



### **Newcore Gold Announces Average Gold Recovery of 91.9% from Bulk-Scale Pilot Heap Tests at the Enchi Gold Project, Ghana**

*60-Day Pilot Tests Completed on 15-Tonne Samples from the Sewum and Boin Gold Deposits*

November 21, 2023

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 two bulk-scale pilot heap tests completed as part of the ongoing metallurgical program at the Company's 100%-owned Enchi Gold Project ("Enchi" or the "Project") in Ghana. Two bulk-scale pilot heap tests, leached for 60-days, were completed on 15-tonne composite samples of oxide mineralization from the Sewum Gold Deposit ("Sewum") and the Boin Gold Deposit ("Boin") at Enchi. An average gold recovery of 91.9% was achieved from both samples, with Sewum achieving an average gold recovery of 93.5% and Boin achieving an average gold recovery of 90.3%. These strong metallurgical results on oxide material from Enchi continue to highlight the Project's amenability to heap leach processing.

#### **Highlights from the Pilot Heap Test Results**

- **Average gold recovery of 91.9% achieved from testwork on oxide mineralization.**
  - Two 15-tonne composite samples from Sewum and Boin, leached for 60-days.
  - Sewum sample achieved an average gold recovery of 93.5% with a head assay grade of 0.81 grams per tonne gold ("g/t Au").
  - Boin sample achieved an average gold recovery of 90.3% with a head assay grade of 1.09 g/t Au.
- **Representative samples were collected at Sewum and Boin from two trenches on the central portions of each deposit, completed specifically for metallurgical testwork.**
  - The Sewum and Boin Gold Deposits at Enchi comprise approximately 76% of the Mineral Resource Estimate defined to date at Enchi.
  - Results continue to show low consumption values for reagents: cement, cyanide, lime.
- **Results in-line with column testwork completed to date, highlight +90% gold recoveries with oxide and transition material amenable to heap leach processing.**
  - The pilot heap test results confirm the results of 14 column tests of 60 days or longer, completed over the past two years, which returned an average gold recovery of 92.2%.
- **Additional metallurgical testwork underway**
  - Optimization work continues with additional column tests to be completed on oxide mineralization from the Sewum, Boin, Nyam and Tokosea gold deposits.
  - Additional testing of sulphide mineralization from Sewum is in progress.

Greg Smith, VP Exploration of Newcore stated, "These bulk-scale pilot heap tests completed on representative oxide material from the Enchi Gold Project returned high recoveries, in-line with results from metallurgical testing completed to date, further supporting the amenability of Enchi to heap leach processing. The larger, 15-tonne samples are a significant step in

confirming the positive results from the extensive lab testing completed to date. These results, along with the additional positive test results completed and reported since 2021, will be incorporated into our updated Preliminary Economic Assessment Study which is targeted for completion in H1 2024. This testwork was completed on samples from the two largest deposits currently identified on the Project, Sewum and Boin, which together compromise approximately 76% of the current Mineral Resource Estimate. We continue to de-risk and advance the development of the Project with further metallurgical testwork underway on both oxide and sulphide mineralization at Enchi."

