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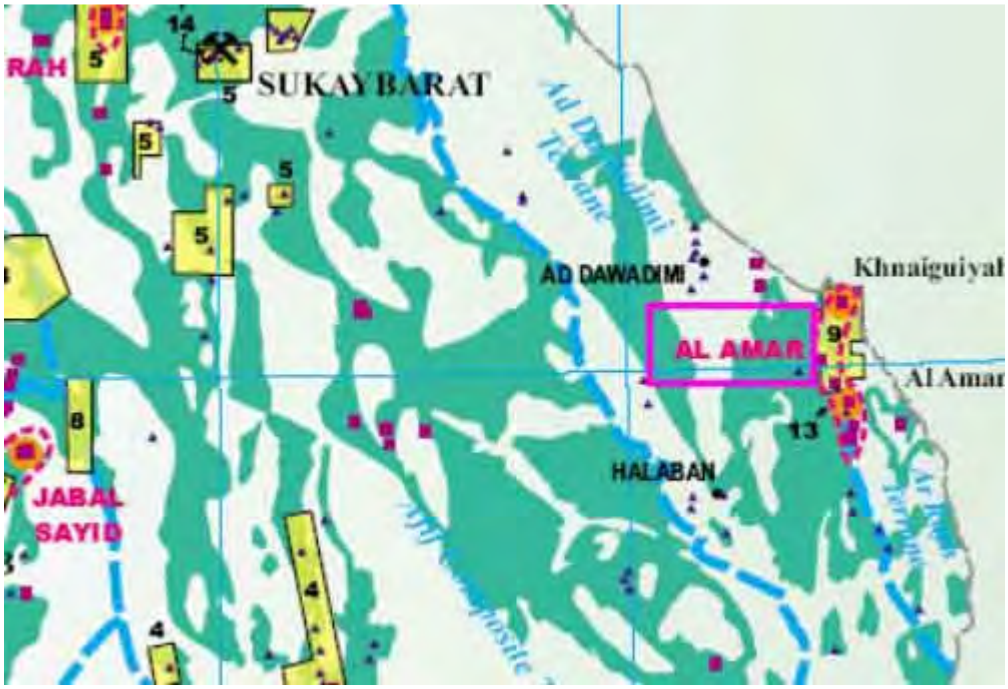
Al-Amar Gold Mine

Location:
Al-Amar Project is located at about 900m above sea level in a desert area where annual rainfall is generally less than 100 mm per year.

Location: Central Saudi Arabia, at the Eastern edge of the Arabian Shield.
Deposit: Gold, copper, zinc, vein type, open down dip.
Resources: North Vein Zone, 1.55 Mt at 12.31 g/t Au.
Measured and Indicated 6.16% Zn, 21.07g/t Ag, 0.92% Cu.
Other inferred resource: South Vein Zone (3.0 Mt at 5.1 g/t Au).
Production : 200,000 tons per year



Location map of Al-Amar Gold Mine

The Al-Amar Gold Mine is located 210Km west of Riyadh, off the Jeddah-Riyadh highway. Ma'aden has held a mining lease for Al-Amar since 1997.

Mineralization
Several occurrences and a Pb-Zn deposit are of the volcano-sedimentary type, other precious- and base-metal deposits, such as Al Amar, are epithermal. About 10 Gold occurrences are related to shears associated with the major Al Amar Fault Zone. A major magnetite deposit (Jabal Idsass) is related to Andesite, and several Copper occurrences are part of the Basic/Ultra-basic Jabal Rugaan complex. Skarn Type Deposit and Peri-Granitic occurrences are known as well.

