



### **Newcore Gold Announces 93.0% Gold Recoveries in Column Testwork for the Sewum and Boin Deposits at the Enchi Gold Project, Ghana**

*Results from Seven Additional Column Tests Completed on Oxide Mineralization*

December 10, 2024

TSX-V: NCAU, OTCQX: NCAUF

**Vancouver, BC - Newcore Gold Ltd. ("Newcore" or the "Company")** (TSX-V: NCAU, OTCQX: NCAUF) is pleased to announce positive results from seven additional column tests completed as part of the metallurgical testwork program underway at the Company's 100%-owned Enchi Gold Project ("Enchi" or the "Project") in Ghana. An average gold recovery of 93.0% was achieved from column testwork completed on five composite samples from the Sewum Gold Deposit ("Sewum") and two composite samples from the Boin Gold Deposit ("Boin").

In addition to metallurgical testwork, further exploration and development work is on-going at Enchi to continue to de-risk the development of the Project and prove-out the district scale exploration potential. This work includes a 10,000-metre reverse circulation drill program focused on resource growth and infill drilling designed to improve the confidence level of the existing Mineral Resource Estimate, drone surveys, hydrogeological testing, condemnation drilling, geotechnical work, environmental work, an airborne magnetic survey, trenching and soil sampling.

#### **Highlights from Column Test Results**

- **Seven Column Tests Completed, Average Gold Recovery of 93.0% Achieved.**
  - A total of seven column tests (five from Sewum and two from Boin) returned an average gold recovery of 93.0%, with a recovery range of 82.6% to 97.2%.
- **Testwork Further Defines the Understanding of Recovery Parameters for Enchi.**
  - Testing completed on representative samples of oxide mineralization from trenches taken from various areas of the Boin and Sewum deposits, including areas not previously included in column testwork.
  - Samples had an overall average assayed grade of 0.56 grams per tonne gold ("g/t Au"), with a range of 0.32 g/t Au to 0.84 g/t Au.
- **Testwork Continues to Highlight Low Reagent Consumption.**
  - All samples showed modest cyanide consumption with an average of 1.63 kilograms per tonne ("kg/t"), with a 0.98 kg/t lime (hydrated) addition to maintain a pH above 10.5.
- **Additional Metallurgical Testwork Underway.**
  - Optimization work is planned on both oxide and transition mineralization from the Sewum, Boin, and Nyam gold deposits consisting of further tests on gold recoveries, percolation rates, and reagent consumptions.
  - Additional testing of sulphide mineralization is in progress consisting of bottle rolls and column tests, as well as additional testwork of rock properties such as bond work indices.

Greg Smith, VP Exploration of Newcore stated, "These additional column tests, completed on representative oxide material from the two largest deposits on the Enchi Gold Project, returned results that are consistent with prior testwork and continue to confirm generally modest reagent consumption. The testwork resulted in high recoveries for all seven composite samples, with the results continuing to highlight the amenability of Enchi to heap leach gold recovery and supporting the oxide recovery assumptions used in the 2024 Preliminary Economic Assessment study. Additional metallurgical testwork on oxide, transitional and sulphide mineralization is underway as we continue to de-risk and advance the development of the Enchi Gold Project."

### Metallurgical Testing Summary

A total of seven composite samples, five from Sewum and two from Boin, were submitted for column testwork to the Intertek Lab located in Tarkwa, Ghana, approximately four hours by paved road from the Enchi Gold Project. Material for the metallurgical samples consisted of trench material collected for metallurgical sampling. The samples were selected to represent the two largest deposits on the Project, Sewum and Boin, and consisted of blended oxide material with individual samples and composites covering a range of gold grades. Composite grades closely compare to the average grade of each of the deposits.

Recovery for the seven samples averaged 93.0%, with a recovery range of 82.6% to 97.2%.

