

# Rich Hill, Arizona: A modern gold rush to a historic gold district

**R**ich Hill, also known as Weaver District No. 2, is among the most productive placer gold locations in Arizona. Located near Congress, AZ (Fig. 1), this district hosted major placer rushes in the 1860s and 1930s. Those rushes were followed by an electronic metal detecting rush that started in the 1980s and continues today. Thousands of ounces of gold have been produced by these modern amateur and professional metal detectorists. Many of them see more gold in an afternoon than Nevada mine workers will ever see outside of the mill.

## Rich Hill discovery

Inspired northeastward by Spanish legends, a party of 10 men left Yuma, AZ on April 1, 1863. Included in the group were Pauline Weaver (Fig. 2), Henry Wickenburg and Abraham Peeples. Wickenburg left the group near the Hassayampa River and discovered the Vulture deposit. The rest of the group arrived at the base of Rich Hill in late May. While drying antelope meat on the first day, a few of the men prospected a nearby creek bed and immediately found gold. In a couple of hours they picked up more than 2,800 g (90 oz) of gold. The next day, four members of the party went searching for their horses and returned with news that a nearby hilltop was literally graveled with nuggets. The next morning the party went to the top of the "Rich Hill" and found chunks of native gold as big as potatoes littering the ground of a gently sloping basin, hence the depression's nickname "Potato Patch."

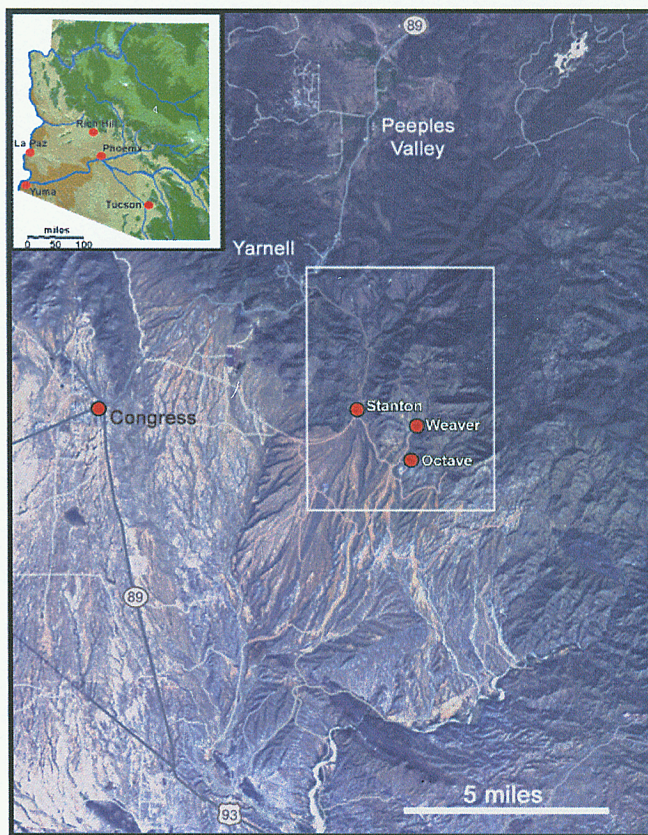
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The supplies ran out before the luck did and Weaver led some of the men to Maricopa Wells for supplies. Word spread about the find and the area was officially designated Weaver District No. 2. During the height of the following rush, Weaver was bringing in 11 kg (25 lbs) of gold each week and placer miners averaged \$65 each

**FIG. 1**

Index map of Arizona, showing the location of Rich Hill and a detailed satellite image of the greater Rich Hill district. Note the visible mine tailings (white) below the Octave Mine, and the large alluvial fan (reddish) below Stanton. The white box is the approximate outline of the Rich Hill mining district.



day. More than 777.5 kg (25,000 oz) of gold were found around Rich Hill during the first five years.

A tent city, named Weaverville (later shortened to Weaver), cropped up at the base of Rich Hill and the population quickly reached 1,400 people. More gold was discovered on the other side of Rich Hill, roughly 3 km (2 miles) northwest of Weaverville and the town of Antelope Station was born.

## Rich Hill and the "Wild West"

After several years, the easy placer gold was mined out. The area started to attract men more interested in stealing gold than mining it. Travelers learned to avoid the town of Weaver, which was taken over by Francisco Vega's gang. Antelope Station began to thrive. The com-

peting stagecoach station and stores owned by George "Yaqui" Wilson and William Partridge had lively but friendly competition until Charles Stanton entered the scene.

