

Belt Exploration Licensing

Jabal Sayid Mineralised Belt







Disclaimer

The information in this document is of a general nature and does not constitute or form part of any offer for the sale, issue, or award of, or the solicitation of any offer to buy, apply for, or be issued or awarded any interest in the sites or any other asset, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever.

Certain information in this document has been reproduced from third-party sources. All such information has not been independently verified. Neither the Ministry of Industry and Mineral Resources (the **Ministry**), the Ministry's consultants and advisors, the Saudi Geological Survey Authority (SGS) takes any responsibility for the accuracy of such information, and no representation or warranty, express or implied, is made as to its fairness, accuracy, correctness, completeness or adequacy.

The information in this document is current only as of its date. It shall not, under any circumstances, create any implication that the information contained herein is correct as of any time subsequent to the date thereof. This document may be updated from time to time, and there is no undertaking by the Ministry or the SGS to publicize such amendments to recipients of this document.

Nothing in this document is to be interpreted as formal legal or tax advice. It should not be relied upon by any person as a substitute for reading the Mining Investment Law and its Implementation Regulations and applicable guidelines.

Investors are encouraged to seek appropriate and independent legal and tax advice relevant to the Mining Investment Law and its Implementing Regulations and any application to obtain a license under the Mining Investment Law (including participation in exploration licensing rounds).

None of the Ministry, the SGS, or any of their respective ministers, executives, employees, affiliates, or representatives makes any representation, warranty or guarantee of any kind, express or implied, as to the accuracy, completeness, or reasonableness of the information contained herein, or any other written or oral communication transmitted or made available to any recipient of this document and expressly disclaims any liability based on or arising from, in whole or in part, such information, errors therein or omissions therefrom.

No representation or warranty is given as to the achievement or reasonableness of any plans, future projections, prospects, or financial returns, and nothing in this document is or should be relied upon as a promise or representation of the future. Each of the Ministry, its consultants and advisors, and the SGS expressly disclaims all liability for any loss or damage that may arise from any person acting on any information and opinions contained in this document or any information that is made available in connection with any further inquiries.

This document contains forward-looking statements. These forward-looking statements are subject to various factors that could cause the results to differ materially from the results expressed or anticipated in these statements. The Ministry has no intention to update or revise forward-looking statements, regardless of whether new information, future events, or any other factors affect the information contained in this document, except where required by law.

This document and the information contained within it are strictly confidential and intended for the recipient's exclusive use and benefit. Distribution of the document to any person other than the recipient and those persons retained to advise the recipient, who agree to maintain the confidentiality of this material and be bound by the limitations outlined herein, is unauthorized. The document may not be copied, reproduced, disseminated, quoted, or referred to, in whole or in part, for any purpose without the express written consent of the Ministry. By receiving this document, you agree to keep the information confidential, not to disclose any of the information contained in this document to any other person, and not to copy, use, publish, record, or reproduce the information in this document without the prior written consent of the Ministry, which may be withheld in its absolute discretion.







Table of **Contents**

Saudi Arabia: Mining Sector Overview	04
Belt Exploration Licensing Rounds Overview	09
Jabal Sayid Mineralized Belt - Overview	11
Key Enablement Programs for Mining Success	13
Infrastructure Network of Saudi Arabia	20
Success Stories: Proven Track Record	22
Jabal Sayid Mineralized Belt - Deep Dive	24
Legal Framework	38
Web Links & Contacts	40





Mining Sector Overview

The Kingdom of Saudi Arabia (the **Kingdom**) has emerged as a prosperous hub of business opportunities, driven by the execution of its ambitious Vision 2030, a coordinated and focused strategic plan that is committed to establishing the country as a leading industrial powerhouse, driving economic growth and global competitiveness, while also seeking to diversify its dependence on oil and gas.

The mining sector is set to become the third pillar of the Kingdom's industrial economy (after oil and gas and petrochemicals), by capitalizing on the Kingdom's huge mineral resources and exponential growth in domestic demand for commodities. To support the achievement of these goals, the Ministry of Industry and Mineral Resources (the **Ministry**) has taken the lead in advancing the mining sector, with aspirations to increase global competitiveness in exploration, mineral extraction, processing and its contribution to the Kingdom's gross domestic product (**GDP**).

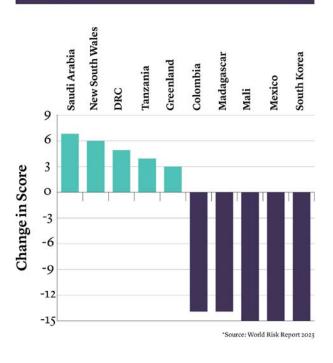






The latest annual assessment of mining investment risks from MineHutte and Mining Journal Intelligence recognizes Saudi Arabia for its exceptional mining investment environment.

Biggest Movers 2018-2023



The recently published World Risk Report 2023, which features MineHutte Risk Ratings, highlights Saudi Arabia as a standout best-performing mining jurisdiction, both regionally and globally. The Kingdom's scores have risen sharply in terms of de-risking mining investments from 2018 to 2023 (five years) to become one of the top 10 countries with the least legal and financial risks - measuring an investor risk of losing the economic benefit of a mineral discovery, corporate taxation, and GDP growth. This follows its sweeping sector reforms designed to attract mining and mineral investment since Saudi Arabia's mining and mineral strategy launched in 2018.







The Benefits of Investing in Saudi Arabia's Mining Sector

The full potential of Saudi Arabia's minerals sector stems from three key competitive advantages: geological endowment, local demand, and factor cost advantages. The exploration and mining sector in Saudi Arabia is bolstered by the Kingdom's provision of numerous compelling benefits, including:



Rich mineral endowment

Saudi Arabia estimates its untapped mineral resources comprising lucrative assets with over 52 identified minerals, such as precious metals, base metals, phosphate, and rare earths, valued at US\$2.5 trillion. The Kingdom's geological landscape offers two distinctive provinces rich in mineral resources. In the West lies the Nubian-Arabian Shield, renowned for extensive gold and copper mineralization. The eastern side features sedimentary rocks of various ages, providing a diverse range of mineral resources. These provinces house a plethora of minerals crucial for global industries, from precious and base metals to bauxite and uranium.



New mining regime

Significant reforms in the Kingdom have resulted in its regulatory and licensing processes aligning to global benchmarks. These reforms include a streamlined and transparent licensing and permitting process, a modernized mining code, and security of tenure-throughout all stages of exploration and development. The Exploration Licensing Rounds serve as an initiative aimed at enticing the mining sector to invest in mineral projects within Saudi Arabia. For investors seeking a more direct approach, the option to apply for licenses directly through the Ministry is available on a first-come, first-served basis, offering a streamlined licensing process. This includes the ability to issue mining licenses within 120 days and exploration licenses within 90 days.







Growth Trajectory

The Kingdom aims to drive its status as a leading G20 nation by substantially boosting the mining sector's contribution to its GDP, aligning with its ambitious Vision 2030. Standing at USD17 billion in 2015, the goal is to increase this figure to USD64 billion by 2030. Furthermore, the Kingdom projects an increase in exploration spending from approximately USD23 per km² in 2019 to around USD67 per km² by 2030. This endeavor underscores the Kingdom's strategic intent for the mining sector to rise as the third pillar of its industrial economy.



Generous and comprehensive financial support

The Kingdom provides robust support for mineral exploration through initiatives like the **Exploration Enablement Program (EEP)**, aimed at mitigating risks associated with mineral exploration in strategic and critical minerals.

Under the EEP, companies can submit applications for up to 15 exploration licenses, with the first five licenses eligible for a full grant of SAR 7.0 million (~USD 2.0 million) per license. For subsequent licenses, incentives focus on drilling activities, with a grant cap of SAR 4.0 million per license.

