



MINING OPPORTUNITIES IN OMAN

Sultanate of Oman

The Public Authority for Mining

2015



OUTLINES



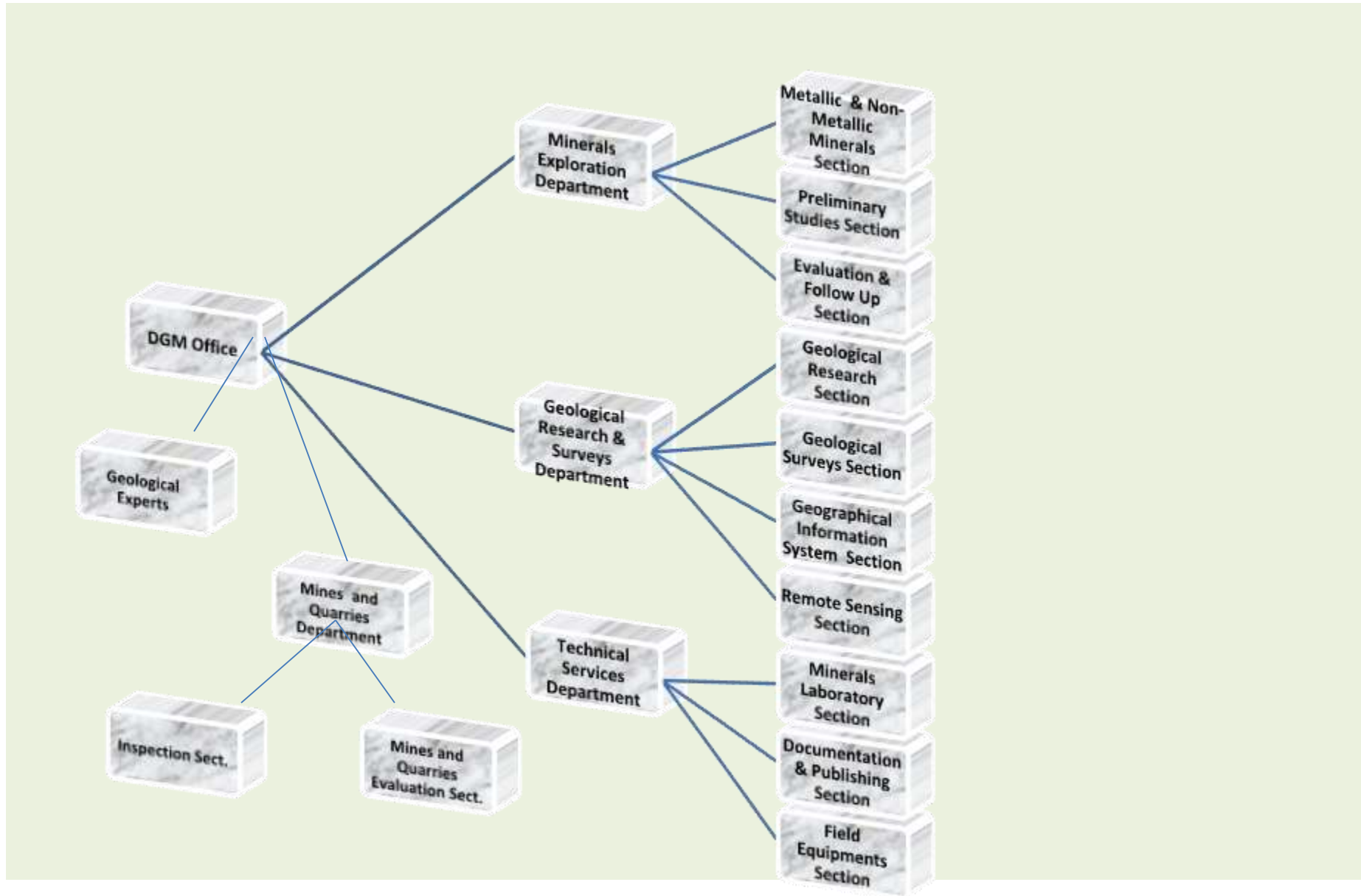
- **Oman Strategic Location.**
- **An Overview about the Public Authority for Mining**
 - The Structure of the Directorate.
 - Duties.
- **The Public Authority for Mining Support & Services**
 - Geological Maps.
 - Available Studies, Reports & Books.
 - Air Bone Surveys.
 - Minerals Laboratory services.
- **Minerals & Industrial Rocks in Oman**
 - Metallic Minerals.
 - Industrial Rocks.
- **Mining Regulation & Laws in Oman**
 - Exploration & Mining Permits.
 - New Governmental Orientations.

OMAN STRATEGIC LOCATION

- Location.
- Politic Stability.
- Friendly investment policies.
- Infrastructures.
- Availability of raw materials.



