

African Bureau of Mining Consultants

A Reliable, Independent and Ethical partner for the African mining industry



WHO WE ARE

African DNA consulting firm

Founded in 2018, AB Mining Consultants ("ABM") provides consultancy services to mining companies, mining investors and government agencies. It is a **value driven consultancy** focused on

- **Strategic advisory,**
- **Financial modelling & valuations,**
- **Technical assistance,** and
- **M&A.**

ABM is led by **Mr Yassine BELKABIR** a UK chartered engineer, a member of IOM3 and a qualified person under NI 43-101.



OUR SERVICES

Hands-on Expertise in Mining & Metals



STRATEGIC ADVISORY

- Executive management advisory,
- Business unit advisory.

FINANCIAL MODELLING & VALUATIONS

- Building financial models for technical reports (PEA, PFS, FS),
- Preparing DCF and comparable valuations,
- Developing Decision-making tools for management

TECHNICAL ASSISTANCE

- Preparing PEAs, Pre-feasibility and Feasibility studies,
- Building Performance management frameworks (Power BI),
- Developing turnaround strategies.

M&A

- Origination & screening of opportunities,
- Financial analytics, modelling and valuations,
- Transaction management,
- Reports and memorandums to investors.

OUR REFERENCES

Strong Record of Achievements

Strategic Advisory



Promotion of Gold permits in Guinea (2019)

Strategic Advisory



Integration of renewables for mines (2019)

M&A



Sale of Balandougou Gold mine in Guinea (2019)

M&A



Acquisition of Tichka Est Gold project in Morocco (2020)

RESTRUCTURE



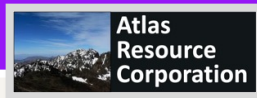
Turnaround Management of Fint Cu mine in Morocco (since 2019)

Strategic Advisory



Business unit advisory for new country entry (2020 & 2021)

Valuation



Due diligence for the restart of an Iron mine in Morocco (2021)

Valuation



Copper project evaluation (PEA) in Béni Mellal region, Morocco (2022)

M&A



Acquisition of a portfolio of 33 permits in Morocco (2022)

M&A



Advisory for the acquisition of a copper project in Morocco (2022)

OUR PARTNERS

ABM delivers top-notch services to African miners



Airborne topographic, spectro and geophysical surveys



Qualified process engineers and metallurgical experts for larger-scale projects



M.Plan is a joint venture company of MICON and ANZAPLAN that focuses on specialty minerals, battery minerals and rare metals



MICON is based in Toronto and has provided consulting services to the world's mining industry since 1988



Strategic Mine Planning software/expertise focused on maximising shareholder value/return



Professional database for the management of tendering and M&A processes



A sale/purchase platform dedicated to African miners delivering alternatives supply routes and strategies to minimize stocks and inventory holdings

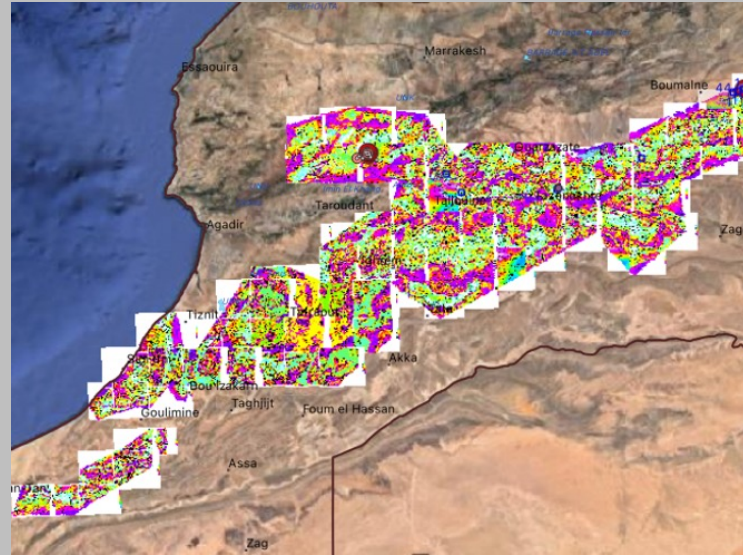


CASE STUDIES

Selection of mandates for illustration purposes



Mr Belkabir comments: “As part of its development strategy, ABM supports mining companies to acquire reliable information and assess the geological potential of selected areas using best-available data, maps and reports”.



