## **BN ENERGY**

# Block RS-12V: A Paradigm-Shifting Discovery

URGENT & HIGH-IMPACT: Evaluation of OMAC Laboratories Assay Report



Nickel-Cobalt



Copper-Gold



Orogenic Gold

**Classification: High-Priority / Company-Making Potential** 

Strategic Evaluation Report Date: 2025-09-19

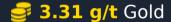
# **Executive Summary: Triple Mineralization System**

A unique polymetallic discovery with transformative potential for BN Energy



## **VMS Copper-Gold**

**7.81**% Copper



Surface samples show rich massive sulfide lenses with world-class grades comparable to top-tier VMS deposits globally.



## **Orogenic Lode-Gold**

**3 2-3 g/t** Gold

Associated with classic

pathfinder elements like Arsenic (As)

Robust, standalone mesothermal gold system with strong economic potential and strategic significance.



## **Magmatic Ni-Cobalt**

>1% Nickel

Unprecedented in the Arabian-Nubian Shield

First economic magmatic Ni-Cu-Co sulfide system discovered in the ANS, with global implications for energy transition and battery metals.

#### **Strategic Significance**

This unique polymetallic (Au-Cu-Ni-Co) signature positions Block RS-12V as a strategic, world-class exploration target with the clear potential to host a multi-commodity mining camp.

# **Technical Analysis: Nickel-Cobalt Anomaly**

A regional first for magmatic Ni-Cobalt sulfide in the Arabian-Nubian Shield

# **L** Key Findings

- First economic magmatic Ni-Cu-Co sulfide system discovered in the ANS
- Values exceeding 1% Ni (>10,000 ppm)
- Suggests presence of a fertile ultramafic intrusive complex at depth

# Geological Implications

- Introduces a completely new and unexplored geological model for Sudan
- Regionally transforming discovery that challenges existing ANS deposit models

# Strategic Value

- Tier-1 Critical Minerals essential for global energy transition
- Particularly important for batteries in electric vehicles (EVs)
- Attracts strategic interest from major miners and battery manufacturers

#### **Magmatic Nickel-Cobalt Sulfide**



## Energy Transition Context

Nickel and cobalt are classified as Tier-1 Critical Minerals for the global energy transition, with growing demand from:







Electric Vehicles Renewable Energy Industrial Applications

# Technical Analysis: Copper-Gold VMS & Orogenic Gold



## **Copper-Gold VMS**



**7.81**% Copper

**3.31** g/t Gold

#### **Global Benchmarking**

- Comparable to early production grades at Neves-Corvo (Portugal): 5-8% Cu
- Rivaling high-grade starter pits such as Bisha (Eritrea)

#### **Economic Implications**

High surface grades indicate near-direct shipping ore potential, providing strong evidence for a significant, high-grade VMS system with excellent economics.



## **Orogenic Lode-Gold**



2-3 g/t Gold

Associated with classic pathfinder elements like Arsenic (As)

#### **System Characteristics**

Robust, standalone mesothermal gold system with strong economic potential and strategic significance.

#### **Project Diversification**

Significantly de-risks the overall project economically. If one commodity's price is depressed, others provide a solid financial floor, enhancing overall project robustness and resilience

# **Comparative Context: Regional Benchmarking**

Positioning RS-12V among regional giants

Feature	Block RS-12V	Bisha Mine (Eritrea)	Sukari Mine (Egypt)
Primary Metals	Cu, Au, Ni, Co	Zn, Cu, Au, Ag	Au
Surface Grade	7.81% Cu, 3.31g/t Au, >1% Ni	High	High
Deposit Style	VMS + Magmatic Ni? + Orogenic Au	VMS	Orogenic Gold
Development Stage	Pre-drill with exceptional surface indicators	Production	Production



#### **Unique Polymetallic Signature**

RS-12V's Ni-Co battery metal suite is a key strategic differentiator in the region.

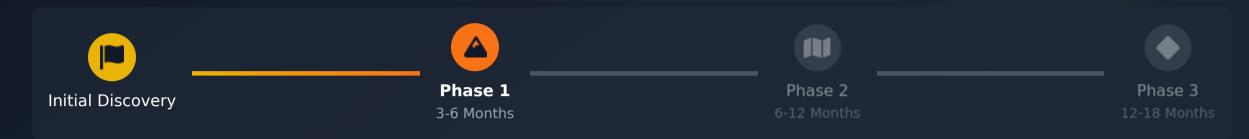


#### **Superior Surface Grades**

Grades rival producing mines and are superior to typical earlystage projects.

