk composite samples from Powerline and Airstrip demonstrate robust recoveries for multiple conventional mill processing options including gravity recovery in combination with Carbon in Leach ("CIL")/Carbon in Pulp ("CIP") and work is ongoing for flotation-leach. The Company will continue to advance and optimize these potential mill flow sheets through ongoing metallurgical test work to support future economic studies.

Highlights:

- Gold recovery of 93%, 92% and 90% from Powerline, Powerline East and Airstrip, respectively, utilizing conventional gravity separation and whole ore leaching (CIL/CIP) at a grind size of 75 microns ("μm").
- Gravity recoverable gold was found to be 54%, 46% and 24% from Powerline, Powerline East and Airstrip bulk samples, respectively.
- Low sulphide concentration and excess buffering capacity indicates Powerline, Powerline East and Airstrip are non-acid generating.

"The increase in gold recovery from metallurgical work on the Powerline Deposit to 93% for CIL/CIP, demonstrates that Powerline has strong mill options with further optimization having likelihood to continue to result in increased overall gold recoveries," Tara Christie, President and CEO, stated. "The Powerline deposit has been a key focus for drilling, metallurgical work and optimization studies in 2024 as we move towards a PEA in 2025."



Methodology

Banyan shipped 82, 48 and 185 individual intervals (~491, 346, and 1,283 kg) of representative drill core from Powerline, Powerline East (formerly known as the Aurex Hill zone) and Airstrip, respectively, to Forte Analytical in Fort Collins, Colorado for the preparation of three master composites for the metallurgical test program. The drill holes and individual intervals selected were based on gold grade, depth from surface, spatial distribution, and lithology (Figure 1). The test program has been designed considering the results of previous metallurgical work which includes over 200 bottle rolls and the initial gold recovery estimates for Powerline utilizing the conventional mill flowsheets identified in the Phase 1 test work released on February 6, 2024.

The program includes acid-base accounting, mineralogy, gold deportment, comminution, gravity recovery, bottle roll cyanidation (with and without gravity), flotation (with and without gravity) and Vat leach diffusion extraction tests. The program was overseen by Deepak Malhotra (SME-RM of Forte Dynamics) who is a "Qualified Person" as defined by National Instrument 43-101, *Standards of Disclosure for Mineral Projects* ("NI 43-101").

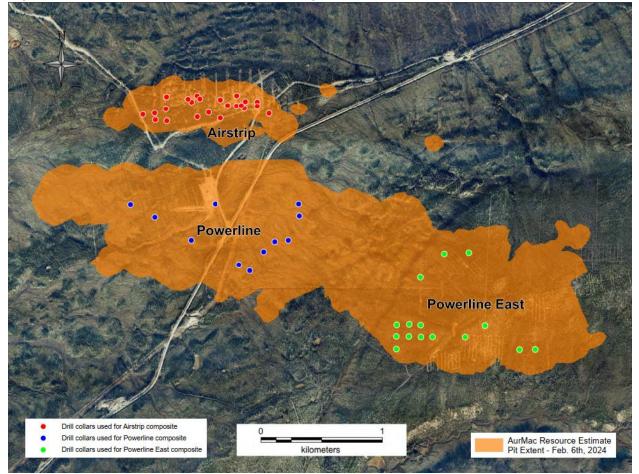


Figure 1. Drill Hole Locations used for Metallurgical Composites

Head Assays

Head samples were assayed for gold, carbon speciation, sulphur speciation, metals, and gold deportment. The total sulphur in the samples ranged from 0.61% to 1.53%, and total carbon ranged from 0.63% to 0.90% predominantly as inorganic carbon (>85%) (Table 1). The gold feed grade for the master composite material for Powerline, Powerline East and Airstrip were found to be 1.05, 0.67 and 1.02 g/t. A gold deportment study was completed on the three composites indicating free milling gold of 85.4%, 92.1% and 88.5% for Powerline, Powerline East and Airstrip, respectively.

