

Geomining Geological and Mining Consultant







About Geomining

Geological and Mining Consultants Company (GMC) was founded in 2012 as a private partnership, specializing in geological and raw materials investigation consultancy for the building materials sector, with a specific focus on the cement industry. The company leveraged the extensive experience of its founder and Managing Director, who had over 30 years of expertise in the cement sector. During his career, he held the position of Head of Geology and Mining at Lafarge Egypt and Orascom Construction Industries (Cement Division), overseeing geological studies and raw materials operations across the region. His earlier roles included work at Assiut Cement Company and Helwan Cement Company.





About Geomining cont.

• In 2016, GMC embarked on an ambitious growth plan, aiming to expand into related sectors by capitalizing on the technical know-how of its partners and executives. As part of this strategy, the company restructured itself as a joint stock entity named GMC SAE. It also formed a strategic partnership with Anchor Building Materials SAE, represented by Dr. Ahmed Moharram. This collaboration allowed GMC to synergize with the ACE Moharram Bakhoum Group, enhancing its capabilities through engineering and project management expertise. The result was a broader spectrum of developmental and engineering solutions.







Geomining ISO Certificates





CERTIFICATE

iCAA, international Conformity Assessment Authority awards a certificate to

Geomining Geology & Mining Consultant

This certificate confirms the application and further development of an effective

Occupational Health and Safety Management Systems

Complying with the requirements of Standard ISO 45001:2018

Scope: Geological and Mining Consultations, Studies, Drilling Operations, Surveying, Factory Setup Advice, Mining Services, Contracting, Building and Raw Material Supply, and Export of Mining Products like Clinker and Cement.

Technical Areas

IAF Code(s) "32"

Address: Duplex Villa Number 403, 503, Fourth Floor, Building Number 15, Block Number 6, Third

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Sector, Zahraa El Maadi, Cairo, Egypt Registration No.: ICAAEGYO10033

Date of initial issue: 23/01/2024

Valid until: 22/01/2025

Expiry date: 22/01/2027

Cairo, 23/01/2024







EP-5-19-1-1 0/01-03-2023

CERTIFICATE

iCAA, international Conformity Assessment Authority awards a certificate to

Geomining Geology & Mining Consultant

This certificate confirms the application and further development of an effective

Quality Management Systems

Complying with the requirements of Standard ISO 9001:2015

Scope: Geological and Mining Consultations, Studies, Drilling Operations, Surveying, Factory Setup Advice, Mining Services, Contracting, Building and Raw Material Supply, and Export of Mining Products like Clinker and Cement.

Technical Area:

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Cairo, 23/01/2024



The validity of this certificate will be maintained through annual rveillance audits and a renewal audit every three years. To Please write the Registration No. The format of the dates on th







FP-5-19-1-1.0/01-03-2023



CERTIFICATE

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Geomining Geology & Mining Consultant

This certificate confirms the application and further development of an effective

Environmental Management Systems

Complying with the requirements of Standard ISO 14001:2015

Scope: Geological and Mining Consultations, Studies, Drilling Operations, Surveying, Factory Setup Advice, Mining Services, Contracting, Building and Raw Material Supply, and Export of Mining Products like Clinker and Cement.

Technical Area:

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Cairo, 23/01/2024











Structure and Business lines

- Geomining was established with an initial focus on geological research to the cement industry.
- The company's proficiency stems from a renowned experience of its founders and executive management that spans the largest and most intricate cement projects in Africa, Europe, Asia, and the Middle East, over 30 years.

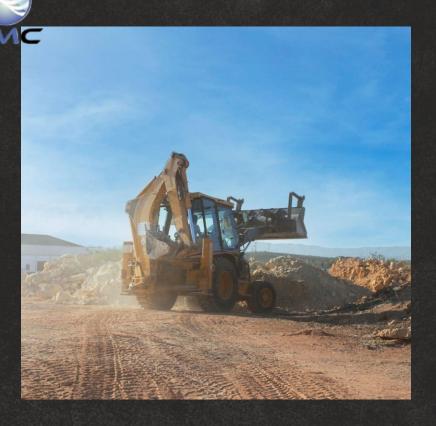




Structure and Business lines

Rapid operational expansion into full quarry management and processing and strategic intent to expand geographically and grow processing/manufacturing base

