The Lab

The National Minerals Testing Laboratory (NMTL) was established in 1974 and grew out of the BLM’s need for a laboratory to process bentonite samples. It has since expanded from “the Worland Clay Lab” to the Bureau’s minerals laboratory encompassing a much wider range of analytical capabilities including the testing of industrial minerals and construction aggregates for the Bureau’s Solid Minerals program.

The NMTL routinely analyzes:

- Bentonite deposits
- Gypsum deposits
- Zeolite deposits
- Diatomite deposits
- Pozzolan deposits
- Sand and Gravel
- Other types of industrial minerals deposits as requested

Today, the NMTL supports the Bureau’s needs for analyses of mining claim commodities helping to fulfill the Bureau’s mission to manage the nation’s public mineral wealth located on federal lands. The NMTL is a part of the BLM Wyoming State Office, which provides operational support. Funding comes from the Division of Solid Minerals in the Washington Office.

The Lab

Bureau employees are welcome to contact the National Minerals Testing Laboratory at any time to discuss your analytical needs. You can contact NMTL staff at:

NMTL
C/O Wind River/Bighorn Basin District Office
101 S. 23rd Street
Worland, WY 82410
blm_wy_nmtl_lab@blm.gov

Marilyn D. Wegweiser - Lab Manager
307.347.4135 (L)
307.388.1261 (C)
307.347.5228 (F)

Additional support provided by:
Washington Office Solid Minerals Division (WO-320)
National Mineral Examination Team

BLM/WY/GI-16/001+1651
**CAPABILITIES**

Meeting tomorrow’s surface management issues in solids minerals requires readiness and the ability to quickly assess the mineral commodity in question. Some of the scientific techniques that the NMTL currently has the ability to perform are:

- X-Ray Diffraction (XRD)
- Scanning Electron Microscopy (SEM)
  - High resolution scanned images
- Elemental Dispersive X-Ray (EDS aka EDX)
  - Point Identification
  - Line & Area Identification
  - Mineral Liberation
- Polarized Microscopy
- Sample preparation for Inductive Couple Plasma (ICP) and Atomic Absorption (AA) Analyses
- Sample preparation for Fire Assay Analyses
  - The NMTL will quantitatively crush, pulverize, and split your hardrock samples and then ship them to the Hardrock Lab of your choice, meeting the custody and control requirements of the Handbook for Mineral Examiners.

**COLLABORATION**

The NMTL’s customers and collaborators include BLM District and Field Offices, other programs besides Solids Minerals, and other Federal agencies such as the US Forest Service (USFS), the Bureau of Indian Affairs (BIA), the National Park Service (NPS), the Department of Justice (DOJ), the Securities and Exchange Commission (SEC), and the Center for Disease Control (CDC). BLM programs that make use of the services at the NMTL include BLM Law Enforcement and Cultural Resources.

**THE STAFF**

The NMTL is currently staffed by Certified Mineral Examiner BLM geologists with expertise in optical mineralogy, geochemistry, general geology, mapping, and report writing. One staff member is also a member of the National Mineral Examiner Team (NMET), a Team that reports to the Washington Office and the Chief Mineral Examiner. Staff members are available to answer general questions pertaining to surface management of minerals and mining claim questions.