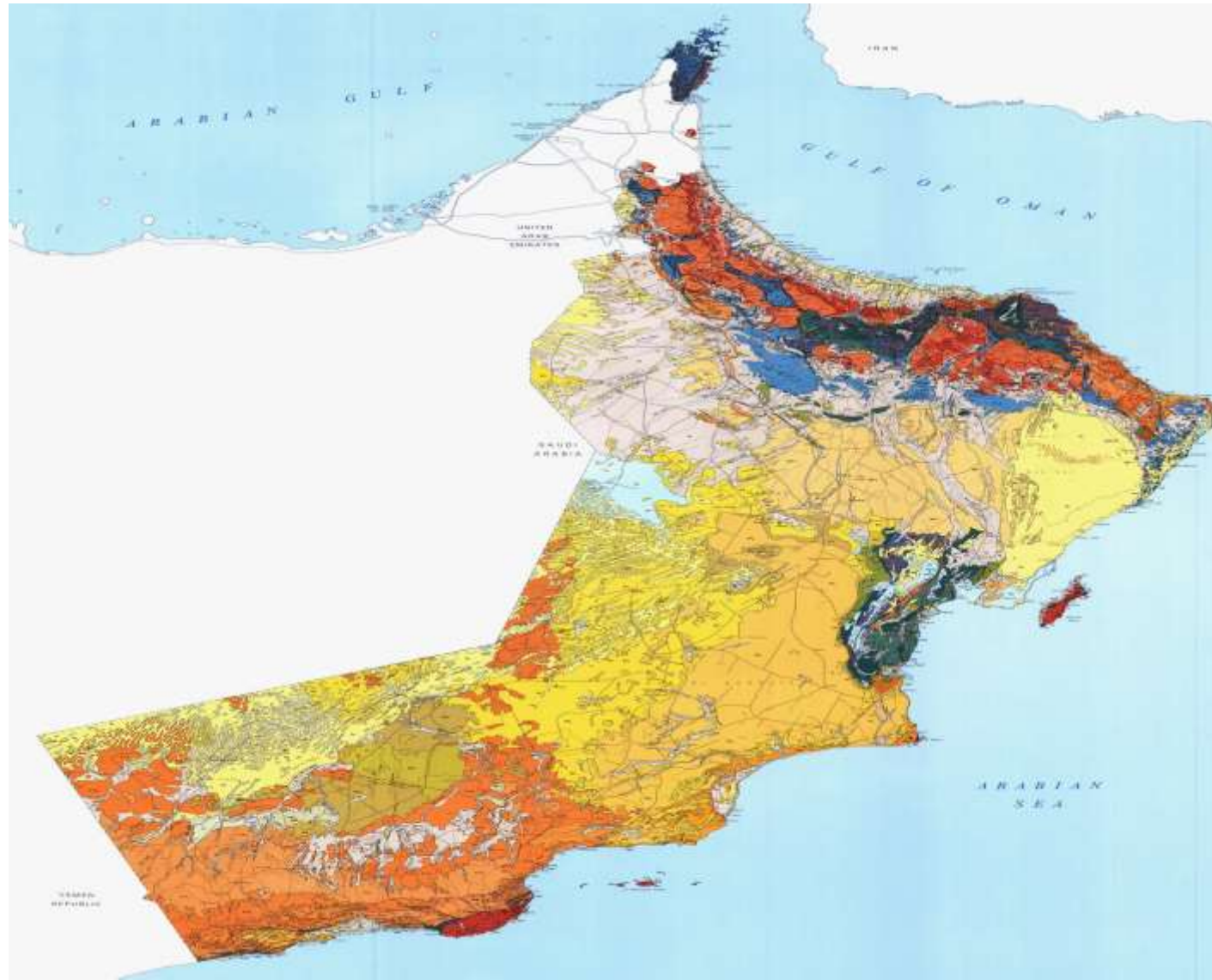
The Public Authority for Mining



THE MAIN DUTIES OF THE PUBLIC AUTHORITY FOR MINING

- Devising the strategies and the policies to develop minerals wealth in the country.
- Development and implementation of plans and studies to ensure the optimum utilization of mineral resources.
- Implementation of studies and geological researches and carry out of researches and explorations for minerals and industrial rocks.
- Dissemination of information and the geological data and facilitating access to them.
- The cooperation with various governmental agencies in the state ,the regional and the international organizations that deal with Earth sciences and the development of minerals resources.
- The Supervision of all activities related to mining researches and minerals explorations.

