

AL HAJIRAH LICENSING ROUND

INFORMATION MEMORANDUM

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Foreword

Economic diversification is the foundation of Saudi Arabia's Vision 2030, and the mining and industrial sectors are critical to the Kingdom of Saudi Arabia's (the "**Kingdom**" or "**KSA**") strategy, through increasing local production, exports, job opportunities and investments, in line with the Vision 2030 targets.

In August 2019, the Ministry of Industry and Mineral Resources was established as an independent government body with responsibility for regulating the mining sector in the Kingdom. This is a clear representation of the government's priority to develop this sector of the Saudi economy and provide opportunities to local and foreign investors while maximizing their benefits.

The mining sector is set to become the third pillar of the Kingdom's economy (after oil & gas and chemicals). To enable this sector growth, the Kingdom's mining strategy includes a comprehensive set of initiatives to develop and enhance the mining ecosystem in the Kingdom, including areas such as accelerating exploration by promoting investor protection, clarifying the legal and fiscal regimes and in promoting geodata acquisition and distribution through the Regional Geological Survey Program and the creation of the National Geoscience Database.

The new mining law that came into effect in 2021 targets the exploitation of the Kingdom's mineral resources and the development of its mineral-based manufacturing industry, all of which is expected to reduce imports to the Kingdom by c. \$10 billion and generate more than 200,000 jobs by 2030.

The Kingdom's competitive Licensing Rounds are a continuation of a successful, new chapter in our journey towards unlocking our country's vast mineral resources by fast-tracking exploration activity. Al Hajirah project is an example of an enticing exploration project with the potential to contribute to the Kingdom's future copper economy.

This Licensing Round will enable the Kingdom to identify the most suitable exploration partners for longterm growth and investment in the mining sector of the Kingdom, and provides interested investors with open access to data relating to Al Hajirah project.

We look forward to showcasing Al Hajirah on a global stage so that, together, we can create value for our partners and the Kingdom.





EXECUTIVE SUMMARY

As announced on 10th January 2024, the Ministry is conducting a competitive licensing round for the exploration of Al Hajirah site ("**Licensing Round**" or the "**Project**") pursuant to which the Ministry will award the successful bidder ("**Successful Bidder**") an exploration license for Al Hajirah site ("**Exploration License**"). The Licensing Round is designed as a transparent, standards-based, competitive process, which will result in the selection of the most appropriate licensee for Al Hajirah site ("**Al Hajirah**" or the "**Site**").

Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding proposal to become a licensee for the Site ("Proposal"). Proposals must be submitted to the Ministry on or before 1st May 2024 ("Proposal Submission Deadline") by completing the application form set out in the Ministry's data room ("Application Form") which can be accessed via the data room created on the Ministry's website <u>https://mim.gov.sa/en/initiatives/31907/</u> ("Data Room").

The Site

The Project covers an area of 257 square kilometres within the southern region of the Kingdom. It is located 25 km west of Al Sufah City and 360 km northeast of the Port of Jazan and can be easily accessed along goodquality regional roads, with gravel tracks providing access throughout the Project area. Al Hajirah is located on the Arabian Shield within the Asir Terrane—a region renowned for its high prospectivity in various mineralization styles, notably volcanogenic massive sulphide (**VMS**) deposits.

Further details are set out in Section 2 of this Information Memorandum

Minimum Qualification Criteria

Bidders must demonstrate that they meet the Minimum Qualification Criteria in order for the Ministry to continue evaluating their respective Proposals, as summarised in the below table and further described in Section 4 of this Information Memorandum.

Whilst the Minimum Qualification Criteria is scored on a 'Pass/ Fail' basis and does not have a weighting score attributed to it, bidders must demonstrate that they satisfy all the Minimum Qualification Criteria in order for their respective Proposals to be evaluated further in this Licensing Round.

Section	Criteria	Description
Technical Ability	Internal Capability	Bidders must demonstrate internal capabilities in mineral exploration.
	Track Record / Examples	Bidders must demonstrate track record experience in VMS or similar style mineralisation including capability in projects through the development cycle and developing exploration projects beyond the discovery stage through pre-feasibility and feasibility studies.





Financial	Exploration	Bidders must have undertaken a minimum expenditure of USD five hundred
Details	Expenditure	thousand (\$500,000) in exploration activities in the last twelve (12) months.
	Exploration	Bidders must demonstrate access to at least USD five hundred thousand
	Funding	(\$500,000) to fund the first three months of any exploration work program to be
		undertaken in the Kingdom in connection with the Project.

Scoring Methodology

Proposals submitted by bidders who satisfy all the Minimum Qualification Criteria will be further evaluated by the Ministry and scored in accordance with the following scoring methodology, and as further detailed in Section 5.8 of this Information Memorandum.

The bidder whose Proposal receives the highest score will be announced as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.

Section	Criteria	Weighting
Proposed Work Program and Exploration Spend	Proposals will be evaluated on the thoroughness and soundness of the bidder's proposed Work Program for the entire licensed area.	50%
Resource Exploration and Discovery Activities	Proposals will be evaluated on the bidder's experience in relation to focused exploration activities.	20%
Innovation	Proposals will be evaluated based on the innovative solutions and technologies used by the bidder in mineral exploration activities.	10%
Social Impact Management Plan	Proposals will be evaluated on the demonstrated ability to successfully implement social development in and around the Site, and local community expenditure.	20%
Financial Capability	Proposals will be evaluated on the bidder's financial resources, and its capability to fund its Work Program.	Pass/ Fail
Environmental Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to ensure the protection of the environment.	Pass/ Fail
Corporate and Legal Requirements	Proposals will be evaluated on the basis of the bidder's corporate and legal information.	Pass/ Fail
Performance Financial Guarantee	Proposal will be evaluated on the bidder's commitment to provide a Performance Financial Guarantee if selected as a Successful Bidder.	Pass/ Fail
Model Exploration License	Proposals will be evaluated on the bidder's commitment to accept the terms of the Model Exploration License.	Pass/ Fail





PART A: GENERAL INFORMATION





1. Introduction

The Ministry has launched the Licensing Round with the objective of identifying a Successful Bidder to whom it will award the Exploration License in accordance with the Mining Investment Law (issued by Royal Decree No. M/140 dated 10/19/1441H) ("**Mining Investment Law**") and its Implementing Regulations issued by Ministerial Resolution (3293/1/1444) dated 05/06/1444H ("**Implementing Regulations**"). The Licensing Round is designed as a transparent, standards-based, competitive process, which will result in the selection of the most appropriate licensee for the Site.

Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding Proposal to become a licensee for the Site. Proposals must be submitted to the Ministry on or before the Proposal Submission Deadline.

The Licensing Round requires that the Successful Bidder possesses, demonstrates and dedicates to the Project qualified management personnel and resources, adherence to principles of sustainability and conformity with the laws of the Kingdom. The Successful Bidder will have demonstrated that it is committed to working with the Government to explore the Project in a timely manner to define future options for local and regional economic growth.

To that end, the Ministry suggests that the following points be considered seriously by the bidders in preparing their Proposals:

- 1) A clear commitment to conduct an accelerated exploration programme for the Site along a suitable timeline, coupled with the technical and financial capability to do so; and
- 2) To the extent possible during the exploration period, the provision of employment for the local population with a particular focus on the education and training of those hired locally.

Responses should be unambiguous and include detailed information.

This Information Memorandum is intended to be used by bidders to provide further information on the Site and the Licensing Round. It also sets out the rules for submission of a valid Proposal and participation in subsequent stages of the Licensing Round, as set out in Part B of this Information Memorandum ("**Proposal Submission Rules**").

1.1 Al Hajirah Gold and Base Metal Project

There are three primary prospects within the Project area: the East Dhahar, West Dhahar, and Al Hajirah prospects. All three prospects show economic potential for base metals (copper (Cu), zinc (Zn), and lead (Pb)), as well as notable gold (Au) and silver (Ag) anomalism. Mineralization within these prospects is comparable to the mineralization style observed in the prominent Al Masane Mine, located 15 km southeast of the Project area.

Previous exploration across Al Hajirah has included field mapping, sampling, regional aeromagnetic surveys, geochemical surveying, and acquisition of a single diamond drill hole from each prospect. In addition, limited induced polarization (IP), self-potential (SP), and ground electromagnetic (EM) surveying



have been conducted in the Dhahar–Al Hajirah region. Noteworthy drill intersections include 0.4 m at 0.36 g/t Au, 20.6 g/t Ag, 1.45% Cu, 0.09% Pb, and 23.68% Zn from DA-1 in East Dhahar, consistently high Zn contents (average = 0.18%) across the sample zone from DA-2 in West Dhahar, and an average of 0.41% Cu across 28 m from DA-3 in Al Hajirah.

The Project holds significant potential as a gold and base-metal project. The area bears a strong geological resemblance to the presently operating Al Masane Mine, is readily accessible along established roads, and early exploration has already identified noteworthy targets across three significant prospects. Prospects would benefit from IP geophysical surveys with lines adjacent to previous drillholes to further target any sulphide bodies.

Prospectivity

The Project is a highly prospective Au and base-metal exploration project. The Project area boasts numerous zones of VMS-style mineralization along a strike length of ~9 km. Situated within the Asir Terrane, the Project area lies within the Kutam–Al Masane VMS Belt, which is one of several underexplored belts characterized by numerous VMS occurrences. The mapped rock units (the Halaban Group) within the project align closely with those hosting Al Masane deposit. The Project area is easily accessible, and with minimal further exploration, there is a likelihood of identifying walk-up drill targets. Early success in exploration could pave the way for swift determination of an initial mineral resource.

Evidence of historical mining activity, known mineralization in three prospects, and the proximity to the operational Al Masane Cu-Zn mine indicate the potential for further discovery of mineralization in the Project area. Exploration work completed to date has highlighted several key areas of mineralization in the Dhahar and Al Hajirah areas. These prospects would benefit from geophysical surveys, with IP lines adjacent to the previous drillholes being a priority to constrain any sulphide bodies.