**Table 1 - Column Tests Grade and Average Recovery**

Sample	Deposit	Grade Au g/t	Recovery Rate
BnMetTr3	Boin	0.60	95.66%
BnMetTr4	Boin	0.48	90.42%
SwMetTr4	Sewum	0.84	94.99%
SwMetTr5	Sewum	0.50	93.15%
SwMetTr6	Sewum	0.55	97.17%
SwMetTr7	Sewum	0.66	97.19%
SwMetTr8	Sewum	0.32	82.57%
<b>Average</b>		<b>0.56</b>	<b>93.02%</b>

Composites were prepared using multiple samples from a previously selected trench interval with total individual samples used for each composite as follows: BnMetTr3 (12 individual samples), BnMetTr4 (17), SwMetTr4 (10), SwMetTr5 (10), SwMetTr6 (10), SwMetTr7 (12), and SwMetTr8 (9). Composites BnMetTr3, BnMetTr4, SwMetTr4, SwMetTr5 and SwMetTr6 each weighed 60 kg; composites SwMetTr7 and SwMetTr8 each weighed 100 kg. In all cases 45 kg of material was added to the column.

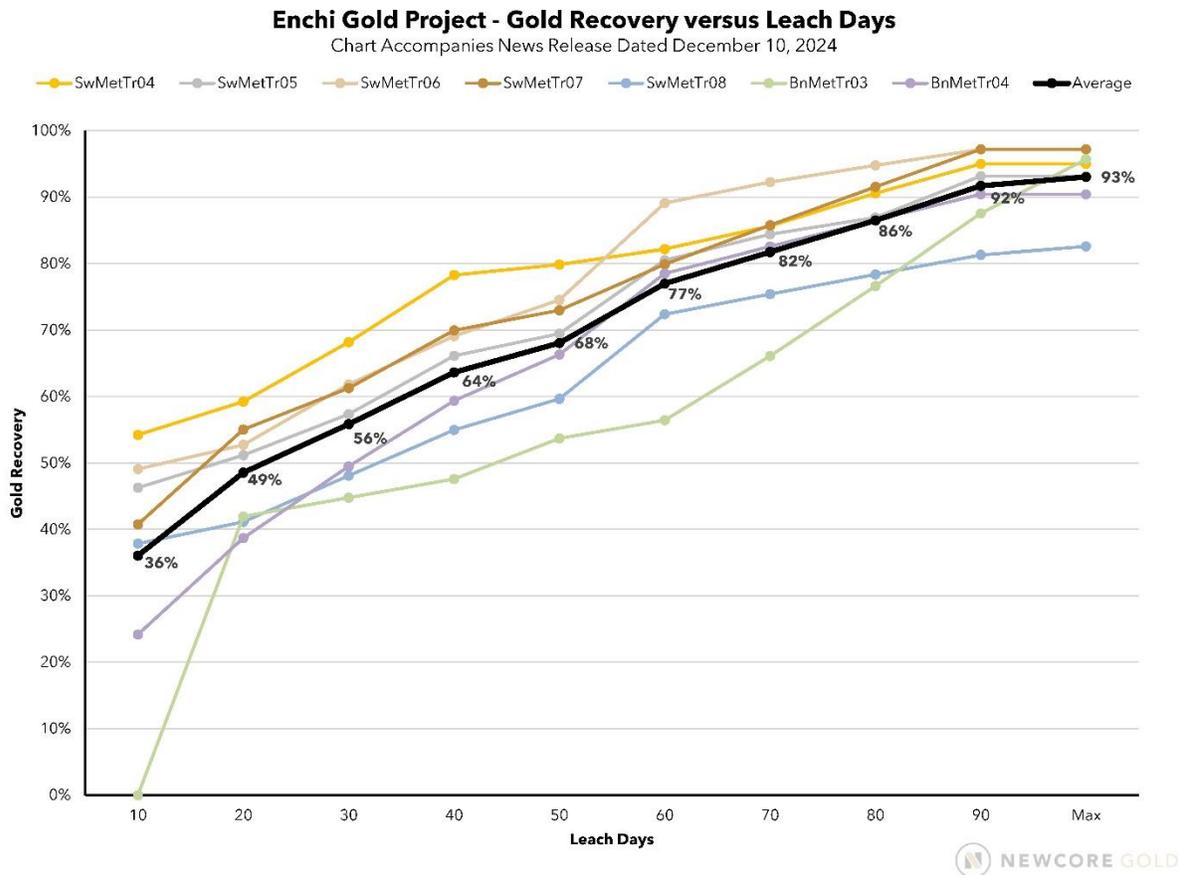
Composite samples were homogenized by mixing all material from the individual samples and crushed to 70% passing 12.5 mm. Each composite sample was then split to provide sub-samples weighing 4 kg each. Two samples were removed and again split into a further four fractions of 2 kg for use in screening and grading analysis, head sample analysis, and ten-day coarse bottle roll leach tests.

