

# Feature

## Mine of the Month

# The Yellow Pine Mine

(Goodsprings District, NV)



## History

One of the largest mines in Clark County, in which the Goodsprings District lies, the Yellow Pine typifies the lead-zinc deposits in the district. It is part of a group of claims that cover most of Porphyry Gulch, 4 miles west of the town of Goodsprings. Several of the claims were located as early as 1892, and the mine produced every year from 1906 to 1931, being most productive between 1911 and 1928. The mine has been idle since the late 1950s.

Production from 1907 to 1930 was 224,245 tons of ore (note: no mention is made of whether these amounts are in short or long tons) averaging 28% zinc, 14% lead, and 12 ozs of silver per ton. The net value of this ore was \$22.87 per ton, and the total net value was \$6,253,583. The average cost of mining by the square-set method was \$12.11.

Underground workings explore the north-dipping Yellowpine Limestone Member, which contains most of the ore bodies, and the Arrowhead Limestone and Bullion Dolomite Members of the Monte Cristo Limestone, to a depth of almost 700 feet below the surface. The ore bodies ranged in thickness from an average of 10 to 20 feet to as much as 40 feet, extended from 50 to 300 feet down the dip, and were found for more than 2,000 feet along the strike. For many years, the Yellow Pine and Prairie Flower mines had been connected and operated together as one mine.

Mine development comprises an incline shaft 900 feet deep with a 300-foot winze from the bottom level. The vertical depth attained in the mine is 465 feet. Total underground workings comprise 52,000 feet. The ores are all oxidized hydrothermal replacement deposits in limestone that has been subjected to considerable faulting.

The most abundant mineral was hydrozincite, though hemimorphite, smithsonite, and galena were widespread. Cerussite and anglesite were also common associates. Also widely found in small amounts were other carbonates (malachite, rosasite, aurichalcite, etc.), sulfates, and silicates (primarily chrysocolla) of zinc, lead, and copper.

It is interesting to note that radioactivity was reported associated with copper mineralization. The radioactive material is porous, silicious limonite with small amounts of malachite and chrysocolla. Chemical analysis of sample material showed .017% U<sub>2</sub>O<sub>3</sub>.

## LOCATION

**DISTRICT:** Goodsprings Clark County, Nevada

**TOPO MAP:** Goodsprings Quadrangle Sec 20 T 24 S R 58 E

**DIRECTIONS:** From Las Vegas, south on I-15, 31 miles to the Jean exit, Route 161. Head W 7 miles to Goodsprings. Continue straight through the small town, past the iconic Pioneer Saloon, to the stop sign at Esmeralda St. Turn right, about 1/4 mile to the end at Pacific Ave. Turn left and continue about 1/2 mile, past fire station at end of pavement. Continue on dirt road for 2.5 miles. Turn left onto rutted road and follow 2 miles to Porphyry Gulch. Yellow Pine is the large dumps in the center of the valley.

## GEOLOGY

**SETTING:** Hydrothermal replacement deposit (breccia-filled and pipe-like); strike NE and dip NW; ore bodies primarily in the Yellowpine member of the Mississippian-aged (360-320 million years ago) Monte Cristo Limestone. Regional structures include normal faults and thrust faulting.

**REFERENCES:** Geology and Mineral Deposits of Clark County, NV  
Nevada Bureau of Mines and Geology; Bulletin 62

Mines of Clark County by William O. Vanderburg



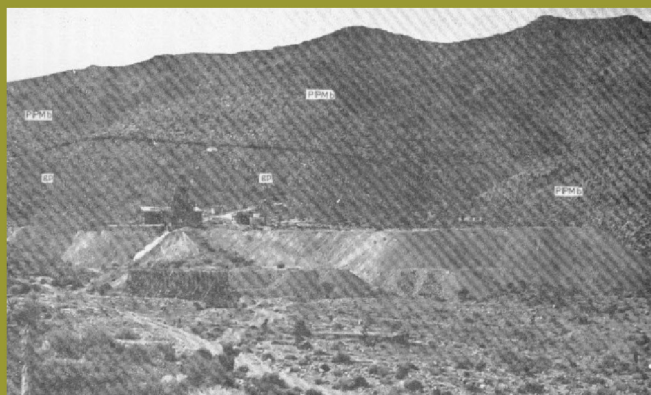
# OBSERVATIONS and COMMENTS

The Yellow Pine is a lead-zinc replacement deposit typical of the district. It is an easily accessible mine near the former camp of Goodsprings, NV, which in its heyday served as the center of activity for the surrounding mines, but now is little more than a bedroom community for Las Vegas 28 miles to the north, and the stateline casinos on the Nevada-California border about 14 miles to the south.

The rutted road leading off the maintained dirt thoroughfare called Kingston Road (or Wilson Pass Road in this section) is traversable by ordinary street vehicles when the weather is dry, but 4-wheel drive is still recommended. About a mile in are several small dumps on the left. These denote the Prairie Flower Mine, which in its early years was eventually connected underground to the Yellow Pine a short distance south; both were then operated as one mine. I have found some decent specimens of descloisite and mottramite, both massive and botryoidal, on these dumps.

