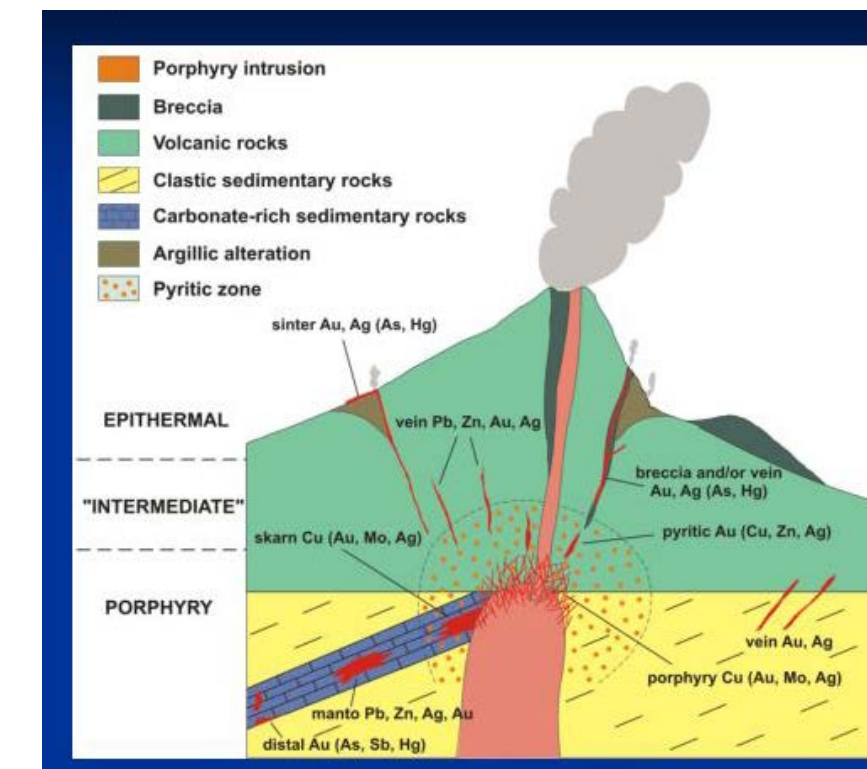
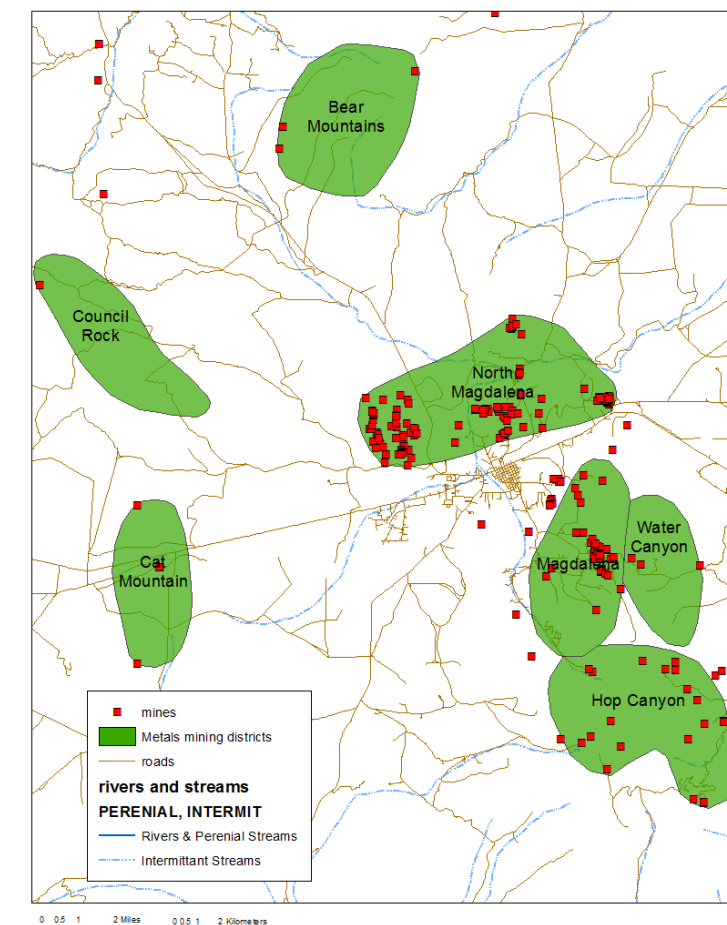


