Check lists of minerals for mining districts of Colfax, northern Taos, and Union Counties, New Mexico

Stuart A. Northrop

in:

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CHECK LISTS OF MINERALS FOR MINING DISTRICTS OF COLFAX, NORTHERN TAOS, AND UNION COUNTIES, NEW MEXICO

By
STUART A. NORTHROP
The University of New Mexico

Most of these records of occurrence are taken from the writer's (1959) "Minerals of New Mexico." Mineral occurrences of unusual interest are indicated by an exclamation mark (!); exceptional occurrences are indicated by two such marks (!!).

COLFAX COUNTY

Lindgren, Graton, and Gordon (1910) recognized four mining districts in this county: Cimarroncito, Moreno (Elizabethtown), Ponil, and Ute Creek (Baldy). The

INDEX MAP OF MINING DISTRICTS

NEW MEXICO: Colfax County: Baldy District (A), Cimarroncito District (B), Elizabethtown District (C), Ponil District (D). Taos County: Anchor District (E), Red River District (F), Rio Colorado Placers (G), Rio Grande Valley Placers (H), Twining District (I). Union County: Black Mesa District (J), Folsom District (K).

COLORADO: Costilla County: Grayback District (L), Plomo District (M), Sierra Blanca Area (N). Huerfano County: Badito Cone District (O), Huerfano District (P), La Veta District (Q), Spanish Peaks Area (R).
Clason (1911) map shows the same four districts but uses the names Baldy (Ute Creek), Cimarroncito, Elizabethtown (Moreno Valley), and Ponil. Hill’s (1912) map is essentially the same as Lindgren, Graton, and Gordon’s (1910). Lasky and Wootton (1933) combined Baldy and Elizabethtown into a single district.

In the first edition of “Minerals of New Mexico” (1942), I recognized four districts: Baldy, Cimarroncito, Elizabethtown, and Ponil. Anderson’s (1955) map shows five districts: Baldy (Ute Creek), Cimarroncito, Elizabethtown (Moreno), Ponil, and Willow Creek. Willow Creek District lies southeast of Baldy Mountain. In the revised edition of “Minerals of New Mexico” (1959), I regarded Willow Creek as an eastward extension of the Baldy District.

**Baldy District**

Subdistricts and synonyms include Aztec, Baldy Mountain, Copper Park, Eagle Nest, Maxwell’s, Mount Baldy, Ute Creek, and Willow Creek.

<table>
<thead>
<tr>
<th>Amphibole</th>
<th>Magnetite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglesite</td>
<td>Malachite</td>
</tr>
<tr>
<td>Calcite</td>
<td>Molybdenite</td>
</tr>
<tr>
<td>Cerargyrite(? )</td>
<td>Pyrostilite</td>
</tr>
<tr>
<td>Cerussite</td>
<td>Pyrrhotite</td>
</tr>
<tr>
<td>Chalcopyrite</td>
<td>Pyrite</td>
</tr>
<tr>
<td>Chalcopyrite</td>
<td>Pyroxene</td>
</tr>
<tr>
<td>Chlorite</td>
<td>Quartz</td>
</tr>
<tr>
<td>Chrysocolla</td>
<td>Rhodonochrosite</td>
</tr>
<tr>
<td>Copper</td>
<td>Scapolite, var.</td>
</tr>
<tr>
<td>Coprite</td>
<td>Wernerite</td>
</tr>
<tr>
<td>Epidote</td>
<td>Silver</td>
</tr>
<tr>
<td>Feldspar</td>
<td>Sphalerite</td>
</tr>
<tr>
<td>Galena (?)</td>
<td>Stehinite</td>
</tr>
<tr>
<td>Garnet</td>
<td>Stilbite</td>
</tr>
<tr>
<td>Gold</td>
<td>Tetradymite</td>
</tr>
<tr>
<td>Placer</td>
<td>Tetrahedrite</td>
</tr>
<tr>
<td>Hematite</td>
<td>Zoisite</td>
</tr>
<tr>
<td>Specularite</td>
<td>“Limonite”</td>
</tr>
</tbody>
</table>

**Cimarroncito District**

Subdistricts and synonyms include Bonito, Cimarron Canyon, Uraca, Urraca, and Urraca Creek.