Farther ahead are the extensive dumps of the Yellow Pine. It takes a good eye and patience, but a thorough search will surrender specimens of rosasite, malachite, sphalerite, hydrozincite, hemimorphite, and large, heavy nodules of galena altered on the surface to anglesite, cerussite, and brown plattnerite. Of special interest is the granite porphyry intrusive that yields nice, well-formed crystals of embedded orthoclase, some as large as a couple inches, and most of which are altered to kaolinite (*see page 10*). Several piles of material are scattered around the south end of the main dump. Or, you could scramble up the lower portion of the nearby mountain slope composed of the granite porphyry intrusion that underlays the host limestone Bird Spring Formation (*see photos below*) and do some digging for fresh specimens. Beyond the Yellow Pine is the Alice Mine, also known as the Yellow Pine Extension, source of beautiful specimens of hemimorphite with rosasite and microscopic molybdoferrocite.

The Yellow Pine is one of the few mines in the district that I have never been into, as entry requires specialized roping skills. Most of the upper levels of the mine have been collapsed for many years. I did find a website (URL: [www.mine-explorer.com/Yellow\\_Pine/yellow\\_pine1](http://www.mine-explorer.com/Yellow_Pine/yellow_pine1)) hosted by two intrepid explorers who managed to make their way into the mine through a ventilation shaft. They have included some great photos of their adventure, including the layout of the mine workings which I included on page 13. I highly recommend you visit this website for a thorough appreciation of the interior of the Yellow Pine Mine.



Yellow Pine Mine in 1956. (cf. Hewett, 1931, pl. 35A).



Yellow Pine Mine in 2014.

Skyline ridge is composed of Pennsylvanian (286-320 mya) thin-bedded Bird Spring Formation comprised of various layers of shale, sandstone, conglomerate, and carbonate rocks. Smooth slope behind hoist is underlain by granite porphyry, source of the mineralizing solutions.



# PHOTOS OF MINE and MINERALS



## Shenandoah Peak

Kingston Road, known as Wilson Pass Road in the vicinity of Goodsprings, stretches towards Shenandoah Peak in the distance. The rutted mining road that leads to the Yellow Pine Mine is just ahead, about 2.5 miles outside of Goodsprings.

## Porphyry Gulch

The Yellow Pine and neighboring mines lie in this small valley outside of the town of Goodsprings. The large dumps in the center background mark the site of the main workings.



## The Yellow Pine Mine

This former Pb-Zn-Ag-Cu-Au-Hg-Sb mine was one of the first and largest in the district. In intermittent operation for more than fifty years, it was the source of a multitude of ore and specimen minerals, including galena, sphalerite, hydrozincite, mottramite, descloizite, anglesite, cerussite, smithsonite, rosasite, cinnabar, vanadinite, heterogenite, and many others. Good specimens can still be claimed from the extensive dumps.



# PHOTOS OF MINE and MINERALS

## Needle in a Haystack

More often than not, finding candidates worthy of display in a collection means sifting and scouring through heaps of dump piles to find those rare treasures discarded and ignored by the original miners who were not interested in mineral specimens.



## Showing Off

Yep, that's me, boasting two nice specimens of descloizite just rescued from a dump. I've been visiting this mine for more than 30 years, and I still find worthy specimens to add to my various collections. It is important to note that the time of day and season affects what you spot on any given trip due to how the sun reveals any bounty. Paltry findings one day can turn into a bonanza on another.



## Closer Inspection

Specimens rarely present themselves readily. A lot of rocks have to be sorted through to look for clues (colors, vugs, glitter, etc) to potential value. However, with perseverance, patience, passion, and luck, one will rarely go home completely empty handed!



# PHOTOS OF MINE and MINERALS



## Anyone for Leftovers?

This is all that remains of the hoist platform located adjacent to the main shaft. A major fire in the late 1950s burned down the shaft, underground support timbers, and just about everything else!

## Treasures Await

These are the main dumps where such specimens as mottramite, desloizite, rosasite, large nodules of argentiferous galena, and others can be found. Directly above the dumps at the base of the ridge in the background is the granitic intrusion that is the source of large, well-formed crystals of orthoclase embedded in the groundmass.



## Entrance No More

This used to be the main entry shaft that led to 9 levels and over 52,000 feet of underground workings. The first 6 levels were buried in a cataclysmic collapse that occurred after a fire that destroyed the supporting timbers along with the hoist.



# PHOTOS OF MINE and MINERALS



Specimen

**XXII 28 C**

*6.75 x 3.25 inches*

Yellow Pine Mine

These are the orthoclase crystals in granite porphyry as mentioned in **Peterson Field Guides Rocks and Minerals Fourth Edition** page 226. Most of the crystals from this area have actually been altered to kaolinite, so technically they are pseudomorphs of kaolinite after orthoclase. Nevertheless, it's always special to personally collect specimens from locations mentioned in any rock and mineral book.



