

- EXPLANATION OF MINERAL RESOURCE POTENTIAL**
- Area of identified resources of zinc in low-grade deposits and geologic terrane having high resource potential for tungsten and copper in a tacite deposit, with certainty level C
  - Mine or prospect having identified resources
    1. Marich claims (silver)
    2. Cinch mine (tungsten)
    3. Deer Trail mine (tungsten)
    4. Eagle Rock mine (tungsten, silver)
    5. Workings at the head of Schwartz Canyon (zinc)
  - Geologic terrane having moderate resource potential for tungsten, lead, zinc, silver, gold, and fluorite in veins and replacement deposits, with certainty level C
  - Geologic terrane having moderate resource potential for tungsten and silver in vein deposits, with certainty level B
  - Geologic terrane having moderate resource potential for gold and silver in veins, with certainty level B
  - Geologic terrane having low resource potential for (1) tungsten, lead, zinc, silver, and gold in tacite, hydrothermal vein, and replacement deposits (applies to all uncolored areas), and (2) uranium and thorium, oil and gas, and geothermal resources (applies to entire study area), with certainty level C; and for clay (applies to entire study area), with certainty level D

**CORRELATION OF MAP UNITS**

Qa	QUATERNARY
Qao	
QTs	
Dg	TERTIARY
Ds	
SOu	
Oes	UNCONFORMITY
Oe	
Op	UPPER DEVONIAN
OCwd	
Cpc	MIDDLE DEVONIAN
Cp	
Cpu	LOWER DEVONIAN
Cb	
CZpl	UNCONFORMITY
Cp	
Cp	UPPER AND MIDDLE SILURIAN
Cp	
Cp	UPPER ORDOVICIAN
Cp	
Cp	UNCONFORMITY
Cp	
Cp	MIDDLE ORDOVICIAN
Cp	
Cp	LOWER ORDOVICIAN
Cp	
Cp	UPPER CAMBRIAN
Cp	
Cp	MIDDLE CAMBRIAN
Cp	
Cp	LOWER CAMBRIAN
Cp	
Cp	LATE PROTEROZOIC(?)
Cp	

- DESCRIPTION OF MAP UNITS**
- Qa Younger alluvial deposits (Quaternary)—Stream deposits of clay, silt, sand, and gravel
  - Qao Older alluvial deposits (Quaternary)—Alluvial fans of silt, sand, and coarse gravels
  - QTs Younger sedimentary rocks (Quaternary and Tertiary)—Conglomerate, sandstone, and siltstone
  - Dg Guilmette Limestone (Upper and Middle Devonian)—Limestone and dolostone
  - Ds Simonson Dolostone (Middle Devonian) and Sevy Dolostone (Middle and Lower Devonian), undivided—Simonson is alternating brown and light-gray dolostone; Sevy is light-gray, aphanitic dolostone
  - SOu Laketown Dolostone (Upper and Middle Silurian) and Ely Springs Dolostone (Upper Ordovician), undivided—Laketown in upper part is medium-grained, light-gray, cherty dolostone; lower part is fine-grained brown dolostone. Ely Springs is medium-dark-brownish-gray, fossiliferous, fine-grained dolostone
  - Oes Ely Springs Dolostone (Upper Ordovician)
  - Oe Eureka Quartzite (Middle Ordovician)—Massive, fine- to medium-grained, white quartzite
  - Op Pogonip Group (Middle and Lower Ordovician)—Fossiliferous limestone, locally cherty
  - OCwd Whipple Cave Formation (Lower Ordovician and Upper Cambrian) and Dunderberg Shale (Upper Cambrian), undivided—Whipple Cave is massive limestone and dolostone, some chert. Dunderberg is limestone and shale
  - Cpc Emigrant Springs Limestone of Kellogg (1963) (Upper and Middle Cambrian) and Pole Canyon Limestone (Middle Cambrian), undivided—Emigrant Springs is light-gray limestone, some siltstone and mudstone. Pole Canyon is mainly massive, medium-light-gray and dark-gray limestone
  - Cp Pole Canyon Limestone (Middle Cambrian)
  - Cp Pioche Formation (Lower Cambrian)—Dark-greenish-gray argillaceous shale with minor amounts of quartzite and limestone
  - Cpu Upper part of Prospect Mountain Quartzite (Lower Cambrian)—White to reddish-brown, fine- to medium-grained quartzite and minor dark-greenish-gray argillite
  - Cb Basalt flow (Lower Cambrian)—Dark-greenish-gray, vesicular olivine basalt
  - CZpl Lower part of Prospect Mountain Quartzite (Lower Cambrian and Late Proterozoic?)—Grayish-purple to reddish-brown, medium- to coarse-grained quartzite; minor amounts of conglomerate