Charles Stanton came to the United States one step ahead of the English authorities and drifted from mining camp to mining camp. The Vulture Mine hired Stanton as assayer in 1871. There, he blackmailed Dennis May for ownership of the Leviathan claim at Rich Hill. When the Vulture Mine shut down, Stanton moved to Antelope Station. However, Stanton saw the businesses of Wilson and Partridge as the real "gold mines." Members of Vega's gang started visiting Stanton, and Vega's men later triggered a feud between Wilson and Partridge. Partridge shot Wilson dead and was sent to the Yuma territorial prison to serve a life sentence. However, John Timmerman showed up to run Wilson's store and Partridge's creditors hired Barney Martin to run their station.

In March 1875, a post office was established at Antelope Station and Charles Stanton was appointed postmaster. His first act was to rename the town "Stanton." Stanton was later elected deputy and justice of the peace. It was rumored that many of the inhabitants of Boot Hill voted for Stanton. Behind the scenes, Stanton continued to mastermind the Vega gang's criminal deeds targeted at Timmerman and Martin. The Martins' house and barn burned to the ground and the stage company's barn burned, too. On a business trip to Wickenburg, Timmerman was robbed and murdered. Stanton, acting as justice of the peace, appointed himself appraiser of the Wilson-Timmerman estate and named himself as sole beneficiary (Fig. 3).

Word of the murder reached Charles Genung, who immediately suspected Stanton. That summer, a myste-

**FIG. 2**

**The only known image of Pauline Weaver. Weaver was an explorer, rancher, trapper, prospector and entrepreneur. Weaver was also involved in the discovery of two Arizona's richest gold strikes, including Rich Hill. (Photo courtesy of Sharlot Hall Museum.)**



rious fire broke out at the Genung ranch at Maricopa. The Lucero family, friends of the Genung's, also ran in to trouble when Stanton decided to have his way with their youngest daughter. Her oldest brother, Pedro, took a shot at Stanton, clipping his ear. Stanton offered a \$5,000 reward and Pedro fled to Mexico.

Martin, tired of rebuilding his station, decided to move with his family to Phoenix. This was not good enough for Stanton, who had Vega's gang ambush the Martin's near Wickenburg. The gang scalped the bodies to give the appearance of an Indian attack and took the strongbox. Stanton watched the whole ugly scene from a nearby hilltop. The attack was so vicious that the *Tombstone Epitaph* referred to the area as "bloody Stanton." Charles Genung and Sheriff Bill Blankenship tracked the culprits to Weaver. However, the gang had split up and escaped to Mexico. On Nov. 13, 1886, three of the Lucero brothers went to Stanton's store where they shot and killed him. Later that evening, the Lucero brothers showed up at the Genung ranch in Maricopa to return a rifle

they had recently borrowed.

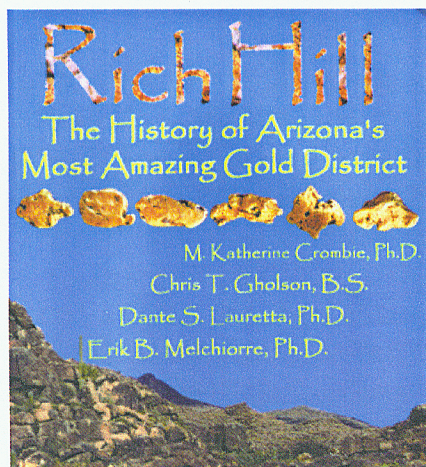
## The start of Hard Rock Mining at Rich Hill

By 1883, cumulative placer gold production was at least 1.5 t (50,000 oz). By 1899, only 20 men were working the placer fields fulltime, each producing about 3,110 g (100 oz) of gold a month. Despite the decline, the Octave Mine manager noted that, after a good rain, most of the shift workers would skip work to hunt for nuggets. By 1907, only 12,440 g (400 oz) of placer gold were produced. Placer mining remained in a slump until the Great Depression.

Early at Rich Hill, lode ore was crushed in crude arastras or shipped to the railhead by oxcart for milling in California or Colorado. The first shipment from the Dixie-Rincon Mine was sent to New Jersey. Once the free-milling surface ores were expended, the deeper sulfide ores would have to wait for larger mining interests with capitol to build a sophisticated mill. More than 20 mining companies eventually operated at Rich Hill (Fig. 4), the largest of which was the Octave.