Specimen

**XXII 28 D**

*3 x 1.75 inches*

crystal is 1.13  
inches long

Yellow Pine Mine

*All specimens from the G. Miles Lehman Collection*



# PHOTOS OF MINE and MINERALS

**XII 19 D**

Botryoidal Descloizite

2.5 x 1.75 inches

**Prairie Flower Mine**



**VII 139 C**

Galena altering to

Cerussite and

Plattnerite,

2.25 x 1.58 inches

**Yellow Pine Mine**



**XVIII 01 C**

Hemimorphite with

Rosasite

2.5 x 3 inches

**Alice Mine**



**VII 42 D**

Cadmium-bearing

Smithsonite

1.75 x 2.5 inches

**Prairie Flower Mine**



**II 03 D**

Sphalerite crystal on Hemimorphite

2.13 x 1.25 inches

**Yellow Pine Mine**



**VII 110 D**

Rosasite

2.75 x 1.5 inches

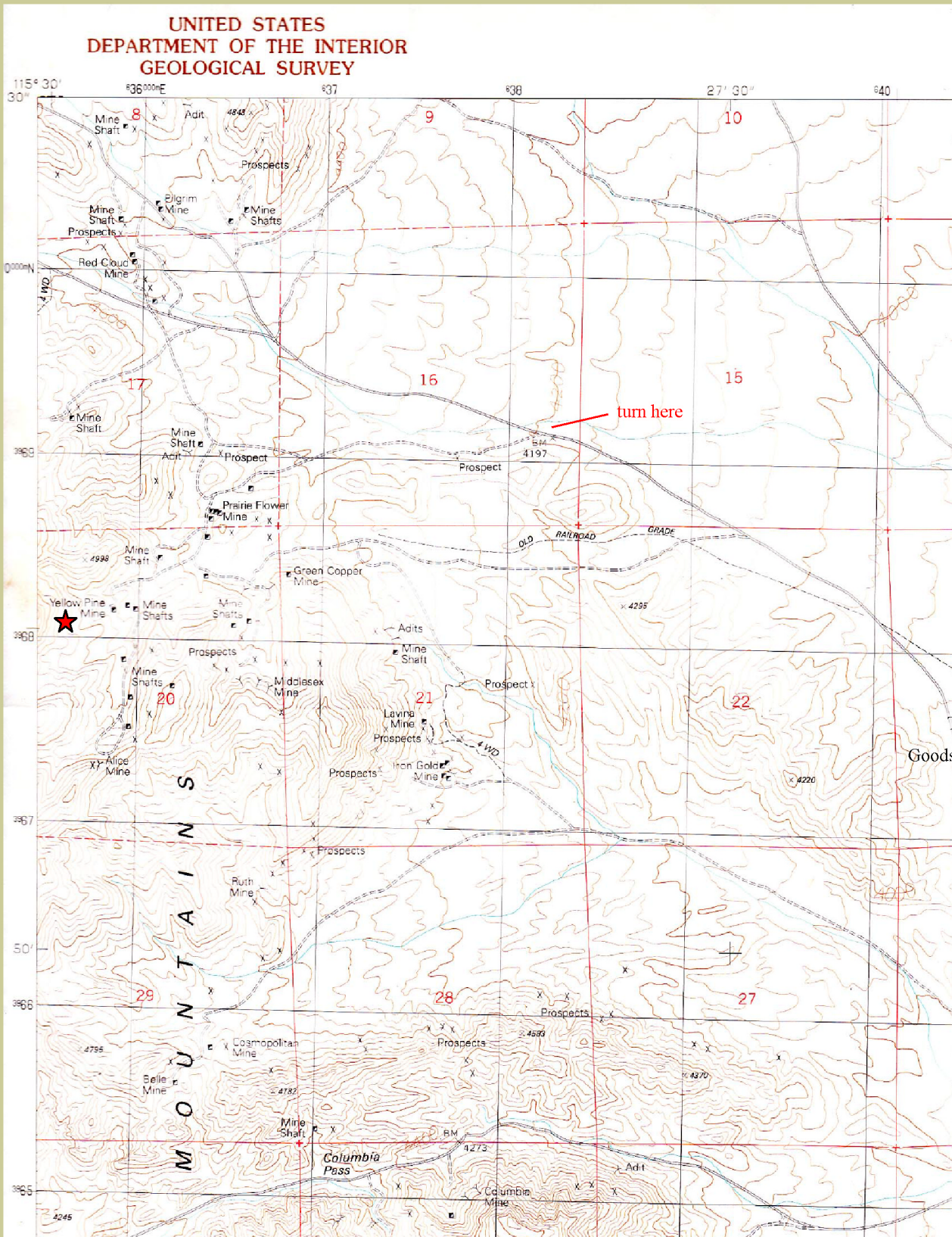
**Yellow Pine Mine**

A visitor to Porphyry Gulch and the Yellow Pine Mine can expect to find at least some of these minerals.

*All specimens from the G. Miles Lehman Collection*



# TOPOGRAPHIC MAP



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**Found on the website: [mine-explorer.com/Yellow\\_Pine/yellow\\_pine1](http://mine-explorer.com/Yellow_Pine/yellow_pine1).  
No notation was given to indicate in what publication this originally was published.**