The Saudi Industrial Development Fund (SIDF) offers significant co-funding opportunities for mining projects, providing up to 75% of the project CAPEX at an attractive interest rate of 3%. Additionally, there are compelling incentives for midstream stakeholders and downstream processing in sectors such as green steel, aluminum smelting, and battery manufacturing.



National Geological Database (NGD)

The NGD represents a significant advancement in transparency and accessibility of geological information in Saudi Arabia. This database serves as a valuable resource for researchers, industry professionals, and policymakers worldwide, facilitating a better understanding of the Kingdom's geological landscape. The Saudi Geological Survey has cooperated with different International Geological Surveys to further enhance geological data availability. Over the course of 11 years, this partnership will focus on executing detailed geological mapping works for the Arabian Shield region, aiming to provide comprehensive insights into the geological characteristics and resources of this area.







Advanced Infrastructure

Saudi Arabia's advanced infrastructure, coupled with an ambitious pipeline of 11 mega-projects exceeding US\$1 trillion in value until 2030, underscores its commitment to leveraging domestically mined minerals. From transportation networks to new cities, these projects are poised to revolutionize various sectors of the economy while harnessing the nation's mineral resources for continuous development.



Factor Cost Advantages

Saudi Arabia offers significant cost advantages for exploration and mining, including low energy prices (oil, gas, diesel, and electricity), efficient water access despite the arid climate, and competitive labor costs with a well-educated workforce.



Talent Pool

Two-thirds of Saudi Arabia's population is under 35, representing significant future opportunities in emerging sectors, coupled with high government spending on education. This young and highly-educated population has contributed to an experienced and ever-growing talent pool. Companies like SABIC, with over 35,000 employees, Maaden, with over 6,000 employees, and AMAK, with over 500 employees, have successfully developed a robust local workforce in the Kingdom.



Competitive Investment Destination

Saudi Arabia has positioned itself as a competitive investment destination through favorable corporate tax policies and structured royalties. The corporate income tax rate is 20% competitive, and royalties on minerals produced range between 1.5% and 3.5%, depending on the commodity, with a honeymoon period for the first five years of production. The country allows for 100% foreign ownership in many sectors, giving foreigners full control over their operations and profits.

Additionally, Saudi Arabia imposes no constraints on foreign exchange transactions, allowing investors to freely convert and transfer their capital and profits. Combined with a stable and transparent regulatory framework, these factors create a financially attractive and secure environment for both startups and established ventures.

This combination of advantages positions Saudi Arabia as an attractive destination for ventures in the mining sector.





Belt Exploration Licensing Rounds Overview

As part of its proactive approach, the Ministry is extending a formal invitation to local and international exploration entities, urging stakeholders from around the world to seize the potential of Saudi Arabia's vast mineral wealth. Stakeholders will be able to engage with the Kingdom's mining and mineral sector through the upcoming Mineralized Belt Exploration Licensing Rounds, which involve licensing two large Mineralized Belts to successful bidders.

The belts to be offered under the Mineralized Belts Exploration Licensing Rounds are:

- **Jabal Sayid mineralized belt:** Mineralized belt hosting the largest currently known VMS deposit in Saudi Arabia, with substantial potential for additional discoveries.
- Al Hajar gold-site: A gold-rich site in a prospective geological setting.

Belt	Commodity	Area (km²)	Region
Jabal Sayid	Cu, Au	2,892	Jiddah Terrane
Al Hajar	Au, Cu	1,896	Asir Terrane

These Exploration Licensing Rounds facilitate and expedite the presence and involvement of local and foreign exploration and mining entities in the Kingdom. This partnership opportunity aligns with the Kingdom's aspiration to fully unlock the value of its mineral resources.

Following the pre-qualification round, the Ministry will issue Information Memorandums for both the belts. This will also be the beginning of Proposal Stage for these Belt Exploration License Rounds.

Timelines

Target Date	Process Stage
June 10 to October 15, 2024	Pre-qualification Round
October 31, 2024	Publication of Information Memorandums and Invitation to Proposal Stage
December 22, 2024	Proposal Submission Deadline
January 9, 2025	Announcement of Results





Scoring Criteria

The Scoring criteria for the proposal stage will emphasize the following:

Scoring Criteria	Description	Weightage
Work Program and Exploration Spend	Thoroughness and ambition of the proposed Work Program, focusing on detailed plans for the first two years and strategic outlines for years 35. Key factors include exploration spend commitments, ambitious area coverage targets, and progressive relinquishment plans.	65%
Demonstrated Expertise and Track Record in Large- Scale/Regional Exploration	Bidder's track record of exploration success, particularly within VMS and/or orogenic gold belts, including large-scale discoveries, regional targeting strategies, and the ability to manage multidisciplinary programs across extensive areas.	15%
Innovation	Bidder's use of innovative solutions and technologies in mineral exploration. Emphasis will be on data-driven targeting, advanced geophysics/geochemistry, and the scalability of these technologies to vast VMS and/or orogenic gold belts.	10%
Social Impact Management Plan	Bidder's ability to successfully implement social development in and around the Site, including proposed local community expenditure and initiatives to benefit the surrounding communities.	10%

This comprehensive and transparent licensing process ensures that the most qualified and committed entities are selected to develop the Kingdom's significant mineral resources.

Join us on this exciting journey to explore and develop Saudi Arabia's rich mineral resources. By participating in the Mineralized Belt Exploration Licensing Rounds, you can contribute to the Kingdom's ambitious vision for a diversified and sustainable economic future.





Jabal Sayid Mineralized Belt **Overview**

Geology & Mineralization

The Jabal Sayid belt contains two known VMS deposits, of which the Jabal Sayid Mine is developed on a large world-class deposit that is currently in production and the Umm ad Damar deposit, which is not yet being exploited at this time. Jabal Sayid Belt is a copper-rich, volcanic-hosted sulfide deposit hosted by felsic volcanic rocks that include extrusive, intrusive, and fragmental rhyolites. The host rocks are NE-trending and dip almost vertically.

Aside from the producing Jabal Sayid Mine, the most prospective occurrence is at Umm Ad Damar. The mineralization is hosted by the Arj Group of volcanic and associated rocks near the margin of a paleohorst at the intersection of two depositional troughs filled with felsic to intermediate lavas and associated pyroclastic rocks (Beziat and others,1989).

The mineralization at the Umm ad Damar North prospect occurs at the top of a felsic volcano-sedimentary unit, which is underlain by dacitic to andesitic volcanic rocks and overlain by mafic to intermediate volcanic rocks. In the vicinity of mineralization, fragmental lithologies resulting from explosive volcanic activity predominate (Ransom, 1982). In this sense, the setting is classic Kuroko-type volcanism. The top of the host unit is marked by thin and discontinuous chert, jasper, and carbonate beds together with an associated pyrite-rich graphitic zone (Howes, 1984). Mineralization is spatially associated with the intersection of north and northeast-trending features. These structures overprint easterly striking fractures and north-easterly trending penetrative schistosities. Continuity is broken by later north-south faults, northeast-trending shears, and northwest-striking Najd faults.





Summary of Jabal Sayid VMS Belt

Key Information

Location: North east Jeddah city

and east Madinah city

Commodity: Zn-Cu-Au

Deposit Type: VMS category

Exploration Activity: Early Exploration



Introduction

The Jabal Sayid mineral belt is located in the northern sector of the Jeddah Terrane and it comprises a bimodal sequence of mafic to felsic volcanics, volcaniclastics and sediments (including black shales) belonging to the Mahd Group (~775 Ma) plus mafic to felsic volcanics of the Arj Group (~785 Ma). This belt is bounded on the west and southeast by Quaternary Harrats Rahat and Kishib respectively and on the north, east and south by older intrusive rocks belonging to the Dhukhr complex (816803- Ma). It covers an area of approximately 9,579 sq. km.