Massive sulphides are present at Al Hajirah, as evidenced by drillhole intersections of massive hematitic gossan and the presence of moderate amounts of hematitic gossan strewn on mine dumps and waste-filled areas. Accordingly, detailed EM surveys would be useful for constraining massive sulphide bodies, potential extensions, and drill targets. East Dhahar is of moderate size at the surface and, because only one drillhole penetrates the sulphide zone, further drilling is needed to delineate mineralized rocks at depth.

1.2 Structure of this Information Memorandum

This Information Memorandum is structured in two main parts as follows:

PART A: GENERAL INFORMATION

- Section 2 provides information about the Site;
- Section 3 introduces the Data Room, an online resource with further information about the license opportunity, including geological survey data as well as the Application Form to be submitted by bidders as part of their Proposal;





PART B: PROPOSAL SUBMISSION RULES

- Section 4 sets out the Minimum Qualification Criteria that bidders must meet in order for their Proposals to be further evaluated for the Project;
- Section 5 sets out the Licencing Round process and Proposal requirements including the criteria and scoring methodology; and
- Section 6 provides additional information regarding participation in the Licensing Round and submission of a Proposal.

1.3 Key Dates

The table below sets out the key dates relating to the Licensing Round. All dates set out in this Information Memorandum are subject to change at the Ministry's absolute and sole discretion. Any revised dates will be notified to bidders through email to the confirmed address(es) submitted by the bidders to the Ministry in their expression of interest submission.

Table 1: Key Dates						
Date	Process stage					
17:00 (Riyadh time) 01 st May 2024	Proposal Submission Deadline					
23 rd May 2024	Announcement of outcome of the Proposal Stage					
	I I I I I I I I I I I I I I I I I I I					
22rd May 2024	Announcement of the Successful Bidder					
23 May 2024	Announcement of the Successful Didder					

The Ministry will be available continuously to support bidders through each stage of the Licensing Round.





2. The Site

2.1 Location

The Project covers an area of 274 km² and is located 25 km west of Al Sufah City and 360 km northeast of the Port of Jazan on the Rea Sea, within the southern region of the Kingdom (Figure 1). The Project is easily accessible via good-quality regional roads, with gravel tracks allowing access throughout the Project area.

The Dhahar region is ~1,900m above sea level with relief consisting of rolling hills incised by a southeast trending drainage system. Jabal Dhahar, a north trending mountain, is a prominent regional geographic feature that skirts the eastern boundary of the area. Vegetation is sparse to absent, and the region has an arid climate with moderate temperatures that permit fieldwork throughout the year. The active Al Masane Cu-Zn mine is located 15km southeast of the centre of the Project area and just 6 km from the boundary (Figure 1).



Figure 1: Project location.

Point	Latitude	Longitude						
1	18° 08' 19.97	43° 44' 13.79						
2	18° 07' 25.20	43° 44' 16.73						
3	18° 07' 25.22	43° 40' 36.64						
4	18° 18' 35.70	43° 40' 36.65						
5	18° 18' 35.70	43° 48' 34.04						
6	18° 08' 19.63	43° 48' 26.77						





2.2 Exploration History

A summary of the exploration work completed in the Project area to date is presented in Table 3.

The mineral potential of the region has long been recognized, as evidenced by numerous small-scale ancient workings. Historical mining activity at the Dhahar and Al Hajirah prospect areas was understood to be targeting Au; however, this cannot be confirmed, as detailed information is not available. At both sites, ruins of ancient villages and scattered slag piles can be observed near the workings that are now nearly filled with mining debris. These workings, understood to have been undertaken thousands of years ago, were rediscovered by Greenwood (1980) during his mapping of the Malahah quadrangle in 1974. These initial works were followed up in 1976 and 1977 when the United States Geological Survey (USGS) conducted geological mapping and rock-chip geochemical surveys of the immediate Dhahar and Al Hajirah areas. The immediate Dhahar area was mapped using low-level aerial photography at a scale of 1:6000, and zones of ancient workings at East and West Dhahar were mapped at a scale of 1:500 by compass and tape survey.

Riofinex

The Riofinex Geological Mission identified the area as an exploration target during a preliminary literature review of mineral opportunities in Saudi Arabia. Recommendations following this review included a program of regional data evaluation and reconnaissance work to confirm the indicated potential for VMS mineralization in the area. The Directorate General of Mineral Resources subsequently included part of this review in their proposals for fieldwork during 1977–1978. Riofinex was invited to carry out a review (RF-1978-3) of the exploration potential of the Wassat–Kutam district of Southeast Asir. This review was based on data available at the time, as well as a field program in which reconnaissance geological mapping was undertaken with an emphasis on known mineral occurrences. A regional wadi-sediment sampling survey was also conducted.

USGS

Between 1976 and 1978, the USGS undertook geological investigation of the Dhahar–Al Hajirah region, including geochemical and geophysical surveys. Work in the region was part of a series of mineral investigations by the USGS made in accordance with work agreements with the Ministry of Petroleum and Mineral Resources, Kingdom of Saudi Arabia. Limited ground EM, IP, and SP surveys were undertaken by the USGS and ARGAS (Arabian Geophysical & Surveying Company) in 1977. At East Dhahar, West Dhahar, and Al Hajirah, the results of geologic mapping, sampling of veins and gossans, and geochemical sampling were encouraging enough to recommend two small diamond-drilling programs. Consequently, one diamond drillhole was drilled at each prospect in 1977 and 1978 for a total of 694 m drilled. Drilling was conducted to evaluate the economic potential of the region and, in particular, assess the Cu-Zn deposits in the vicinity of ancient workings at Dhahar and Al Hajirah. Drilling at Dhahar intersected encouraging basemetal mineralization, although further drilling is required to assess all favourable targets. The results of this work are presented by Smith (1980).



Key Reports	Entity	Location	Activities
BRGM-TR-05-	Unknown	Regional	Aeromagnetic survey of the Arabian Shield
36	1962–1967 AD		covering 550,000 km ² .
			Data reprocessed by French Bureau de
			Recherches Géologiques et Minières (BRGM)
			between 1970 and 1980 AD.
RF-1978-3	Riofinex	Wadi-	Investigation of the geology and exploration
	1978 AD	Wassat-	potential of the Wadi Wassat-Kutam district
	1398 AH	Kutam	of Southeast Asir.
		District	Included geochemical analysis of field
		Southeast	samples collected over a large area
		Asir.	encompassing Al Hajirah tenement.
			No coordinates available for sample location,
			so it is not possible to determine if the data are
			relevant.
RFO - 1979- 12-	Riofinex	Regional	Reconnaissance activities covering areas
1	1978-1981 AD		identified from a review of previous geological
	1398-1401 AH		data and 1:50,000 geological mapping.
			Prospects identified were gridded, mapped at
			1:1000, geochemically sampled and, if
			(SP_IP_FM) and drilled
DROIFCT	DCMP	Jabal	Bayiow of Au doposite within the district scale
PROJECT		Jabai Jabaa	Au balt Two montions of Dhahar but no
KEI OKI	19/9 AD	Wadi	details
	15997111	Tathlith Au	details.
		Belt	
USGS-SA-lR-	USGS/ARGAS	Dhahar-Al	Three exploratory holes drilled by Arabian
343	1977-1978 AD	Hajirah	Drilling Company to assess economic
515		Region	potential, particularly to evaluate Cu-Zn
		U	deposits in the vicinity of historical workings.
USGS USGS-	USGS 1980	Dhahar-Al	Review of previous field mapping, sampling,
SA-IR-343		Hajirah	drilling, and geophysics completed in the area
		Region	of interest.
			Includes selected results from three drillholes
			(drilled in 1978), including intercept assays, as
			well as drawn sections for each drillhole. Field
			maps are included for each project area with
			sample locations, but no table of samples is
			included.
			Further geophysical surveys should be
			completed, especially IP, to test extensions to
			drilled sulphide intercepts at depth.
			Excellent review and field mapping of
			historical mining activity.

Table 3: Summary of past exploration (latest at the top).



Key Reports	Entity	Location	Activities
USGS-OF-03-92	USGS	Dhahar-Al	Compilation of all geophysical data acquired
	1983 AD	Hajirah	up to the time of the report.
	1401 AH	Region	Chrone EM, SP, and IP surveys of the Dhar-Al
			Hajirah region.
WGM-CR-11-13	DGMR	Regional	Review of previous work completed in the
	1992 AD		Saudi mineral fields.
	1412 AH		
WGM-CR-11-	DGMR	Regional	Recommendations for future work based on
14	1992 AD		the review of previous work in the other
	1412 AH		DGMR report of 1992.

Source: National Geoscience Database of Saudi Arabia (NGD)

2.3 Geology and Mineralisation

Tectonic Overview

The Project is located on the Arabian Shield within the Asir Terrane and is regionally highly prospective for several different mineralization styles including, VMS. The tectonic evolution of the Kingdom is fundamental for the formation of various deposit styles across the region. The Arabian Shield can be divided into two main regions: the Arabian Shield and the Arabian Platform (Figure 2). The Arabian Shield, a segment of the Arabian–Nubian Shield (ANS), separated from the Nubian Shield to the west during rifting and extension in the Red Sea from ~30 Ma (Bosworth 2015, Hamimi, Fowler et al. 2021). The Arabian Platform comprises layered Phanerozoic rocks, with thicknesses of up to 10 km, which were deposited on the Arabian Shield. The rock units and structures of the shield can be traced beneath the Phanerozoic cover rocks using magnetic anomalies, and they extend up to 300 km laterally from the exposed shield margins (Hamimi, Fowler et al. 2021).





Figure 2: Tectonic framework of the Arabian Peninsula, showing plate boundaries, relative plate motion vectors, and major fault zones (Stern and Johnson 2010).