Oman Geological Map Scale 1:1000,000

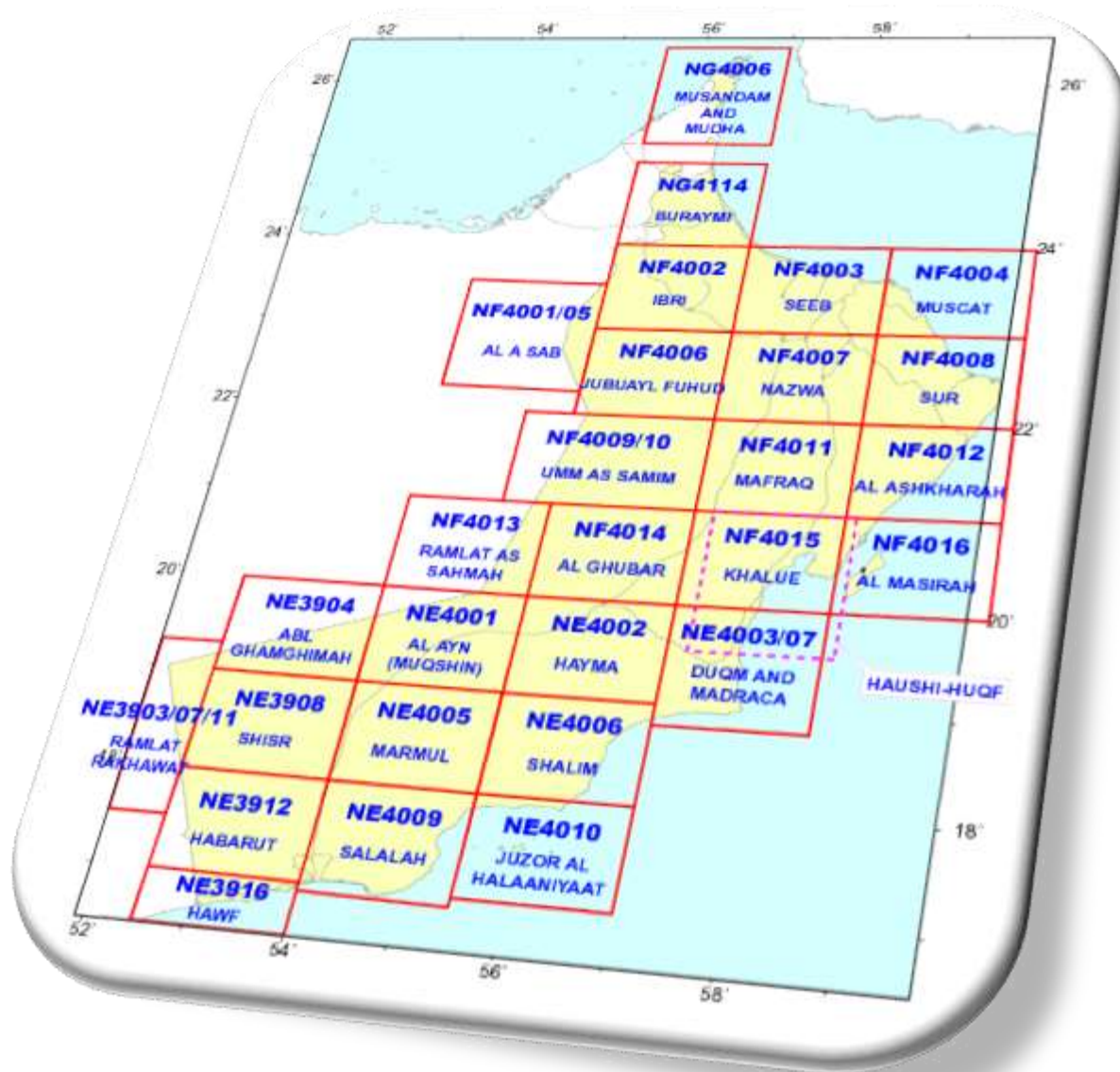


THE PUBLIC AUTHORITY FOR MINING SUPPORT & SERVICES

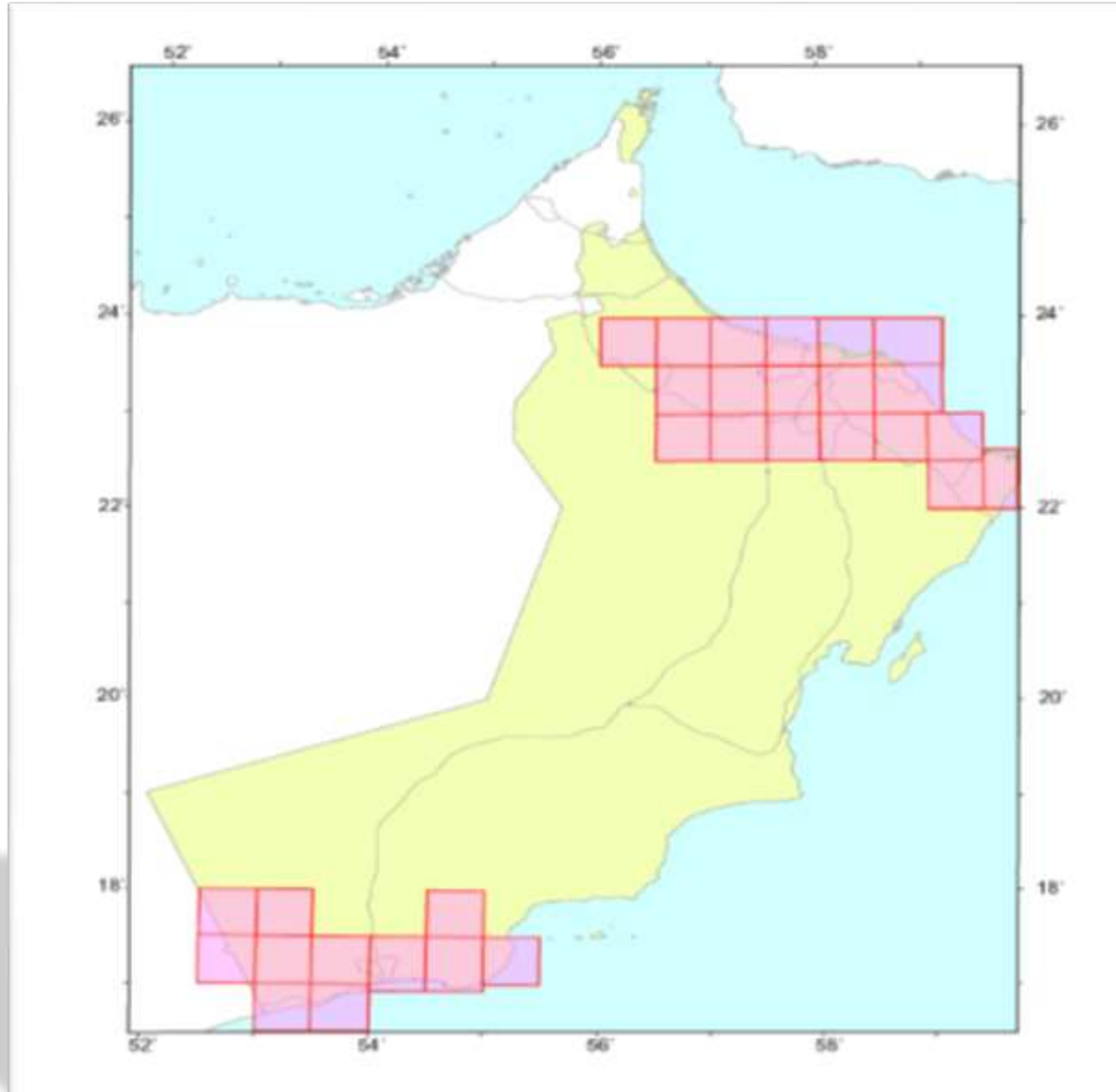
– Geological Maps

scale	No. of Maps
1:1000.000	1
1:500.000	2
1:250.000	28
1:100.000	30
1:50.000	16
1: 25.000 (Muscat tectonic maps)	8