Exploration & Key Minerals Occurences

The Jabal Sayid belt contains two known VMS deposits of which the Jabal Sayid Mine is developed on a large world-class deposit that is currently in production, and the Umm ad Damar deposit that is not yet being exploited at this time. In addition, the belt contains nine other occurrences that do not have a resource figure attached to them.



~ 3,000 km²
Belt area to

be allocated



Mines
Jabal Sayid
and Mahd mines



1954 - 1994 ARGAS, BRGM, USGS and Riofinex explore



150 km Located NE of Madinah



Exploration activates

Geological mapping and Geophysical survey



Nearest airport/ Port

Madinah 150Km Yanbu 350 km





Key Enablement Programs for Mining Success

Exploration Enablement Program (EEP)



In April this year, the Ministry launched a game-changing initiative—the 685 million SAR (equivalent to US\$182 million) Exploration Enablement Program (EEP). This innovative program is specifically tailored for companies holding an active exploration license in the Kingdom in the first 5 years duration of the life of the license (New license), focusing its efforts on greenfield exploration sites.

The primary objective of the EEP is to entice mineral exploration companies to engage in strategic and critical mineral exploration activities within Saudi Arabia. Stimulate and de-risk mineral exploration investment. Enhance detailed innovative data acquisition with world class standards. Identify new areas of high mineral potential on green field areas, which can be prioritized for further exploration and development. Targeting companies with a shorter exploration license duration ensures a concentrated effort on greenfield exploration. Support the development of local talent in the field of exploration in the Kingdom.

The program, allocates an impressive US\$2 million per license capped with 15 applications (licenses) for each company. Designed to span from 2024 to 2030, this initiative is more than just financial backing; it's a strategic partnership aimed at fostering knowledge exchange and mutual growth. The program seeks to deepen geological understanding, ultimately expediting new discoveries within Saudi Arabia. The EEP emerges as a pivotal step towards advancing the mineral exploration landscape in Saudi Arabia.





Enablers Under the Program

Under the wings of the EEP, the Ministry is committed to providing comprehensive support by covering specific costs incurred by mineral exploration companies. Here's a breakdown of the financial assistance offered:

> Drilling, Lab Testing, and Geoscientific Studies Costs

The Ministry will contribute up to 25 percent of the total expenses related to drilling, laboratory testing, and geoscientific studies. This injection of funds aims to significantly alleviate the financial burden associated with these critical exploration activities.

> Salary Costs for Employees Residing in the Kingdom

The EEP extends its support to cover up to 15 percent of the salary costs for employees residing in the Kingdom. This facet of the program acknowledges and addresses the workforce-related financial aspects, enhancing the overall feasibility of companies engaged in mineral exploration.

Local Salary Costs

To further facilitate companies during their initial years, the program will cover 70 percent of local salary costs in the first two years of exploration. Subsequently, after the initial two years, the Ministry will take charge of the entirety of local salary costs, providing sustained financial relief as companies continue their exploration endeavors within the Kingdom.





Cost Items	Threshold,%	Cap, SAR
Drilling, Lab Testing and Geoscientific Studies	Up-to-25% of total drilling, lab testing and geoscien-tific studies costs	4 million (max 15 applications per company)
Talent / Labor	Up-to-15% of salary costs of employees' resident in KSA	1.5 million (max 5 applications per company)
Talent / Labor: Additional cash incentive to cover local salary costs beyond HRDF coverage	(70% of total local salary costs in the first 2 years) (100% of total local salary costs post 2 years)	1.5 million (max 5 applications per company)
Total	20-25% of total costs	7.0 million

^{*}Source: Ministry of Industry and Mineral Resources

These financial provisions underscore the Ministry's commitment to fostering a conducive environment for mineral exploration, ensuring that companies can focus on advancing their projects with reduced financial barriers and enhanced sustainability.

> Note: Acquiring a license through the Auction Round does not automatically qualify the holder for the Exploration Enablement Program. Eligibility for the EEP is determined through a separate and independent application process.

For concerns and inquiries, email: ExplorationIncentive@mim.gov.sa



The geology of the Kingdom of Saudi Arabia (KSA) can be broadly classified into two provinces. The western side of KSA is dominated by the Arabian Shield, comprising predominantly crystalline igneous and metamorphic rocks of Pre-Cambrian age. The eastern side of the country is predominantly comprised of sedimentary rocks from the Palaeozoic and Mesozoic age. These sedimentary rocks overlie a basal igneous and metamorphic complex, which is the eastern, underlying extension of the Arabian Shield.

The Arabian Shield is the eastern part of the more extensive Arabian-Nubian Shield (ANS). The ANS consists of the Arabian Shield and the Nubian Shield in northeastern Africa, which are separated by the Red Sea. The Red Sea occupies a continental-scale rift system, where seafloor spreading commenced geologically recently, an estimated 13 million years ago (Figure 1).





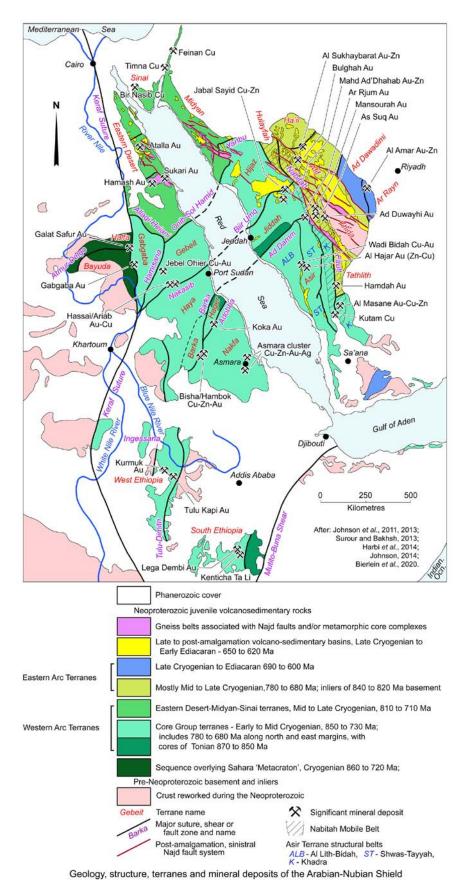


Figure 1 Significant mineral deposits of the Arabian-Nubian Shield

Source: Porter Geodatabase: https://portergeo.com.au/database/display.asp: Arabian Nubian Shield Overview





Both the Arabian Shield and the Nubian Shield consist of multiple terranes which have differing geological and structural characteristics but which were amalgamated by plate tectonics during the Neoproterozoic Era, 1 billion to ~540 Ma (ibid).

The Arabian Shield comprises predominantly deformed meta-volcanic and meta-sedimentary rocks that have been intruded by Neoproterozoic oceanic arc igneous rocks. Subsequently, large volumes of post-orogenic granitic intrusions and unconformable volcano-sedimentary successions have resulted in a relatively complex regional geological framework. Rare pre-Neoproterozoic enclaves crop out in the southwest part of the Arabian Peninsula. The Shield formed through the amalgamation of island arc terranes and multiple oceanic sutures cross-cut the region and has acted as a focus for subsequent deformation.

The Arabian Shield is sub-divided into eleven terranes (Midyan, Hijaz, Hulayfah, Ha'il, Afif, Jiddah, Ad Dawadimi, Ar Rayn, Asir, Tathlith, and the pre-Neoproterozoic Khida terrane) separated by major regional faults and shear zones which play an important role in mineral emplacement in the region. These terranes are formed by global tectonic events and various accretions of oceanic crust and continental micro-plates.