## The Octave Mine

The Octave deposit was discovered in the late 1860s. However, the Octave lode was not free milling and little work was done until the 1890s



## History of Rich Hill district available

The authors of this article also have a book available on the subject. *Rich Hill: the History of Arizona's Most Amazing Gold District* contains 246 pages. The book includes 10 pages of color, satellite images of Rich Hill, location maps and more than 100 historical photographs. It available for \$24.99 from Books West, phone 866-369-2468 or 303-449-5995.

when a syndicate of eight men organized the Octave Gold Mining Co. (Fig. 5). A 40-stamp mill was built. Between 1900 and 1905, the Octave lode was mined to a depth of more than 610 m (2,000 ft) along the dip of the vein and 610 m (2,000 ft) along strike. It produced gold and silver worth about \$2.25 million in the dollars of the time. The town of Octave sprang up on patented claims owned by the mine. A company store was built and miners were partially paid in company scrip.

The mine changed hands several times between 1905 and 1918. The Octave Mines Co. was organized in 1918 and J. Nelson Nevius was hired as mine engineer. In 1921, he reported that: "The Octave Mine is an object lesson, showing that a mine may be abandoned before it is exhausted... The evidence underground, a mill-bin a third full of waste, and correspondence left at the office tell the tale of the wrecking of a good mining enterprise." (Nevius, 1921).

After careful geologic detective work, Nevius directed heroic "double-jack" hand-drilling operations that found the displaced vein on the other side of the Joker Fault. Nevius blocked out ore containing 777.5 kg (25,000 oz) of gold. Production between 1895 and 1925 was 1.65 t (53,000 oz) of gold and 2.3 t (75,000 oz) of silver.

In 1928, the Arizona Eastern Gold Mining Co. was formed. A 45-t (50-st) flotation mill was built. Between 1928 and 1930, 8.2 kt (9,100 st) of ore were crushed, producing gold-rich concentrates valued at \$90,000.

In 1934, the American Smelting and Refining Co. (Asarco) purchased the property and modernized the mill. Between 1934 and 1941, Asarco mined 44.2 kt (48,700 st) of ore averaging 12.44 g/t (0.363 oz/st) gold, 15.9 g/t (0.464 oz/st) silver, 0.24 percent lead and 0.03 percent copper. The mine closed in December 1942 due to the War Production Board law WPB-L-208. Little work was done following the war and the mine was razed along with the nearby town during the late 1950s.

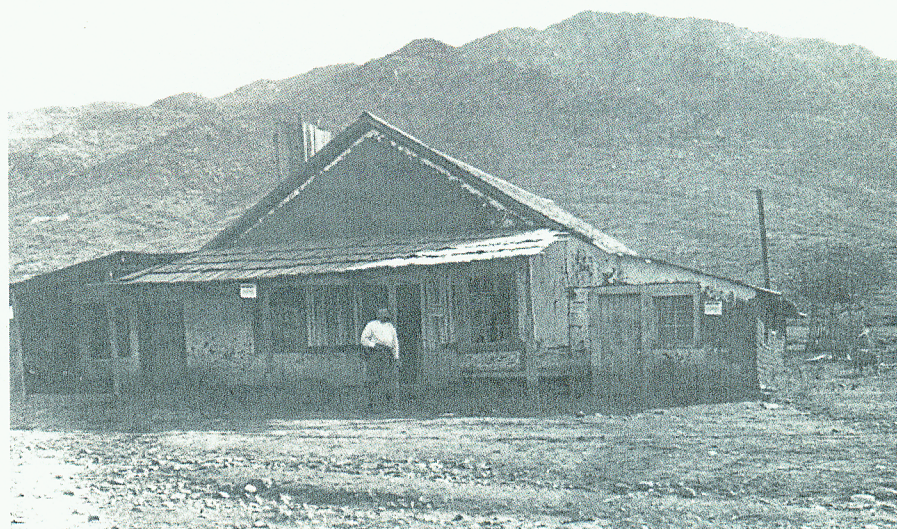
The Octave Mine produced about 2.48 t (80,000 oz) of gold, making it the largest producer of lode gold from the Weaver District.