Confidential Clients

CASE STUDIES

*Acquisition of geological
maps in Morocco*

- In June 2021, ABM acquired a full set of geological, geochemistry and geophysics reports, data and maps covering twenty-two (22) prospective provinces in Morocco.
- Typical data sets include 1/100 000 and 1/ 50 000 geological maps, multi-element analysis of regular mesh rock or stream-sediment campaigns as well as the results of airborne geophysics campaigns.
- All data, maps and reports are prepared by qualified consultants from BRPM, USGS, the British Geological survey, China Géo-Engineering Corporation or the Council for Geoscience (South Africa).

Exploration & Resource

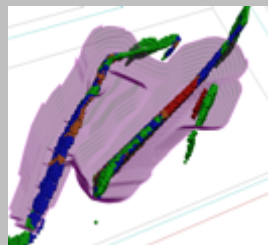
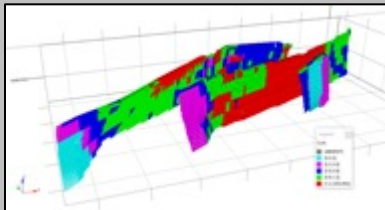
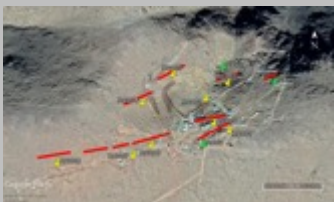
Management of a drilling campaign,
Multi-element analysis,
Bloc model interpretation and modelling,
Resource estimate,
Limited metallurgical test-work.

Reserve & Mine planning

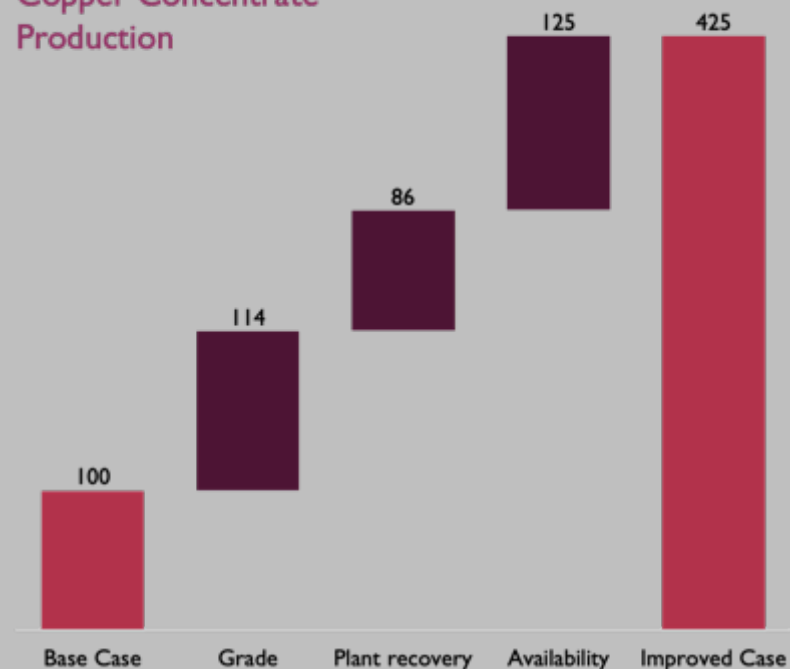
Determination of technical and economic parameters,
Pit optimisation and reserve estimate,
Mine equipment optimisation,
Mine planning.

Performance Management

Organisation of operations,
Installation of management reporting and performance indicators,
Design of processing plant upgrade solutions,
Sourcing of key personnel.



Copper Concentrate Production



CASE STUDIES

Performance Management of a Copper Mine

■ In December 2019, ABM was solicited to complete an independent due diligence of a copper mine near Ouarzazate, Morocco.