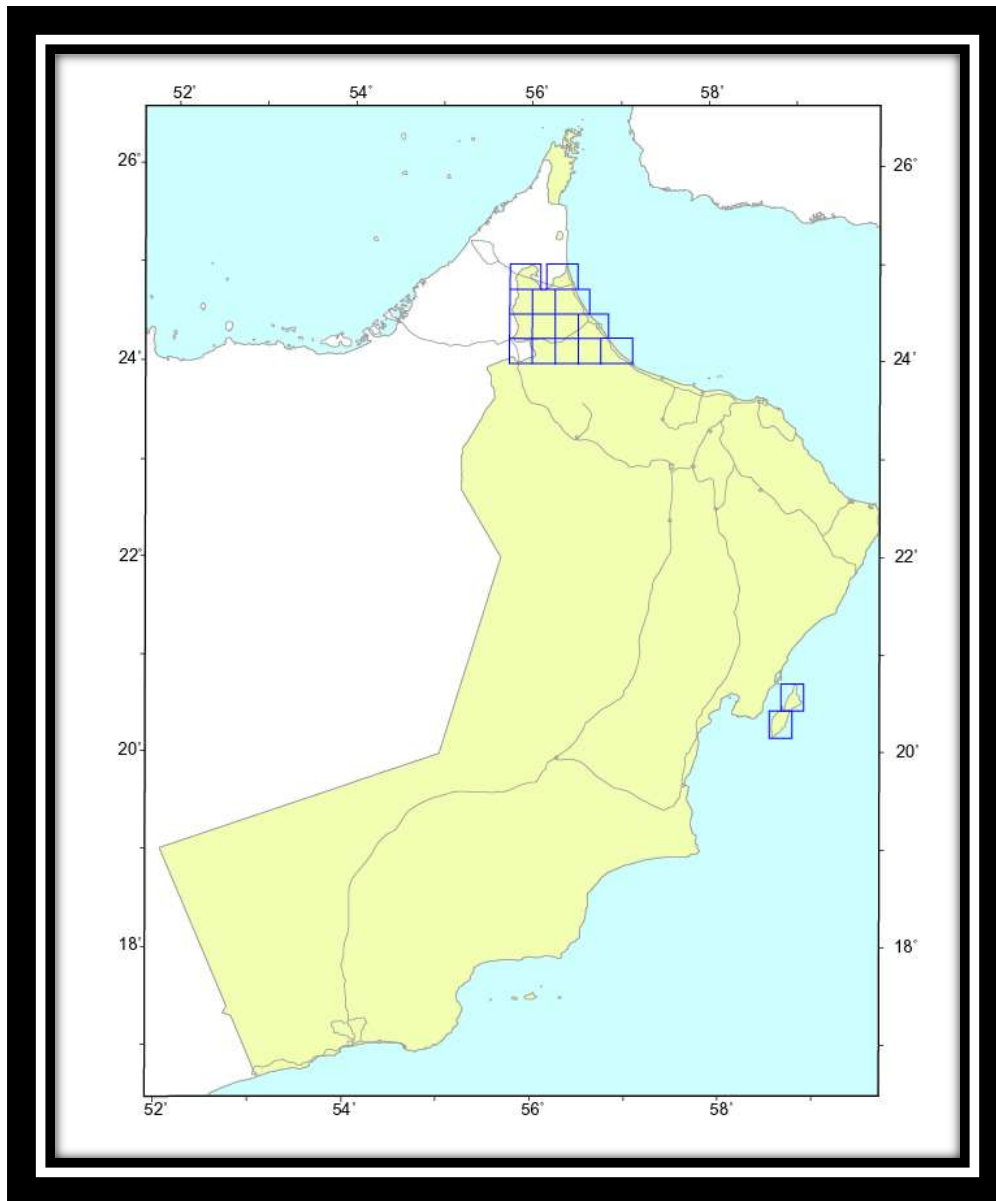
1:250,000 Maps



1:100,000 Maps



1:50,000 Maps

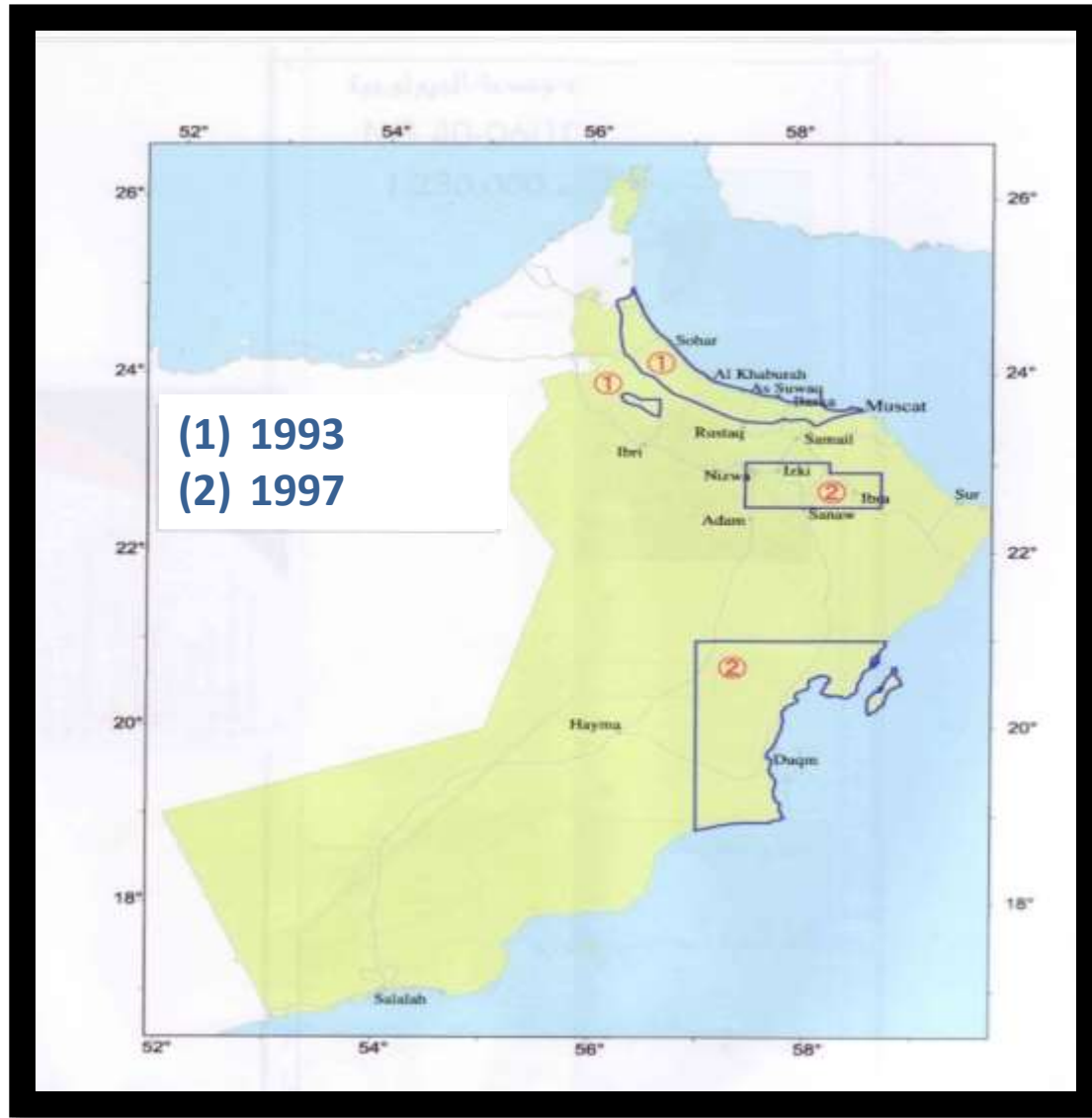


THE PUBLIC AUTHORITY FOR MINING SUPPORT & SERVICES

- Studies, Reports & Books: Many reports ,

ITEM NO.	ITEM NAME	Year	PRICE / RIALS
1	Minerals Of Oman	1987	10/000
2	Ophiolite and Metamorphic Rocks of the - A petrography Atlas	1990	15/000
3	Geology of Dhofar	1995	20/000
4	Industrial Rocks and Minerals Deposits in the Sultanate	1995	50/000
5	Chert Hosted Manganese Deposits in the Wahrah Formation.	1995	10/000
6	Geology of Easternmost Al Wahrah Formation (Part 1 & Part 11)	1995	10/000each book
7	Information on Mining Blocks of the Northern part of the Sultanate	1995	50/000
8	Geology and Mineral Wealth of the Sultanate	1995	50/000
9	Industrial Rocks & Minerals of : Development Possibilities	2004	10/000

AIR BONE GEOPHYSICAL SURVEYS



MINERALS LABORATORY SERVICES

Analysis Type	The Mineral Laboratory provide different chemical analysis for the private Mining companies with low prices
XRF	
XRD	
ICP	
AAS	
Crashing & Powdering	



- **Minerals & Industrial Rocks in Oman**
 - Metallic Minerals.
 - Industrial Rocks.

- **Mining Regulation & Laws in Oman**
 - Exploration & Mining Permits.
 - New Governmental Orientations.

MINERALS & INDUSTRIAL ROCKS IN OMAN

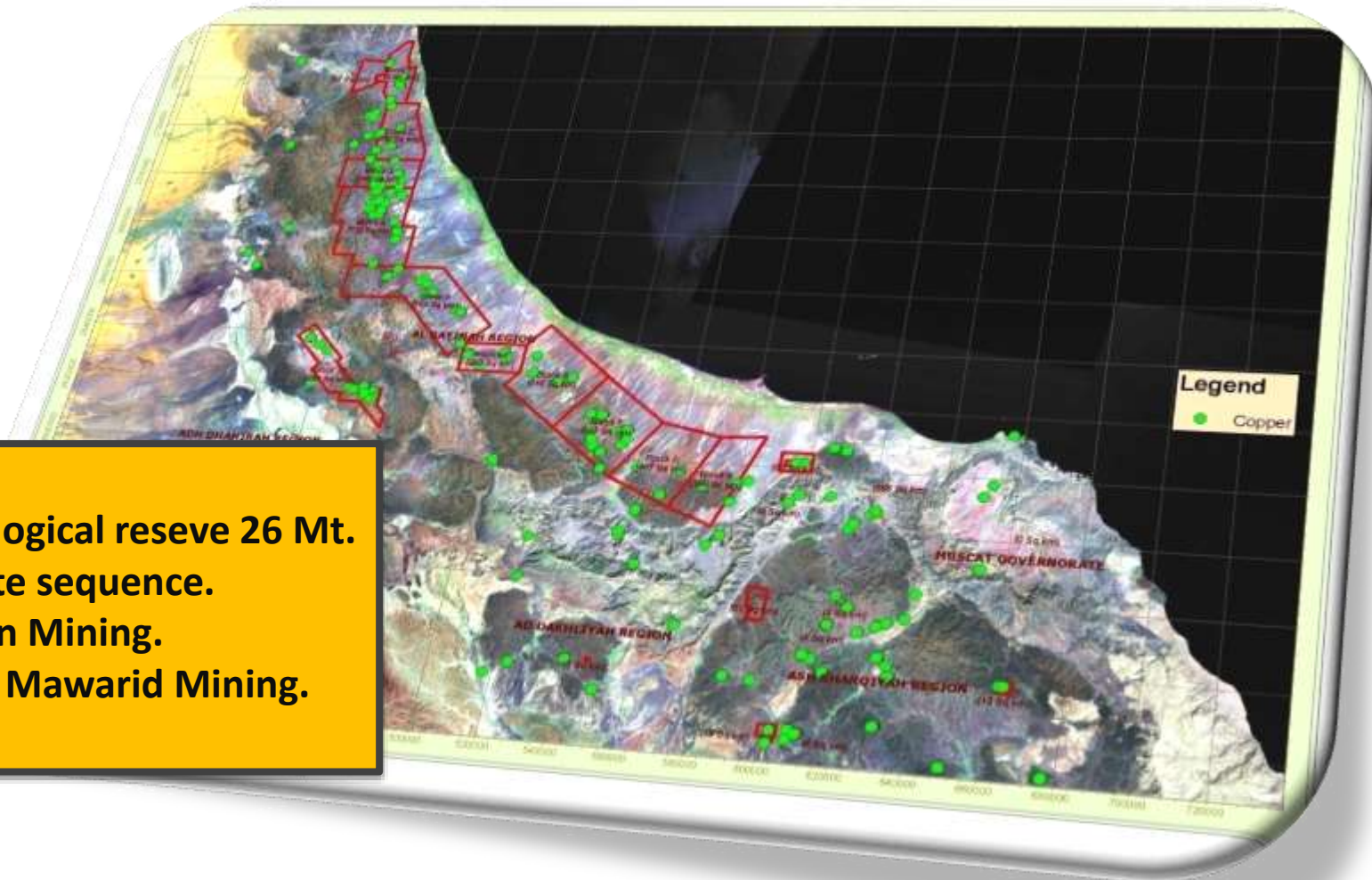
❖ Main Metallic Minerals:

- 1. Copper**
- 2. Chromite**
- 3. Laterite**
- 4. Manganese**

❖ Industrials Minerals & rocks

- 1. Limestone & Marble**
- 2. Dolomite**
- 3. Gypsum**
- 4. Silica sands and Quartzite**
- 5. Clays and Shale**
- 6. Salt**
- 7. Coal**
- 8. Olivine**
- 9. Kaoline**
- 10. Salt**
- 11. Aggregates**

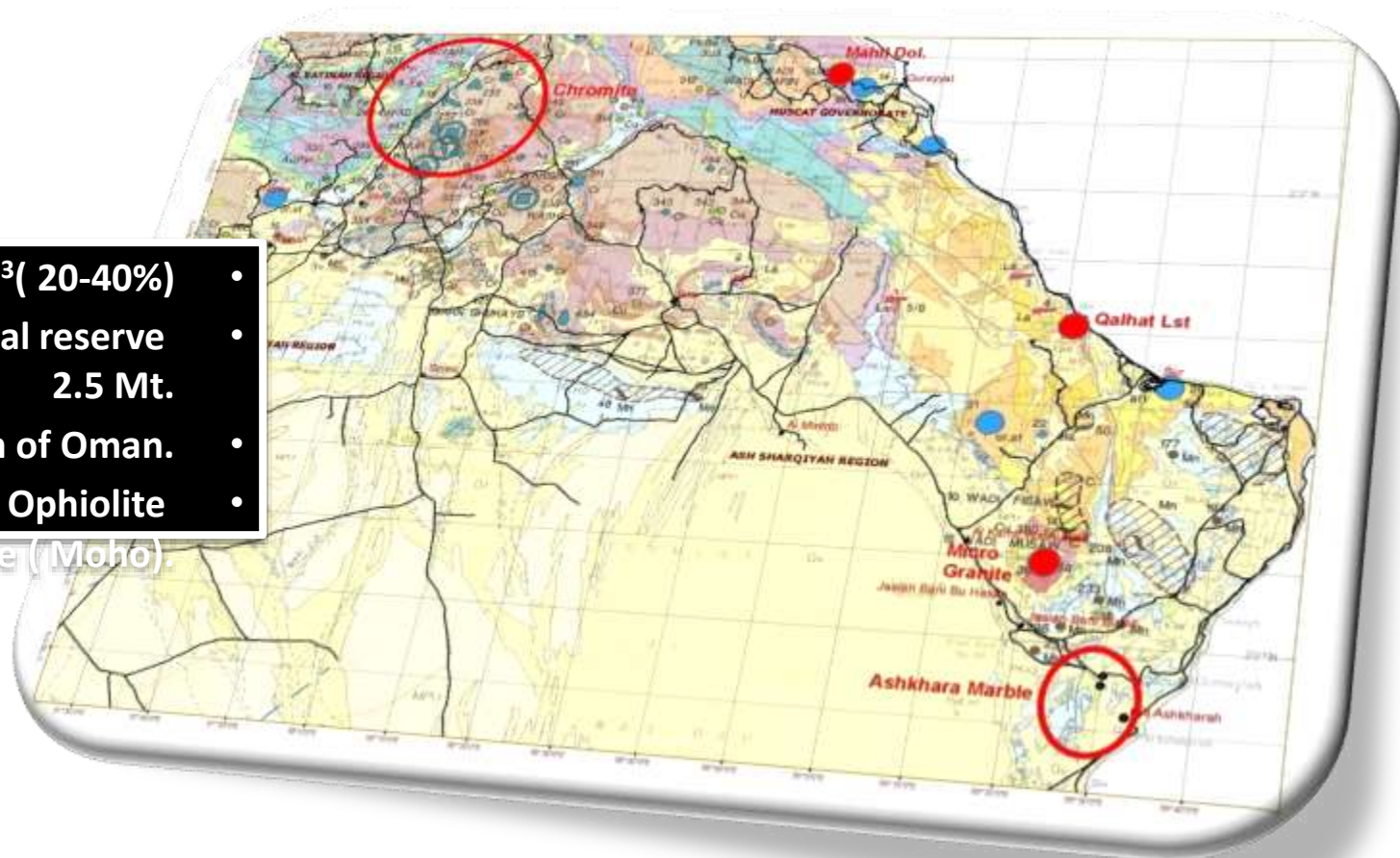
COPPER



- Grade : 1-2%
- Estimated geological reserve 26 Mt.
- Upper Ophiolite sequence.
- Smelter : Oman Mining.
- Concentrator : Mawarid Mining.

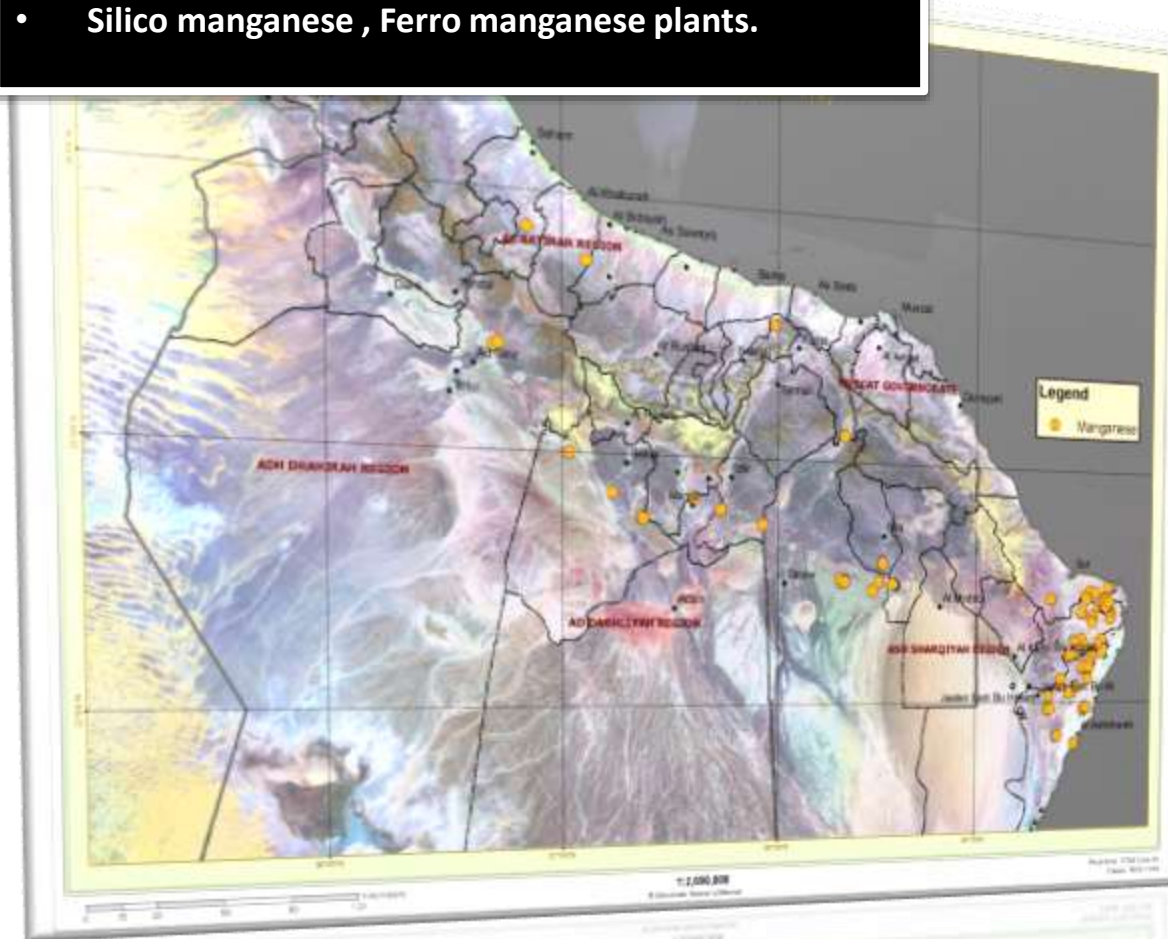
CHROMITE

- Cr_2O_3 (20-40%)
- Estimated geological reserve 2.5 Mt.
- North of Oman.
- Lower part of the Ophiolite Sequence (Moho).