The gold and base metal deposits of the Arabian-Nubian Shield, many of which are globally significant, are dated during the Cryogenian Period (850 to ~630 Ma) of the Neoproterozoic (Figure 2). To reiterate, the host terranes are composed of Late Tonian to Cryogenian intra-oceanic magmatic arcs, unconformably overlain by late to post-tectonic marine and terrestrial basins, all intruded by large volumes of granitoid batholiths.

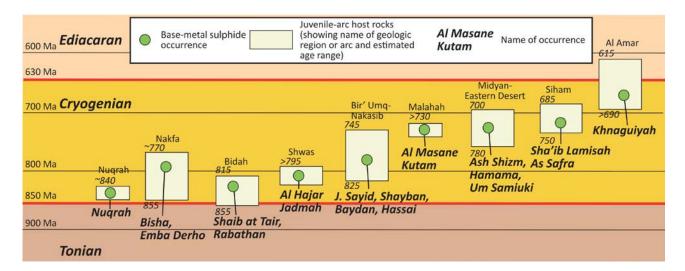


Figure 2 Time spread of mineral deposits of the Arabian-Nubian Shield

Source: Volesky, J.C., Leybourne, M.I., Stern, R.J., Peter, J.M., Layton-Matthews, D., Rice, S. and Johnson, P.R., 2017: Metavolcanic host rocks, mineralization, and gossans of the Shaib al Tair and Rabathan volcanogenic massive sulphide deposits of the Wadi Bidah Mineral District, Saudi Arabia, International Geology Review, 2017 Vol. 59, No. 16, 1975-2002





This complex geological setting is highly prospective for a wide range of metallic deposit types, representative of different parts of the supercontinent cycle, examples of which are found in the project areas. This range includes:

- VHMS/VMS (volcanic-hosted or volcanogenic massive sulphide) deposits, such as Mahd Ad'Dhahab in Saudi Arabia which produced 31,227 oz gold in 2018, and the world-class Bisha Cu-Zn Mine in Eritrea (Total Resource of 68.7 million tons containing 1.49 MOz gold, 71.2 MOz silver, 696.7 kt copper and 3.071 Mt of lead plus zinc),
- Intrusion-related gold systems (IRGS) such as the Ad Duwayhi gold deposit in Saudi Arabia (which in 2018 produced 274,519 oz of gold) and the Sukari gold mine in Egypt (which produced 472,418 oz of gold in 2018),
- Cogenetic VHMS epithermal gold deposits like the Al Amar prospect in Saudi Arabia (Total Reserves in 2019 of 2.77 million tons at 3.26 g/t gold and 3.96% zinc)
- Orogenic gold deposits like the As Suq gold mine in Saudi Arabia (Total Reserves in 2019 of 5.7 million tons at 1.59 g/t gold).

2Stern, R.J. and Johnson, P. (2010) Continental Lithosphere of the Arabian Plate: A Geologic, Petrologic, and Geophysical Synthesis. Earth-Science Reviews, 101, 2967-

3Johnson, P.R., Zoheir, B.A., Ghebreab, W., Stern, R.J., Barrie, C.T. and Hamer, R.D., 2017 - Gold-bearing volcanogenic massive sulfides and orogenic-gold deposits in the Nubian Shield: in S. Afr. J. Geol. v.120

4Porter Geodatabase: https://portergeo.com.au/database/display.asp: Arabian Nubian Shield Overview







Infrastructure Network of Saudi Arabia

Infrastructure

Saudi Arabia has historically invested considerable effort in developing a robust transportation network and continues to invest in mega transportation projects. In 2019, the World Economic Forum ranked Saudi Arabia first in road connectivity and 21st in liner shipping connectivity.

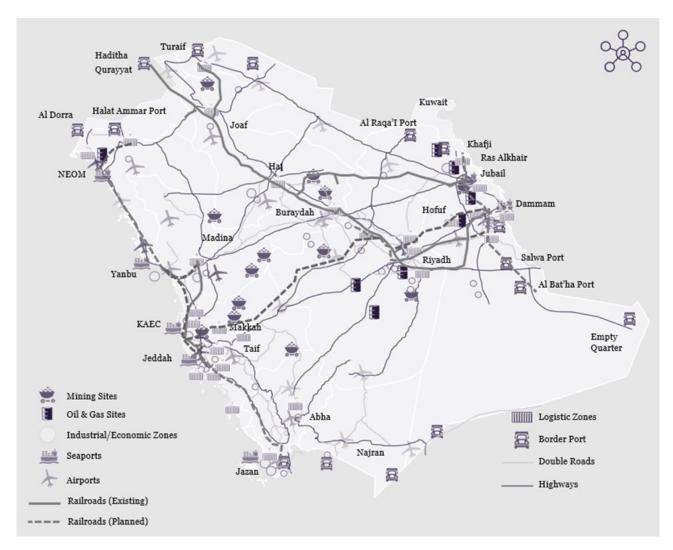


Figure 3 Infrastructure Network of Saudi Arabia

Source: Ministry of Industry and Mineral Resources





Highlights			
Roads	Railroads		
73,000 km total length of roads in KSA	2.5 million passengers		
4,900 km of highways	10.4 millions tons of minerals (North-South)		
14,189 km of double roads	+350k containers (Riyadh-Dammam)		
54,180 km of single roads			
Seaports	Airports		
10 Seaports (for Non-oil trade)	29 Airports		
9 million containers	13 international airports		
+280 millions tons of goods	16 domestic airports		
	103.3 million passengers		
	o.8 million tons of cargo		

Table 4 Saudi Arabia Infrastructure







Success Stories: Proven Track Record

The Jabal Sayid copper operation is located 350 kilometers north-east of Jeddah in the Kingdom of Saudi Arabia. It's a 5050/joint venture operation between Barrick Gold and Ma'aden. The first shipment of copper concentrate occurred in December 2015, and the mine commenced commercial production in July 2016.

The mine produced 151 million pounds of copper in 2021 and has a forecasted production of 140145- million pounds with 780 million pounds of measured and indicated copper resources.



Jabal Sayid is located in the prospective Neo-Proterozoic Arabian Shield. The shield continues west of the Red Sea into Egypt and Sudan as the Nubian shield. Jabal Sayid is a volcanic hosted massive sulphide (CHMS) system, lying within the Asir volcanic arc. Four separate mineralized lodes located within a northeast-trending corridor 1.2 km long and between 200 and 700 meters wide have been identified. Load 1 mineralization has significant sphalerite (zinc sulphide) while loads 2 and 4 are dominated by chalcopyrite (copper-iron sulphide) rich stockwork mineralization.

Water source of Jabal Sayid is coming from the water network of Medina water treatment plan with an approx. cost of 2.75 SAR/m3.