Raw Materials Exploration	 Aerial photogrammetry and preliminary exploration
	Topographic survey
	Geophysical Measurements
	Overall Investigation and Design of Core Drilling Grid
	Sample Preparation and Chemical Analysis
	Distribution Maps
	Block Model
	Estimation of Elements Distribution
	Reserves Calculation
Mining Plan	Long, medium and short-term planning
	Rehabilitation plan
Quarry Management /Operation and Minerals Supply	Quarry management and operation for the cement industry
	 Mining and supply of raw materials for the building materials industry in general
Minerals/Buil ding Materials Processing and Manufacture	Developing aggregates quarries and aggregates' crushing faciliti
	Processing building materials for industrial use (prospected)
	Industrial development of cement plants (prospected)



Raw Material Exploration

Objectives

The primary objectives of the exploration are to understand and achieve the following:

- Understand the main geological features of the deposit area.
- Provide reliable information of the deposits quality and quantity.
- Ensure steady supply of raw materials with regards to quality and quantity.
- Ensure optimum utilization of resources with respect to lifetime, costs and waste.
- Ensure that the mining plan is matching with the environmental assessment plan.





Raw Materials Exploration: Aerial Photogrammetry

Aerial images help obtain early regional information about the studied area.

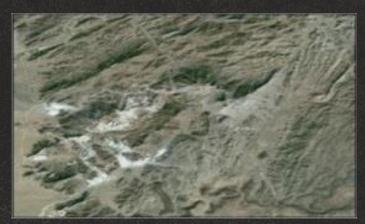


Photo: image of a project area in Saudi Arabia.

Defining the occurrence and relation between different formations is part of the field study.



Photo: Marble deposit of a project in Saudi Arabia.



Preliminary Exploration

- The main target of the preliminary exploration is to judge whether the deposit is promising or not and whether we can go further or look for other areas.
- A team of expert geologists visit the proposed deposit area and record all geologic features.
 Representative samples are collected over a wide range in a way that reflects the situation of the deposit.
- The surface weathered part of the deposit is removed or trenches are made to remove the surface weathered part and collect the desired samples
- Reveals to some extent the nature and homogeneity of the deposit, the lateral and vertical variation and hence the suitability for industrial needs.

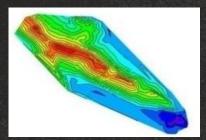


Photo: Trench sampling during the preliminary exploration for a project in Iraq.

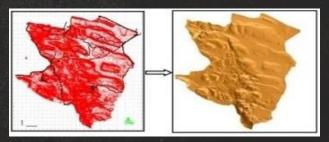


Topographic Survey

- A precise topographic survey of the prospecting area is carried out, then contour maps are prepared with a scale up to 1:1000, and Digital Terrain Modeling (DTM) is used to model the exact topography of the studied area.
- A precise survey should accurately reflect the terrain and accessibility and help to design the roads through the area.
- Necessary for calculating the reserve of the deposit later on, whereby it gives precise information about the variable thickness of the deposit due to the topography profile.
- Contouring is done using reliable computer software.



Topographic contour map of a limestone deposit for a project.



Topographic contour map of processed into Digital Terrain Model prior to the calculation of the deposit reserve

Geophysical Measurements

- Geophysical measurements are carried out to provide an insight into the deep characteristics of the deposit, and define the boundary between strata.
- Give a fast and reliable image about the bottom of each of the penetrated beds.
- Indicate the potential existence of under ground water, and if this exists economically in a way that can be used in the production process. Very shallow underground water can represent a challenge for mining and blasting operations.







Photos: Resistivity measurements for an new project in Iraq



Overall Investigation and Design of Core Drilling Grid

- Contouring is done using reliable computer software Having drawn an idea about the quality of the deposit and the terrain of the area, the core drilling grid is designed, with suitable spacing typically ranging between 100 to 400 m.
- In case of fluctuation in the quality of the deposit as revealed from the initial core drilling grid, infill drilling is made in between to minimize the spacing between the previously collected boreholes.
- Core drilling is performed at the predetermined locations using rotary drilling rigs with continuous sampling along the complete depth of the bore hole.

Work is performed as follows:

- 1. Air or fresh water circulation is used during the boring process to flush the drilling cuttings away, and to cool-down the drilling pits.
- 2. Continuous cores of all kinds of strata are recovered and special drilling pits, short drilling runs with reasonable diameter of samples (minimum 76 mm), are used to ensure high recovery (not less than 95%).
- 3. Casings are installed inside the bore holes especially at upper layers (if necessary).

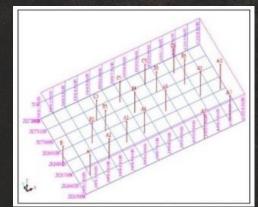


Image: Core sample boreholes grid of a project in the UAE.



Overall Investigation and Design of Core Drilling Grid cont.