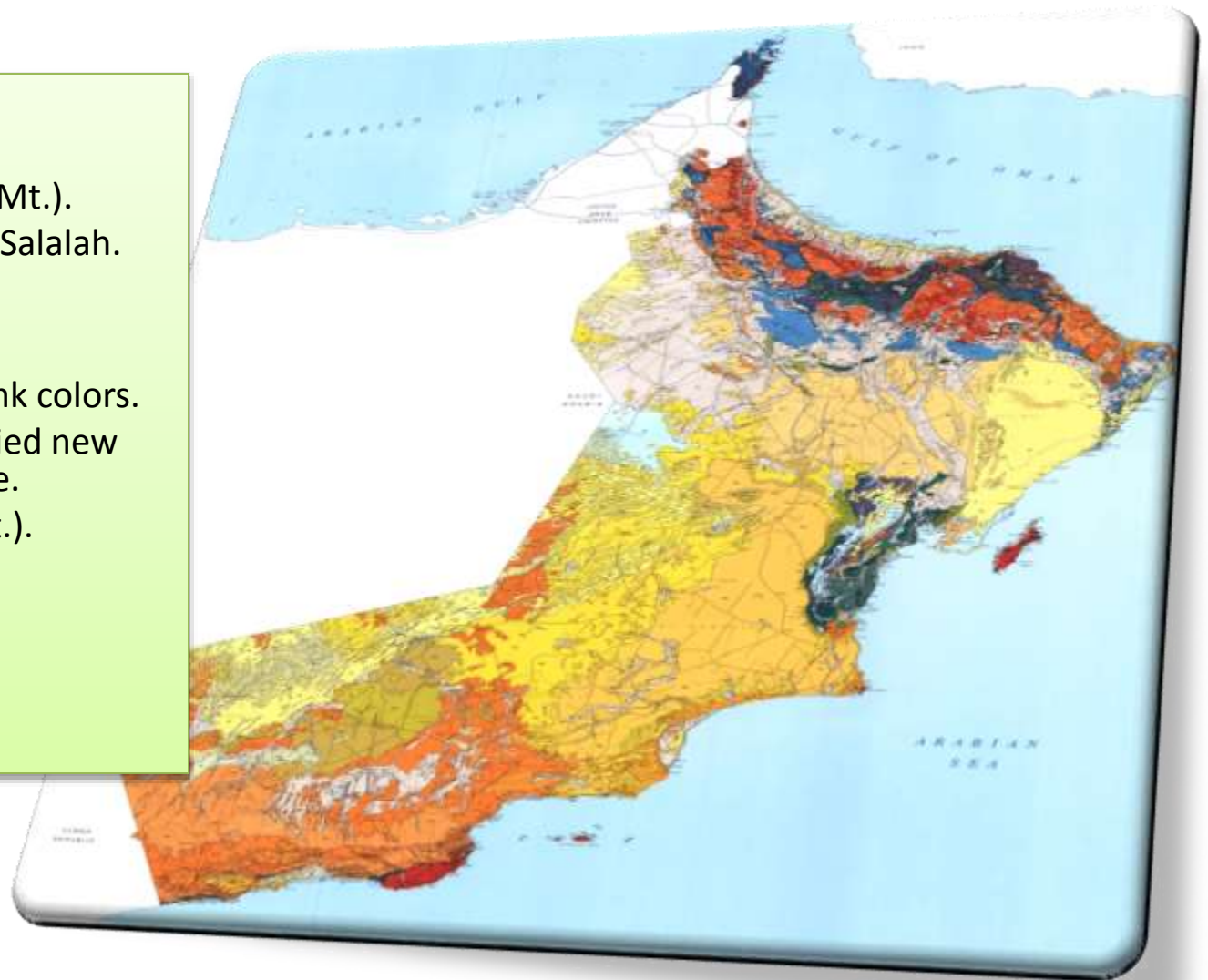
MANGANESE

- **Grade: 30- 65%. High Silica.**
- **The estimated geological reserve about 1520,000 tons.**
- **Silico manganese , Ferro manganese plants.**