# **Exploration Roadmap: Phase 1 (3-6 Months)**

Immediate follow-up actions to capitalize on the high-impact discovery





- Detailed Geological Mapping 1:2,000 scale geological mapping and structural analysis focused on high-grade zones (RS-18, RS-21, RS-22)
- Infill Sampling
  Soil and rock chip sampling on a tight 25m x 25m grid to refine surface anomalies

# Priority Geophysics

Ground Magnetics

Map lithological contacts and identify magnetic ultramafic bodies (potential Ni source) and alteration zones

Ground Electromagnetics (EM)

#### **TOP PRIORITY**

The only direct method to detect conductive massive sulfide bodies (Cu, Ni) at depth. Critical for defining drill targets.

**U** IP Survey

Characterize chargeability anomalies associated with disseminated sulfides and gold zones

Strategic Focus: Near-direct shipping ore potential at surface suggests excellent economics for future mining operation

# **Exploration Roadmap: Phases 2 & 3 (6-18 Months)**

Strategic progression from target refinement to resource delineation



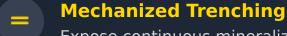


6 Months

12-18 Months

# Phase 2: Target Refinement

Months 6-12



Expose continuous mineralization, obtain bulk sample grades, understand true width of mineralized zones

- Diamond Drill Target Definition

  Synthesize all data to generate a ranked portfolio of highconfidence drill targets
- Metallurgical Scoping
  Initial flotation tests on composite samples to assess recoveries for Cu, Au, Ni, Co
- Primary goal: Refine targets and prepare for drilling

## **Phase 3: Maiden Drill Campaign**

Months 12-18



## **Maiden Diamond Drill Program**

Execute **2,000-3,000 meter** drill program to test highest-priority targets



#### **Resource Delineation Drilling**

Upon success, rapidly escalate to larger program to define initial Inferred Mineral Resource



#### **Resource Definition**

Aim to delineate maiden resource with strong grade and continuity

Primary goal: Confirm depth, thickness, continuity, and grade of mineralization

# Risk Assessment & Mitigation Strategies

A comprehensive approach to managing project uncertainties



## **Geological Risk**

Surface samples may not represent bulk tonnage. High-grade zones may be discontinuous or not persist at depth.



- Disciplined exploration sequence
- Geophysics → Trenching → Drilling
- Dense sampling network



## **Jurisdictional Risk**

Sudan carries inherent political and investment risk that could delay project advancement.

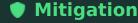
### Mitigation

- Proactive community engagement
- Strong government relations
- Strategic partnerships



## **Exploration Risk**

The unique Ni-Co signature is uncharted territory in the ANS. Geological models will need real-time adaptation.



- Global expert engagement
- Specialized in magmatic sulfide deposits
- Enhanced exploration team



A robust risk management framework is essential for successful project advancement. The identified mitigation strategies will be implemented in parallel with exploration activities.

# Strategic Recommendations & Conclusion

The OMAC assay report is a **transformative data set** that elevates BN Energy's Block RS-12V to the status of a globally significant exploration asset with the potential to be a company-making discovery.

## Key Strategic Recommendations

Immediate Follow-Up: Execute Phase 1 exploration program (3-6 months) with high-resolution mapping, geophysics, and trenching.

Target Refinement: Prepare for drilling with 

✓ mechanized trenching and metallurgical scoping (6-12 months).

Maiden Drill Campaign: Execute 2,000-3,000 meter
 ◆ drill program within 12-18 months to define initial resource.

## **Conclusion & Call to Action**

#### The mandate is clear:

Aggressive, well-funded, and technically superb follow-up is required **immediately**.

The next 18 months, culminating in a maiden drill program, will be critical in determining if this is one of the most significant mineral discoveries in the recent history of the Arabian-Nubian Shield.



We recommend the immediate allocation of capital and resources to execute Phase 1 without delay.

# **Next Steps: Immediate Action Items**

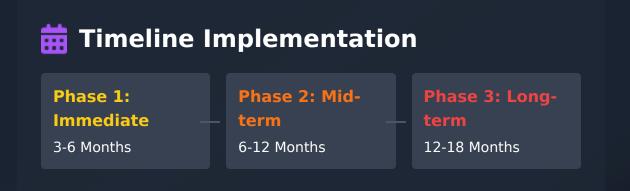
Aggressive, well-funded follow-up is required to capitalize on this company-making potential



- Immediate allocation of exploration budget for Phase 1 activities (3-6 months)
- Provision of adequate resources for high-resolution mapping and geophysics
- Budget for initial metallurgical testing and pilot drill program

# 🗱 Team Formation

- Assemble a technical team with expertise in VMS and magmatic sulfide deposits
- Engage global experts in magmatic Ni-Cu-Co sulfide deposits
- Establish project management structure with clear responsibilities



# **İ**Strategic Actions

- Prepare strategic partnership options for battery manufacturers seeking Ni-Cu diversification
- Develop community engagement strategy for the exploration area
- Establish clear communication protocol with stakeholders

The next 18 months will determine if this is one of the most significant mineral discoveries in the recent history of the Arabian-Nubian Shield.