- 4. All extruded samples are placed in sequence within standard wooden boxes with the scale, color chart, and labels showing the project name, location, and depths to the top and bottom of each core run.
- 5. Description of rock formations and borehole logs are done as drilling operation proceeds.
- 6. Sample boxes are stored for future reference.



Photo: Core drilling machine drills through limestone deposits at a project in Iraq.

Rotary drilling rig with core barrel sampler is used for best core samples recovery.



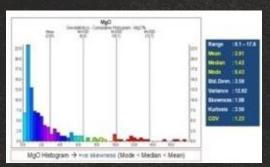
Photo: Limestone core samples from a project in Iraq.

Core samples are stored in series in wooden boxes.

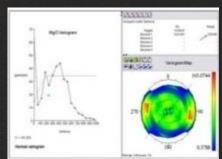


Geo-statistical Analysis

- Geostatistical analysis of data helps to measure the reliable deposit grade. to top-cut the extreme grades of undesired species which may give misleading idea about the total average of the deposit, and generally to filter the data of any misleading information.
- Results of complete chemical analysis are processed and interpreted using geo-statistical techniques to understand the deep behavior of the deposit grade.
- Geo-statistical parameters are calculated for each chemical species such as the mean, median, mode, standard deviation, variance, skewness, kurtosis and coefficient of variation (CoV).
- Histograms of each chemical species are drawn which reflect the uniformity and sorting of the deposit grade.
- Variogram maps are prepared to infer the direction of maximum continuity of the deposit grade in three dimensions, which in turn is the desired extension of the deposit.



Example of the geostatistical analysis of raw materials using histograms for MgO from a project in KSA.

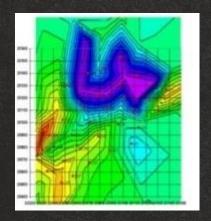


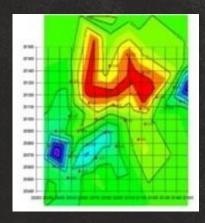
Example of the geo-statistical analysis of raw materials using variogram mapping for MgO in a marble deposit in KSA.



Distribution Maps

After refining the data through the geo-statistical analysis phase, iso-chemical distribution maps for the deposit grade are prepared for each chemical species, which help to give rapid visualization of the grade classification, and indicate the ranges of each chemical species.



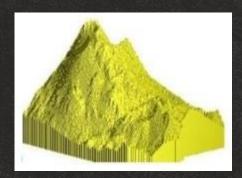


Examples of iso-chemical maps for a project in Algeria.

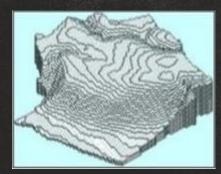


Block Model

- The deposit body is modelled, using the topographic survey works done, in the three dimensional space, packed inside a number of blocks, each having a definite block dimension.
- The block dimension is defined according to different parameters such as: the vertical and horizontal
 uniformity of chemical analysis, the roughness of topography of the deposit area, the expected
 bench height, the percentage of storage efficiency of the deposit body inside the block model, and
 the annual consumption of the material during operation.



Block model of a project in KSA.

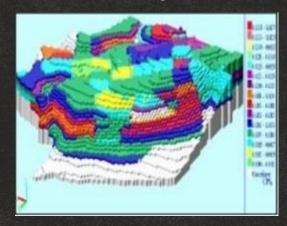


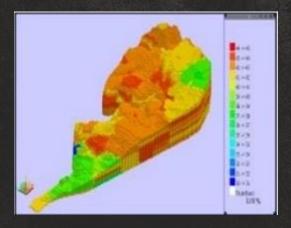
Block model of a project in Algeria.



Estimation of Elements Distribution

- A database that contains all the data obtained for boreholes is prepared: collar data, chemical
 analysis of all samples with co-ordinations, any existing structural elements, and survey points.
- The database is used accompanied with the block model to make estimations of the chemical composition of all blocks using different estimation techniques.
- After estimation of the whole model, the grade of any part of the deposit can be inquired with precision up to a single block dimension



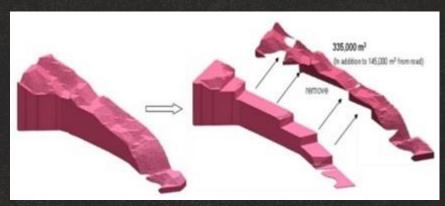


Samples of block models created for new projects, after the estimation of the grades of each block using the database of drilling and survey data.