### Metallurgical Testing Summary

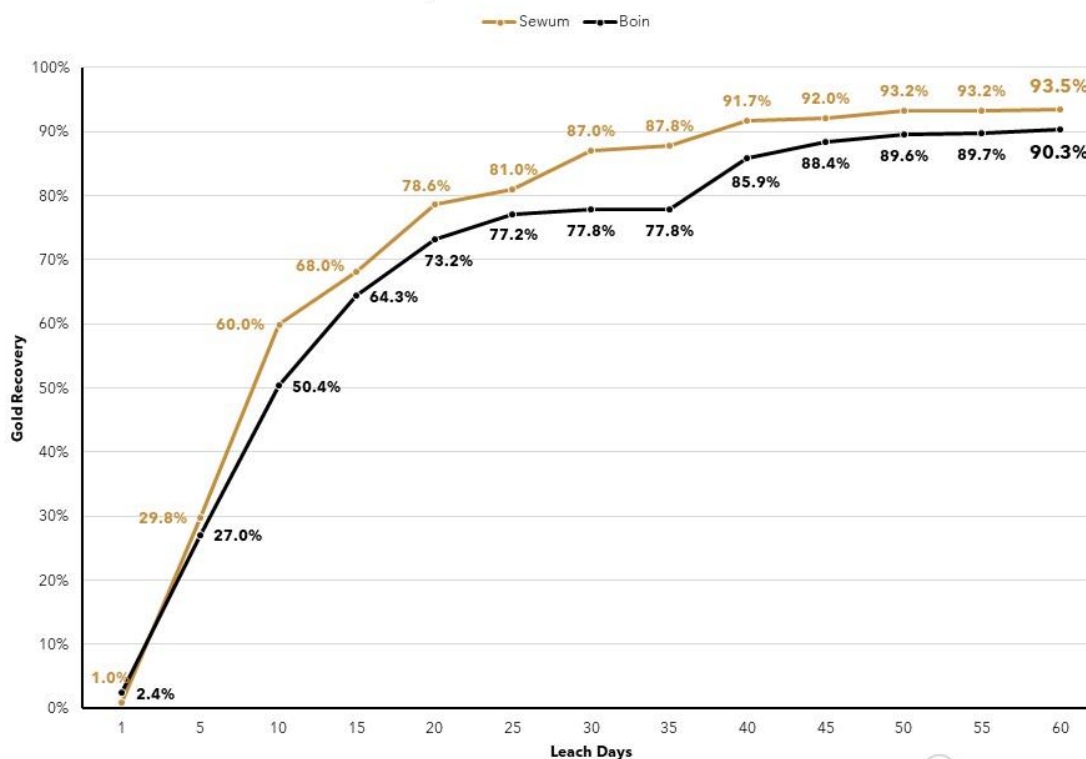
The two bulk-scale 15-tonne pilot heap tests on oxide mineralization were completed as part of the ongoing metallurgical program at the Company's 100%-owned Enchi Gold Project in Ghana. A gold recovery of 93.5% for Sewum and 90.3% for Boin was achieved after 60 days of leaching.

**Table 1 - Pilot Heap Tests Detail and Average Gold Recovery**

Deposit	Sample Size	Test Length	Grade (g/t Au)	Average Recovery
Sewum	15 tonnes	60 days	0.81	<b>93.5%</b>
Boin	15 tonnes	60 days	1.09	<b>90.3%</b>
Average	15 tonnes	60 days	0.95	<b>91.9%</b>

**Enchi Gold Project - Pilot Heap Leach Tests - Gold Recovery versus Leach Days**

Chart Accompanies News Release Dated November 21, 2023



A graph showing the leach curve can be viewed at the following link:  
[https://newcoregold.com/site/assets/files/5834/2023\\_11-ncau-nr-met-pilot-test-results-graph.pdf](https://newcoregold.com/site/assets/files/5834/2023_11-ncau-nr-met-pilot-test-results-graph.pdf)

The gold recovery increased rapidly for the first 20 days reaching 78.6% for Sewum and 73.2% for Boin, continued at a moderate rate until day 40 reaching 91.7% for Sewum and 85.9% for Boin, with ultimate recoveries of 93.5% for Sewum and 90.3% for Boin achieved after 60 days.

### Head Sample Analysis

The mineralized material collected from the trenches was mixed in an agglomeration drum, with three representative sub-samples taken at regular intervals. The head assay data for the three sub-samples is presented in Table 2. The average assay for the Sewum mineralized material was 0.81 g/t Au and that for Boin was 1.09 g/t Au.

**Table 2a - Head Assays (g/t Au) of Sub-Samples for Sewum**

Sample	Assay 1	Assay 2	Average
1	0.85	0.88	<b>0.87</b>
2	0.51	0.76	<b>0.64</b>
3	0.94	0.89	<b>0.92</b>
<b>Average</b>			<b>0.81</b>

**Table 2b - Head Assays (g/t Au) of Sub-Samples for Boin**

Sample	Assay 1	Assay 2	Average
1	1.14	1.10	<b>1.12</b>
2	1.15	1.21	<b>1.18</b>
3	0.97	0.98	<b>0.98</b>
<b>Average</b>			<b>1.09</b>

### Reagent Consumption

The samples showed low reagent consumptions, in-line with the column testwork completed to date. During agglomeration, 8 kg/t of cement was added for each 15-tonne bulk sample. Cyanide consumption averaged 0.74 kg/t (0.77 kg/t for Sewum and 0.71 kg/t for Boin) with a 2.28 kg/t lime (hydrated) addition to maintain a pH above 10.5 for both tests.