Historical work of closest mine

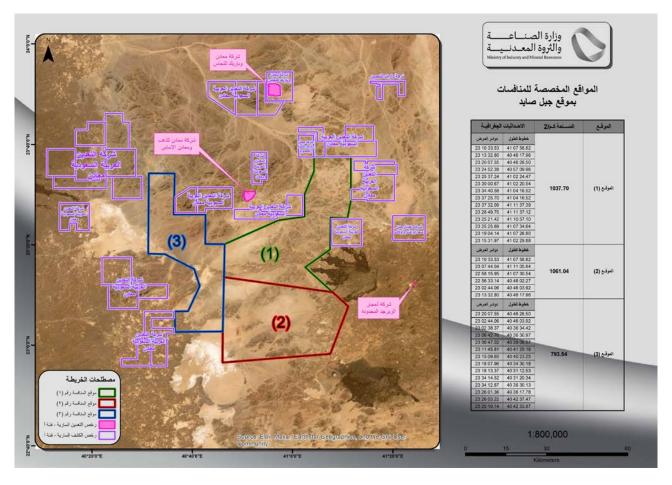
1966-1974	Geophysical surveys, mapping, and surface diamond drilling
1974 - 1979	Surface drilling, mapping, and geophysical surveys
1977 - 1979	Mapping and compilation of regional prospects
1980 - 1984	Two-phase underground exploration culminating in PFS
1989	Data review. Made recommendation to revisit PFS with revised economic parameters prior to any major expenditure.
1997	Maiden JORC Compliant Mineral Resources and Mineable Reserves Statement
2001	After EL granted, surface drilling, data compilation, and resource estimation. Reported an inability to recreate a reliable database and decided not to proceed
2006	Granted exploration license over the Jabal Sayid area
2012	Construction of processing infrastructure
Jul 2015	Commissioning of the mine
Aug 2015	First copper concentrate produced
2024	the average production of the mine is around: 70,000 tonnes of Copper annually





Jabal Sayid Mineralized Belt

Site location and map



The Jabal Sayid Mineralized Belt, located within the northern sector of the Jeddah Terrane, encompasses an area of approximately 9,579 km². The current licensing round focuses on three distinct license areas within the belt:

• **Area 1:** 1,037.70 km²

Area 2: 1,061.04 km²

• **Area 3:** 793.54 km²

The total area available for licensing in this round is 2,892.28 km². The map (provided) illustrates the boundaries of the Jabal Sayid mineralized belt and the location of the three license areas, along with their respective coordinates.





Highlights

The Jabal Sayid belt contain one known VMS copper deposit, the Jabal Sayid Mine, as well as an emerging VMS discovery at Umm ad Damar.

The Jabal Sayid belt also includes the Mahd adh Dhahab gold mine, the Bari intrusion-related advanced exploration gold target, and the Lahuf epithermalgold exploration target. Nine mineral occurrences are currently known in this underexplored belt. Historical information summarising the occurrences is presented in Table 1.

Table 1 Summary of Occurrences in the Jabal Sayid Mineralized Belt

MODS	Name New	Name Old	Main Commodi-ty	Longitude	Latitude	Nearest Town	Potential Ranking	Geometry
0001	Jabal Sayid	Jabal Sayid	Cu	40.9361670	23.8426110	Al Mahd	Very high	bx, ms
0017	Jibal Umm Ad Damar-N	Umm Ad Damar-N	Cu	41.0532780	23.6752500	Al Mahd	Medium	lenses
0361	Wadi Al Juraysiyah	Wadi Jurayssiyah-E	Cu	40.8467220	23.5686110	Al Mahd	Low	dd
0362	Wadi Juraysiyah-W	Wadi Juraysiyah-W	Cu	40.8166670	23.5527780	Al Mahd	Very low	dd
0712	Jabal Sayid-S2	Jabal Sayid-S2	Cu	40.9401110	23.8487780	Al Mahd	High	stratiform, stockwork v
1185	Jibal As Sufrah	Jabel As Sofra	Cu	40.9151110	23.4590000	Al Mahd	Medium	dd
1414	Umm Safiyah	Umm Safiyah	Cu	40.9625830	23.8509170	Al Mahd	Medium	dd
2215	Jibal Umm Ad Damar	Umm Ad Damar-SE	Cu	41.0481110	23.6647500	Al Mahd	Medium	dd, lenses, stratiform
2216	Jibal Umm Ad Damar	Umm Ad Damar-SE	Cu	41.0581940	23.6550560	Al Mahd	Medium	dd, strati- form
2282	Wadi As Sayilah	Jabal Ad Daba	Cu	40.7235830	23.3430830	Al Mahd	Low	dd
4821	Jibal Lahaf	Lahuf prospect	Au	40.7710830	23.4752500	Al Mahd	Medium	veins
2016	Jibal Hidan	Jabal Hadhn-E	Fe	40.9967220	23.0249440	Al Mahd	Undefined	lenses
2283	Jjibal Hidan-NW	Jabal Ihdan-E	Fe	40.9935560	23.0277500	Al Mahd		undefined

NOTES: 1) *ranking according to MODS 2) v=veins, dd = disseminated; bx = breccia; ms = massive *classified as VMS based on limited descriptions - no resource estimates available





Aside from the producing Jabal Sayid Mine, the most prospective occurrence is at Umm Ad Damar. The mineralization is hosted by the Arj Group of volcanic and associated rocks near the margin of a paleo-horst at the intersection of two depositional troughs filled with felsic to intermediate lavas and associated pyroclastic rocks (Beziat and others, 1989).

Volcanogenic massive sulfide ("VMS") deposits are accumulations of the massive polymetallic, stringer, and disseminated sulfides that form at or near the seafloor in submarine volcanic environments and in extensional environments. They form by focused discharge of metalliferous hydrothermal solutions into ocean floor seawater. Initially, it was thought that the deposits formed by exhalation processes, but more recently, the replacement has been recognized as an important factor, so many deposits may be formed by combining both processes (Piercey, 2015). A generalized section of a typical VMS deposit is shown in Figure 1.

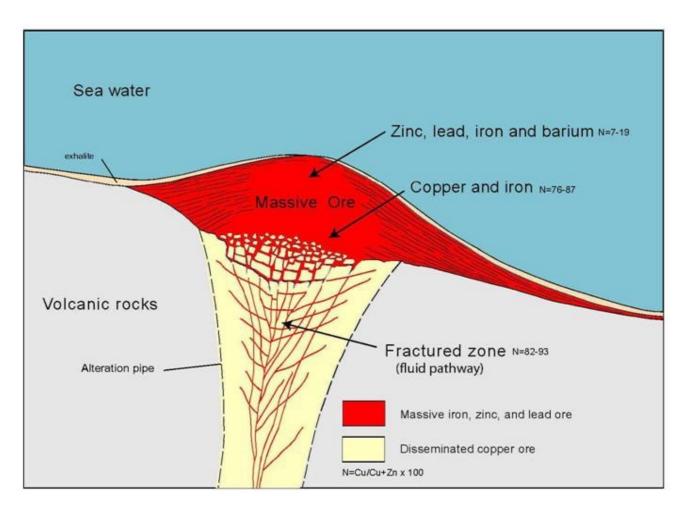


Figure 1: Schematic Section Through a VMS Deposit





Typically, VMS deposits collectively form districts containing deposit clusters possibly derived from a common heat source and are underlain by a discordant stringer/alteration zone (proximal) that may be related to more extensive subconformable alteration zones. Distal deposits may form without a discernible alteration zone directly below. They have been classified into six divisions (Franklin et al. 2005) according to host rock lithology; however, the most common in the Arabian shield are the Bimodal-Felsic and the Felsic-Siliclastic varieties. The generalized character of each type, along with the average size and grade of comparable deposits in Canada, is shown in Figure 2.

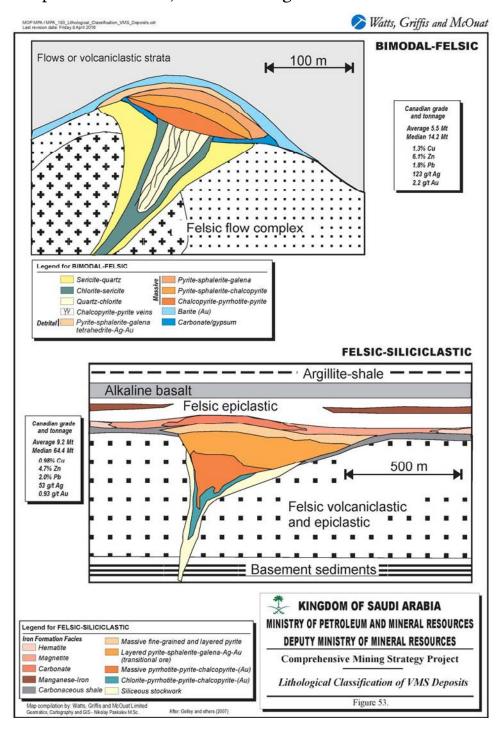


Figure 2: Lithological Classification of VMS Deposits (modified after Gelley and others, 2007)





Location

The Jabal Sayid mineral belt is located in the northern sector of the Jiddah Terrane, and it comprises a bimodal sequence of mafic to felsic volcanics, volcaniclastics, and sediments (including black shales) belonging to the Mahd Group (~775 Ma) plus mafic to felsic volcanics of the Arj Group (~785 Ma). This belt is covered to the west and southeast by the Quaternary basalt flows of Harrats Rahat and Kishib. The belt is limited to the north, east, and south by older intrusive rocks from the Dhukhr



complex (816803- Ma). It covers an area of approximately 9,579 km², as shown in Figure 3.