<table>
<thead>
<tr>
<th>Calcite</th>
<th>Hematite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chalcoprysite</td>
<td>Specularite</td>
</tr>
<tr>
<td>Epidote</td>
<td>“Limonite”</td>
</tr>
<tr>
<td>Garnet</td>
<td>Magnetite</td>
</tr>
<tr>
<td>Andradite</td>
<td>Malachite</td>
</tr>
<tr>
<td>Gold</td>
<td>Pyrite</td>
</tr>
<tr>
<td>Placer</td>
<td>Quartz</td>
</tr>
</tbody>
</table>

**Elizabethtown District**

Subdistricts and synonyms include Eagle Nest, E-Town, Hematite, Hematite Creek, Iron Mountain, Moreno, Moreno Valley, and West Moreno.

<table>
<thead>
<tr>
<th>Amphibole</th>
<th>Garnet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentite</td>
<td>Gold</td>
</tr>
<tr>
<td>Calcite</td>
<td>Placer</td>
</tr>
<tr>
<td>Chalcoprysite</td>
<td>Hematite</td>
</tr>
<tr>
<td>Chrysocolla</td>
<td>Specularite</td>
</tr>
<tr>
<td>Cuprite</td>
<td>Hornblende</td>
</tr>
<tr>
<td>Diopside</td>
<td>“Limonite”</td>
</tr>
<tr>
<td>Epidote</td>
<td>Magnetite</td>
</tr>
<tr>
<td>Feldspar</td>
<td>Malachite</td>
</tr>
<tr>
<td>Galena</td>
<td>Muscovite</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pyrite</th>
<th>Tremolite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrrhotite</td>
<td>Uraninite</td>
</tr>
<tr>
<td>Quartz</td>
<td>Wolframite, var.</td>
</tr>
<tr>
<td>Scapolite, var.</td>
<td>Ferberite</td>
</tr>
<tr>
<td>Wernerite</td>
<td>Zoisite</td>
</tr>
</tbody>
</table>

In addition to these, Clark (1966) cites biotite, bornite(?), cassiterite(?), and lepidolite(?). The last two minerals were reported by R. F. Pettit, Jr. from the Hematite Creek subdistrict.

**Ponil District**

From this district, placer gold and quartz have been cited.

**Eastern Colfax County**

Many of the following minerals have been cited in petrographic descriptions.

<table>
<thead>
<tr>
<th>Acmite-diopside</th>
<th>Noeleite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acgresite</td>
<td>Olivine</td>
</tr>
<tr>
<td>Analcime</td>
<td>Orthoclase</td>
</tr>
<tr>
<td>Anorthoclase</td>
<td>Cryptothortite</td>
</tr>
<tr>
<td>Apatite</td>
<td>Microporplite</td>
</tr>
<tr>
<td>Arfvedsonite</td>
<td>Soda-orthoclase</td>
</tr>
<tr>
<td>Barkevikite</td>
<td>Plagioclase</td>
</tr>
<tr>
<td>Augite</td>
<td>Albite</td>
</tr>
<tr>
<td>Titan-augite</td>
<td>Andesine</td>
</tr>
<tr>
<td>Biotite</td>
<td>Bytownite</td>
</tr>
<tr>
<td>Cancrinite</td>
<td>Labradorite</td>
</tr>
<tr>
<td>Chlorite</td>
<td>Oligoclase</td>
</tr>
<tr>
<td>Dinopside</td>
<td>Prehnite</td>
</tr>
<tr>
<td>Garnet</td>
<td>Pyrite</td>
</tr>
<tr>
<td>Gypsum, var.</td>
<td>Pyroxene</td>
</tr>
<tr>
<td>Hypersthene</td>
<td>Quartz</td>
</tr>
<tr>
<td>Hauynite</td>
<td>Chalcedony</td>
</tr>
<tr>
<td>Hematite</td>
<td>Resin</td>
</tr>
<tr>
<td>Hornblende</td>
<td>Riebeckite</td>
</tr>
<tr>
<td>Basilic hornblende</td>
<td>Rutile</td>
</tr>
<tr>
<td>Hypersthene</td>
<td>Serpentine</td>
</tr>
<tr>
<td>Ice (in ice caves)</td>
<td>Antigorite</td>
</tr>
<tr>
<td>“Iddingsite”</td>
<td>Sodalite(? )</td>
</tr>
<tr>
<td>Ilmenite</td>
<td>Sphene</td>
</tr>
<tr>
<td>“Limonite”</td>
<td>Thomsonite</td>
</tr>
<tr>
<td>Magnetite</td>
<td>Thorium minerals</td>
</tr>
<tr>
<td>Tianno-magnetite</td>
<td>Uranium minerals</td>
</tr>
<tr>
<td>Muscovite</td>
<td>Zeolites</td>
</tr>
<tr>
<td>Natrolite</td>
<td>Zircon</td>
</tr>
<tr>
<td>Nepheline</td>
<td></td>
</tr>
</tbody>
</table>