The ANS underwent a complex geological evolution spanning over 300 Myr (Stern and Johnson 2010). The juvenile crust of the ANS formed in primitive arc systems throughout the existence of the Mozambique Ocean, which opened as a result of the break-up of the Rodinia supercontinent during 870-800 Ma (Mole, Barnes et al. 2018). The magmatic arcs, ophiolites, and clastic sedimentary rocks forming the ANS, including the Asir Terrane, were accreted on the margin of West Gondwana, gradually accumulating through a series of subduction-related events referred to as the Nabitah Orogeny (Stern and Johnson 2010). At 630-600 Ma, the accretionary margin of West Gondwana collided with East Gondwana, resulting in the formation of a major Neoproterozoic mountain belt, the East Africa-Antarctica Orogen (EAAO) (Stern 1994). The accretion resulted in the formation of tectonostratigraphic terranes that are separated by major north, northwest, and northeast trending suture zones or major northwest trending faults. The suture zones host serpentinized ultramafic rocks, which comprise dismembered ophiolites, along with synorogenic plutonic complexes and transpressional gneissic domes (Nehlig, Genna et al. 2002). This collisional event resulted in the formation comparable to the present-day Alpine–Himalayan range.

The final stages of the EAAO's evolution were marked by movement along continental-scale shear zones (escape tectonics), orogenic collapse, crustal delamination, and the exhumation of gneissic domes and deposition of sediments at 600–550 Ma (Hamimi, Fowler et al. 2021). Following the assembly of the newly amalgamated arc terranes, volcano-sedimentary assemblages were deposited in post-amalgamation basins from ~650 Ma (Figure 4) (Johnson, Andresen et al. 2011).





The Arabian Shield is partially overlain by Phanerozoic rocks, including Lower Paleozoic siliciclastic rocks and Mesozoic–Cenozoic rocks (Haq and Al-Qahtani 2005). These Phanerozoic sedimentary rocks host significant mineral deposits, such as phosphates, evaporites, and potentially stratabound Zn-Pb deposits. Carbonate replacement-type Zn-Pb-Ag deposits are also formed in the limestones of the Red Sea coast (Taylor, Schulz et al. 2005).

Early Cambrian uplift led to widespread erosion, and subsequent Cambrian–Devonian sequences were typically deposited on a peneplaned platform (Konert, Afifi et al. 2001). Gentle subsidence during the Late Cambrian and Early Ordovician was followed by increased subsidence during the mid-Ordovician, which led to marine transgressions (Sharland, Archer et al. 2001).

During the Late Ordovician, a glacial episode occurred while the Arabian Shield resided at a relatively high southern latitude. The plate started to drift northward into lower latitudes in the Early Devonian, reaching tropical environments by Permian times (Konert, Afifi et al. 2001). The Late Silurian saw uplift, broad regression, and stratigraphic gaps on the Arabian Platform (Sharland, Archer et al. 2001).

The Hercynian Orogeny (the Late Devonian to Permian diastrophism in Europe and North America) resulted in multiple phases of compression and block faulting (Konert, Afifi et al. 2001). Back-arc rifting and basaltic eruption occurred in the northern margin of the Arabian Shield. The compression, uplift of central Arabia, and clockwise plate rotation produced resulted in widespread inversion and erosion, leading to the removal of several kilometers of sediment from uplifted areas (Konert, Afifi et al. 2001).

During the early Permian, another phase of major crustal extension weakened the crust enough to allow sediment load alone to drive subsidence and facilitate the accumulation of thick carbonate sediments in subtropical latitudes. In the Late Permian, further rifting and block faulting along the northeastern front of the Arabian Shield resulted in the initiation of continental break-up and the development of a passive margin along most of the northeastern boundary of the plate, fronting the newly opened Neo-Tethys Ocean. During this period, sedimentation on the Arabian Platform was dominated by carbonates over a break-up unconformity. The subsidence at the northeastern passive margin was initially largely post-rift thermal and then replaced by sediment loading (Bishop and Al-Husseini 1995).

Rifting also began in the central Mediterranean during the Early Jurassic, affecting the northern part of the Arabian Shield. Jurassic rifting at the northwestern boundary of the plate led to the later development of a new passive margin and the creation of accommodation space along the subsiding shelf (Sharland, Archer et al. 2001). The Mediterranean rifting continued into the Early Cretaceous and may have been partially responsible for uplift in western Arabia (Haq and Al-Qahtani 2005).

Before the Eocene, the ANS formed the northernmost corner of the African continental plate, which moved progressively northward toward Eurasia, resulting in the closure of the Tethys Ocean. The Arabian Shield separated from the African Shield with the opening of the Red Sea and the development of the Gulf of Aden rift system at 35–30 Ma. Rifting was centered in the Afar region of Ethiopia, where a mantle plume resulted in volcanism and uplift from ~45 Ma, with peak activity at ~30 Ma (Bellahsen, Faccenna et al. 2003).







Figure 3: Chronology of major geological events through the geodynamic evolution of the Arabian Shield (Bonnetti, Fontaine et al. 2023).







Figure 4: Simplified geological map of the Arabian Shield, showing the locations of key mines within the Kingdom. Major tectonostratigraphic terranes are delineated by sutures and major fault zones. The Project is located within the Asir Terrane, toward the southeastern corner of the map. Modified after Nehlig at al. (2002).





Asir Terrane

Al Hajirah is located at the southeastern edge of the Arabian Shield within the Asir Terrane (Figure 5). The Asir Terrane is dominated by deformed Proterozoic bimodal volcanic and sedimentary rocks of the Halaban Group, three main groups of orogenic to post-orogenic igneous bodies, and a suite of mafic intrusive rocks of non-uniform age. The volcano-sedimentary strata have been dated at 780–740 Ma, with intrusive complexes ranging in age from 735 to 625 Ma. Younger units include remnants of the unconformably overlying, gently eastward dipping beds of the Cambro-Ordovician Wajid Sandstone, Cenozoic basalts, and eolian sandstones of the Rub'el Khali Basin, which cover the Arabian Shield to the east.

The rocks of the Asir Terrance are highly deformed and have been affected by isoclinal north trending folds and ductile shear zones. Metamorphosed volcanic, sedimentary, and plutonic rocks developed owing to the assembly of ocean-plateau, island-arc, and spreading-center deposits that crop out in two large north trending structural belts, i.e. the Tarib (>720 Ma) and An Nimas (840–810 Ma) arcs. The arc deposits were intruded by large volumes of arc-related calc-alkaline diorite, tonalite, granodiorite, and trondhjemite, as well as two phases of syn-tectonic orthogneiss. The younger orthogneiss phase has been dated at 680–640 Ma (Stoeser and Stacey 1988). The assembly of the Asir Terrane is estimated to have occurred at 720–680 Ma, thereby post-dating the formation of the Tarib arc and the emplacement of the younger orthogneiss phase (Johnson and Kattan 2001). Numerous Au and base-metal mineral deposits of varying mineralization styles occur throughout the Asir Terrane. The terrane also hosts several well-known VMS mineral belts, including:

- the Ar Rjum VMS belt;
- the Muhadad VMS belt;
- the Wadi Bidah VMS belt;
- the Wadi Shwas VMS belt;
- the Kutam-Al Masane VMS belt; and
- the Ash Shib VMS belt.

The Project area lies within the Kutam-Al Masane VMS belt (Figure 6).







Figure 5: Simplified geological map of the Kutam–Al Masane VMS Belt. The Project area is in the center of the map (Workman et al., 2016).





2.3.1 Local Geology

Al Hajirah straddles the western margin of the Malahah Structural Belt. The area includes a complex suite of Precambrian volcanic and sedimentary rocks that have undergone regional metamorphism to lower greenschist facies. These rocks are intruded by batholiths, dikes, and sills with compositions ranging from alkali quartz monzonite to serpentinite.

Neoproterozoic Halaban Group metavolcanic and metasedimentary rocks occur as slivers that are bounded by north trending faults (Figure 5). Igneous rocks are coarse to finely layered and range in composition from basalt to dacitic tuff. These rocks are intensely folded and metamorphosed to greenschist and lower amphibolite facies. Compositional layering is typically parallel to foliation, which dips steeply toward the west.

Several intrusive suites of felsic to mafic composition are exposed throughout the project area. Tonalite, diorite, and gabbro intrusions of the Mushrifah complex are in faulted contact with Halaban Group rocks in the southwest of the area (Figure 5). In the west of the Project area, Halaban Group rocks have been syntectonically intruded by a hypabyssal quartz porphyry pluton of uncertain age. Associated dikes extend considerable distances from the main intrusive body. The quartz porphyry and volcanic rocks are cut by later quartz porphyry dikes across the majority of the region. These dikes locally cut layering and schistosity and are distinguished from other quartz porphyry rocks by their larger size and higher percentage of quartz crystals.

South of Al Hajirah area, the strikes of the foliation and layering are oriented to the northwest, parallel to major faults along the margin of the Wadi Tarib batholith (Greenwood, 1980b). Tight folding is best observed in Al Hajirah region, where there are north trending anticlinal ridges of intermediate pyroclastic rocks, which overlie quartz crystal tuff. The rocks have not been overturned. Several lineation measurements taken in Al Hajirah district suggest that fold hinge lines plunge toward the south.

Major east trending faults and joints cut all rocks and controlled the development of much of the drainage system in the region. These discontinuities can be traced for many kilometers; however, lateral displacements along faults are only a few meters in magnitude. In several places outside the area, these faults are marked by the occurrence of Eocene basalt.







Figure 6: Al Hajirah Project geology and mineral occurrences. Source: NGD and Geological Map of the Bi'r Idamah quadrangle GM-079A 1:250,000 Sheet 18G, KSA.





2.3.2 Mineralisation

Kutam – Al Masane VMS Belt

The Kutam-Al Masane belt is located in the southern part of the Asir Terrane, covering an area of over 8,000 km² (Figure 6). The belt is composed of Malahah Belt rocks and associated Halaban Group rocks. Key mineral deposits in the belt are Al Masane and Kutam deposits (Figure 6); however, examples of VMS mineralization can be found between Nuqrah and Najran.

The mineralization of Al Masane deposit varies from thinly bedded Zn-rich massive sulphide to Cu-rich massive sulphide, sulphide breccia, and massive pyrite, as well as disseminated or interbedded sulphides. The deposit does not appear to have an underlying zone of stringer mineralization (Workman et al., 2016).

At Kutam, the mineralization consists of disseminated and stringer chalcopyrite and sphalerite in quartz-sericite and quartz-chlorite schists near the contact with a large intrusion of felsic quartz-feldspar porphyry (Workman et al., 2016).

