

Strategic Evaluation: BN Energy Block RS-12V Assay Results

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Executive Summary: A Paradigm- Shifting Discovery

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The initial assay results from BN Energy's Block RS-12V are not merely positive; they are exceptional and potentially transformative. The data indicates not one, but three co-located, high-grade mineralization systems:

High-Grade Volcanogenic Massive Sulfide (VMS) Copper-Gold: Surface samples with +7% Cu and +3 g/t Au are indicative of rich, outcropping massive sulfide lenses.

Orogenic Lode-Gold: Consistent gold values (2-3 g/t Au) associated with pathfinder elements (As) point to a robust mesothermal gold system.

Magmatic Nickel-Cobalt Sulfide: The reported >1% Ni (>10,000 ppm) values represent a geological revelation for the Arabian-Nubian Shield (ANS), suggesting a previously unrecognized deposit type in the region.

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

Detailed Technical Analysis & Benchmarking

The Nickel-Cobalt Anomaly: A Regional First

Implication

The ANS is prolific for orogenic gold and VMS deposits but has no known economic magmatic Ni-Cu-Co sulfide deposits. This discovery suggests the presence of a fertile ultramafic intrusive complex at depth, a completely new exploration model for Sudan.

Strategic Value

Nickel and Cobalt are Tier-1 Critical Minerals for the global energy transition (batteries, EVs). A discovery here would attract immense interest from major miners and battery manufacturers seeking to diversify supply chains away from traditional sources.

Copper-Gold VMS: Exceptional Grade

1

Benchmarking

Grades of 7.81% Cu and 3.31 g/t Au are in the upper echelon of global VMS deposits. For comparison:

- Neves-Corvo (Portugal): Early production grades \~5-8% Cu.
- Bisha (Eritrea): High-grade starter pit.

2

Implication

These are near-direct shipping ore grades at surface. They strongly suggest the presence of a significant, high-grade VMS system.



Orogenic Gold: A Standalone System

Implication

The consistent gold values provide a second, parallel target. This de-risks the project economically—if one commodity's price is depressed, the others provide a financial floor.

Comparative Context: RS-12V vs. Regional Giants

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Feature	Block RS-12V (Initial Results)	Bisha Mine (Eritrea)	Sukari Mine (Egypt)	Commentary
Primary Metals	Cu, Au, Ni, Co	Zn, Cu, Au, Ag	Au	RS-12V's Ni-Co battery metal suite is a key differentiator.
Surface Grade	Exceptional (7.81% Cu, 3.31g/t Au, >1% Ni)	High	High	Grades are superior to typical early-stage projects.
Deposit Style	VMS + Magmatic Ni? + Orogenic Au	VMS	Orogenic Gold	Suggests a mining camp potential, not a single deposit.
Strategic Position	Target Generation	Production	Production	Pre-drill stage, but with unparalleled surface indicators.

Critical Recommendations & Path Forward



Critical Recommendations & Path Forward

The following phased, fully-funded exploration program is imperative to capitalize on this discovery and define a maiden resource.

Phase 1: Immediate Follow-Up (Next 3-6 Months)



High-Resolution Mapping & Geochemistry: Conduct detailed (1:2,000 scale) geological mapping and structural analysis focused on the high-grade zones (RS-18, RS-21, RS-22). Complete infill soil and rock chip sampling on a tight grid (25m x 25m).



Priority Geophysics:

- Ground Magnetics: To map lithological contacts and identify magnetic ultramafic bodies (source of Ni) and magnetite-rich alteration (IOCG/VMS affinity).
- Ground Electromagnetics (EM): THE /#1 PRIORITY. EM is the only direct method to detect conductive massive sulfide bodies (Cu, Ni) at depth. This will define drill targets for the VMS/Ni systems.
 - IP Survey: To characterize chargeability anomalies associated with disseminated sulfide mineralization and gold zones.

Phase 2: Target Refinement & First-Pass Testing (Next 6-12 Months)

Mechanized Trenching: Excavate trenches across identified geochemical and geophysical anomalies to expose continuous mineralization, obtain bulk sample grades, and understand true width.

Diamond Drill Target Definition: Synthesize all data (geochem, geophysics, geology, trenching) to generate a ranked portfolio of highconfidence drill targets. Metallurgical Scoping: Conduct initial flotation tests on composite samples to assess recoveries for Cu, Au, Ni, and Co. This is crucial for future economic modeling.



Phase 3: Maiden Drill Campaign (Next 12-18 Months)

1

Maiden Diamond Drill Program: Execute a minimum 2,000-3,000 meter drill program to test the highest-priority targets. The goal is to confirm the depth, thickness, continuity, and grade of the mineralization.

2

Resource Delineation Drilling: Upon success, rapidly escalate to a larger program to define an initial inferred mineral resource.

Risk Assessment

Risk Assessment

1

Geological Risk

Surface rock chip samples are point-intime data and may not be representative of bulk tonnage. The key risk is that highgrade mineralization is discontinuous or does not persist at depth. This risk is mitigated by the sheer number and consistency of high-grade samples.

2

Jurisdictional Risk

Sudan carries political and investment risk. This must be managed through strong community engagement, government relations, and appropriate financial structuring.

3

Exploration Risk

The unique Ni-Co signature is uncharted territory in the ANS. Geological models will need to be adapted and refined in real-time.

Final Conclusion

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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.

The potential discovery of a major nickel-cobalt system within the ANS is a landmark event. Coupled with world-class copper-gold grades, this project has the hallmarks of a tier-one polymetallic discovery.

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 history of the Arabian-Nubian Shield.

Thank You