Staatz (1965, p. 231) describes thorium-bearing veins in the Chico Hills area:

“at least seven veins ranging from a fraction of an inch to 15 feet in width . . . in irregularly brecciated zones in Dakota sandstone and in phonolite. Their exposed length is from 10 to 50 feet. Vein material consists principally of quartz, iron-oxide minerals, thorite, plumbogummite, and brockite; brockite is the principal thorium mineral.”

Parker (1965, p. 294) describes an occurrence of niobium in the Laughlin Peak area:

“some veins which cut phonolite and the Dakota Sandstone are rich in thorium, niobium, and rare earths and contain also carbonate, phosphorus, barium, and strontium. The niobium content in some veins is as much as 0.37 percent, but the
minerals containing the niobium have not yet been identified.”

At various other localities in Colfax County, the following have been noted:

- Aragonite
- Arsenopyrite
- Augite
- Biotite
- Calcite
- Iceland spar
- Graphite
- Gypsum, var.
- Selenite
- Hornblende
- "Iddingsite"
- Ilmenite
- "Leucoxene"

**NORTHERN TAOS COUNTY**

Mining districts in southern Taos County, such as Glenwoody, Harding Mine, and Picuris, are not included in this resume.


In the first edition of “Minerals of New Mexico” (1942), I used the same four, and Anderson’s (1955) map uses the names Anchor, Red River, Rio Grande Placer, and Rio Hondo Districts. In the revised edition of my book (1959), I accepted Rio Colorado Placers as distinct from the Rio Grande Valley.

In his report on Taos County, Schilling (1960) noted that much confusion exists as to names and extent of some districts. He stated that the Anchor and Red River subdistricts are commonly included in a much larger Red River District which extends west to the Questa Molybdenum Mine and southeast to the Black Copper Mine. However, he recognized Rio Hondo (Twining, Arroyo Hondo) as a separate district. Schilling’s Rio Grande Placer District extends from Questa southwestward along Red River to the Rio Grande and thence southward and southwestward to the south boundary of the county near Dixon, with lobes extending up several tributary streams such as the Rio Hondo. He also established No Agua as a new district to include the perlite and scoria deposits of northwestern Taos County.

**ANCHOR DISTRICT**

Subdistricts and synonyms include Keystone, La Belle, and Midnight.