## Metallurgical Testing - Column Tests

The primary goal of column tests is to simulate the response to leaching of the sample with the emphasis on establishing the gold dissolution characteristics (rate and extent), reagent consumption, and the degree of slumping.

All samples showed amenability to heap leaching, with recoveries averaging 93.0% after 90 to 120 days. A graph showing the leach curve can be viewed at the following link:

[https://newcoregold.com/site/assets/files/5885/2024\\_12-ncau-nr-met-graph.pdf](https://newcoregold.com/site/assets/files/5885/2024_12-ncau-nr-met-graph.pdf)



Seven 45 kg closed-cycle column leach tests were conducted on the samples which were crushed to 12.5 mm. The test charge was loaded into 150 mm-in-diameter by 1.5-metre-tall PVC columns. 30 kg of the individual samples were agglomerated in a rolling drum using Portland cement at a 10 kg/t addition rate and then allowed to air dry for three days. After the samples had been air dried, they were loaded into the columns with the columns tilted at an angle to avoid compaction before being set upright. The column was then allowed to sit for a day before the initial level was taken to determine the slump.

The leaching parameters used in these column leach tests included the addition of approximately 1.4 kg/t of lime which was blended into each feed solution, and a cyanide concentration of 1,000 ppm. The initial feed solution was prepared by adding lime to tap water to obtain a solution pH above 10.5, followed by the addition of one gram of sodium cyanide per litre of solution with a solution application rate of 10L/h/m<sup>2</sup> for all samples. The column testwork was conducted under a closed cycle for 90-120 days. All solution samples were

assayed for gold and pH and free sodium cyanide was analyzed and recorded. Leach residue was thoroughly washed, dried, screened and analyzed for gold by fire assay.

The samples showed low cyanide consumption averaging 1.63 kg/t with a 0.98 kg/t lime (hydrated) addition to maintain a pH above 10.5. The slumps were within acceptable industry standards with an overall average of 7.09%. The sample response to a percolation rate of 10L/m<sup>2</sup>/hr resulted in minimal flooding. The percolation rate will continue to be studied and optimized with further testwork.

**Table 2 - Summary of Column Leach Tests**

Composite	Leach Time	Slump %	Reagent Consumption kg/t		
			NaCN	Lime	Cement
BnMetTr3	120 days	7.39%	1.44	0.99	15
BnMetTr4	90 days	8.01%	0.59	0.89	15
SwMetTr4	90 days	8.77%	1.96	0.79	10
SwMetTr5	90 days	4.86%	1.88	0.50	10
SwMetTr6	90 days	7.08%	2.12	2.75	10
SwMetTr7	90 days	6.10%	1.89	0.66	10
SwMetTr8	120 days	7.40%	1.52	0.30	10
<b>Average</b>		<b>7.09%</b>	<b>1.63</b>	<b>0.98</b>	<b>11.4</b>

The column leach test program has shown that the gold in the samples tested is readily leachable and amenable to heap leaching. The recoveries achieved are considered high and are interpreted to indicate amenability to heap leaching. The particle size distribution and size by size analysis performed on both the head and residue after leach showed that the maximum gold recovery occurred in the finer fractions as compared to the coarser size fractions.

### Screening and Grading Analysis of Head Samples

A size analysis was done on each of the seven composite samples. The samples were tested at eight screen sizes and included analyses for percent mass.

The samples were assayed for gold which showed that gold was present in all size fractions analysed. The distribution shows relatively consistent gold grades for all size fractions within average values in a range of 0.38 g/t Au to 1.02 g/t Au, averaging 0.59 g/t Au. Results include 4% to 56%, averaging 21.5%, passing 150 microns indicating that agglomeration is warranted.