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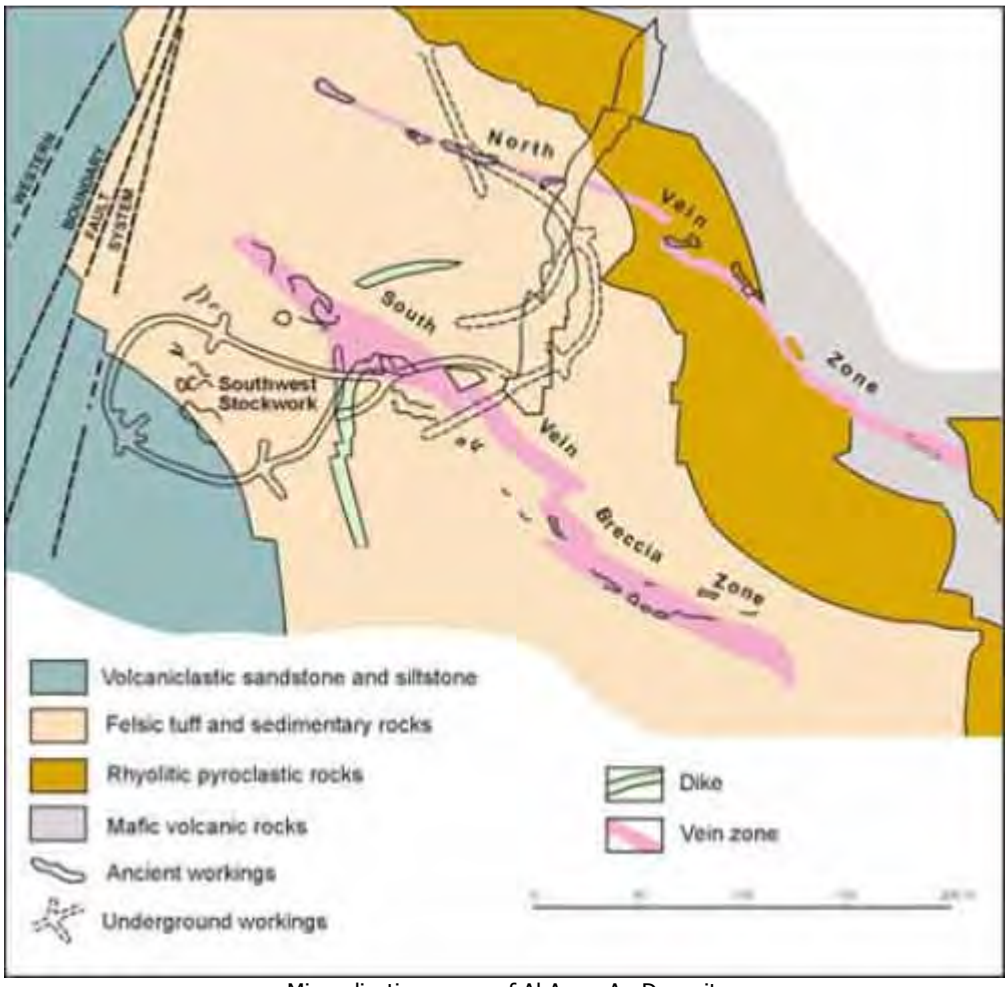
Epithermal Mineralization

Al Amar deposit was found beneath extensive old workings in meta-volcanic rocks. Initially, it was interpreted as Au-Cu-Pb-Zn vein mineralization, and then it was seen as an exhalative Massive Sulphide Deposit with Base Metals, before being recognized as Epithermal Gold mineralization accompanied by Ag, Cu, and Zn. Five basic volcanic cycles, intermediate to acid, were found at Al Amar. An early mineralization developed as a stockwork with Quartz, Pyrite, Chlorite, Sericite, Barite, and Sphalerite in "Unit 2", and sulphide Lenses with Barite and Talc occur at the top of Felsic "Unit 3". Most of the Gold mineralization is found in two zones: the "North vein", striking North. 100E with a 70 SW dip, and the sub-parallel "Breccia vein".



Mineralization zones of Al Amar Au Deposit

The North Vein shows Poly-phase filling with cockade Breccia and Ribbons of Sphalerite, Pyrite, and Chlorite. There is a correlation between Zinc and Gold grades.
Gold and Silver tellurides are found, as at Mahd adh Dhahab.

The estimated resource is 1 Mt at 33 g/t Au, 31 g/t Ag, 7.8% Zn, and 0.87% Cu for the "North vein", and 1.1 Mt at 9.4 g/t Au, 26 g/t Ag and 5.75% Zn and 0.68% Cu for the southern "Breccia vein".

Several occurrences of the same type, but with few old workings and much more discrete hydrothermal alteration, yielded disappointing results, such At Taybi (South of Al Amar) where Zn-Cu-Ag sulfides were intersected.

Exploration perspectives

Re-investigation of the At Taybi and Umm Ad Dabah occurrences appears warranted, on the base of Al Amar deposit-model.

The Magnetite Lenses at Jabal Idsas, whose economic interest as Iron Ore is limited, might indicate the presence of blind Gold-Copper Au/Cu Porphyry mineralization according to the Hollister (1978) model.

The copper occurrences of Jabal Rugaan merit a check from the viewpoint of possible Gold and PGE mineralization associated with ultrabasic cumulates.

Exploration of selected (with the help of compiled previous geochemical samplings) areas of Al Amar Belt for porphyry deposits is necessary, as well as a regional re-appraisal of the Al Amar Fault Zone for mainly Gold and PGM.

View of Al Amar Gold Mine.

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Resource and Grade:
The mine has significant resources of Gold, Silver, Zinc, and Copper. (Au/Ag/Zn/Cu)

The mine's North Vein Zone holds 1.55 million tons grading 12.31 g/t of Gold, 21.07 g/t Silver, 6.15 percent of Zinc, and 0.92 percent of Copper.

The South Vein Zone has inferred resources of 3 million tons, grading 5.1 g/t of Gold.

In December 2003, Ma'aden signed a technical design and consulting contract with the Canadian **S.N.C. Lavalin** for Al-Amar mine and its refining facilities. Construction work is expected to be completed in 2005, and commercial operations will begin in 2006.

Ma'aden expects the mine to be productive for seven years.