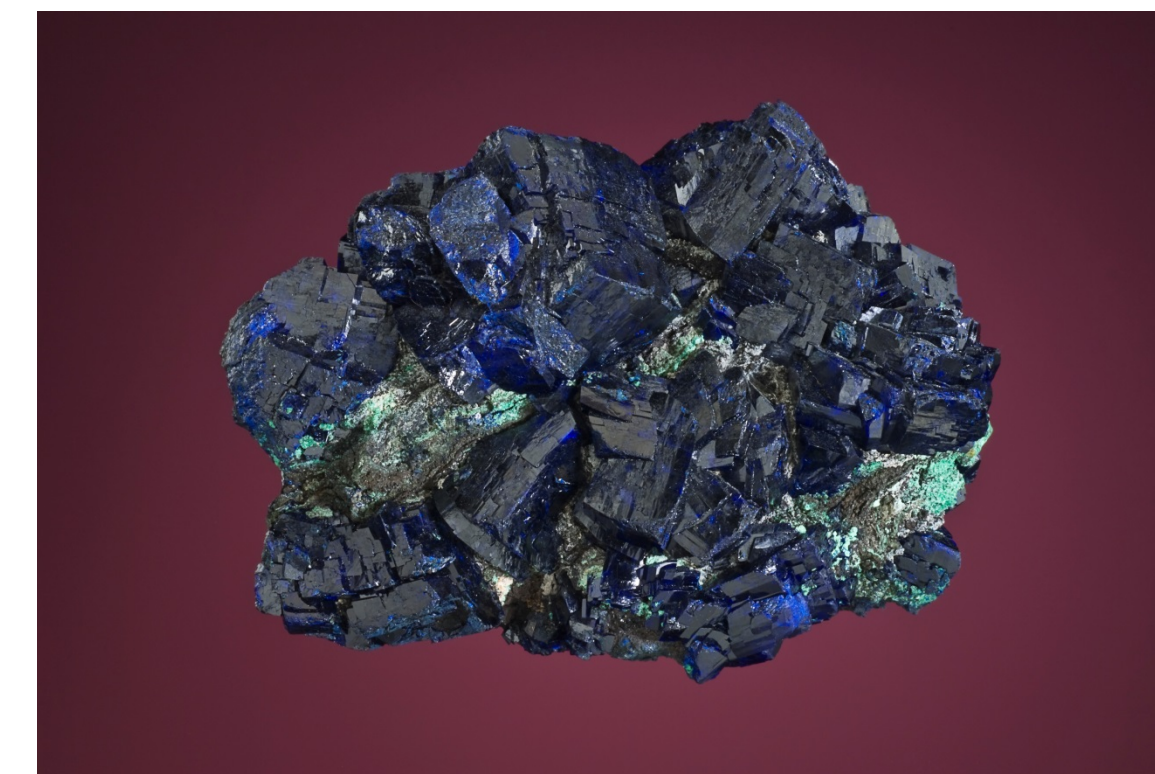
A photograph of a large, light blue, translucent, and highly textured mineral specimen, likely a variety of quartz or calcite, set against a dark background. The specimen has a complex, rounded, and somewhat crystalline structure with many facets and a slightly rough surface.