**Table 3 - Size Analysis by Composite Sample**

Sieve	BnMetTr3		BnMetTr4		SwMetTr4		SwMetTr5		SwMetTr6		SwMetTr7		SwMetTr8	
	% mass	Au g/t												
+10.0mm	0.98	0.09	1.50	0.17	8.2	3.50	9.4	0.48	41.4	0.69	18.0	0.18	43.7	0.37
+6.3mm	8.23	1.02	8.90	1.62	8.9	2.18	12.9	0.51	17.7	0.77	9.5	0.78	13.1	0.29
+2.5mm	25.1	0.72	15.5	1.02	29.5	1.15	31.4	0.51	19.7	0.53	18.7	0.74	11.9	0.52
+1.0mm	14.5	0.55	8.89	0.71	23.8	0.99	22.3	0.33	9.0	0.24	11.4	0.69	6.3	0.29
+300µm	10.7	0.63	6.70	0.81	18.2	0.38	15.1	0.24	6.3	0.24	10.4	0.64	6.5	0.27
+212µm	1.93	0.39	1.49	0.53	2.5	0.32	2.1	0.24	1.1	0.30	2.4	0.57	1.9	0.55
+150µm	2.11	0.47	1.41	0.38	1.9	0.37	1.6	0.17	0.9	0.24	2.0	0.75	1.9	0.44
-150µm	36.4	0.35	55.6	0.17	6.9	0.51	5.2	0.28	4.0	0.19	27.7	0.95	14.7	0.24

## Head Sample Analysis

Using the results of the sizing and grading analysis, a head grade was calculated for each of the composite samples. The results were then compared to the head grade assays which were completed on the 50-gram subsamples. The results compared well for six of the composites, with one sample within an acceptable variance.

**Table 4 - Grade Analysis by Composite Sample**

<b>Gold Grade g/t</b>	<b>BnMetTr3</b>	<b>BnMetTr4</b>	<b>SwMetTr4</b>	<b>SwMetTr5</b>	<b>SwMetTr6</b>	<b>SwMetTr7</b>	<b>SwMetTr8</b>	<b>Average</b>
Assayed Grade #1	0.60	0.49	0.85	0.50	0.52	0.68	0.29	<b>0.56</b>
Assayed Grade #2	0.60	0.47	0.83	0.50	0.57	0.64	0.35	<b>0.57</b>
Avg Assayed Grade	0.60	0.48	0.84	0.50	0.55	0.66	0.32	<b>0.56</b>
Calculated	0.56	0.53	1.18	0.40	0.58	0.68	0.35	<b>0.61</b>

## Ten Day Coarse Bottle Roll Leach

Simulated heap leach testing was conducted on the composite samples using two-kilogram sub-samples which underwent leaching for ten days. Batch dissolution tests (ten days, intermittent rolling-bottle) were completed under excess leach conditions (grind size - as received, 50% solids, leach time: ten days, pH 10.5, NaCN (sodium cyanide) addition 1 gram/litre). The final residue was dried, weighed, and assayed for gold. In 24-hour leaching periods, solution assays were taken and analyzed, and reagent consumption (cyanide and lime) was calculated. Recoveries after ten days averaged 62.1% in a range of 30.0% to 82.8%. In all cases, gold dissolution was continuing at the end of the ten-day period with ultimate recoveries expected to continue to increase with additional leaching time.

## Screening and Grading Analysis of Tails Samples

A size analysis was done on all the tails from the composite sample column tests. The samples were tested at eight screen sizes including analyses for percent mass and assayed for gold. The distribution shows consistently low grades of gold for all size fractions, in line with the high gold recoveries in the column tests, within a range of 0.00 g/t Au to 0.15 g/t Au with only one outlier of 0.48 g/t Au. The calculated grades for the tails ranged between 0.01 and 0.09 g/t Au averaging 0.04 g/t Au.

## Multi-Element Analyses

The seven composites were tested for 33 elements using multi-acid digestion and analysed by Inductively Coupled Plasma Optical Emission Spectrometry ("ICP"). The samples show very similar profiles for all elements analysed. All samples contain no silver with every result below the detection limit of 0.2 g/t silver. All samples reported low values for lead, zinc, and copper averaging 18, 23, and 70 ppm respectively and mildly elevated arsenic averaging 422 ppm with no relationship to the gold grade. All samples reported below detection for mercury and cadmium (<0.2 ppm), and bismuth (<2 ppm). The oxide material had elevated concentrations of iron (average 8.8%) and aluminum (average 1.1%), both within a normal range.

## Boin and Sewum Oxide Sample Details

Composite samples for this release were sourced from four trenches dug manually for metallurgical testwork on the Enchi Gold Project. The locations of the trenches were selected in order to allow for wide gold mineralized intercepts approximating the average grade in each of the two largest deposits, Sewum and Boin. Material exposed in the trenches is considered representative of the oxide portion for both deposits. Samples were assigned a new unique number and submitted to the Intertek Lab located in Tarkwa, Ghana.