Active Exploration Areas within the Jabal Sayid Mineralized Belt

Jabal Sayid

The Jabal Sayid belt was first identified as having mineralization potential following waste dump sampling of the ancient mines at Umm ad Damar (1954). An estimated 108,000 short tons of slag were found to contain 0.85% Cu, 17.14 g Ag/t and trace amounts of gold (Goudarzi, 1954). Test pits in ancient dumps averaged 1.87% to 2.10% Cu and 96 stope samples averaged 0.72% Cu (Schaffner, 1954a). In 1959, a reconnaissance survey of the ancient workings was completed, a magnetometer survey was carried out and 1:100 scale sketches of the workings were created (MacLean, 1959).

Exploration by the BRGM which included drill-testing of Lodes 1 and 2 and the discovery of the shallow levels of Lode 4 concluded with the identification of multiple additional VMS targets generated through historical geophysical surveys. Ma'aden completed four diamond drillholes and then relinquished the ground. Citadel Resources, an Australian junior exploration company, successfully discovered multiple high-grade copper extensions including Lode 4 Deeps, and successfully converted Jabal Sayid into a Reserve. Citadel Resources was acquired by Equinox Minerals Ltd which then was acquired by Barrick Gold. In 2014 Barrick formed a 50:50 joint venture with Ma'aden under MBCC. Production of copper commenced in July 2016. The decision to bring the deposit into production was based on the February, 2009 resource estimate by Citadel as follows:





Resource Classification	Туре	Tonnes (millions)	Copper (%)	Tonnes Copper (x1,000)	Zinc (%)	Tonnes Zinc (x1,000)
	Massive Sulphide	6.4	1.21	77	1.67	106
Indicated	Stockwork	24.8	1.62	403	0.17	42
	Oxide	О	n/a	О		О
	All	31.2	1.54	480	0.47	148
	Massive Sulphide	15	0.8	114	1.9	279
Inferred	Stockwork	52	1.2	613	0.3	144
	Oxide	-5	1.6	7	0.3	1
	All	67	1/1	735	0.6	425
	Massive Sulphide	21	0.9	192	1.8	385
Total	Stockwork	77	1.3	1,016	0.2	186
	Oxide	-5	1.6	7	0.3	1
Grand Total		99	1.2	1,215	0.6	572

Multiple new discoveries have been successfully advanced in recent years, including high-grade copper at Lode 1 Deeps and new copper away from the known lodes at Janob. MBCC continues to advance its Exploration program.

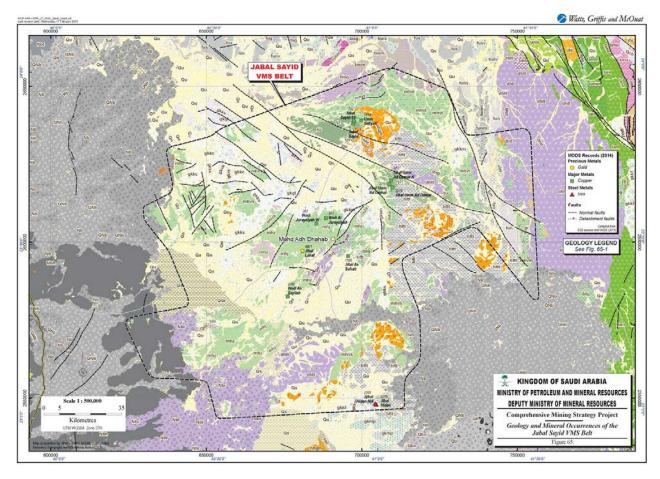


Figure 3: Geology of the Jabal Sayid VMS Belt





Of the total estimated resources¹ of 99 Mt averaging 1.2% Cu at a 0.2% Cu cut-off grade, the mine plan involves mining 32.2 Mt using a 1% copper grade as the cut-off for copper ore blocks. The underground and open-cut mining of the deposit has been extensively studied, and the mine plan involved staged development as follows:

Ore Body 1

Open-cut mining was carried out on a resource of 1.35 Mt grading 1.3 g Au/t in oxidized gold mineralization outcropping at the surface together with approximately 0.5 Mt of copper ore averaging 1.6% Cu.

Ore Body 2 and 4

The existing decline for underground access was enlarged to handle larger underground haul trucks that can haul up to 100 t for production. Conventional large-scale open stopes were planned for ore extraction, with selective stope development to optimize grade over the project's life. A transition to shaft hoisting in later years was also planned.

The ore to be mined from Lode 2 and 4 underground will be delivered to the concentrator 11 years of the mining and will total 30.4 Mt, with an average copper grade of 2.26% and average gold and silver grades of 0.14 g/t and 8.11 g/t, respectively. However, the overall precious metal grades are expected to increase. The production rate is expected to average 2.8 Mt per year.



¹⁾ For the latest information on resources and mine plans, investors are encouraged to consult Barrick 's 2023 Annual Report.





Umm ad Damar

Umm ad Damar, like Jabal Sayid, has a long and complex exploration history. Initial surveys in the 1960s revealed promising geophysical anomalies (Turam, SP, magnetic) associated with copper mineralization. Subsequent ground surveys and drilling throughout the 1960s and 1970s encountered zones of chalcopyrite stringers and pyritization, with some intersections grading up to 4.8% copper. However, drill core recoveries were often poor.

In the 1980s, Riofinex expanded the exploration, discovering new gossanous zones. Detailed mapping, IP surveys, and trenching identified a strong chargeability anomaly, with channel samples containing up to 3.2% Cu and 6.5% Zn. Drilling intersected significant copper-zinc mineralization, but Riofinex ultimately considered the potential for a large deposit to be "remote."

A re-evaluation in 1984 suggested that prior drilling hadn't adequately tested known zones, leading to further drilling that encountered a 16-m-thick zone averaging 0.66% Cu and 12.9 g/t Ag.

The deposit's complexity and the lack of modern exploration techniques at the time left the full extent of mineralization at Umm ad Damar unresolved. This presents a significant opportunity for new exploration with today's advanced technologies and techniques to unlock the potential of this promising VMS prospect.

The gold, silver, and base-metal mineralized gossans in the Jabal Sayid area have been mined since pre-historic times. Jabal Sayid is a copper-rich, volcanic-hosted sulfide deposit hosted by felsic volcanic rocks, including extrusive, intrusive, and fragmental rhyolites (Figure 4). The host rocks are NE-trending and dip almost vertically. They have been interpreted as forming the northern limb of a localized anticline formed around a core of intrusive rhyolite, associated with parallel NWtrending axial plane shears and faults. The overlying sedimentary sequence to the east may also have been folded into a similar antiform structure, broadly related to the folding within the underlying rhyolitic sequence.