Composite Sample	Gold Feed Grade	Free Milling Gold	Total Carbon	Inorganic Carbon	Organic Carbon	Total Sulphur	Total Sulphide	Total Sulphate
	g/t	%	%	%	%	%	%	%
Powerline	1.05	85.4	0.63	0.58	0.05	0.75	0.28	0.47
Powerline East	0.67	92.1	0.87	0.83	0.04	0.61	0.40	0.21
Airstrip	1.02	88.5	0.90	0.77	0.13	1.53	0.77	0.76

Table 1. Head Assays for Powerline, Powerline East and Airstrip Composite Samples

Industry standard comminution testing was completed on the composite samples to determine Bond's ball mill work index (BWi) and abrasion work index (Ai) parameters. The BWi for the Powerline, Powerline East and Airstrip were 14.7, 14.6 and 13.9 kWh/t, respectively, indicating the composites are classified as medium. While the abrasion indices were 0.094, 0.11 and 0.12 for Powerline, Powerline East and Airstrip, respectively, indicating the composites are slightly abrasive.

Gravity Recovery

The Phase 1 test work identified 53% Gravity Recoverable Gold ("**GRG**") for Powerline, and additional evaluation was done using E-GRG test work consisting of three stage concentration (1245, 239 and 94 μ m). E-GRG test work had gravity recoverable gold of 53.7, 46.1 and 24.0% for Powerline, Powerline East and Airstrip, respectively. The E-GRG results are consistent with the Phase 1 gravity results for Powerline and confirm the opportunity of a gravity circuit in a mill flow sheet for AurMac in future economic studies.

Bottle Rolls

Bottle roll tests for the three master composites were run for 48 hours at P_{80} grind sizes of 53, 75, 150 μ m (Table 2). The whole ore leach results for Powerline ranged from 88.4 to 95.2%, Powerline East ranged from 79.9% to 88.2% and Airstrip ranged from 86.4% to 90.6%. The whole ore leach results show increasing gold recovery with finer grind size. The 75 μ m bottle roll tests had an average of 77% gold recovery within the first eight hours and over 89% average gold recovery in the first 24 hours showing rapid gold recovery kinetics.

The master composite samples were also run for gravity concentration followed by leaching of the gravity tailings. The gravity concentration utilised a Knelson concentrator and Gemini table

collecting ~1% of the weight followed by leaching of the combined gravity tailings. Each composite was tested at the same three P_{80} grind sizes (53, 75, 150 µm) as whole ore leach testing for direct comparison of potential benefits of gravity to the CIL/CIP flow sheet (Table 3). The combined gravity and leach gold recovery for Powerline ranged from 91.2 to 93.7%, Powerline East ranged from 89.2% to 91.8% and Airstrip ranged from 89.1% to 92.4%. The combined gravity and leach results did not consistently show the same trend as whole ore of increased recovery at finer grind size. The inclusion of the gravity gold concentration prior to leaching on average increased gold recovery by approximately 3%.

Sample	P ₈₀ Grind μm	Calculated Head g/t gold	Extraction % Gold	Residue g/t gold					
Powerline	Powerline								
	150	1.12	88.4	0.12					
	75	1.04	92.3	0.08					
	53	2.06	95.2	0.12					
Powerline	Powerline East								
	150	0.55	79.9	0.11					
	75	0.66	86.3	0.09					
	53	0.68	88.2	0.08					
Airstrip	Airstrip								
	150	0.96	86.4	0.13					
	75	1.01	90.1	0.10					
	53	0.96	90.6	0.09					

Table 2. Whole Ore Leach Results for Powerline, Powerline East and Airstrip Composite Samples

P₀ Grind Size	Gravity Concentrate Recovery		Concentrate Grade	Leach Extraction	Residue	Leach Calculate Feed	Calculate Feed g/t	Combined Gravity & Leach Recovery	
μm	Weight %	% gold	g/t gold	% gold	g/t gold	g/t gold	g/t gold	% gold	
Powerline	Powerline								
150	1.05	52.9	56.2	86.7	0.07	0.53	1.11	93.7	
75	0.34	41.5	125	88.2	0.07	0.60	1.02	93.1	
53	0.25	27.9	89.4	87.8	0.07	0.58	0.80	91.2	
Powerline	Powerline East								
150	1.34	37.8	13.0	82.6	0.05	0.29	0.46	89.2	
75	0.54	36.7	41.7	87.2	0.05	0.39	0.61	91.8	
53	0.27	22.9	40.5	86.4	0.05	0.37	0.48	89.5	
Airstrip									
150	1.46	28.9	20	84.7	0.11	0.73	1.01	89.1	
75	0.59	18.6	29.7	88.2	0.09	0.77	0.94	90.4	
53	0.28	17.8	64.1	91.4	0.07	0.83	1.01	92.4	