2.3.3 Nearby Occurrences

Gold and base metal mineral occurrences (MODS) are distributed throughout the Malahah Mobile Belt within and surrounding the Project (Table 4).

MOD	English name	Long DD	Lat DD	Adm Regn	Main Metal s	Minor Metals	Works	Strat. Unit	Host rocks	Gitolo gy	Min Style
MODS 0616	SHAIB ANAS (WADI AL HIRRA)	44.10055 6	18.125000	Najran	Gossa n	Pyrite	Undefine d	Halaba n Group	Andesite; black shale; chert; dacite; pyroclast ic rock	Volcan ic sedime ntary	Dissemin ation; Lens; Stratabou nd
MODS 0618	WADI QATAN (AN NUGGER)	44.06838 9	18.183083	Najran	Pyrite	Pb; Zn; Ag	Pit; trench	Halaba n Group	Andesite; carbonat e rock; metasedi mentary rock; shale	Hydrot hermal	Dissemin ation; shear zone
MODS 0670	SHAIB YASAN	43.963611	18.039444	Najran	Gossa n	Fe; Ni	Undefine d	Halaba n Group	Black shale; carbonat e rock; mudston e; conglom erate; graywack e; phyllite; shale	Unclas sified	Dissemin ation

Table 4: Summary of Mineral Occurrences (MODS)





MODS 0673	AL MASANI; WADI HIZMAH (AL MASANE)	43.859167	18.136389	Najran	Cu	Ag; Zn; Au	Open pit; shaft; slag area; stope	Halaba n Group	Dacite; meta- andesite; tuff	VMS; Volcan ic	Dissemin ation; Lens; Stratabou nd
MODS 0680	JABAL AR RUKHMA H	43.651389	18.054722	Asir	Gossa n	Pyrite	Undefine d	Grano diorite and granite suite	Quartz diorite; trondhje mite (leucoton alite)	Unclas sified	Dissemin ation
MODS 0993	JIBAL QAYYAN	43.920222	18.171167	Najran	Au		Dump; pit; slag area; trench	Halaba n Group	Basalt; dacite; meta- andesite	Aurifer ous quartz- vein	Dissemin ation; veins
MODS 1360	DHAHAR (EAST)	43.74444 4	18.223611	Asir	Cu	Zn; Au; Ag	Open-cut	Halaba n Group	Basalt; meta- andesite; pyroclast ic rock; quartz; tuff	Volcan ic sedime ntary	Dissemin ation; Lens; Stockwor k
MODS 1361	DHAHAR (WEST)	43.738889	18.223611	Asir	Cu	Ag; Zn; Au	Trench	Halaba n Group	Dacite; meta- andesite; tuff	Volcan ic sedime ntary	Dissemin ation
MODS 1455	WADI HIGAN (MASANA AL MASAGH A)	43.60000 0	18.425000	Asir	Au		Slag area; trench	Granit e suite	Greensc hist; monzogr anite	Aurifer ous quartz- vein	Lens
MODS 2004	WADI SHAYBAH (AL HAJIRAH)	43.727778	18.166667	Asir	Cu	Ag	Grinding area; open-cut; pit; shaft; trench	Undefi ned	Pyroclast ic rock; quartz; quartz porphyry ; volcanic breccia	Volcan ic	Dissemin ation; Stockwor k
MODS 2005	WADI SHAYBAH (AS SALIF AGARAT)	43.728333	18.166667	Asir	Au	Ag	Open-cut	Halaba n Group	Meta- andesite; quartz porphyry ; volcanic breccia	Aurifer ous quartz- vein	Dissemin ation; veins
MODS 2006	SHAIB SHASRAH	43.86666 7	18.225000	Najran	Au		Open-cut	Halaba n Group	Conglom erate	Hydrot hermal	Veins
MODS 2160	BIR AL WUDAYK AH (ABU HAYALA)	44.08863 9	18.387083	Najran	Au	Ni	Pit	Halaba n Group	Quartz; volcanic rock (extrusiv e)	Aurifer ous quartz- vein	Veins
MODS 2161	WADI AS SAHAN (SAHAN)	44.10988 9	18.458111	Najran	Gossa n	Pyrite	Undefine d	Halaba n Group	Black shale; volcanic rock	Unclas sified	Dissemin ation; Lens, Stratabou nd



									(extrusiv e)		
MODS 2168	WADI UWAYL WEST(HU Q)	44.112222	18.117167	Najran	Gossa n	Pyrite	Undefine d	Halaba n Group	Andesite; black shale; chert; shale	Unclas sified	Lens; Stratabou nd
MODS 4957	MARRAH HAH NORTH	44.07083 3	18.020833	Najran	Au	As	Undefine d	Gabbr o, diorite and syenite suite	Biotite- hornblen de diorite; monzoni te s.l.; quartz diorite	Epithe rmal	Stockwor k; veins
MODS 2163	WADI TILHAM (MILHA)	44.07519 4	18.325250	Najran	Gossa n	Pyrite	Undefine d	Halaba n Group	Andesitic tuff; black shale; diorite	Unclas sified	Undeter mined
MODS 2164	WADI TILHAM (MILHA EAST)	44.07519 4	18.325250	Najran	Au	Cu	Pit	Halaba n Group	Quartz	Aurifer ous quartz- vein	Veins
MODS 2069	SHAIB AL MULYYIH AH (NILAIHA)	43.845833	17.908333	Najran	Au	Cu	Trench	Tonali te- diorite suite	Quartz diorite	Aurifer ous quartz- vein	Veins
MODS 2086	JABAL HARSHAF (MARAH HAH)	44.07500 0	18.000000	Najran	Au		Pit	Gabbr o, diorite and syenite suite	Diorite; gabbroic plutonic rocks; quartz	Hydrot hermal	Stockwor k; veins

2.3.4 Project Mineralisation

Mineralized zones at East Dhahar and West Dhahar occur within a series of tightly folded volcaniclastic rocks. East Dhahar (MODS 1360; Figure 6) comprises a series of lensoidal gossans that are hosted in highly sheared quartz crystal tuffs in structural contact with quartz crystal pyroclastic breccia to the east and basaltic flows to the west (Smith, 1980). The mineralized zone, which was mapped and sampled during the 1970s, contains a large, massive quartz vein as the prominent feature. Ancient workings exploited secondary Cu and Zn along the selvages of the quartz vein and the adjacent country rock. The mineralized zone is ~25 m wide and defined by intense shearing and quartz-sericite-pyrite alteration. Pods of gray-brown brecciated marble are dispersed along the zone, and local gossans in contact with quartz crystal tuffs have been worked. Ancient workings and sulphide mineralization occur mainly within quartz crystal tuffs and parallel to contacts between these rocks and basaltic flows to the west and quartz crystal pyroclastic breccia so the east. A quartz porphyry dike intrudes both the quartz crystal tuffs and the pyroclastic breccia and is cut by quartz veins and sulphide mineralization. The mineralization at East Dhahar is consistent with the criteria of a volcanogenic deposit.

West Dhahar (MODS 1361) is located ~500 m from East Dhahar and consists of a 900 m \times 200 m zone of abundantly disseminated pyrite within quartz crystal tuffs. Sphalerite occurs as very fine isolated crystals



or as a replacement of pyrite throughout much of the pyritized zone. Scarce occurrences of chalcopyrite are dispersed sporadically within the zone. Smith (1980) suggested that the mineralization at West Dhahar may represent a metalized halo surrounding the massive sulphide deposit at East Dhahar.

The centre of Cu mineralization at Al Hajirah (MODS 2004; Figure 6) which is located 6 km southwest of Dhahar, coincides with the area where dike swarms of quartz porphyry are most abundant. Cu occurs both within the dikes and along contact zones in pyroclastic rocks. Secondary Cu minerals occur locally throughout Al Hajirah. Cu oxides are typically found within pyroclastic rocks of intermediate composition or quartz porphyry dikes. Scattered ancient workings and areas of secondary Cu staining located at considerable distances south and north of the dike swarm provide evidence of the extent of the overall Cu mineralized footprint. Drillhole DA-3 intersects a 66 m wide zone of disseminated and stringer sulphides (pyrite, sphalerite, and chalcopyrite), including a 3 m intercept @ 0.13 g/t Au, 4 g/t Ag, 1.17% Cu, 0.002% Pb, and 0.01% Zn.

2.3.5 Nearby Deposits

The mineralization at Al Hajirah exhibits similarities to other Cu-Zn VMS systems globally and in the Arabian Shield, based on the limited exploration to date. These systems are associated with bi-modal volcanism, being proximal to rhyolite domes and flows, and they comprise clusters of deposits and include underlying stockwork (feeder) zones.

There are several examples in the Kingdom, including the operating Jabal Sayid mine in the central-western part of the country (Figure 5: Ma'aden/Barrick Joint Venture) and Al Masane mine, located 50 km to the north in a similar geological setting to Al Hajirah. One point of difference is that Al Masane is interpreted as having formed as a mound on the seafloor, rather than as hypabyssal mineralization, which is the case at Al Hajirah.

Given its proximity to Al Hajirah, Al Masane will be discussed briefly here.

Al Masane Cu-Zn Mine

Al Masane Cu-Zn mine is located ~5 km from the southwestern corner of the Project (Figure 6). The mine is currently exploited as an open pit (Figure 7) and underground, where development has focused on the Saadah and Al Houra orebodies. Operations extend 291 m underground (Al Masane Al Kobra Mining Co). Mining began in 2012 and, at the time of commissioning, the mineral resource was over 5 (Table 5). The mine is currently producing ~800,000 tpa of Zn and Cu concentrates. However, as discussed in the 2022 Annual Report, an expansion plan, including the development of the Moyeath orebody and expansion of the plant to 1.2 Mtpa, was initiated in 2019.

Al Masane comprises three separate ore lenses, with operations including both open-pit and underground. The Saudi Stock Exchange listed Al Masane Al Kobra Mining Company's (AMAK) 2022 Annual Report as confirming total JORC-compliant mineral resources of 7.51 Mt @ 0.94% Cu, 4.90% Zn, 1.06 g/t Au, and 38.13 g/t Ag, as of September 2022, with ore reserves of 7.04 Mt @ 0.65% Cu, 3.91% Zn, 0.81 g/t Au, and 29.73 g/t Ag. These figures are net of previously mined materials.