Mineralized intervals from the four trenches which supplied the material for the results reported in this release are below:

**Table 5 - Enchi Gold Project Trenching Results Highlights**

Hole ID	Zone/Deposit	From (m)	To (m)	Length (m)	Au (g/t)
<b>KBTR_MET_002</b>	Boin	92.0	122.0	<b>26.0</b>	<b>0.52</b>
<b>KBTR_MET_003</b>	Boin	56.0	86.0	<b>30.0</b>	<b>1.13</b>
<b>SWTR_MET_002</b>	Sewum	0.0	112.0	<b>112.0</b>	<b>0.59</b>
including		20.0	40.0	<b>20.0</b>	<b>1.05</b>
and		154.0	194.0	<b>40.0</b>	<b>0.73</b>
<b>SWTR_MET_004</b>	Sewum	0.0	36.0	<b>36.0</b>	<b>0.58</b>
and		46.0	66.0	<b>20.0</b>	<b>0.56</b>

Notes:

1. Intervals reported are trench lengths with true width estimated to be 75 - 85%; and
2. Length-weighted averages from uncut assays.

Trench KBTR\_MET\_002 supplied the mineralized material for sample BnMetTr3; Trench KBTR\_MET\_003 supplied the mineralized material for sample BnMetTr4; Trench SWTR\_MET\_002 supplied the mineralized material for samples SwMetTr4, SwMetTr5, SwMetTr6; Trench SWTR\_MET\_004 supplied the mineralized material for samples SwMetTr7 and SwMetTr8.

## 2024 Enchi Work Program

A 10,000-metre RC drill program is underway at Enchi, targeting near-surface oxide and shallow sulphide mineralization with a primary goal of infill drilling for resource conversion to improve the confidence level of the existing Mineral Resource Estimate. Most of the infill drilling is allocated to the two largest deposits at Enchi, Boin and Sewum. Improving the confidence level of the Mineral Resource Estimate at Enchi is a key component of the development work required to be completed in advance of commissioning a Pre-Feasibility Study for the Project. A subset of the drill program will also focus on outlining resource growth, with all deposit areas and pre-resource targets at Enchi remaining open along strike and at depth, providing for future resource growth across the district-scale property.

Additional exploration and development work is on-going at Enchi, including metallurgical testwork, drone surveys, an airborne magnetic survey, trenching, hydrogeological testing, condemnation drilling, geotechnical work, environmental work and soil sampling. Drone topographic surveys are underway, expanding on previously completed work, at the KwakyeKrom and Tokosea deposit areas to provide detailed topographic information required

to improve the confidence level of each deposit's Mineral Resource Estimate. Additionally, the drone survey will be completed across the proposed heap leach facility area to contribute additional data for future detailed engineering studies. An airborne magnetic survey will test grass roots targets related to a series of gold-in-soil anomalies and gold mineralization identified in trenching. Soil sampling is also currently being completed on the Omanpe and Abotia licenses with a goal of further defining early-stage targets across Enchi for future trenching and drilling.

### **Enchi Gold Project Mineral Resource Estimate**

The Enchi Gold Project hosts an Indicated Mineral Resource of 41.7 million tonnes grading 0.55 g/t Au containing 743,500 ounces gold and an Inferred Mineral Resource of 46.6 million tonnes grading 0.65 g/t Au containing 972,000 ounces (see Newcore news release dated [March 7, 2023](#)). Mineral resource estimation practices are in accordance with CIM Estimation of Mineral Resource and Mineral Reserve Best Practice Guidelines (November 29, 2019) and follow CIM Definition Standards for Mineral Resources and Mineral Reserves (May 10, 2014), that are incorporated by reference into National Instrument 43-101 ("NI 43-101"). The Mineral Resource Estimate is from the technical report titled "Mineral Resource Estimate for the Enchi Gold Project" with an effective date of January 25, 2023, which was prepared for Newcore by Todd McCracken, P. Geo, of BBA E&C Inc. and Simon Meadows Smith, P. Geo, of SEMS Exploration Services Ltd. in accordance with NI 43-101 - *Standards of Disclosure for Mineral Projects*, and is available under the Company's profile on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca). Todd McCracken and Simon Meadows Smith are independent qualified persons ("QP") as defined by NI 43-101.