New Mexico Bureau of Geology and Mineral Resources, New Mexico Tech, Socorro, NM, 87801

INTRODUCTION

[illegible]

Most of the mineral deposits in the Magdalena area were formed from hydrothermal fluids associated with volcanic rocks. The most productive mineral deposits are lead-zinc with some silver and gold found in the Kelly Limestone of the Magdalena Group, mostly as pods and replacements, minor skarns, and minor veins in carbonate rocks that are adjacent to intrusive rocks. They are typically lead-zinc dominant, with a by-product of copper, silver, and gold, consisting predominantly of galena and sphalerite with lesser amounts of chalcopyrite and other minerals.



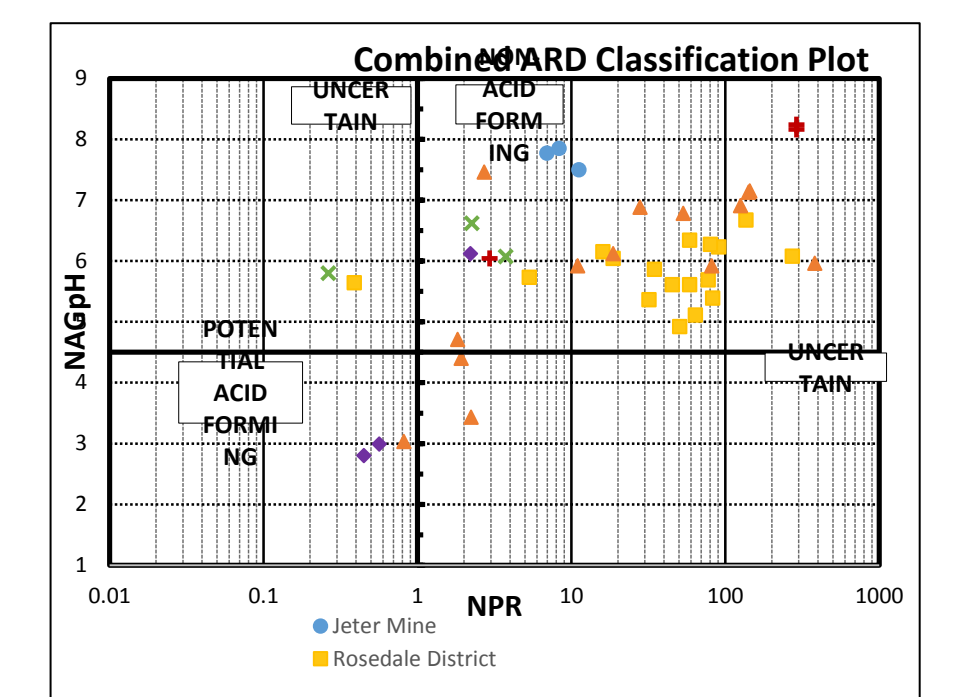
Native Copper–
Kelly mine, 1987.
Courtesy of
Wendell E. Wilson,
Historical Archives,
NM Bureau of
Geology, Socorro
NM



- Mine workings, rock piles, tailings, and heap leach facilities can result in physical hazards
- Acid rock drainage and contamination by metals and other constituents is a problem at some sites in the Magdalena area and can result in potential water quality issues

Lead is present in many districts

- Since there is no complete inventory of the mines, we do not know the extent of any problems



WHY STUDY MINING DISTRICTS?

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- A black and white photograph of a large industrial complex, possibly a steel mill, built into a hillside. Several large, dark buildings with gabled roofs are visible. A tall, slender smokestack stands prominently in the center, emitting a thick, dark plume of smoke that rises into the sky. To the left, another smaller smokestack or vent is visible, also emitting smoke. The foreground consists of a rough, dirt-covered slope. The overall scene conveys a sense of heavy industrial activity.

NMBGMR is conducting research on inactive/ abandoned mine features in New Mexico. The objective of our research is to develop a better procedure to inventory and characterize inactive or abandoned mine features in New Mexico. For more information see <https://geoinfo.nmt.edu/geoscience/research/home.cfm?id=13>

MINERAL-RESOURCE POTENTIAL

Most of the mineral deposits have been mined out. There is only moderate potential for gold and copper in some districts.