Table 3. Gravity and Leach Results for Powerline, Powerline East and Airstrip Composite Samples

Environmental

Mineralogy and acid-base accounting were performed on the three master composite samples and the results indicate that Powerline, Powerline East and Airstrip are not acid generating and have excess buffering capacity. The samples were mainly composed of quartz (>64%) and minor quantities of albite, anorthite, augite, plagioclase, biotite, calcite, clinochlore, epidote and muscovite, with pyrite being the primary sulphide mineral present. The non-acid generating nature and excess buffering capacity of AurMac project material is an important consideration in future permitting and waste management designs.

Summary and Next Steps

These metallurgical results demonstrate strong gold recoveries at 75μ m for the CIL/CIP leaching flow sheets ranging from 86% to 90% for whole ore leach and 90% - 93% for gravity and leach. The gravity, flotation and leach test work is ongoing and further work is planned for optimization. Overall, the CIL/CIP and gravity with flotation-leach processes both continue to be flow sheet options that provide robust gold recoveries.

Additional test work for AurMac is ongoing and further test work is planned to focus on the CIL/CIP and gravity-flotation-leach flow sheets using 2024 drill core. Continuing test work will advance our understanding of:

- grind sizes, flotation times and mass pull for the flotation flow sheet
- grind sizes, leaching time and reagent usage for CIL/CIP flow sheet

• optimizations of both mill flow sheets utilizing gravity recovery

The focus will remain on mill flow sheet optimization to minimize capital and operating costs for the mill flow sheets to maximize value in future economic studies.

Upcoming Events

- Denver Gold Forum Americas September 15 18
 - Corporate Presentation: September 17 4:50 PM MDT
- Metals Investor Forum Vancouver September 20 21
 - Corporate Presentation: September 20 1:50 PM PDT
- GCFF Conference (Vancouver) September 21
 - Corporate Presentation: September 21 10:30 AM PDT

Qualified Persons

Deepak Malhotra SME-RM, Director of Metallurgy, of Forte Dynamics is a "**Qualified Person**" as defined by NI 43-101, independent of the Company and have reviewed and approved the content of this news release. Mr. Malhotra has verified the data disclosed in this news release, including the sampling, analytical and test data underlying the information.

Paul D. Gray, P.Geo., is a "Qualified Person" as defined under NI 43-101, and has reviewed and approved the content of this news release. Mr. Gray is a consultant to Banyan and has verified the data disclosed in this news release, including the sampling, analytical and test data underlying the information.

About Banyan

Banyan's primary asset, the **AurMac Project** is located in Canada's Yukon Territory. The current inferred Mineral Resource Estimate ("**MRE**") for the AurMac Project of 7.0 million ounces has an effective date of February 6, 2024.

The 173 square kilometres ("**sq km**") AurMac Project lies 40 km from Mayo, Yukon. The AurMac Project is transected by the main Yukon highway and benefits from a 3-phase powerline, existing power station and cell phone coverage. Banyan has the right to earn up to a 100% interest, in both the Aurex and McQuesten Properties respectively, subject to certain royalties.

The inferred MRE for the AurMac Project was prepared on February 6, 2024, and consisted of **7,003,000** ounces of gold (see Table 4) hosted within near surface, road accessible pit constrained Mineral Resources contained in two near/on-surface deposits: the Airstrip and Powerline Deposits.