- Calaverite (?)
- Chalcopyrite
- Fluorite

In addition to these, Schilling (1960) cites the following:

- Actinolite (?)
- Alumite (?)
- Anatas
- Apatite
- Argentite
- Augite
- Biotite
- Bismuth
- Calaverite (?)
- Calcite
- Manganous calcite
- Chalcolite
- Chalcopyrite
- Chlorite
- Dolomite
- Epidote
- Feldspar
- Ferrimolybdate!
- Fluorite
- Galena
- Garnet
- Almandite
- Grossularite
- Gold
- Placer
- Graphite
- Gypsum
- Selenite
- Hematite
- Specularite
- Hornblende!
- Ilmenite
- Jarosite
- Kaolinite
- Kyanite
- "Limonite"
- Magnetite
- Malachite
- Microcline

In addition to these, the following have been cited by Schilling (1960):

- Arsenopyrite
- Azurite
- Piourite (?)

Arsenopyrite and “ruby silver” were reported from the Jay Hawk Mine; azurite stains were observed at prospects along Spring Gulch and at the Copper King Mine; tenorite occurs also at the Copper King.
Rio Colorado Placers and Rio Grande Valley Placers

Placer gold and quartz seem to be the only minerals reported from these districts.

Twinning District

Subdistricts and synonyms include Amizett, Amizette, Arroyo Hondo, and Rio Hondo. The last two names should not be confused with Hondo Canyon, northeast of Pilar, in southern Taos County. Northrop's (1959) Hondo Canyon District has been assigned by some writers to the large Picuris District. The following minerals have been reported from the Twinning District.

- **Amphibole**
- **Azurite**
- **Bornite**
- **Calcite**
- **Chalcocite**
- **Chalcopyrite**
- **Cuprite**
- **Copper**
- **Epidote**
- **Galena**
- **Gold**
- **Placer**

In addition, Schilling (1960) reported the following:

- **Biotite**
- **Chrysocolla**
- **Cuprite**

Chrysocolla occurs at the Frazer Mine and at the Comstock and Highline prospects; cuprite occurs at the Highline prospect. Clark (1966) cites hornblende.

A number of other minerals occur at isolated mines and prospects not generally assigned to any district, such as those in the Culebra Range, northern Taos Range, Cabeesto Creek area, and San Cristobal Creek. See Schilling (1960).

Union County

No mining districts had been recognized by early workers, such as Lindgren, Gratton, and Gordon (1910), the Clason (1911) map, Hill (1912), Lasky and Wootton (1933), Northrop (1942), and Anderson (1955). However, in his report on the geology and ore deposits of northeastern New Mexico exclusive of Colfax County, Harley (1940) had described two "mineralized districts," Folsom and Black Mesa. I decided in 1959 to accept these as mining districts.

Black Mesa District

Both Black Mesa and Folsom have been called the Dry Cimarron area or district.

- **Azurite**
- **Barite**
- **Bornite**
- **Chalcocite**
- **Chalcopyrite**
- **Chrysocolla**
- **Copper**
- **Malachite**
- **Quartz**
- **Tenorite, var.**
- **Melanite**
- **Uranium minerals(?)

Folsom District

- **Azurite**
- **Chalcocite**
- **Gold**
- **Placer**

- **Alunogen**
- **Analcime**
- **Apatite, Carbonate-apatite**
- **Halloysite**
- **Hematite**

Baldwin and Muchijlberger (1959) have cited the following, mostly in petrographic descriptions.

- **Aegirite(?)**
- **Anorthoclase(?)**
- **Augite**
- **Barite**
- **Calcite**
- **Cancrinite(?)**
- **Enstatite**
- **Gibbsite**
- **Gypsum**
- **Selenite**
- **Hauyne**
- **Hypersthene**
- **"Iddingsite"**

- **Kaolin**
- **Magnetcite**
- **Microcline**
- **Pigeonite(?)**
- **Plagioclase**
- **Andesine**
- **Bytownite**
- **Ladaborite**
- **Oligoclase**
- **Quartz**
- **Agate**
- **Chalcedony**

REFERENCES CITED


Northrop, S. A., 1942, Minerals of New Mexico: Univ. New Mexico Bull. 379, Geol. ser., v. 6, no. 1. This first edition was reprinted in 1944 as a book by the Univ. New Mexico Press.