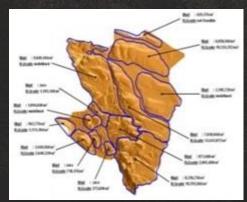


Reserve Calculation

- The block model can be perfectly used to calculate the reserve of the whole or any part of the deposit body; bench by bench, above or below a certain level or any specified part of the deposit.
- Another material volume-calculation is that of the cut and filling activity during quarry opening works. The calculation depends in this case on modelling the two situations before and after the activity to calculate the material extracted/dumped. This could be done before the physical work to estimate the equipment, budget and time required to get the job done



Example of the cut and filling calculation of the quarry opening activity of a project in the UAE.



Reserve calculation of deposits in a mining lease of a project in Pakistan. The area was needed to be divided into (13) separate zones.

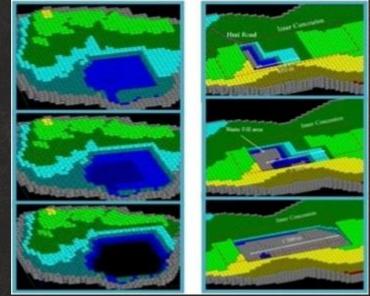


Mining and Rehabilitation Plan

• Results from the previous exploration and overall investigation phase are utilized to determine the quarry management plan:

Long-term plan To utilize the available raw material with minimum waste, the LTP will be used after

finalizing the overall study report.



Long-term planning of limestone (left) and clay deposits of a project in Egypt.



Mining and Rehabilitation Plan Cont.

Medium-term plan

Mining and Rehabilitation Plan

A five-years plan is applied subject to the change in the progress of the quarry and the needs of the production process. This plan concentrates on the cost of the materials extraction, cost of the corrective materials, available extraction and transportation equipment and the quality required as per the market needs.

Short-term plan

A yearly plan that should be aligned with the annual overall objectives and targets. This plan is strictly applied in cooperation with the quality control team and affects the daily production process and subsequently the annual targets. Short term planning is carried out by collecting powder resulting from drilling machines equipped by automatic samplers, and apply full chemical analysis on it before blasting. The result of the chemical analysis helps to know the definite quality of the prospecting blasting within the following few weeks and help adjust the quarry management plan and determining amounts and quantities of correctives.

Rehabilitation plan

The process of returning the land in a given area to some degree of its former self. Rehabilitation aims to minimize and mitigate the environmental effects of mining activity which involves movement of significant volumes of rocks.



Geomining Previous Projects

1) Geological Investigation / Raw Material Assessment / Mining Plan for the Egyptian Cement Factory









Geomining Previous Projects

2) Supply of Basalt to El Sewedy Cement Factory



3) Geological investigations, Raw material assessment and Mining Plan for Dolomite quarry at Attaqa mountain for Reliance Company





Geomining Current Projects

1) Total Management of Lafarge Basalt Quarry



Lafarge Clay Quarry Km 52

2) Total Management of



ORASCOM

3) Total Management of Lafarge Clay Quarry Km 12

4) Supply of Basalt for Orascom Company For RTL (Train)



Geomining Current Projects

5) Supply of Basalt for GlassRock company





6) Supply of Basalt to ASCOM Geology & Mining



7) Sinai Cement Total Quarries Operation

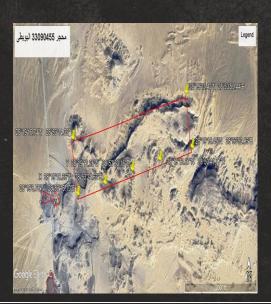


Geomining Current Projects

8) Geomining Basalt crusher at Bahariya Oasis









Our Clients

















ORASCOM[®]



Quarry Management and Raw Materials Supply Cont.

- The company currently has a significant backlog of quarry management and supply contracts for different raw materials used as feedstock for the cement and glass industries.
- We now operate the clay quarries supplying a monthly tonnage of more than 120,000 tons of clay used n the production of 8.5 mtpa of cement by Lafarge Egypt.
- Our quarry management and operation contracts involved the management and supply of 540,000 tons of sand used for cement manufacture in Egypt.
- Other projects involved the supply of gypsum, iron ore, kaolin, anhydrite, basalt, feldspar and serpentine for building materials' manufacturers.
- We have prospects to expand our quarry management and raw materials supply operations geographically and spanning different products/minerals such as iron ore, manganese, basalt, kaolin, limestone, clay, marlstone, etc.