Table 4: Pit-Constrained Inferred Mineral Resources – AurMac Project⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾

Deposit	Gold Cut- Off g/t	Tonnage Tonnes	Average Gold Grade g/t	Gold Content oz.			
Inferred							
Airstrip	0.30	35,243,000	0.75	845,000			
Powerline	0.30	312,243,000	0.61	6,158,000			
Combined Inferred	0.30	347,486,000	0.63	7,003,000			

Notes to Table 4:

- The effective date for the MRE is February 6, 2024 and was prepared by Marc Jutras, P.Eng., M.A.Sc., Principal, Ginto Consulting Inc., an independent Qualified Person in accordance with the requirements of NI 43-101. The technical report supporting the Resource Estimate entitled "AurMac Property, Mayo Mining District, Yukon Territory, Canada" (the "Technical Report") has been filed on SEDAR at www.sedarplus.ca on March 18, 2024.
- 2. 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, changes in global gold markets or other relevant issues.
- 3. The CIM Definition Standards were followed for classification of Mineral Resources. The quantity and grade of reported Inferred Mineral Resources in this estimation are uncertain in nature and there has been insufficient exploration to define these Inferred Mineral Resources as an Indicated Mineral Resource and it is uncertain if further exploration will result in upgrading them to an Indicated or Measured Mineral Resource category.
- 4. Mineral Resources are reported at a cut-off grade of 0.30 g/t gold for all deposits, using a US\$/CAN\$ exchange rate of 0.75 and constrained within an open pit shell optimized with the Lerchs-Grossman algorithm to constrain the Mineral Resources with the following estimated parameters: gold price of US\$1,800/ounce, US\$2.50/t mining cost, US\$5.50/t processing cost, US\$2.00/t G+A, 80% gold recoveries, and 45° pit slopes.
- 5. The number of tonnes and ounces was rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects; rounding followed the recommendations as per NI 43-101.

Detailed images of the Mineral Resource model, including an interactive 3D model and additional information can be found at: <u>https://www.banyangold.com/projects/aurmac/</u>

In addition to the AurMac Project, the Company holds the Hyland Gold Project, located 70 km Northeast of Watson Lake, Yukon, along the Southeast end of the Tintina Gold Belt (the "**Hyland Project**"). The Hyland Project represents a sediment hosted, structurally controlled, intrusion related gold deposit, within a large land package (over 125 sq km), accessible by a network of existing gravel access roads.

Banyan trades on the TSX-Venture Exchange under the symbol "**BYN**" and is quoted on the OTCQB Venture Market under the symbol "**BYAGF**". For more information, please visit the corporate website at <u>www.BanyanGold.com</u> or contact the Company.

ON BEHALF OF BANYAN GOLD CORPORATION

(signed) "Tara Christie" Tara Christie President & CEO For more information, please contact: Tara Christie • 778 928 0556 • <u>tchristie@banyangold.com</u> Jasmine Sangria • 604 312 5610 • jsangria@banyangold.com

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No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein.

FORWARD LOOKING INFORMATION: This news release contains forward-looking information, which is not comprised of historical facts and is based upon the Company's current internal expectations, estimates, projections, assumptions and beliefs. Such information can generally be identified by the use of forwarding-looking wording such as "may", "will", "expect", "estimate", "anticipate", "intend(s)", "believe", "potential" and "continue" or the negative thereof or similar variations. Forward-looking information involves risks, uncertainties and other factors that could cause actual events, results, performance, prospects and opportunities to differ materially from those expressed or implied by such forward-looking information. Forward looking information in this news release includes, but is not limited to, the Company's plans for exploration and future economic studies, and statements regarding exploration expectations, prospectivity of the Company's property interests, potential mining processes, pricing assumptions and costs ease and confidence in increasing ounces, exploration or development plans and timelines; mineral resource estimates; mineral recoveries and anticipated mining costs. Factors that could cause actual results to differ materially from such forwardlooking information include uncertainties inherent in resource estimates, continuity and extent of mineralization, capital and operating costs varying significantly from estimates, the preliminary nature of metallurgical test results, delays in obtaining or failures to obtain required governmental, environmental or other project approvals, political risks, uncertainties relating to the estimation of mineral resources and the availability and costs of financing needed in the future, changes in equity markets, inflation, changes in exchange rates, fluctuations in commodity prices, and the other risks involved in the mineral exploration and development industry, enhanced risks inherent to conducting business in any jurisdiction, and those risks set out in Banyan's public documents filed on SEDAR. Although Banyan believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Banyan disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.