Similar deposits include the Noranda deposits of the Archean Abitibi Belt in Canada, which comprises over 22 individual deposits. These deposits are related to the bi-modal volcanic Noranda Cauldron, which is



interpreted as a volcanic subsidence structure related to the collapse of an underlying magma chamber that initially formed a subsea shield volcano.

Two groups of deposits are present. The first has resources that typically exceed 5 Mt, and these are associated with bi-modal volcanic rocks and located within the cauldron. The second group comprises larger deposits (the Home deposits), which are associated with rhyolitic breccias outside the cauldron. The latter are more Au-Cu rich and Zn poor than the former.

Classification	Tons (t x 1000s)	Zn (%)	Cu (%)	Au (g/t)	Ag (g/t)
Measured	535	4.0	1.5	0.83	23
Indicated	5,279	3.8	1.3	0.84	25
Inferred	108	4.0	1.1	1.13	30

Table 5: Al Masane minera	al resources (2012), reporting code	unknown ((Workman et al., 2016)

These estimates do not account for recent mining activity.



Figure 7: Guyan open pit. Source: https://amak.com.sa/

Kutam Cu-Zn Deposit

The Kutam Cu-Zn deposit is located ~40 km west-southwest of the Project (Figure 6). Workman et al. (2016) note the following for the Kutam deposit:

"The Kutam deposit is the largest in the entire belt and it has significant potential for expansion. This deposit (MODS 1128) is located within the southern Asir mountains. The ancient workings marking the deposit were discovered by the USGS in 1973 during a regional mapping program covering the half-degree Mayza Quadrangle (17/43B). The USGS subsequently carried out geological, geochemical, and geophysical surveys as well as drilling eight diamond drillholes totaling 1,929 m (Smith and others, 1977). Noranda





obtained an exploration license for the area in 1976 and carried out more detailed geological mapping and geophysical surveying (ground and airborne), followed by the drilling of 15 cored holes (3,495 m). After Noranda completed its program, Riofinex carried out an economic assessment of the deposit and concluded that it was not viable if it was assumed that no additional tonnage or higher-grade mineralization would be discovered (Riofinex; 1978a). The metal zoning at Kutam was studied and Riofinex postulated that a high-grade copper stringer zone may exist at depth. A resource was estimated for the prospect that totaled 16.43 Mt grading 1.03% Cu, 0.51% Zn and 0.1 g Au/t (Lawson Gold Independent Technical Report, 2012). Coffey considered the resource estimate to have deficiencies however they recommended that the resource be considered as Inferred Resources. The resources were open to depth and Coffey recommended additional drilling at depth down plunge to potentially increase the resource base."

2.3.6 Exploration Data

Regional Geophysical Data

Diverse geophysical data covering almost the entire Kingdom were available. Some of the data compilation included surveys flown by the USGS and still used for interpretation today; however, since 2006, many areas have been re-surveyed. Table 6 summarizes the acquisition parameters of various airborne geophysical surveys. Various data compilations were accessed primarily as processed grids to assess the quality of the data. The compilations are composed of surveys stitched together, rather than merged and blended, which reduces the overall quality of the data. Line spacings vary between 300 and 2,500 m, which is evident in the compilations despite gridding to a consistent cell size. All analyzed data were only available in basic corrected form (i.e. reduction to pole (RTP), first vertical derivative (1VD)) and as images (i.e. geotiffs). For enhancements and to filter the data to highlight attributes, original grid data are necessary.

Table 6: Overview of available geophysical data.					
Survey Name	Method	Coverage (km ²)	Line Spacing (m)	Grid size (m)	
Arabian Shield Magnetic Compilation	Magnetic	Compilation	300-2,500	200	
Habla, Sukhaybarat, Najadi/Shabah and Najadi/Quartz Hill	Magnetic, EM and Radiometric	952	200	50 (magnetic and radiometric)	
Al Hajar	Magnetic, EM	748	250	no information available	
Wadi Bidah, Hamdah	Magnetic, EM	4,236	250-300	50	

Magnetic Data

The magnetic data (total magnetic intensity, TMI) were provided alongside RTP, 1VD, analytical signal (AS), and tilt derivative enhancements. The compilation grids have been stitched together rather than blended, so the individual surveys are delineated, which gives the appearance of a change in resolution (Figure 8). This does not necessarily hinder interpretation; however, a coherent blended grid would allow further enhancements of the dataset without creating edge artifacts within the data during processing. An RTP magnetic grid may not reflect the location of source bodies owing to the Kingdom's location relative to the magnetic equator. There appears to be discord between the analytical signal and RTP grids, implying that a reduction to equator (RTE) may have provided better results for accurately locating source bodies.







Figure 8: Magnetic data compilation available across the Kingdom.





Gravity Data

Gravity data coverage was limited to imaging swaths of the western KSA and a thin section of the eastern coast (Figure 9). The resolution of the data was low (1,000 m) compared with the resolution of targets expected to be generated in this report. No further corrections or enhancements of the data were available beyond a Bouguer correction and free-air correction. Although there are some small-scale trends in the data, including these data in a regional study is problematic because the coverage is limited and often perpendicular to the structural trends of the region. However, gravity data highlighting the density contrasts between various lithologies at a resolution suitable for the target are likely to be particularly useful here.







Figure 9: Gravity data coverage of the KSA.





2.3.7 Project Geophysics

In support of geological and geochemical exploration for VMS deposits, the USGS conducted a series of geophysical surveys in the Dhahar–Al Hajirah region (Blank 1983). These investigations included the deployment of crone electromagnetic (CEM), SP, and IP surveys.

Reconnaissance CEM traverses across the Dhahar and Al Hajirah prospects delineated numerous zones of conductivity; however, none had a dip angle greater than 10°.

With the exception of two encouraging results, SP surveys at Al Hajirah showed broad gradients and anomalies of <40 mV. Dipole–dipole IP surveys at Al Hajirah delineated two polarizable zones that are nearly continuous along a strike length of ~7 km. Blank (1983) noted that these two zones are symmetrically oriented around an aplitic dike, potentially reflecting the presence of a southward plunging antiform. These chargeability anomalies are coincident with zones of high Cu and Zn revealed by the geochemical survey of Smith (1980).

2.3.8 Surface Geochemistry

A geochemical survey was conducted at Al Hajirah consisting of 901 rock chip samples and covering an area of ~3.5 km × 2.5 km between Wadi Harba in the north and Wadi Gharab in the south (Smith, 1980). This area was chosen to coincide with a zone where volcanic rocks have undergone pyritization, epidotization, and chloritization. Rock-chip samples were collected at 20–25 m intervals wherever possible, and along lines trending 80°, approximately orthogonal to the regional structural trend. Rock-chip samples were analyzed for Au, Ag, Cu, Pb, and Zn using atomic absorption methods, and a further 26 elements were analyzed using semi-quantitative spectroscopy. Analytical results for Cu and Zn were statistically grouped using the method of Lepeltie (1969) and plotted in four categories ranging from background to highly anomalous (Figure 10; see Smith (1980) for Zn results). Contouring of anomalous Cu and Zn results was carried out with an assumption that values are continuous along strike between transects. This assumption was considered reasonable on the basis of the general geology and the hydrothermal alteration, pyritization, and secondary Cu mineralization observed at outcrop.

The most prominent Cu anomaly occurs as a 3.5 km long zone defined by Cu values exceeding 470 ppm. Limited areas with >2640 ppm Cu occur locally within this zone. The large anomalous zone is coincident with areas where rocks have undergone visible hydrothermal alteration and secondary Cu mineralization is present.







Figure 10: Cu contents of rock-chip samples within Al Hajirah Project area (from Smith 1980).





2.3.9 Drilling

Three diamond holes were drilled within the Project area (Figure 11), the results of which are detailed by the USGS in Smith (1980).

Drillhole DA-1 targeted a hypothesized sulphide zone below a gossanous area in East Dhahar (Figure 12). The drillhole was directed toward an azimuth of 75° , declined at an angle of -45° , and was positioned to intersect the primary mineral zone at ~70 m in vertical depth. At 122.10 m, the vertical depth drillhole intersected a lens of nearly massive sulphides with a horizontal width of 40 cm. The mineralogy of this lens includes pyrite, light-brown sphalerite, and chalcopyrite assaying 0.36 g/t Au, 20.6 g/t Ag, 1.45% Cu, 0.09% Pb, and 23.68% Zn. A second intersection of moderate economic interest occurs between 125 and 128 m, where weighted averages of 0.59 g/t Au and 5.4 g/t Ag with low associated Cu and Zn values were obtained. In addition, bands, stringers, and disseminations of sphalerite and chalcopyrite (increasing with depth) were intersected on the hanging-wall side of the massive sulphide. This entire zone of 3.40 m horizontal width averaged 0.15 g/t Au, 4.84 g/t Ag, 0.48% Cu, 0.02% Pb, and 4.17% Zn. Sulphide contents diminish with depth from 128 m.

In West Dhahar, drillhole DA-2 was targeted toward intersecting a pyritized Cu and Zn anomalous zone at ~80 m below the surface. The drillhole was directed toward an azimuth of 86° and declined at an angle of -45°. Varying amounts of disseminated sulphides were intersected between 68.5 and 180 m. The horizontal width of the sulphide zone is 90 m, and it is near vertical. Chalcopyrite and sphalerite occur in association with pyrite throughout the pyritized zone. Chalcopyrite occurs in greater concentrations within chloritized zones and areas with strong quartz-sericite alteration. The highest concentrations of chalcopyrite are within a chloritized zone at 95–100 m. Sphalerite and chalcopyrite form 5–10 cm thick bands at 135.4, 139.7, and 145.5 m. Zn concentrations are high across the sample zone, averaging 0.18%. The highest Zn concentrations are associated with thick sphalerite intersections.