Aside from the producing Jabal Sayid Mine, the most prospective occurrence is at Umm Ad Damar. The mineralization is hosted by the Arj Group of volcanic and associated rocks near the margin of a paleo-horst at the intersection of two depositional troughs filled with felsic to intermediate lavas and associated pyroclastic rocks (Beziat and others, 1989).





Mineralization

The Jabal Sayid Deposit

The mineralisation occurs as stockworks of sulphide-bearing veinlets that are capped by lenses of massive pyrite, chert, jasper and carbonate (limestone) within an uppermost black shale unit containing pyrite and graphite.

The main outcropping gossan (No.1 Orebody) consists of a 30 m thick, 500 m long and 200 m wide outcrop of massive chert-limonite gossan which gives way at depths of 3060- m to massive sulphides that dip steeply to the southeast. At the north-eastern end, this orebody is offset about 300 m to the east by the "Eastern Valley Fault" to form the No. 2 Orebody. The small No.3 Orebody and the large No.4 Orebody are located just northeast of No.2, but their structural relationships are complex.

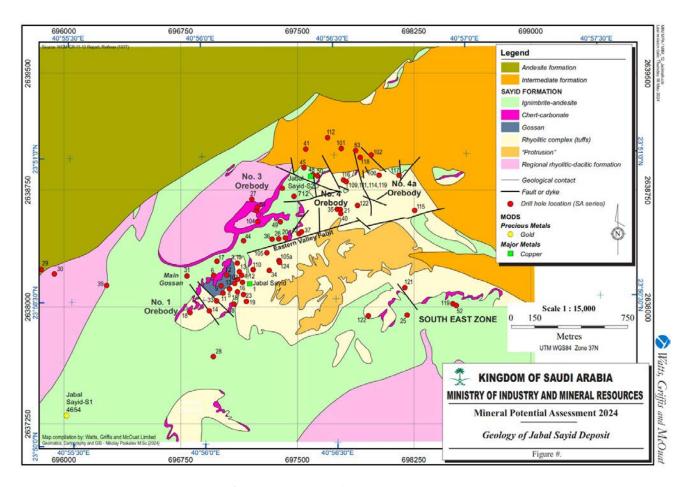


Figure 4: Geology of the Jabal Sayid Deposit





The mineralization originally formed a massive pyrite lens about 1,000 m in length and up to 50 m thick that is underlain in the No.1, No.2, and No.4 deposits by a widespread stockwork of sulphide-bearing veins. To the northwest, the copperzinc sulfide body is bordered by a bed of chert or jasper, and several thin (< 5 m) beds of limestone form the hanging wall. The deposit extends down-dip to the southeast to a depth of at least 550 m. The No. 3 Orebody is the most northerly of the deposits and does not outcrop; it was discovered at a depth of 200 m below the surface, and mineralization extends to a depth of at least 700 m. The No. 4 Orebody is the largest of the Jabal Sayid deposits and has the most economic potential. It consists of a vertical stockwork of pyrite and chalcopyrite veinlets associated with disseminated sulfides in a sub-volcanic dome of porphyritic quartz rhyolite. About 300 m below the surface, the stockwork mineralization is stratigraphically overlain by a 22 m thick jasper horizon and a 10 m thick lens of massive pyrite and pyrrhotite that exhibits obvious clastic textures. The massive sulfide and jasper were evidently deposited under subaqueous conditions, as were the succeeding rhyolitic tuffs. The No. 4 Orebody extends over a vertical interval of 600 m and is open at depth (Leveque, 1985).

Nearby Occurrences

The only significant prospect with similar geology is the Umm ad Damar deposit described herein. The immediate area also contains the Jabal Sa'id uranium-REE deposit (MODS 1184) as well as several other nearby records in the mineral occurrence database which are fluorite occurrences that were historically named Jabal Sayid and which have now been renamed Jibal ash Sharar NE (2280), Jibal ash Sharar NE1 (2281) and Jibal ash Sharar S (2279), as well as two Jabal Sayid niobium occurrences renamed Jibal ash Sharar SE (0358) and Jibal ash Sharar W (0356). These can be confused with the Jabal Sayid copper-gold mine (MODS 0001 and 0712), which is the subject of this document and is located only a short distance (3 km) from the northwest. These sites might also be confused with the granite occurrence named Jabal Sayid (MODS 4847) located in the same general area. Confusion remains due to the similarity in names pronounced by those unfamiliar with Arabic. Jabal Sa'id is a radioactive aplite-pegmatite body (apogranite) in the northern margin of an alkali microgranite, a component of the Jabal Hadb ash Sharar granitic complex. Based on four drill holes, the upper, higher grading portion of the apogranite was estimated to contain a resource of 23 Mt averaging >1.7% Zr, 4,151 ppm Y, 1,290 ppm Nb, 1,301 ppm Ce, 834 ppm Th, 587 ppm La, 199 ppm Sn, 134 ppm U and 82 ppm Ta. The lower (inner) portion of the apogranite was estimated to contain 35 Mt averaging >1.9% Zr, 2,656 ppm Y, 904 ppm Nb, 829 ppm Ce, 461 ppm Th, 339 ppm La, 149 ppm Sn, 49 ppm U and 66 ppm Ta (Hackett, 1986). This deposit is not genetically related to the VMS deposit being mined at Jabal Sayid.





Prospectivity

The Jabal Sayid mineral belt, distinguished as the largest currently known VMS deposit in Saudi Arabia, stands out not only regionally but also globally. The recommendation for comprehensive modern airborne EM, Mag, and possibly gravity surveys bolsters the potential for expanding the known resource. These would identify follow-up targets for detailed prospecting, sampling, and drilling, employing down-hole EM techniques to explore the depths of the Jabal Sayid deposit.

Historically, VMS deposits have demonstrated significant economic prospects. The Jabal Sayid belt, for instance, mirrors global trends where such deposits typically cluster around volcanic centers, each potentially hosting considerable base metal content. Studies by the USGS and researchers like Singer and Sangster underline the importance of accurately selecting grade and tonnage models, which impact the assessment more significantly than minor errors in deposit count estimation.

The belt's vast potential is illustrated by the fact that VMS deposits often form in clusters, suggesting that many remain undiscovered and awaiting identification through focused exploration. Historical data suggests that each volcanic center can host extensive metal content, with average grades of around 6% combined base metals (copper, zinc, lead). This positions Jabal Sayid as a prospective site for both continued exploration and development.

Empirical observations and quantitative studies suggest that a typical mineral belt like Jabal Sayid can contain an average of 12 deposits (Figure 5), with a significant portion of these deposits falling within economically viable sizes and grades. The largest deposits within such belts can disproportionately contain the majority of base metal resources, emphasizing the potential high reward of targeted exploration strategies.

For investors, the historical data combined with modern geological modeling presents a compelling case for the prospectivity of the Jabal Sayid VMS belt. The existing and potential base metal resources, backed by robust geological studies and historical exploration success, highlight the belt's capacity to yield significant economic benefits under targeted and technologically advanced exploration efforts.





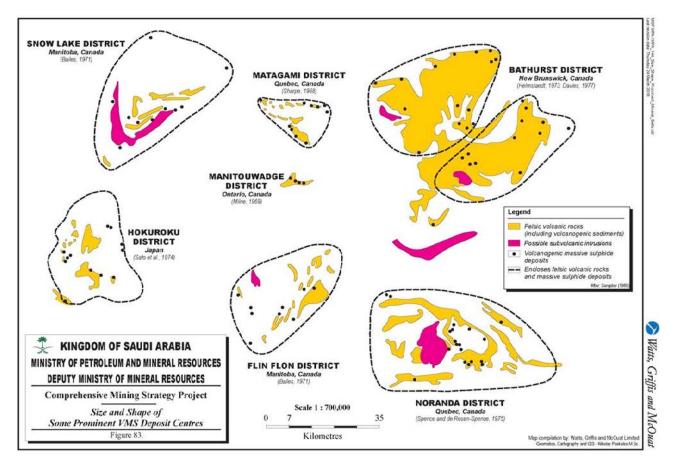


Figure 5: Size and Shape of Some Prominent Mineral Belts.