### **Newcore Gold Best Practice**

Newcore is committed to best practice standards for all exploration, sampling and drilling activities. Drilling was completed by an independent drilling firm using industry standard RC and Diamond Drill equipment. Analytical quality assurance and quality control procedures include the systematic insertion of blanks, standards and duplicates into the sample strings. Samples are placed in sealed bags and shipped directly to Intertek Labs located in Tarkwa, Ghana for 50 gram gold fire assay.

### **Qualified Person**

Mr. Gregory Smith, P. Geo, Vice President of Exploration at Newcore, is a Qualified Person as defined by NI 43-101, and has reviewed and approved the technical data and information contained in this news release. Mr. Smith has verified the technical and scientific data disclosed herein and has conducted appropriate verification on the underlying data including confirmation of the drillhole data files against the original drillhole logs and assay certificates.

### **About Newcore Gold Ltd.**

Newcore Gold is advancing its Enchi Gold Project located in Ghana, Africa's largest gold producer<sup>(1)</sup>. Newcore Gold offers investors a unique combination of top-tier leadership, who are aligned with shareholders through their 18% equity ownership, and prime district scale exploration opportunities. Enchi's 248 km<sup>2</sup> land package covers 40 kilometres of Ghana's prolific Bibiani Shear Zone, a gold belt which hosts several multi-million-ounce gold deposits,

including the Chirano mine 50 kilometres to the north. Newcore's vision is to build a responsive, creative and powerful gold enterprise that maximizes returns for shareholders.

(1) Source: Production volumes for 2023 as sourced from the World Gold Council.

## **On Behalf of the Board of Directors of Newcore Gold Ltd.**

Luke Alexander  
President, CEO & Director

### **For further information, please contact:**

Mal Karwowska | Vice President, Corporate Development and Investor Relations  
+1 604 484 4399  
info@newcoregold.com  
[www.newcoregold.com](http://www.newcoregold.com)

*Neither the 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.*

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

*This news release includes statements that contain "forward-looking information" within the meaning of the applicable Canadian securities legislation ("forward-looking statements"). All statements, other than statements of historical fact, are forward-looking statements and are based on expectations, estimates and projections as at the date of this news release. Any statement that involves discussion with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions, future events or performance (often, but not always using phrases such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved) are not statements of historical fact and may be forward-looking statements. In this news release, forward-looking statements relate, among other things, to: statements about the estimation of mineral resources; results of preliminary economic assessments; completion of a pre-feasibility study; results of metallurgical testwork; results of our ongoing drill campaign; results of drilling, magnitude or quality of mineral deposits; anticipated advancement of mineral properties or programs; and future exploration prospects.*

*These forward-looking statements, and any assumptions upon which they are based, are made in good faith and reflect our current judgment regarding the direction of our business. The assumptions underlying the forward-looking statements are based on information currently available to Newcore. Although the forward-looking statements contained in this news release are based upon what management of Newcore believes, or believed at the time, to be reasonable assumptions, Newcore cannot assure its shareholders that actual results will be consistent with such forward-looking statements, as there may be other factors that cause results not to be as anticipated, estimated or intended. Forward-looking information also 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. Such factors include, among others: risks related to the speculative nature of Newcore's business; Newcore's formative stage of development; Newcore's financial position; possible variations in mineralization, grade or recovery rates; actual results of current exploration activities; fluctuations in general macroeconomic conditions; fluctuations in securities markets; fluctuations in spot and forward prices of gold and other commodities; fluctuations in currency markets (such as the Canadian dollar to United States dollar exchange rate); change in national and local government, legislation, taxation, controls, regulations and political or economic developments; risks and hazards associated with the*

*business of mineral exploration, development and mining (including environmental hazards, unusual or unexpected geological formations); the presence of laws and regulations that may impose restrictions on mining; employee relations; relationships with and claims by local communities; the speculative nature of mineral exploration and development (including the risks of obtaining necessary licenses, permits and approvals from government authorities); and title to properties.*

*Forward-looking statements contained herein are made as of the date of this news release and Newcore disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results, except as may be required by applicable securities laws. 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.*

# Enchi Gold Project - Gold Recovery versus Leach Days

Chart Accompanies News Release Dated December 10, 2024