Drillhole DA-3 was drilled in Al Hajirah, where high Cu concentrations were predicted on the basis of geochemical and geophysical data. The drillhole is oriented toward an azimuth of 82° and declined at an angle of -45°. Approximately 20% of the drill core consists of cavities resulting from the leaching of sulphides, now lined with limonite. In addition, much of the rock is stained by secondary Cu minerals, namely malachite and lesser chrysocolla. There is a direct spatial association between quartz porphyry dikes and Cu mineralization, where higher-grade Cu concentrations occur either within porphyry dikes or in neighbouring pyroclastic rocks. From 51 to 79 m, the drill core averaged 0.41% Cu, and a Cu concentration of 1.75% was obtained in a 1 m interval at 76 m.







Figure 11: Geological map of the Dhahar area showing the locations of drillholes DA-1 and DA-2 (from Smith, 1980).







Figure 12: Geological cross section along drillhole DA-1 at East Dhahar (from Smith, 1980).





3. Data Room Overview

Technical and other data as well as the Application Form are hosted in the Data Room and can be accessed through the Ministry's website (https://mim.gov.sa/en/initiatives/31907/) or any other link provided by the Ministry.

TECHNICAL INFORMATION

The technical information folder in the Data Room includes the files described in the table below and will remain open to bidders until the award of the Exploration License.

Table 7: File Overview

Key Reports	Entity	Location	Activities
BRGM-TR-05-36	Unknown 1962-1967 AD	Regional	Aeromagnetic survey of the Arabian Shield covering 550,000 km ² . Data reprocessed by French Bureau de Recherches Géologiques et Minières (BRGM) between 1970 and 1980 AD.
RF-1978-3	Riofinex 1978 AD 1398 AH	Wadi– Wassat– Kutam District Southeast Asir.	Investigation of the geology and exploration potential of the Wadi Wassat-Kutam district of Southeast Asir. Included geochemical analysis of field samples collected over a large area encompassing Al Hajirah tenement. No coordinates available for sample location, so it is not possible to determine if the data are relevant.
RFO - 1979- 12- 1	Riofinex 1978-1981 AD 1398-1401 AH	Regional	Reconnaissance activities covering areas identified from a review of previous geological data and 1:50,000 geological mapping. Prospects identified were gridded, mapped at 1:1000, geochemically sampled and, if required, subjected to geophysical surveys (SP, IP, EM), and drilled.
PROJECT REPORT	DGMR 1979 AD 1399 AH	Jabal Ishmas- Wadi Tathlith Au Belt	Review of Au deposits within the district-scale Au belt. Two mentions of Dhahar, but no details.
USGS-SA-IR-343	USGS/ARGAS 1977-1978 AD	Dhahar–Al Hajirah Region	Three exploratory holes drilled by Arabian Drilling Company to assess economic potential, particularly to evaluate Cu-Zn deposits in the vicinity of historical workings.



Key Reports	Entity		Location	Activities
USGS USGS-SA-lR- 343	USGS 1980		Dhahar–Al Hajirah Region	Review of previous field mapping, sampling, drilling, and geophysics completed in the area of interest. Includes selected results from three drillholes (drilled in 1978), including intercept assays, as well as drawn sections for each drillhole. Field maps are included for each project area with sample locations, but no table of samples is included.
				Further geophysical surveys should be completed, especially IP, to test extensions to drilled sulphide intercepts at depth.
				Excellent review and field mapping of historical mining activity.
USGS-OF-03-92	USGS		Dhahar–Al Hajirah	Compilation of all geophysical data acquired up to the time of the report.
	1401 AH	Region	Chrone EM, SP, and IP surveys of the Dhar–Al Hajirah region.	
WGM-CR-11-13	DGMR 1992 1412 AH	AD	Regional	Review of previous work completed in the Saudi mineral fields.
WGM-CR-11-14	DGMR		Regional	Recommendations for future work based on the review of previous work in the other
	1992 AD			DGMR report of 1992.
	1412 AH			





APPLICATION FORM

The Data Room includes the Application Form that must be completed by bidders as part of their Proposal. The Application Form includes the below sections as referenced in this Information Memorandum.

Section	Description
Section A	Proposal Cover Letter
Section B	Minimum Qualification Criteria
Section C	Technical Requirements
Section D	Resource Exploration and Discovery Activities
Section E	Innovation
Section F	Social Impact Management Plan
Section G	Environmental Impact Management Plan
Section H	Financial Information Requirements
Section I	Corporate and Legal Requirements
Appendix 1	Model Exploration License
Appendix 2	Form of Statement of Confirmation (to be used for Consortium submissions only)





PART B: PROPOSAL SUBMISSION RULES





4. Minimum Qualification Criteria

Bidders must demonstrate that they meet the below minimum technical and financial criteria ("**Minimum Qualification Criteria**") in order for the Ministry to continue evaluating their respective Proposals. Bidders must provide responses relating to the Minimum Qualification Criteria in accordance with the form set out in Section B of the Application Form.

The below Minimum Qualification Criteria will be evaluated on a "Pass/Fail" basis. Bidders who do not pass <u>all</u> the Minimum Qualification Criteria or do not provide the supporting documents required by the Ministry in relation to any or all of such criteria will be disqualified from the Licensing Round and their Proposal will not be evaluated any further.

As such, bidders are encouraged to consider the Minimum Qualification Criteria and exercise their own judgment in ensuring that they meet such criteria and are able to provide the supporting documents before they proceed with preparing their Proposal for the Project. The Ministry is not liable to any bidder who submits a Proposal and following evaluation by the Ministry, such bidder is deemed unqualified for the Project for any reason including not satisfying the Minimum Qualification Criteria and is therefore disqualified from the Licensing Round.

For the avoidance of doubt, where the bidder is a Consortium (as defined in Section 5.13), the technical and financial criteria may be satisfied by separate (and not all) Consortium members. The identity of the relevant Consortium member satisfying the relevant requirement must be indicated clearly in the relevant section and response.

PART A: TECHNICAL CAPABILITY

1. Internal Capability

Bidders must demonstrate internal capabilities in mineral exploration, and are encouraged to demonstrate the following experience in relation to their personnel:

- access to and ability to appoint, as required, sufficient qualified and experienced geoscientists to carry out the exploration work program as agreed with the Ministry to be undertaken by the bidder, if successful, following the award of the Exploration License, the requirements for which are set out in Section C of the Application Form ("**Work Program**").
- base metals and/ or precious metals experience; and
- ability to develop (or manage the development of) assets through pre-feasibility and feasibility studies.

Bidders must provide CVs of proposed staff for the Projects (including the exploration manager) and are encouraged to demonstrate the following experience in relation to its personnel:

- access to and ability to appoint, as required, sufficient qualified and experienced geoscientists to carry out the Work Program;
- base metals experience; and



– ability to develop (or manage the development of) assets through pre-feasibility and feasibility studies to construction and operation.

2. Track Record / Examples

Bidders must demonstrate the following in relation to their past relevant experience:

- a track record of at least one greenfield site and/or two brownfield sites;
- experience in volcanogenic massive sulphide (VMS) or similar style mineralisation;
- capability in base metal/ precious metal projects through the development cycle, from discovery to preliminary economic assessment, via feasibility studies; and
- capability in developing exploration projects beyond the discovery stage.

Bidders must include the following in relation to each project:

- details of minerals being explored;
- any significant reliance upon third-party sub-contractors;
- details of any geophysical surveying conducted;
- details of any relevant technologies used; and
- *details of any geological activity including mapping and drilling (diamond drilling and reverse drilling).*

PART B: FINANCIAL CAPACITY

3. Exploration Expenditure

Bidders must have undertaken a minimum expenditure of USD five hundred thousand (\$500,000) in exploration activities in the last twelve (12) months, and be able to provide suitable evidence of this.

4. Exploration Funding

Bidders must demonstrate access to at least USD five hundred thousand (\$500,000) to fund the first three months of the Work Program to be undertaken in the Kingdom in connection with the Project.





5. Licensing Round Process and Proposal Requirements

5.1 Overview of Licensing Round

After the announcement of made by the Ministry in January 2024 in relation to the launch of the next series of the exploration licensing rounds, prospective bidders were invited to submit a nonbinding expressions of interest confirming their interest in participating in licensing rounds launched by the Ministry in the year 2024. Prospective bidders are now invited to participate in the subsequent stage of Al Hajirah Licensing Round by submitting a Proposal in response to this Information Memorandum.

Bidders are hereby invited to submit their best offer for the Exploration License as part of a valid and binding Proposal.

It should be noted that all bidders must satisfy the Minimum Qualification Criteria set out in Section 4 of this Information Memorandum in order for the remainder of their Proposal to be considered and evaluated by the Ministry.

Bidders who do not satisfy all the Minimum Qualification Criteria or do not provide the supporting documents required by the Ministry will be disqualified from the Licensing Round and their Proposal will not be evaluated any further.

As such, bidders are encouraged to consider the Minimum Qualification Criteria and exercise their own judgment in ensuring that they meet such criteria and are able to provide the supporting documents before they proceed with preparing their Proposal for the Project. The Ministry is not liable to any bidder who submits a proposal and following evaluation by the Ministry, such bidder is deemed unqualified for the Project and will therefore disqualify from the Licensing Round.

The Proposal stage will identify a single Successful Bidder. The Ministry may then proceed to final discussions with the Successful Bidder, with an expectation that an Exploration License will be awarded to that bidder as quickly as possible.

5.2 Proposals

Bidders participating in the Licensing Round should submit a complete Proposal by the Proposal Submission Deadline. The Proposal must be prepared using the Application Form included in the Data Room.

Proposals will be assessed and scored based on a number of criteria, including technical and commercial terms and environmental and social impact management plans, including commitment to local communities development.

The bidder whose Proposal receives the highest score following evaluation will be declared as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.





If the Ministry selects a single Successful Bidder, they will proceed directly to the final stage of the Licensing Round. In this case, the relevant Successful Bidder will be invited by the Ministry to proceed straight to conclusion of the final terms of its Proposal. The second highest scoring bidder in such circumstances shall be the "**Reserve Bidder**".

5.3 Model Exploration License

Bidders will be required to confirm in as part of the Proposal Cover Letter (Section 1 of the Application Form) that they accept the terms and conditions of the model exploration license in the form set out as Appendix 1 of the Application Form ("**Model Exploration License**").