Similar Deposits

The Jabal Sayid deposit which is a bi-modal VMS deposit, are not unlike other exhalative volcanogenic massive sulphide deposits elsewhere in the world, which span an extraordinary age range from the early Archean to Recent. The belt's layered rock sequences, indicative of a favorable depositional environment for VMS deposits, are typical of mineral belts worldwide that host significant mineral resources.

VMS deposits are generally confined to narrow time-stratigraphic horizons and may be marked by distinct cap horizons of chert, ironstone, carbonate, and/or barite, extending across large mineral belts. Such features serve as exploration guides by delineating permissive stratigraphic intervals for targeting. For instance, the welldocumented Wadi Bidah Mineral Belt provides a useful parallel, underscoring the potential for extensive mineralization within similar geological setups.

Historical exploration data from the Noranda VMS mining center in Canada exemplifies the clustered nature of VMS deposits, often localized to linear rifts or calderas conducive to such formations. Notable discoveries like the Horne and





Amulet deposits underline the effectiveness of combining geophysics and ground prospecting in unearthing significant mineral resources.

Empirical models and past studies, such as those by Sangster (1980) and Boldy (1977), suggest that VMS belts typically contain multiple deposits with significant base metal content. The Jabal Sayid Belt's potential aligns with these models, which predict average diameters for belts and deposit densities that match the scale observed in the Arabian Shield (Figure 6).

Ongoing exploration and scientific advancements are expected to refine the belt's geological models, enhancing the understanding and targeting of mineral deposits. As illustrated by historical and recent studies, persistence in exploration is critical in realizing the full potential of such mineral belts. Moreover, aligning geological data with advanced modeling techniques, such as those employed in the Noranda camp, supports a robust outlook for discovering new deposits within the Jabal Sayid Belt.

For investors, the Jabal Sayid VMS Belt represents a prime exploration target with substantial upside potential, demonstrated by both historical successes in similar global deposits and advanced geological modeling. The belt's extensive area and favorable geological conditions suggest a high likelihood of additional VMS deposit discoveries, making it an attractive prospect for mineral exploration and potential development.





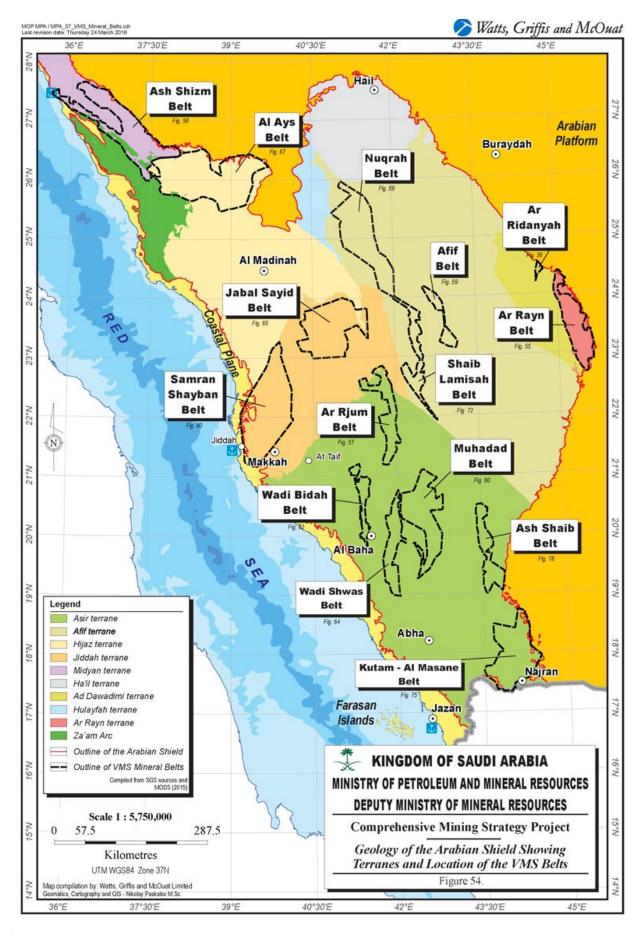


Figure 6: Basic Geology of the Arabian Shield Showing Terranes and Location of the VMS Belts.





Legal Framework

Overview of the KSA Mining Regime

The Mining Regime in the Kingdom is regulated pursuant to the Mining Investment Law (issued by Royal Decree No. M/140 dated 101441/19/H) (Mining Law), which came into force on 1 January 2021.

The Mining Law is supported by the Implementation Regulations, which provide a comprehensive set of executive regulations to support the implementation and interpretation of the Mining Law.

The Ministry of Industry and Mineral Resources (the Ministry) is mandated to oversee and supervise the application of the Mining Law and its Implementation Regulations.

The Ministry is permitted to designate sites for competitive bidding, in which case it must make a public declaration announcing that the license for the designated site is subject to an open bidding process. The announcement must include information such as the description of the land and qualification criteria.





Classification of Minerals

Minerals are classified under the Mining Regime into three categories:



this includes metallic minerals, precious and semi-precious stones, and ores that require advanced operations and concentration (e.g., zinc, copper, gold, manganese, uranium)



non-metallic minerals, industrial minerals, and raw materials (e.g., low-grade iron ore, dolomite, gypsum, red clay, magnesite, salt)



materials used for construction (e.g., gravel, crushed marble, sand, and clay).

The Mining Regime further clarifies that certain minerals are subject to special regulation, such as phosphates, tantalum, niobium, rare earth elements, thorium, quartz, high-grade iron, high-grade bauxite, and all radioactive minerals.

Please refer to the Mining Investment Law, available on the Taadeen platform, for more information.







Web Links & Contacts

The Ministry of Industry and Minerals Resources is committed to leading initiatives to drive the industrial and mining sectors and contribute to achieving Vision 2030 goals. These goals aim to position the mineral sector as the third pillar of the Kingdom's economy and increase mining GDP.

The Saudi Geological Survey is responsible for all specialized earth science works in the Kingdom of Saudi Arabia, from basic geologic mapping to applied geoscientific studies, especially mineral and groundwater explorations and the development of mineral resources, including the provision of investment opportunities in the field of mining.

INVEST SAUDI is Saudi Arabia's national investment promotion platform established to support global business expansion in the Kingdom. It is overseen by the Ministry of Investment (MISA), which facilitates investments in the Kingdom, supports the country's economic growth, and positions it at the forefront of global business opportunities.

The Ministry of Investment for Saudi Arabia (MISA) facilitates access to business opportunities in the Kingdom by developing a reliable, robust, business-friendly ecosystem. It works across government ecosystems to support investors and businesses throughout their investment journey.

The National Geological Database is Saudi Arabia's mineral wealth and mining information management system. It provides a reliable national geological and topographic data repository for the entire Kingdom, including geological and topographic maps, Mineral Occurrences Documentation System (MODS), geochemistry and geophysics data, borehole data, surface samples, data, and more.

Taaden is a platform that offers an easy and legal process for obtaining the necessary permitting and mining licenses to operate in Saudi Arabia.

Below are web links to Saudi Arabia's investment ecosystem:

Ministry of Industry and Mineral Resources	mim.gov.sa
Saudi Geological Survey	sgs.gov.sa
Saudi Invest	investsaudi.sa
Ministry of Investment of Saudi Arabia	www.misa.gov.sa
National Geological Database	ngp.sgs.org.sa
Taadeen	mining.smsc.sa
For inquiries	miningbidding@mim.gov.sa