Minerals/ Building Materials Processing and Manufacturing

- One of the important lines of business of GMC is the operation of quarries, and processing and supply of processed minerals/building materials for different industries.
- We currently own and operate facilities that produce more than 450,000 cubic meters per annum of crushed aggregates of different sizes, for use in the construction sector and other industries.
- Located in Bowiti Oasis, 350 km from Cairo, our basalt quarry and crusher, produces a daily volume of 1,500 cubic meters of basalt aggregates, of sizes 1, 2, and 6 for the construction sector mainly, in addition to sizes 2-12 for glass manufacturing.
- We are currently in the process of studying the expansion into minerals processing/beneficiation to produce processed minerals such as kaolin and ground quartz.

Basalt crushing, and minerals processing are amongst our main lines of business...









Cement Plant Operations and Technical Assistance

- The significant experience of our executives, managers and shareholders spans more than 30 cement plants in Africa, Asia and Europe.
- This vast unprecedented experience is capitalized upon by providing technical assistance to operating teams of cement plants or stepping in to manage the quarry and mining operations of newly-developed plants or existing ones willing to turnaround operations and improve operational efficiency.
- The experience and credentials of our team and our human resource network in the field of cement manufacturing enables us to call upon the best personnel in the field and provide full cement plant operations, or a wide spectrum of technical support.
- Our technical support services in the field of raw materials and mining management covers the following:
- 1. Follow-up on the mining plan and its actual impact on the produced raw mix.
- 2. Check the application of short and long-term plans every 1-2 years.
- 3. Improving the quality of the raw material and enabling cost optimization by further geological investigation for the existing deposits and/or other external deposits.
- 4. Training support for existing and new staff..



Sinai Cement Total Quarries Operation (Limestone / Clay / Sand / Basalt)



- Starting from 1st of January 2022 GMC start the full Total Operations Management for Sinai Cement quarries include limestone, clay, Sand include mining plan
- With Daily production 15k ton limestone, 7K ton Clay and 500ton Sand
- 4 Bulldozer, 4 Jack Hummer, 32 Truck, 9 loader and 4 drilling Machine
- All drilling and blasting operations







Strategic Alliances

GMC is in a strategic alliance with ACE Moharram Bakhoum Group, in which the alliance would complement the developmental side of GMC's activities through providing different engineering and project management tasks necessary for the development of greenfield projects as well as expansions and rehabilitations of existing ones.

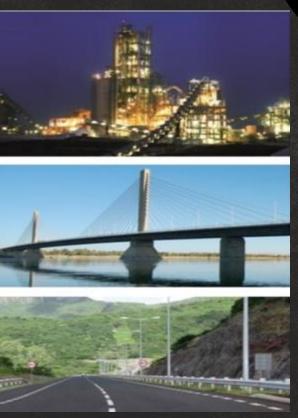
These services would generally cover:

- Development and project management (PMO office tender and procurement management contracts formulation and administration construction management cost management etc.). Planning and engineering design (structural civil MEP architectural), and relevant tender documents preparation.
- Construction supervision.
- Geotechnical investigation, foundation engineering, and soils and materials testing and quality assurance.



Strategic Alliances Cont.

ACE Moharram Bakhoum is a project management and engineering group established in 1950 that has a long-standing experience in large, complex and demanding infrastructure, transportation, industrial, irrigation, residential, and commercial projects. ACE has a projects' list that encompasses thousands of projects, thousands of kilometers of roads, a considerable list of bridges, airports, wastewater treatment plants, multi- purpose buildings and industrial complexes. The group has a workforce of around 2,100 employees through 12 branches in 11 countries and with its projects spanning around 40 countries...





Past Experiences

Track Record

30+ 15+ 10+
Projects Countries Bn US 5
Worth of Projects

The accumulated experience of our executives, management and shareholders covers raw materials/quarries management, plant development/operation and intricate geological studies for cement ants and other ding materials s. This covers more than 15 countr Africa, Europe and with mor US\$ 10 billion of investments.



Past Experiences

Track Record

30+ Projects

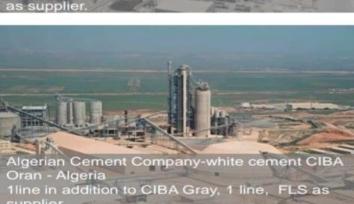
15+
Countries

10+b

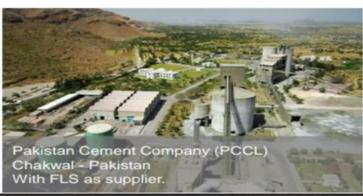
Worth of Projects

30+











Track Record

30+

Projects

15+

Countries

10+b

US \$ Worth of Projects

30+

Vear







With Holcim partnership and FLS as supplier.