Bidders are advised that the terms of the Model Exploration License are non-negotiable, and this should be taken into account in the course of preparing their submissions.

5.4 Performance Financial Guarantee

Bidders will be required to confirm in the Application Form and particularly in the Proposal Cover Letter (Section 1 of the Application Form) that, if they are announced as the Successful Bidder, they will provide a performance financial guarantee in favor of the Ministry to guarantee the Successful Bidder's due and punctual performance of the Work Program submitted as part of its Proposal ("**Performance Financial Guarantee**").

The Successful Bidder must submit a Performance Financial Guarantee within the timeline specified by the Ministry (not to be less than 30 days) from when it is announced as the Successful Bidder. The Performance Financial Guarantee must be for an amount equal to at least fifteen per cent. (15%) of the Successful Bidder's projected expenditure throughout the Work Program.

The Performance Financial Guarantee should take the form of an irrevocable on demand bank guarantee, in accordance with the forms approved by the Saudi Central Bank.

The Performance Financial Guarantee shall be provided by a bank licensed to operate in the Kingdom and made in favour of the Ministry and with a validity period of not less than thirty (30) months from the Exploration License issuance date, renewable automatically on a rolling basis for one (1) year periods throughout the term of the Exploration License.

The Performance Financial Guarantee may be called upon by the Ministry at any time during the term of the Exploration License in the event that the relevant Licensee fails to meet the agreed performance requirements and targets as set out in the Work Program.

5.5 Social Impact Management Plan

Bidders must submit a social impact management plan ("**Social Impact Management Plan**"), identifying proposed contributions to the local community, and how the applicant will address the communities' needs and mitigate any negative impacts. The form of the Social Impact Management Plan to be submitted by bidders is set out in Section G of the Application Form.





5.6 Environmental Impact Management Plan

Bidders must submit an environmental impact management plan ("**Environmental Impact Management Plan**") in accordance with the form set out in Section H of the Application Form.

5.7 Proposals Evaluation

The Proposal stage evaluates both the technical and financial aspects of each submission. This analysis will look at the bidder's capabilities, as well as its plans and proposed investments with regards to the exploration and possible development of the Site including community engagement and employment and training opportunities for the Local Communities.

It should be noted that pursuant to the Implementation Regulations, Local Communities for the purposes of preparing Proposals means natural persons who permanently reside in communities within one hundred (100) kilometres from the Site. Please refer to the Mining Investment Law and its Implementing Regulations for the further clarify on the definition of Local Communities.

When submitting any Proposal, bidders are to always adhere to the Proposal Submission Rules and this Information Memorandum. Proposals that are not compliant with the requirements to this Information Memorandum, or are incomplete, may be rejected by the Ministry. All Proposals must be received by the Ministry by the Proposal Submission Deadline.

The bidder whose Proposal receives the highest score will be announced as the Successful Bidder for the Site and will be awarded the Exploration License by the Ministry once the legal and regulatory requirements are satisfied.

5.8 Scoring Methodology

Each Proposal shall be assessed by the evaluation Committee in accordance with the scoring method set out in the following table.

Section	Criteria	Weighting
Proposed Work Program and Exploration Spend	Proposals will be evaluated on the thoroughness and soundness of the bidder's proposed Work Program for the entire area and the knowledge and understanding of the regional and license area geology, including stage planning, contingency planning and whether the bidder has the ability to attain the objectives in a timely manner. Bidders must address the requirements set out in Part 1.1 of Section C of the Application Form.	50%
Resource Exploration and Discovery Activities	Proposals will be evaluated on the bidder's experience in relation to focused exploration activities, based on its responses to the information required in Section D of the Application Form.	20%

Table 8: Scoring Criteria Weighting





Section	Criteria	Weighting
Innovation	Proposals will be evaluated based on the innovative solutions and technologies used by the bidder in mineral exploration activities and discovery of mineral potential in base metals, based on the responses provided by bidders to the information required in Section E of the Application Form.	10%
Financial Capability	Proposals will be evaluated on the bidder's financial resources, and its capability to fund its Work Program and other proposed expenditure, in accordance with the form and requirements set out in Section F of the Application Form. Each bidder should provide an outline of its potential financing plan for the first two license years to support such funding requirements.	Pass/ Fail
Social Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to successfully implement social development in and around the Site, as well as their proposed local community expenditure based on its responses to the information required in Section G of the Application Form.	20%
Environmental Impact Management Plan	Proposals will be evaluated on the basis of whether the bidder has the demonstrated ability to ensure the protection of the environment based on its responses to the information received in the form set out in Section H of the Application Form.	Pass/ Fail
Corporate and Legal Requirements	Proposals will be evaluated on the basis of the bidder's corporate and legal information regarding the structure, activities and litigation history of the bidder and its group, as set out in Section I of the Application Form.	Pass/ Fail
Performance Financial Guarantee	Proposal will be evaluated on the bidder's commitment to provide a Performance Financial Guarantee if selected as a Successful Bidder.	Pass/ Fail
Model Exploration License	Proposals will be evaluated on the bidder's commitment to accept the terms of the Model Exploration License.	Pass/ Fail

5.9 Final Satisfaction of Legal and Regulatory Requirements Stage

The announcement of the Successful Bidder will be made promptly after the Evaluation Committee¹ has concluded its evaluation of the Proposals. Following the announcement, the Ministry will invite the Successful Bidder into final discussions and conclusions on the details of any proposed Work Program,

¹ The evaluation committee appointed by the Ministry to assess the Proposals, comprising of experts in mining, environmental, legal, and commercial matters





Environmental Impact Management Plan or Social Impact Management Plan, to the extent that the Ministry believes any such discussions are required.

5.10 Award of Exploration License

Once a Successful Bidder is selected, the Ministry may seek to clarify with the Successful Bidder certain final points on the Successful Bidder's Work Program, the Environmental Impact Management Plan and the Social Impact Management Plan.

If discussions are concluded successfully, and subject to the satisfaction of all legal and regulatory requirements (including issuance and delivery of the Performance Financial Guarantee) the Ministry shall award the Exploration License to that Successful Bidder.

In the event that the final discussions referred to above are not successfully concluded with the Successful Bidder, the Ministry shall have the right to approach the Reserve Bidder to enter into such discussions.

If, subject to the satisfaction of all legal and regulatory requirements (including issuance and delivery of the Performance Financial Guarantee) the Reserve Bidder becomes the Successful Bidder, the Ministry shall award the Exploration License to that Successful Bidder.

If no agreement is reached with either the Successful Bidder or the Reserve Bidder, the Ministry reserves the right to approach such other bidders who have submitted a valid and binding Proposal as it sees fit.

5.11 Bidders' Information Requests and Clarifications

Bidders may wish to raise clarifications or request further information concerning this Information Memorandum.

All clarification and information requests concerning this Information Memorandum must be written in Arabic or English and submitted via email to miningbidding@mim.gov.sa no later than 21st April 2024 ("**Information Request Deadline**").

Bidders should not contact any person within, or associated with, the Ministry or the Government, or persons associated with their Project advisors, in connection with any requests for additional information or clarifications relating to this Information Memorandum, except via email as set out above.

To the extent possible, such information requests shall receive written responses by email communication as soon as practicable and where the question is of relevance to all bidders, the question and response will be distributed to all bidders may not respond to information requests submitted after the Information Request Deadline. The Ministry may, in its sole and absolute discretion, delete or remove any of the clarifications or request for further information if in the Ministry's view the clarification or request will result in any confusion in respect of the Information Memorandum or contains indications to certain items such as costs and prices.





5.12 Bidder Site Visits

In the event a bidder wishes to visit the Site in advance of submitting its Proposal, such bidder may liaise with the Ministry to arrange a site visit by sending a request via miningbidding@mim.gov.sa.

5.13 Consortium Proposals

Bidders may form a consortium (including as a joint venture, special purpose vehicle with multiple shareholders or other similar arrangements) ("**Consortium**") and the lead consortium member should be identified in the Proposal ("**Lead Consortium Member**"). Responses must enable the Ministry to assess the overall Consortium.

For the avoidance of doubt, the Consortium does not necessarily need to include a KSA national partner or KSA incorporated entities; however, Consortium members should note that, pursuant to Article 17 of the Implementation Regulations, the members of the Consortium that are part of a successful bid for the Project are required to incorporate a legal entity in KSA, with the shareholdings of each member in that legal entity being equal to the members' interests in the Consortium. The Exploration License is then required to be issued to the KSA-incorporated legal entity, within the period prescribed by the Ministry.

Proposals submitted by Consortiums must include the following:

- 1. Details of the arrangement to establish the consortium (maximum 500 words).
- 2. Proposed percentage shareholding and governance rights of each member in the Consortium.
- 3. The elements of the Proposal and the wider Project for which will each Consortium member be responsible.
- 4. Confirmation statement signed by all proposed members of the consortium (in the form set out as Appendix 2 of the Application Form).

In responding to the Minimum Qualification Criteria on behalf of the Consortium, technical and financial requirements may be satisfied by separate (and not all) Consortium members. The identity of the relevant Consortium member satisfying the relevant requirement must be indicated clearly in the relevant response.





6. Other Terms of the Proposal Submission Rules

6.1 Documents and Information

This Information Memorandum is and shall remain the property of the Ministry and is provided to the bidders solely for the purpose of preparing and submitting their Proposal.

The provisions of this section shall also apply to Proposals and all other documents submitted by the bidders in relation to their Proposals, and the Ministry will not be under any obligation to return to the bidders any bid, document or any information provided along therewith.

6.2 Proposal Submission Rules

Submissions must be received no later than the Proposal Submission Deadline and shall be deemed to be the bidder's binding offer with respect to the award of the Exploration License.

Bidders are required to prepare their Proposals in the English language and submit their Proposal electronically via email to miningbidding@mim.gov.sa.

The Ministry will provide written acknowledgement of receipt of each submission, indicating the time and date of such receipt, as soon as is reasonably practicable.

The Ministry may, in its sole discretion, extend the Proposal Submission Deadline, by issuing an amendment to the Proposal Submission Rules that is made available to all bidders.