■ At first sight, it was very clear that mine/plant performance levels are well below industry standards ; however, the favorable geological context and our cost-effective exploration and production methods offered a unique opportunity to significantly improve the overall business plan of the operation. Accordingly, the client solicited a full-service assistance from exploration to operation management.

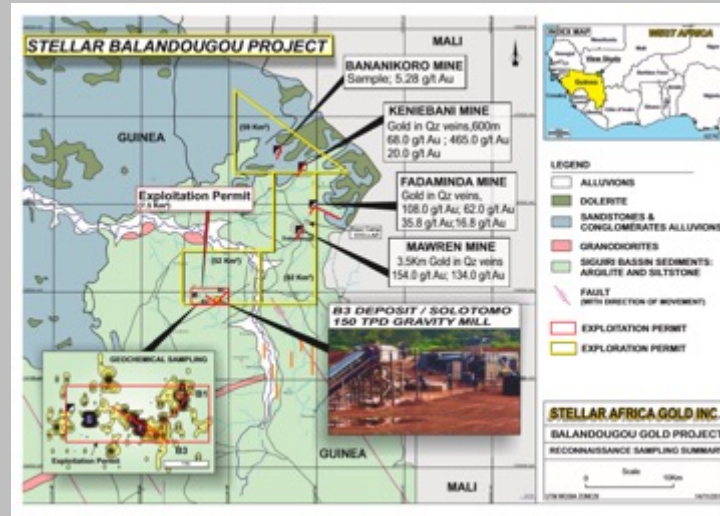
■ After a period of six months, the mine/plant performance has reached target performance (four folds improvement), as shown in the adjacent graph.

John Cumming

Chairman of Stellar AfricaGold said:

“African Bureau of Mining Consultants and its founder ("ABM") of Casablanca, Morocco were instrumental in the transaction origination and are providing ongoing essential transaction facilitation services including structuring the transaction, inter-jurisdictional legal coordination, project technical consulting, and cross-cultural advice.”

Vancouver, BC - TheNewswire - August 22, 2019



CASE STUDIES

Sale of Balandougou Gold Project in Guinea

- In December 2018, ABM completed a review of Balandougou gold project and gravity pilot plant in Guinea, owned by Stellar AfricaGold (Canada), TSX-V listed company.
- Since 2011, Stellar achieved excellent exploration results and discovered numerous gold prospects in the Balandougou property. However, the gravity plant showed poor performance compared to design parameters, which resulted in the suspension of operations.
- In this context, ABM offered an alternate M&A solution to Stellar AfricaGold by searching for an experienced gold operator capable to complete the exploration works, revise the plant design and operate a small-scale gold operation. Acquisition was closed in October 2019.



Americas
Africa
Asia
Europe

X MRIWA	X AUSIMM	X AMIRA INT
X USGS	X CIM	X CMIC
X CSIR	X SAIMM	X REMINEX
X ONHYM		
X BGRIMM	X MGMI	
X BRGM	X IOM ₃	X MFG
Government Agencies	Association	Public-Private Initiatives



Ministère de l'Énergie, des Mines
et du Développement Durable



CASE STUDIES

Training and Research
Facility for Miners

- In August 2019, ABM was solicited to identify training topics and research ideas to improve the conditions of small-scale miners in Morocco.
- In this occasion, ABM organized multiple visits to mining sites along the trajectory described in the adjacent map. All permit owners, artisanal miners and small-scale producers were very enthusiastic and contributed numerous ideas for the future training and research center. In parallel, ABM completed a benchmark of training and research centers worldwide (see above) to determine best industry practices.
- A final recommendation has been submitted to a government agency (IRESEN) and a presentation was made to the Ministry of Energy and Mines in Morocco.

SELECTED CLIENTS

Mining companies, exploration companies & government agencies



Ministère de l'Energie, des Mines
et du Développement Durable



*THANK YOU
FOR YOUR
ATTENTION*

<https://www.abminingconsultants.com>

Contact@abminingconsultants.com

Phone: +212 (0) 520 312 808

Casablanca, MOROCCO



AB MINING
CONSULTANTS