**Table 3 - Reagent Consumption (kg/t) Summary**

Reagent	Sewum	Boin	Average
Cyanide	0.77	0.71	<b>0.74</b>
Lime	2.28	2.28	<b>2.28</b>
Cement	8.0	8.0	<b>8.0</b>

## **Metallurgical Testing - Pilot Heap Tests**

The two 15-tonne samples were transported to the University of Mines and Technology located in Tarkwa, Ghana.

Two platforms were built to receive the bulk-scale metallurgical samples. Each of the two samples received were blended in an agglomeration drum and sub-samples taken for head assays. 8 kg/t of Portland cement, 1000 ppm cyanide solution and 2.28 kg/t lime were used in the agglomeration process and the agglomerates were placed on the prepared platforms. After a curing period of 72 hours, irrigation began and was completed for 60 days.

The heap leach pad preparation commenced with compaction of the ground with an impermeable clay layer at a slope angle of between 3 and 6 degrees near the designated collection solution point. The ground compaction was done such that there was uniform strength across the ground to prevent point stresses that could puncture the impervious membrane. Primary berms of height 0.5 metres were constructed around each leach pad, approximately 1.0 metre away from the heaps. The space that was occupied by the mineralized material was approximately 2.5 x 2.5 metres and was covered with quartz pebbles to create channels for the solution to run through the heap and then flow without obstruction to the collection point. 15-tonnes of each of the two different mineralized materials, one from Sewum and one from Boin, were then agglomerated on site with the aid of a concrete mixer. Coarse material larger than 5 to 10 cm was crushed, otherwise the mineralized material was agglomerated as received and poured out and heaped manually. The cyanide solution was pumped into the dripper tubes that were laid on top of the pilot heaps, for discharge onto the prepared heaps. Dripper tubes were used to prevent splashing of cyanide solution beyond heaps as an environmental precaution. Percolated solution then flowed down the pad slope to the collection point where the solution was channelled into a container filled with activated carbon for gold adsorption. Solution samples were then taken before and after adsorption for Atomic Absorption Spectrophotometry ("AAS") analysis to determine the gold in solution for metal balancing and recovery calculations. After adsorption, the solution was conditioned and recirculated onto the heaps (closed circuit) for 60 days.

At the end of each processing day, solution exiting the heap was collected, the volume measured and the gold in solution determined. Gold in all particulate samples was analysed by fire assaying and that in solution samples by AAS.

The objective of the pilot heap tests was to simulate the response to leaching of the samples with the emphasis on establishing the gold dissolution characteristics (rate and extent) and reagent consumption within the material. All samples showed amenability to heap leaching, with recoveries from samples from both Sewum and Boin averaging 91.9% after 60 days.

## **Boin and Sewum Oxide Sample Details**

The material for the pilot heap tests was sourced from two trenches excavated for metallurgical testwork on the Enchi Gold Project. The locations of the trenches were selected in order to allow for wide gold mineralized intercepts of oxide gold mineralization 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. A total of 61 metres was completed on KBTR\_MET\_001 from Boin and 107 metres was completed on SWTR\_MET\_001 from Sewum. Trench KBTR\_MET\_001 at Boin was dug-out manually while as SWTR\_MET\_001 was dug-out

mechanically. Samples were assigned a new unique number and submitted to the Intertek Lab located in Tarkwa, Ghana.

Trench KBTR\_MET\_001 at Boin includes a mineralized interval of 1.43 g/t Au over 44 metres, with a 15-tonne composite sample prepared from one 30-metre-long segment consisting of 30 one-metre samples with an average grade of 1.22 g/t Au (ranging from 5.17 g/t Au to 0.05 g/t Au).

Trench SWTR\_MET\_001 from Sewum includes a mineralized interval of 1.18 g/t Au over 92 metres, with a 15-tonne composite sample prepared from three segments totalling 60 metres in length and comprised of 60 one-metre samples with an overall average grade of 0.83 g/t Au (ranging from 5.31 g/t Au to 0.17 g/t Au).

Select assay results from the two trenches are shown below:

**Table 4 - Enchi Gold Project Trenching Results Highlights**

Hole ID	Zone/Deposit	From (m)	To (m)	Length (m)	Au (g/t)
<b>KBTR_MET_001</b>	Boin	1.0	45.0	<b>44.0</b>	<b>1.43</b>
including		5.0	34.0	<b>29.0</b>	<b>1.97</b>
<b>SWTR_MET_001</b>	Sewum	15.0	107.0	<b>92.0</b>	<b>1.18</b>
including		27.0	40.0	<b>13.0</b>	<b>2.70</b>
including		58.0	81.0	<b>23.0</b>	<b>1.78</b>

Notes:

1. Intervals reported are trench lengths with true width estimated to be 75 - 85%; and
2. Length-weighted averages from uncut assays.
3. For additional details and results of column tests completed on the same material see news release dated [October 4, 2023](#).