Calabar - Nigeria





Track Record

30+ Projects

15+
Countries

10+b

Worth of Projects

30+







Geological investigation





30+

Projects

15+

Countries

10+b

US \$
Warth of Projects

30+

Year











Track Record

30+

Projects

15+

Countries

10+b

US \$ Worth of Projects

30+

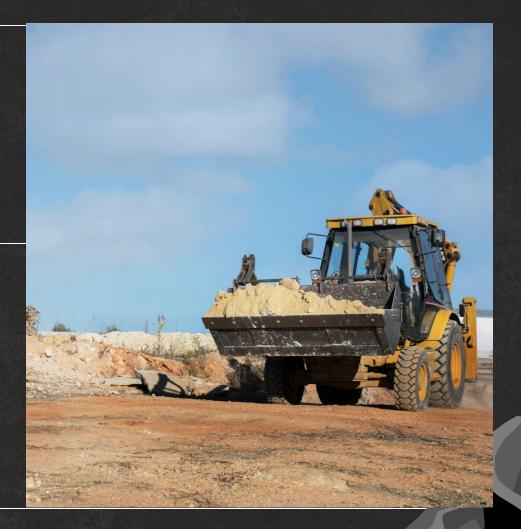








Key Personnel





Gel. Mohamed Hosny

Position: Chairman and CEO

Experience: Position: Company:

Geologist 1980 - 1982Helwan Cement Company, Egypt Geologist 1982 - 1983Assiut Cement Company, Egypt Limestone Quarry Operation – Section Head 1984 – 1989 Assiut Cement Company, Egypt **Limestone Production Manager** 1990 - 1992Assiut Cement Company, Egypt Cement Mills Production Manager Assiut Cement Company, Egypt 1992 - 1992Main Quarries Production Manager 1993 - 1993Assiut Cement Company, Egypt Production Manager – Line 1 (1.5 m Tons) 1994 - 1995Assiut Cement Company, Egypt Project Manager, Basalt Quarry and crushing Plant 1995 - 1996Orascom Egypt



Gel. Mohamed Hosny

Position: Chairman and CEO

Experience: Position: Company:

1996 – 2001 Raw Material and Mining working Director Egyptian Cement Company

2001 – 2007 Group Director For Raw Material and Orascom Egypt

Mining Operations

2007 – 2012 Group Director Of Geology and Mining Lafarge Egypt

Operations

2012 – Present Founder And Managing Director GMC (Limited Partnership)









Consultant Expert Certificate

Mohamed Hosny Mohamed Mahmoud Makram

Reg No: 15769 Class No : 2339 **Division: Geology**

Certificate No: 2024/3/000093 Certificate Date: 2024/07/31 Union

Cerificate Duration: 2024/07/31 Expiry Date: 2027/07/31

Consultant Expert in the field of:

Geological Studies and Mining Projects

Scientifical Committee

Dr : Salah Elnady

Judicial guard Prof : Emad Ali Shams

Issuing Branch: General

وsspegypt@gmail.com المركبة • ٢٢٥٩١٢٥٢٠ الموقع الرسمي ، www.esspeg.org البريد الالكتروني، esspegypt@gmail.com





Gel. Ayman Abdelaal

Position: Vice President

Experience: Position: Company:

1989 – 1995 Exploration Geologist Bakka Company For Mining

And Quarrying

1995 – 1997 Geological Research Site Manager Arab Swiss Engineering Company

(ASEC)

1997 – 1999 Team Leader – Quarry Operation Egyptian Cement Company

1999 – 2006 Team Leader Quarries Exploration and Planning Egyptian Cement Company



Gel. Ayman Abdelaal

Position: Vice President

Experience: Company: Position:

Process Leader – Clays, Additives,

2006 - 2009**Exploration and Planning** Egyptian Cement Company

2009 - 2014Works Director –Quarries, Crushers

And Mobile Equipment

2014 - 2015Quarries and Production Director

2015 - 2016**Operation Director**

2016 - Present Co-Founder and Vice President

Lafarge Cement Egypt

Lafarge Cement Egypt

Lafarge Holcim Egypt

GMC (Limited Partnership)









Consultant Expert Certificate

Ayman Mohamed Abdelaal Mohamed

Reg No: 30443 **Division**: Geology Class No : 5720

Issuing Branch: General Certificate No: 2024/3/000105 Certificate Date: 2024/03/05 Union

Cerificate Duration: 2024/03/05 Expiry Date: 2027/03/05

Consultant Expert in the field of:

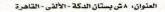
Mining Geology

Scientifical Committee Dr: Salah Elnady

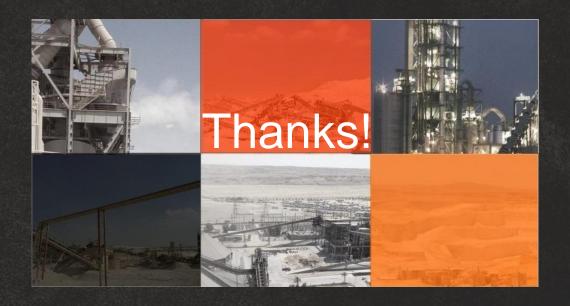
Judicial guard

Prof: Emad Ali Shams











GSK MINING & Trading COMPANY

GSK MINING COMPANY

INVEST FUTURE **IN YOUR**

ABOUT GSK MINING





GSK Mining business is a private limited business that aims to develop its operations across the Middle East and establish a position in the international market.

GSK MINING COMPANY was founded in Egypt to provide world-class mineral exploration and mining support services to mining firms primarily in Egypt, .We provide a broad range of technical services, including drilling, surveying, ore reserve estimations, orebody modelling, project management, and geology. planning for mine output, mine management, and mining designs. We handle our projects with a workforce that possesses the critical technical and managerial skills.

GSK MINING COMPANY is a pioneering mining organization founded to fulfil the kingdom's vision of creating a modern technological mining system, Targeting implementation industry for technological advances across the entire mining value chain to optimize processes and business outcomes.



To expand sustainability and establish ourselves as the best and most influential firm in the MENA area for mining, drilling, and exploration services.

To being recognized by their clients as the greatest business partner

and achieving the highest degree of excellence in exploration and mining services.

To offer and assist our clients with the best services possible at a price they can afford, together with long-lasting technical support,



while also meeting their needs and maximising their benefits.

To offer the highest safety and environmental standards to provide a secure and highly professional work environment.

Safety: Prioritise safety above anything else.

Respect: Treat with respect and human decency. **Integrity**: Keep our word and are trustworthy.

Sustainability Contribute in a constructive way to a lecting would

Sustainability: Contribute in a constructive way to a lasting world.

Excellence: Prioritise constant development in order to create a high-performing culture.

Together, we work to create a fantastic business.

Our Services

Geological Studies

Ore Body Modeling

Reserves Estimation

Surveying

Mining Plan

Drilling

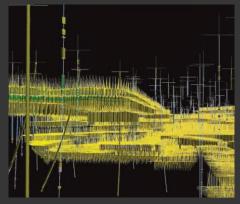
Blasting

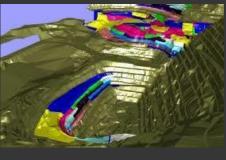
Quarries Total Management

Mines Rehabilitation Studies

Technical Consultation













Geological Studies Works

- Preliminary Raw Material Investigations.
- Overall Raw Material Investigations.
- ♦ Geological Mapping and Cross-Sections.
- Geophysics.
- Raw Mix Design.
- Structural Geology.
- Application of "SURPAC"
- Computer Aided Deposit Evaluation. (CADE)
- ❖ Drill Hole Data Base.(DHDB)
- Deposit Block Model.(DBM)
- Resource Estimation For Geological Deposits (JORC).

Preliminary Raw Material Investigations.

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Preliminary Raw Material Investigations

<u>Sequence of Operations in Exploration & Development of Reserve</u>

Reconnaissance

Geological Mapping Prospecting Geochemistry Geophysics

Preliminary

Geological Mapping Prospecting Geochemistry Geophysics Limited Drilling

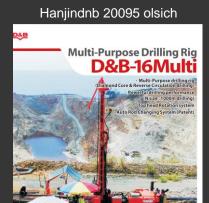
Detailed Follow up

Drilling Limited metallurgical testing

Feasibility Study

Drilling
Metallurgical Testing
Mine Design

Preliminary Raw Material Investigations





Surveying Works

- Contour Maps.
- Topographic Maps.
- Profiles.
- Cut and Fill Designing
- Traverse Network
- Grid System.
- Road Designs.
- Settlement Monitoring
- *Equipment Alignment.
- Stockpiles Volumes Calculations

Mining Planning & Quarry Design

- General Mining System.
- 🔖 Quarry Opening Plans.
- Optimal Pit Design Surpac Software.
- Design Access Roads.
- ♦ Quarry Development Mechanism And Impacts.
- Choice and Sizing OF Equipment
- Define Processes OF Quarrying.
- Production Calculations.
- *Matching Machines For Combined Operations.
- Calculate Unit Production Cost.
- *Design Long- and Short-term Mining Plans.
- Design waste dumps, Stockpiles, Ramps.
- Quarry Scheduling Optimization Plans.