**Mines and prospects not having identified resources—**  
See list below; numbered workings are described in table 1

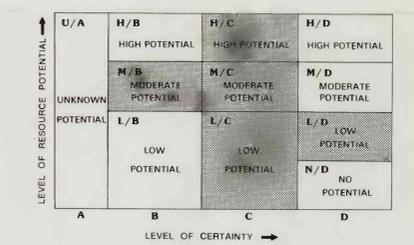
**Large mine or prospect workings**  
**Lesser mine or prospect workings**

**Area of mining claims**

**Geochemical sample locality (heavy-mineral concentrate)—**Showing sample locality number and the amounts of selected elements determined to be present, if any. Each point on the eight-sided star represents a specific element, and the length of the point indicates the amount of that element that is present in the sample, in parts per million. A range of values is shown for some elements rather than a specific amount.

Tungsten (W)	100, 150, 200
Silver (Ag)	1.5, 2, 3
Gold (Au)	20
Zinc (Zn)	300, 500
Bismuth (Bi)	70, 100
Molybdenum (Mo)	15, 20
Lead (Pb)	50, 70, 100
Antimony (Sb)	200, 300, 500
Tungsten (W)	300, 500, 700
Silver (Ag)	5, 7, 10
Gold (Au)	50
Zinc (Zn)	700
Bismuth (Bi)	150, 200, 300, 500
Molybdenum (Mo)	30, 50
Lead (Pb)	150, 200
Antimony (Sb)	700, 1000, 1500
Tungsten (W)	1000, 1500, 3000
Silver (Ag)	15, 20, 30
Gold (Au)	100
Zinc (Zn)	1000
Bismuth (Bi)	700-1000
Molybdenum (Mo)	70-100
Lead (Pb)	300, 500
Antimony (Sb)	2000
Tungsten (W)	Greater than 3000
Silver (Ag)	50, 70, 100, 150, 200, 300
Gold (Au)	200
Zinc (Zn)	1500
Bismuth (Bi)	1500-2000
Molybdenum (Mo)	150-200
Lead (Pb)	700-1000
Antimony (Sb)	3000, 5000, 7000

- Mines and prospects shown on plate 1**
1. Marich claims
  2. Cinch mine
  3. Deer Trail mine
  4. Eagle Rock mine
  5. Workings at the head of Schwartz Canyon
  6. Lake Valley (Geyser) mine
  7. Unnamed workings at Patterson Pass
  8. Unnamed workings at Patterson Pass
  9. Unnamed Patterson district workings on a northwest-trending fault zone
  10. Unnamed Patterson district workings on a northwest-trending fault zone
  11. Unnamed Patterson district workings on a northwest-trending fault zone
  12. Unnamed Patterson district workings on a northwest-trending fault zone
  13. Cave Valley mine
  14. Streator mine
  15. North Creek Spring prospect
  16. Lanter mine
  17. Pip mine



**LEVELS OF RESOURCE POTENTIAL**

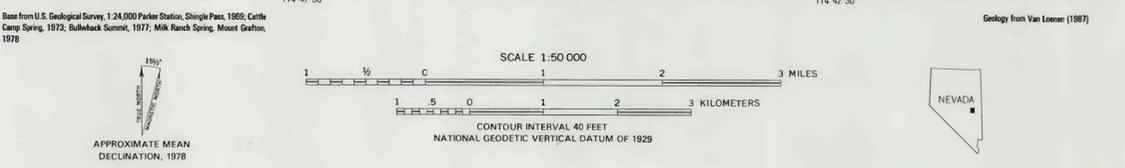
**H** High mineral resource potential  
**M** Moderate mineral resource potential  
**L** Low mineral resource potential  
**U** Unknown mineral resource potential  
**N** No known mineral resource potential

**LEVELS OF CERTAINTY**

**A** Available data not adequate  
**B** Data indicate geologic environment and suggest level of resource potential  
**C** Data indicate geologic environment, give good indication of level of resource potential, but do not establish activity of resource-forming processes  
**D** Data clearly define geologic environment and level of resource potential and indicate activity of resource-forming processes in all or part of the area

Diagram showing relationships between levels of mineral resource potential and levels of certainty. Shading shows levels that apply to this study area

- Contact**
- High-angle fault—Bar and ball on downthrown side; dashed where approximate; dotted where concealed
  - Thrust—Sawtooth on upper plate
  - Strike and dip of inclined bedding



**MAP SHOWING MINERAL RESOURCE POTENTIAL, GEOLOGY, MINES AND CLAIMS, AND GEOCHEMICAL SAMPLE SITES, MOUNT GRAFTON WILDERNESS STUDY AREA AND VICINITY, LINCOLN AND WHITE PINE COUNTIES, NEVADA**