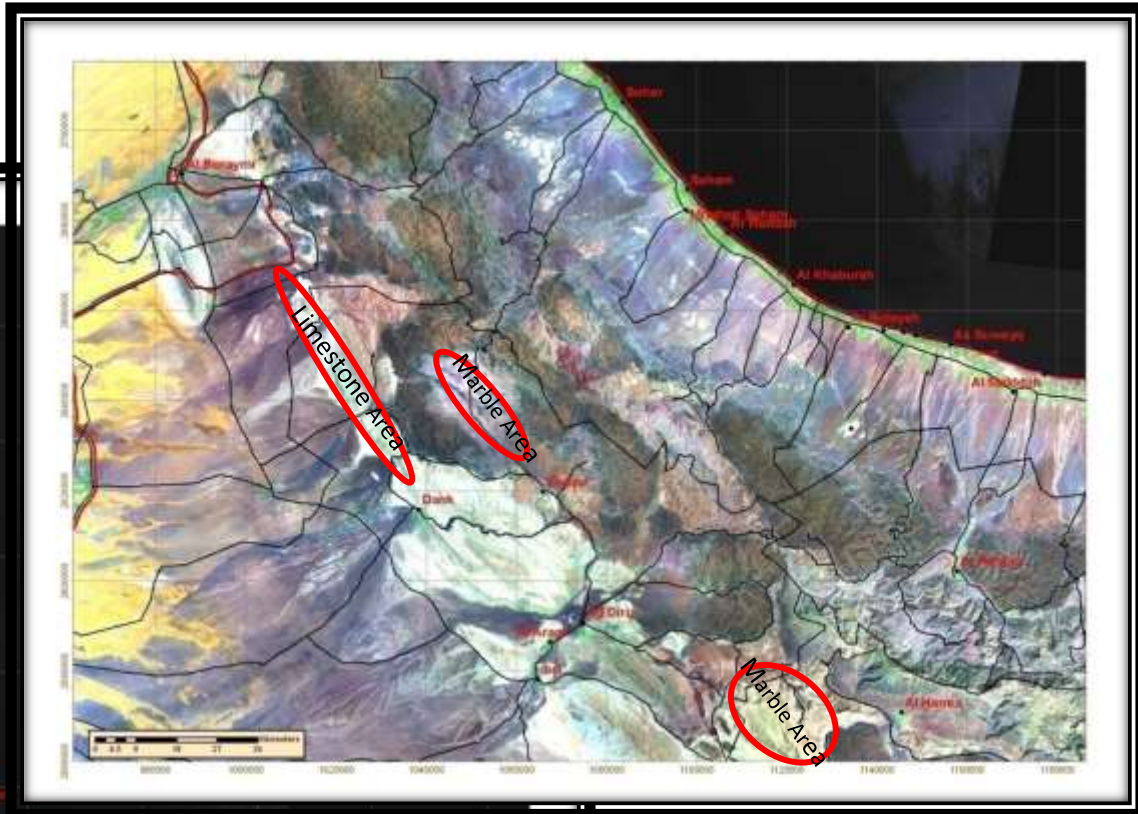
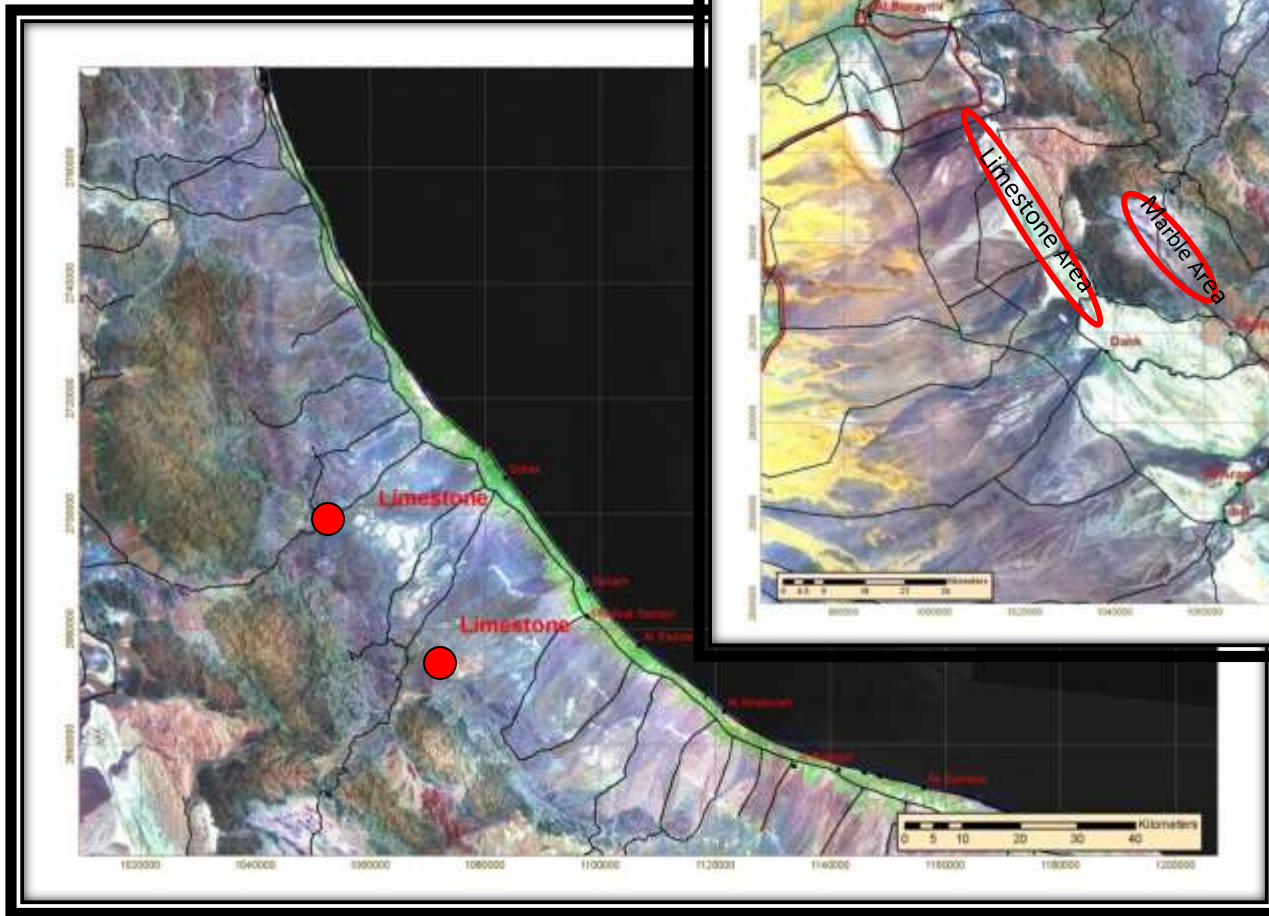


LIMESTONE , MARBLE & DOLOMITE

- **Limestone :**
 - CaCO_3 up to 99%.
 - Reserves (23924 Mt.).
 - New Lime Plant in Salalah.
- **Marble:**
 - White , Beige & Pink colors.
 - PAM recently studied new locations of marble.
 - Reserves (1500 Mt.).
- **Dolomite:**
 - MgO up to 21%
 - Huge Reserves.



LIMESTONE & MARBLE



GYPSUM

No.	Deposit Location	Reserve	Gypsum %
1	Shuwaymiyah	900Mt-1Bill t	>90%
2	Thumrait	200-400Mt	>85%
3	Suddah	100-400Mt	>85%
4	Thakabayt	1-50Mt	>85%
	Ghaba	0.5-2Mt	>85%
	Juraymi	30,000-50,000t	>97%

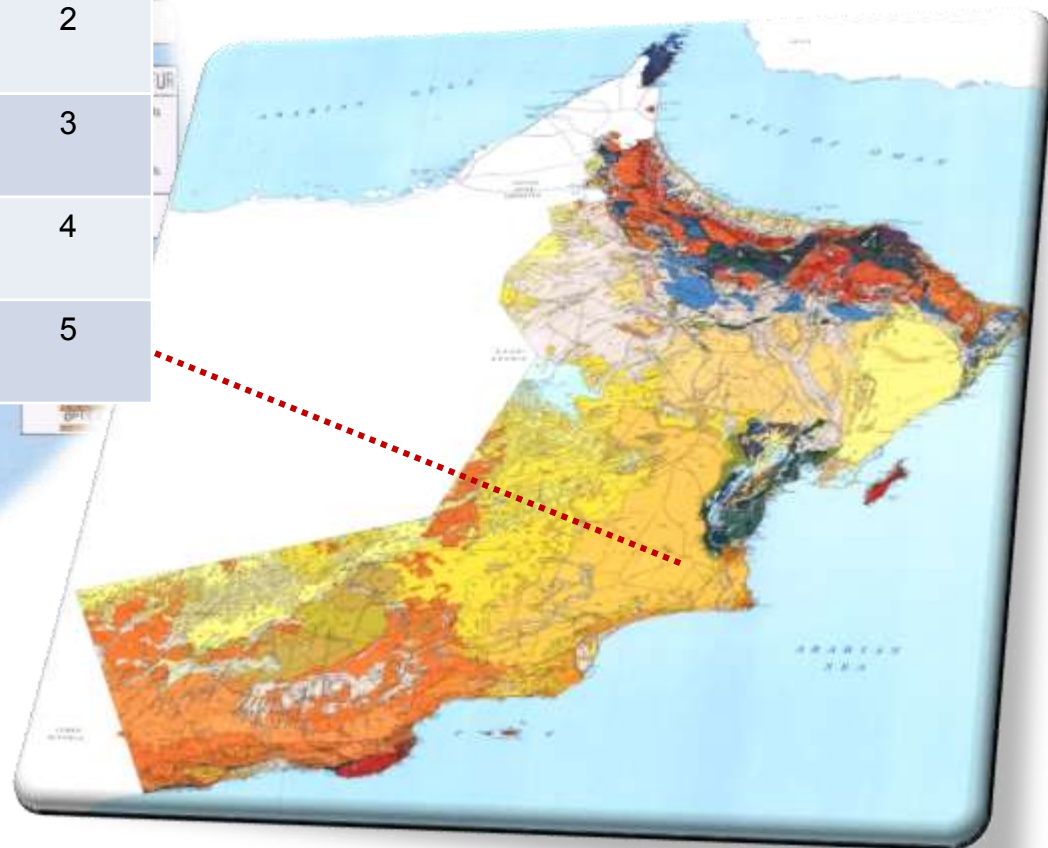
نقاوة الخام	الاحتياطي (طن متري)	الموقع	م
>90%	900 مليون - 1 بليون	الشويمية	1
>85%	200 مليون - 400 مليون	ثمرت	2
>85%	100 مليون - 400 مليون	سدح	3
>85%	1 مليون - 50 مليون	ثقبیات	4
>85%	0.5 مليون - 2 مليون	غابة	5
>97%	50.000 - 30.00	السنيينة	6