Drilling Works

- Diamond Core Drilling
- *Rotary Drilling
- Reverse Circulation Drilling.
- ♦ Wire Line Drilling.
- Drilling Pattern Design.

Blasting Works

- *Management of Explosives Magazines.
- *Design Blast holes pattern.
- *Blast Hole Charging.
- Blasting Consultants.
- ♦ Drilling and Blasting Proposals.
- Quarry Benches Profiling (MDL LaserAce Burden finder).
- Blast Hole Deviation (MDL Boretrak cabled).
- Slast Monitoring (MREL High Speed Video Camera).
- *Blast Vibration and Air Pressure Measurement.
- ♦ Velocity Of Detonation (VOD) Measurement.
- Cost Optimization Study.
- ♦ Applying High Safety Rules & Regulations.

Quarries Total Management Activities

Define Applicable Quarrying Processes. Applying Master Mining Plan. (Mineshed-Surpac Software) Analysis OF Achieved Production V.S Planned

- Production.
- Managing drilling, Blasting, Loading, Hauling and dumping operations. Crushing and Conveying Operations.
- Raw Materials Quality Control
- Implement Cost Optimization Initiatives
- *Achieve High Overall Equipments Effectiveness.(O.E.E.)

Plans.

- Control Mining Fleet Idle time, Power, Fuel, Spare
- Parts and Manpower Utilization. Applying Risk Management Procedures and Mitigation

Quarries Total Management Activities

- ❖ Preparation for Detailed Rehabilitation & Closer Plans including:
- ♦ Geotechnical Studies and Slope stability.
- Designing Major closing benches, ramps as regulations considering mines reserves
- Designing the planned volumes for barriers, emergency
 - roads and entrances.
- *Mines Closer Cost breakdown Estimations
- Relevant regulatory requirements and other guidelines
- Effective consultation with key stakeholders.

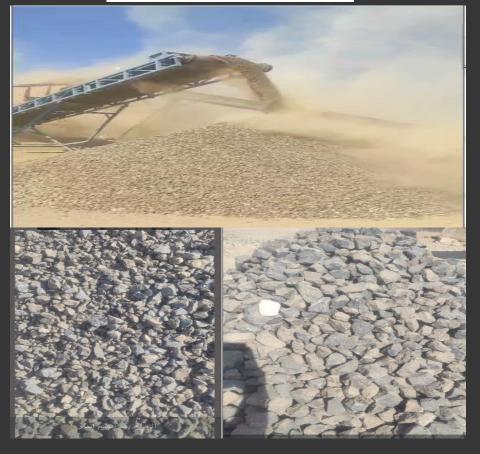
Basalt Wadi Hagul



WADI HAGUL, SUEZ



Basalt SINAI Cement



Basalt Sanai Cement

Aswan Clay

Wadi Abu Agag, Aswan



Aswan Iron ore

Wadi Abu Agag, Aswan



Zafarana Gypsum

Red Sea Gypsum

























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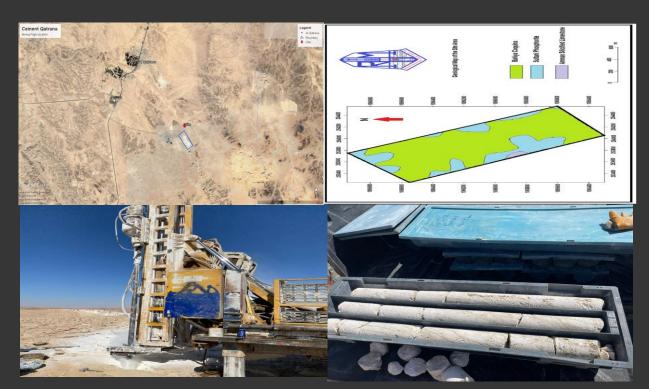
ALGHAD ALMUSHRIQ FOR MINING

ALGHAD ALMUSHRIQ Mining

*ALGHAD ALMUSHRIQ MINING COMPANY entered the Saudi Arabia Market in 2024 .We provide a broad range of technical services, including drilling, surveying, ore reserve estimations, orebody modelling, project management, and geology, planning for mine output, mine management, and mining designs. We handle our projects with a workforce that possesses the critical technical and managerial skills. GSK MINING COMPANY is a pioneering mining organisation founded to fulfil the kingdom's vision of creating a modern technological mining system, Targeting implementation industry 4.0 technological advances across the entire mining value chain to optimise processes and business

Qatrana Cement Project

Updated
Limestone
quarry Mining
Plan



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