The Octave vein is hosted within older granite and diorite, and dips 20° to 30° to the northwest, and strikes 70° east of north. The vein is traceable on the surface for at least 760 m (2,500 ft) of strike. The vein averages 0.9 m (3 ft) thick. It consists of massive quartz, with rare disseminations (4 percent to 5 percent) of pyrite and galena. The pure galena assays 3,428 g/t (100 oz/st) gold and silver. The pyrite averages 582 g/t (17 oz/st) and the chalcopyrite averages 171 g/t (5 oz/st).

Electron microprobe analyses of Octave galena showed a complex mineralogy where "gold" occurs as 0.5 to 5 micron blebs, with an average purity of 84 percent (16 percent silver). The gold telluride Petzite is also present. Silver also occurs as micron-sized inclusions of silver sulfide, native silver and rare silver iodide.

**FIG. 3**

**Charles P. Stanton in front of "his" store (Photo courtesy of Sharlot Hall Museum.)**



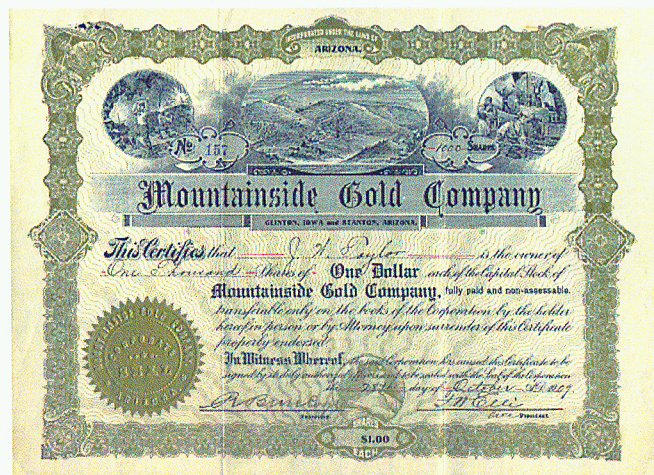
## The Johnson Mine

This mine is probably the oldest lode mine in the district. William Johnson hand-mined high-grade ore by underhand stoping from a 61-m- (200-ft-) deep inclined shaft and processed it in two horse-drawn arastras. An 1899 report to the territorial governor states that the mine "was worked ... by the hermit Johnson, whose bones now lie buried under an immense wall of the lode from which he was stoping ore" (Blake, 1899).

The report also states that Johnson took Stanton to court over a stolen gold specimen. According to court testimony, Johnson claimed that he caught Stanton in his shack and later discovered that his prized gold specimen was missing. The judge ruled against Johnson, due to a lack of conclusive proof. Within a year, the veteran miner Johnson was dead from an unexplained cave-in of his mine. He is still entombed there. Perhaps like so many others, he was the victim of Stanton's vengeful ways.

**FIG. 4**

**Stock certificate in the Mountainside Gold Co. (Photo courtesy of Fred Holabird Americana.)**



**FIG. 5**

The Octave Mine in the late 1890s. In the upper left corner is the No. 2 shaft and headframe. The mill, center-right, was connected to the shaft by an elevated, wooden tramway. (Photo courtesy of Sharlot Hall Museum.)



In the 1930s, the Johnson Gold Mines Inc. sunk a 143-m- (470-ft-) deep inclined shaft with stopes on five levels to mine a payable ore zone 0.3 to 0.6 m (1 to 2 ft) thick. More than 460 m (1,500 ft) of workings were developed. Ore was mined from stopes on 10-m (35-ft) centers and backfilled with waste rock. The mine employed 17 men who were paid \$5 a day and housed in a bunkhouse at the mine.

The Johnson Mill had a capacity of 45 t/d (50 stpd). Ore was crushed in a 255- x 50-mm (10- x 2-in.) jaw crusher and a 1.2- x 1.5-m (4- x 5-ft) ball mill. A Deister vibrating sand table produced a concentrate of heavy

minerals. Tailings were processed by flotation to recover gold-bearing sulfide minerals.

Gravity concentrates contained 514 g/t (15 oz/st) gold and 103 g/t (3 oz/st) silver. Flotation concentrates averaged 137 g/t (4 oz/st) gold and 137 g/t (4 oz/st) silver. These concentrates were processed by amalgamation. Retorting of the gold- and silver-rich mercury was performed once a week under the watchful eye of the foreman. Mining was halted at the start of World War II, the pumps were turned off and the workings filled with water to about 15 m (50 ft) below the haulage level.