Zoom view from 1:1000,000 map

SILICA

م	الموقع	الاحتياطي (طن متري)	نسبة الخام
1	قريات (السليل)	10-5 مليون	>98%
2	الراقي	1.4-0.7 مليون	>98%
3	ابو تان	10-6.4 مليون	>98%
4	وادي بو	4.17-1.8 مليون	>98%
5	حوف	10-5.3 مليون	>98%

No.	Location	Estimated Reserves	SiO ₂ %
1	Salil (Quartzite)	5-10 Mt	>98%
2	Ar-Raqi	0.7-1.4 Mt	>98%
3	Abu Tan	6.4-10 Mt	>98%
4	Wadi Baw	1.8-4.17 Mt	>98%
5	Hawf	5.3- 10 Mt	>98%



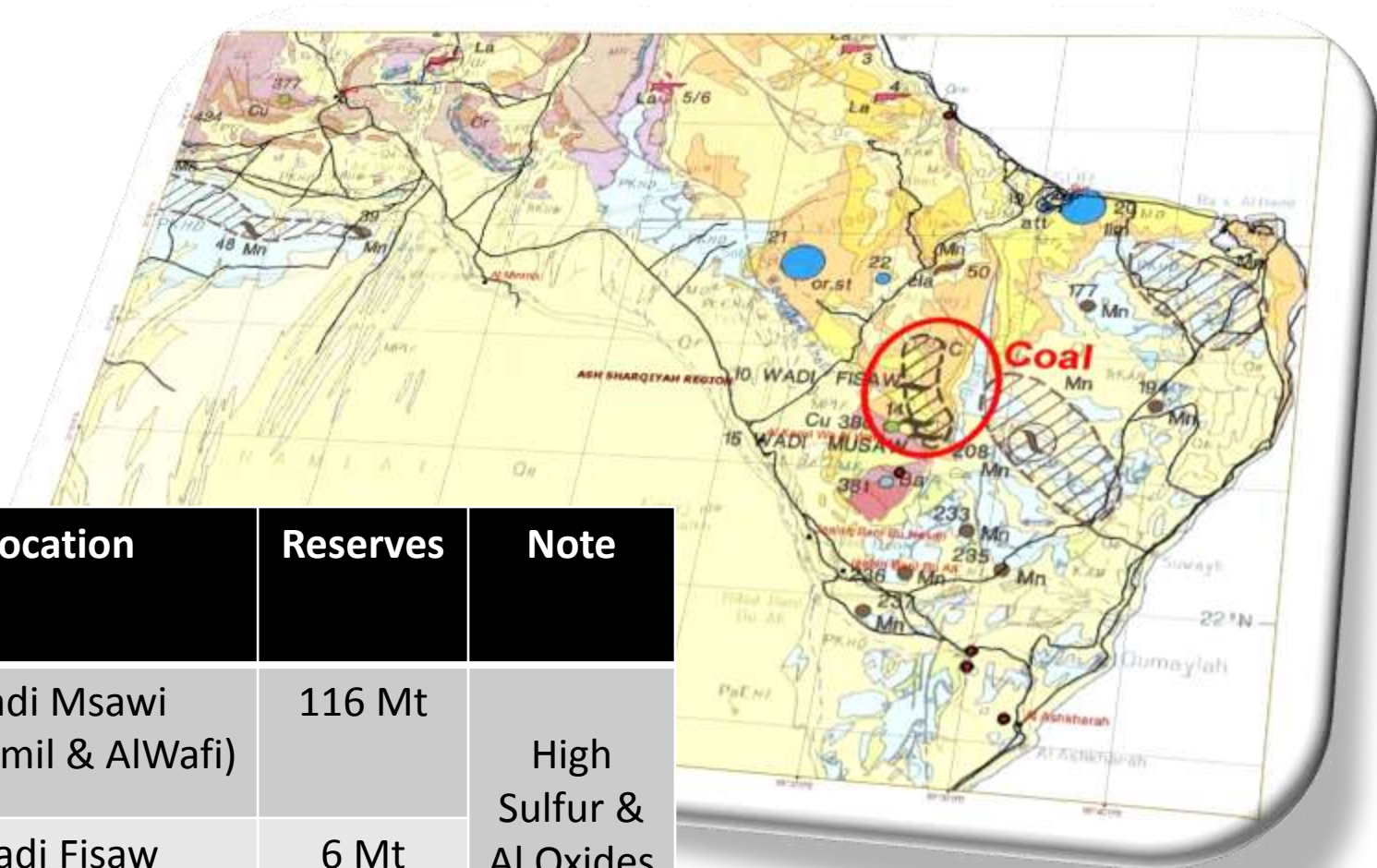
CLAYS

No.	Clay Type	Deposit Location
1	Kaolin	Masira (5Mt) Quarayat Wadi Sumaini Hawshi
2	Attapulgit e	Shuwaymiyah (300Mt)
3	Common Clays & Shale	Many Locations (Muti Formation) (Red ceramic tiles industry)

SALT

Deposit Location
<ul style="list-style-type: none">•Salt Domes (Ara Formation).•Umm Asamim.•Bar Al Hakman (solar evaporation)

COAL



No.	Location	Reserves	Note
1	Wadi Msawi (AL Kamil & AlWafi)	116 Mt	High Sulfur & Al Oxides
2	Wadi Fisaw (AL Kamil & AlWafi)	6 Mt	

MINING REGULATION & LAWS IN OMAN

- **Exploration & Mining Permits**

1. Submit application to PAM.
2. PAM study the application & coordinates with other governmental agencies.
3. Provide an exploration program.
4. Get the environmental license from Ministry of Environment.
5. Fees payment & issuing the exploration license (1 year).
6. Submission of the exploration study, feasibility study & mining plan.
7. Submitted studies will be evaluated.
8. Fees payment & issuing the mining license (5 years).

- **Omani Companies or Registered companies in Oman are allowed to apply for exploration & mining license.**

- **New Governmental Orientations**

- Enhance and develop local industries that are related to the available raw materials.
- Develop new regulations that help mining sector to grow up & attract investors.

Statement	Fees & Royalties (O.R)	License
Exploration License Application	100	Exploration
Exploration License & renewal	250	
Area rental fees (metallic) >100km ² /year	25/ km ²	
Area rental fees (metallic) <100km ² /year	50/km ²	
Area rental fees (non-metallic) <10km ² /year	100/km ²	
Area rental fees (non-metallic) >10km ² /year	50/km ²	
Mining License Application	100	Mining
Mining License & renewal	500	
Area rental fees /year	500/km ²	
Royalty	5% of sales	



THANK
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