6.3 Costs of Proposal

The bidders shall be responsible for all costs and expenses associated with the preparation of their Proposal and their participation in the Licensing Round. The Ministry will not be responsible or in any way liable for such costs and/or expenses, regardless of the outcome of the Licensing Round.

6.4 Verification of information by the Bidders

By submitting a Proposal, each bidder is deemed to have:

- (1) made a complete and careful examination of the Information Memorandum and unconditionally and irrevocably agreed and accepted the terms thereof;
- (2) reviewed all relevant information provided by the Ministry or SGS as may be relevant to the Proposal;
- (3) undertaken their own review of any information provided in the Data Room and which is publicly available, taken any professional advice they deem appropriate and accepted the risks of inadequacy, error or mistake of the information provided in this Information Memorandum or furnished by or on behalf of the Ministry relating to any of the matters related to the Licensing Round;





- (4) satisfied itself on all matters regarding the Licensing Round and the submission of the Proposal, in accordance with this Information Memorandum and the Mining Regime (including in relation to the performance of any obligations);
- (5) acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in this Information Memorandum shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations and loss of profits from the Ministry, or a ground for termination of the Exploration License by the Successful Bidder; and
- (6) agreed to be bound by and to comply with the terms of the undertakings provided by it.

The Ministry shall not be liable for any omission, mistake or error in respect of any of the information provided or on account of any matter or thing arising out of or concerning or relating to the Information Memorandum or the linked documents, including any error or mistake therein or in any information or data given by the Ministry.

6.5 Information Requests, Verification by the Ministry and Disqualification

The Ministry reserves the right to verify all statements, information and documents submitted by the bidder in response to the Information Memorandum, and to request any further information it requires in order to make an informed assessment of any Proposal. The bidder shall, when so required by the Ministry, make available all such information, evidence and documents as may be reasonably requested by the Ministry. A bidder is encouraged to provide a written response to such request or clarification promptly and in all cases, within five (5) business days. Any such verification or lack of such verification by the Ministry shall not relieve the bidder of its obligations or liabilities hereunder or under the Mining Investment Law and its Implementing Regulations nor will it affect any rights of the Ministry thereunder.

The Ministry reserves the right to reject any Proposal in the event that any of the following occurs:

- a. at any time a misrepresentation is made by the relevant bidder or the Ministry becomes aware of any such misrepresentation;
- b. the bidder does not provide, within the time specified by the Ministry, any supplemental information requested by the Ministry to complete its evaluation of the Proposal; or
- c. any act or omission of the bidder which results in violation of or non-compliance with this Information Memorandum, or any other document referred to therein or issued pursuant thereto or the Mining Regime and any other applicable laws relevant for the award process.

Any rejection of a Proposal under the above terms may lead to a disqualification of the bidder for bidding in any stage of the Licensing Round or any other Licensing Round(s) conducted by the Ministry for a period of five (5) years commencing from the submission date of the Proposal or any other earlier date specified by the Ministry.



6.6 Non-Compliant Proposals

Notwithstanding Section 6.5, bidders may submit non-compliant Proposals which depart from the terms set out in this Information Memorandum, including without limitation, the various requirements set out in Section 5. However bidders are advised that in evaluating Proposals, preference will be given to compliant Proposals and any non-compliant Proposals will only be considered when there is demonstrable and substantial commercial or technical benefit to the Kingdom, such assessment to be made solely at the Ministry's discretion.

6.7 Amendments to this Information Memorandum

At any time prior to the Proposal Submission Deadline, the Ministry may, for any reason, whether on its own initiative or in response to clarifications requested by a bidder, amend this Information Memorandum.

Any amendment to this Information Memorandum shall be made in writing and shall be made available to all bidders. Any such amendment and shall be deemed as an integral part of this Information Memorandum.

In order to provide the bidders reasonable time to take into account any such amendment, or for any other reason, the Ministry may, in its sole discretion, extend the Proposal Submission Deadline.

6.8 Modifications/Substitutions/Withdrawal of Proposals

A bidder may modify, substitute or withdraw its Proposal after submission, but prior to the Proposal Submission Deadline.

No Proposal shall be modified, substituted or withdrawn by the bidder on or after the Proposal Submission Deadline, unless the modification, substitution or withdrawal has been expressly requested by the Ministry.

6.9 Rejection of Proposals

Notwithstanding anything contained in this Information Memorandum, the Ministry reserves the right to reject any Proposal and/ or to annul or elect not to proceed with the Licensing Round and reject all Proposals at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefor.

Without prejudice to the generality of the foregoing, the Ministry reserves the right to reject any Proposal based on any conditions specified in this Information Memorandum, including without limitation, the following:

- a. the relevant Proposal has not been submitted with all the information and details listed as being required in this Information Memorandum; or
- b. the relevant Proposal is incompliant with the terms of this Information Memorandum.





6.10 Validity of the Proposals

A Proposal must be and remain valid for a period of one hundred and eighty (180) days from the Proposal Submission Deadline.

If the Successful Bidder is not announced within of one hundred and eight (180) days from the Proposal Submission Deadline, the Licensing Round shall be annulled.

6.11 Changes affecting Bidders

Upon submission of the Proposal, any changes of information which have been submitted by the bidder must be immediately communicated to the Ministry.

6.12 Fraud and Corrupt Practices

Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Licensing Round and subsequent to the grant of the Exploration License. Notwithstanding anything to the contrary contained herein, the Ministry may elect to reject a Proposal and/or revoke the Exploration License, without being liable in any manner whatsoever to the bidder, Reserve Bidder, or the Successful Bidder, as the case may be (each a "**Relevant Bidder**"), if the Ministry determines that the Relevant Bidder has, directly or indirectly or through an agent, engaged in Corrupt Practices, Fraudulent Practice, Coercive Practice, Undesirable Practice or Restrictive Practice as part of the Licensing Round.

Without prejudice to the rights of the Ministry hereinabove and the rights and remedies which the Ministry may have under the Exploration License, or otherwise if a Relevant Bidder is found by the Ministry to have directly or indirectly or through an agent, engaged or indulged in any Corrupt Practices, Fraudulent Practices, Coercive Practices, Undesirable Practices or Restrictive Practices during the award process, or after the grant of the Exploration License, such Relevant Bidder shall not be eligible to participate in any Licensing Round undertaken by the Ministry for a period of five (5) years from the date the Ministry becomes aware of the same.

For the purposes of this Information Memorandum, the following terms shall have the meaning hereinafter respectively assigned to them:

Corrupt Practice means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Licensing Round (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Ministry who is or has been associated in any manner, directly or indirectly, with the Licensing Round, or at any time prior to the expiry of 1 (one) year from the date such official resigns or retires from or otherwise ceases to be in the service of the Ministry, shall be deemed to constitute influencing the actions of a person connected with the award process);





Fraudulent Practices	means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the award process;
Coercive Practices	means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the award process;
Undesirable Practice	means
	i. establishing contact with any person connected with or employed or engaged by the Ministry with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the award process; or
	ii. violating of the Mining Regime or any other applicable laws; and
Restrictive Practice	means forming a cartel or arriving at any understanding or arrangement among other bidders with the objective of restricting or manipulating a full and fair competition in the award process.

6.13 Correspondence

Unless otherwise provided in this Information Memorandum, all communications and correspondence from bidders to the Ministry in connection with the Licensing Round prior to the award of the Exploration License must be in English and submitted via email to miningbidding@mim.gov.sa.

For the avoidance of doubt, clarifications relating to the Information Memorandum should be sent by bidders to the Ministry in accordance with Section 5.11.

6.14 Governing law

The Licensing Round shall be governed by, and construed in accordance with, the laws of the Kingdom.

6.15 Rights of the Ministry

The Ministry, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to:

- a. suspend and/ or cancel the Licensing Round and/or amend and/or supplement the award process or modify the dates or other terms and conditions relating thereto;
- b. consult with any bidder as it may deem fit in connection with the Licensing Round;
- c. seek clarification of any Proposal, to interview, or to hold discussions with any bidder at any time after the Proposal Submission Deadline;





- d. retain any information and/ or evidence submitted to the Ministry by, on behalf of, and/ or in relation to any bidder; and/or
- e. independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any bidder.
- f. establish the rules and procedures governing the bid preparation, submission, evaluation, and selection processes;
- g. cancel or modify the terms and conditions of Proposal Submission Rules and/or cancel the evaluation process at any stage;
- h. select the Successful Bidder and Reserve Bidder;
- i. appoint an Evaluation Committee;
- j. use the Transaction Advisory Team and/or any third-party consultants to assist with any aspect of the Proposal submission, evaluation, selection, and/or negotiation processes; or
- k. waive any deficiency, irregularity, or omission in any Proposal provided that such waiver does not materially affect the substance or validity of the tender process as outlined in this Information Memorandum.

By submitting a Proposal, a bidder agrees to release the Ministry, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Licensing Round and waive, to the fullest extent permitted by applicable law, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.

6.16 Bidder Acknowledgements

In addition to the acknowledgments set out in Section 6.4, by submitting a Proposal, each bidder acknowledges the following:

- a. neither the Ministry nor its representatives makes any express or implied representation or warranty as to the completeness, accuracy, currency, reliability or suitability of this Information Memorandum and none of such persons will have any liability to the bidder or its representatives relating to or arising from their use of any information or for any errors therein or omissions therefrom nor will they be obliged to update or correct any inaccuracy in the information or otherwise provide additional information;
- b. reliance upon or use of the information contained in this Information Memorandum is at the sole risk of the bidder and its representatives;
- c. the Ministry will not be under any legal obligation or have any liability to the bidder of any nature whatsoever by virtue of the instructions in this Information Memorandum;





- d. the Ministry will not be deemed to have accepted any offer, and no contract or agreement with respect to the Site would be deemed to be entered between the Ministry and any bidder, unless and until the Exploration License has been executed by the Ministry and awarded to the Successful Bidder; and
- e. the Ministry has the right at any time and in its absolute discretion to terminate, change or delay the award process and terms and the Ministry will not be obliged to accept any or the highest or best offer and may, at any time and in its absolute discretion, request that the bidder return or destroy any document or information provided to it in connection with this Information Memorandum.