### **Enchi Gold Project - Comparison of Pilot Heap Test Results to Column Test Results**

The positive gold recovery values (average recovery of 91.9%) from the bulk-scale pilot heap testwork confirm results from a series of column tests completed over the last two years. A total of 14 column tests with leach times of over 60-days have been completed, with an average gold recovery of 92.2% achieved. This column testwork included six tests with a 60-day duration, two tests with a 70-day duration, and six tests with a 90-day duration. Gold recovery curves were similar with average gold recoveries of 65.6% after 30 days, 85.6% after 60 days, and 92.2% at the completion of the tests. The tests were completed on oxide and transition material from the Sewum and Boin deposits, except for one sample completed on mixed oxide and transition material from the Kwakryekrom gold deposit. Material used for the testwork included reverse circulation chip coarse rejects, split diamond drill core, as well as trench samples. Consumption values for reagents (cement, lime, cyanide) are similarly low when comparing the results of the column tests with the pilot heap test results. All testwork was completed at labs located in Tarkwa, Ghana, with thirteen of the column tests completed at Intertek Lab and one completed at the University of Mines and Technology.

## **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>. The Project currently hosts an Indicated Mineral Resource of 743,500 ounces of gold at 0.55 g/t and an Inferred Mineral Resource of 972,000 ounces of gold at 0.65 g/t<sup>(2)</sup>. Newcore Gold offers investors a unique combination of top-tier leadership, who are aligned with shareholders through their 20% equity ownership, and prime district scale exploration opportunities. Enchi's 216 km<sup>2</sup> land package covers 40 kilometres of Ghana's prolific Bibiani Shear Zone, a gold belt which hosts several 5 million-ounce gold deposits, including the Chirano mine 50 kilometers to the north. Newcore's vision is to build a responsive, creative and powerful gold enterprise that maximizes returns for shareholders.

## **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)

(1) Source: Production volumes for 2022 as sourced from the World Gold Council

(2) Notes for Mineral Resource Estimate:

1. *Canadian Institute of Mining Metallurgy and Petroleum* ("CIM") definition standards were followed for the resource estimate.
2. The 2023 resource models used ordinary kriging (OK) grade estimation within a three-dimensional block model with mineralized zones defined by wireframed solids and constrained by pits shell for Sewum, Boin and Nyam. Kwakyekrom and Tokosea used Inverse Distance squared (ID<sup>2</sup>).
3. Open pit cut-off grades varied from 0.14 g/t to 0.25 g/t Au based on mining and processing costs as well as the recoveries in different weathered material.
4. Heap leach cut-off grade varied from 0.14 g/t to 0.19 g/t in the pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs.
5. CIL cut off grade varied from 0.25 g/t to 0.27 g/t in a pit shell and 1.50 g/t for underground based on mining costs, metallurgical recovery, milling costs and G&A costs.
6. A US\$1,650/ounce gold price was used to determine the cut-off grade.
7. Metallurgical recoveries have been applied to five individual deposits and in each case three material types (oxide, transition, and fresh rock).
8. A density of 2.19 g/cm<sup>3</sup> for oxide, 2.45 g/cm<sup>3</sup> for transition, and 2.72 g/cm<sup>3</sup> for fresh rock was applied.
9. Optimization pit slope angles varied based on the rock types.
10. Reasonable mining shapes constrain the mineral resource in close proximity to the pit shell.
11. Mineral Resources that are not mineral reserves do not have economic viability. Numbers may not add due to rounding.
12. 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 National Instrument 43-101 *Standards of Disclosure for Mineral Projects* and is available under Newcore's SEDAR+ profile at [www.sedarplus.ca](http://www.sedarplus.ca). Todd McCracken and Simon Meadows Smith are independent qualified persons ("QP") as defined by National Instrument 43-101.

*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; timing and completion of an updated PEA; results of metallurgical testwork, 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 the Company's business; the Company's formative stage of development; the Company'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.*

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# Enchi Gold Project - Pilot Heap Leach Tests - Gold Recovery versus Leach Days

Chart Accompanies News Release Dated November 21, 2023