From the late 1940s to early 1960s, Frank Russell mined small quantities of ore from above the water table. In 1975, the Precious Metals Mining Co. sunk a 53-m- (175-ft-) deep inclined shaft and drove a 21-m (70-ft) adit into the vein. Significant tonnages of payable ore were not found and the company suspended operations in 1976.

The Johnson vein is 0.45 to 1.8 m (1.5 to 6 ft) thick and 91 m (300 ft) long. It strikes northeast and dips 29° northwest. The vein is quartz with lenses of gold-bearing pyrite up to 0.9 m (3 ft) thick. Native gold was noted in upper levels during 1894 and 1930s operations.

## Mining during the Great Depression

The Great Depression spurred a revival of placer gold mining in Arizona, and Rich Hill was no exception. At Rich Hill, many families and small groups of men survived and even prospered during the hard times by dry washing.

About 50 men worked the field in the winter of 1932-1933. Each averaged only about 4.6 g (0.15 oz) of gold a week (Wilson, 1952). During that same winter, lucky individuals found several nuggets of more than 93 g (3 oz) in Weaver Creek, and two nuggets of more than 155 g (5 oz) from Antelope Creek (Wilson, 1952). Lode mining also experienced a revival during the 1930s (Fig. 6).

## Full Circle: gold, guns and god in the 1970s

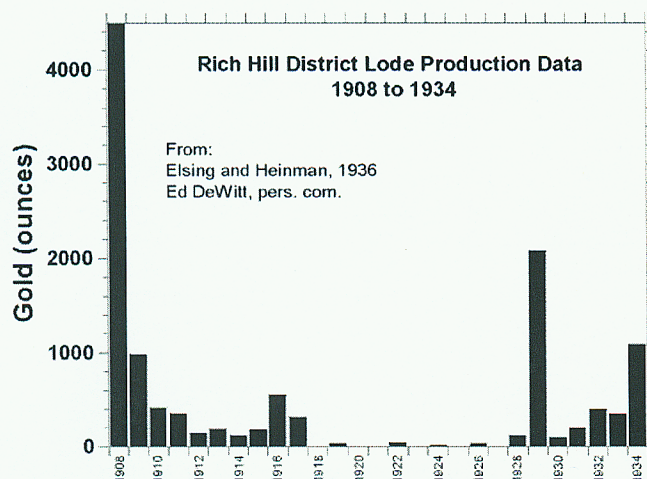
In 1975, the Rhenium Corp. floated a scheme to re-process the Octave Mine tailings, claiming a grade of 34.2 g/t (1 oz/st) palladium, 17 g/t (0.5 oz/st) platinum and 34.2 g/t (1 oz/st) rhenium.

The unsuspecting Rev. Jack Oliphant, the executive director of the Ranch Challenge Hallelujah People, purchased \$100,000 of Rhenium Corp. stock. In the winter of 1976, Oliphant and about 50 of his followers, known as the "Hallelujah Boys," took up residence in some of the abandoned buildings at Octave, believing the Rhenium Corp. stock gave them ownership of the mine (Fig. 7).

This did not sit well with, Carl Carlson, another man who claimed ownership of the mine, and his trio of armed guards. They lived directly across the road from

**FIG. 6**

Lode gold production from the Rich Hill area, 1908 to 1934. More than 3.1 t (100,000 oz) of gold has been produced from the hard-rock mines of the district.



the Hallelujah Boys camp. Tensions quickly began to run high between the two heavily armed camps. On March 20, 1978, Oliphant lost most of his right arm when he pulled a 16-gauge shotgun barrel first from his car to confront Carlson's guards.

This feud was not the only incident in the Rich Hill area. And when gold hit \$25/g (\$800/oz), things got so crazy that the police and propane refueling trucks refused to come out to Octave.

In March 1980, the vice president of Rhenium Corp. was arrested and charged with 13 felony counts of fraud. He allegedly sold worthless stock in several Arizona corporations whose assets listed several played-out gold mines, including the Octave.

Jack Oliphant's story did not end with the Rhenium Corp. and Octave gold mine. Around 1979, Oliphant and his band left Rich Hill and joined the "Arizona Patriots." The group plotted to rob a Wells Fargo armored car. Oliphant and seven other men were arrested. Oliphant was sentenced to a four-year prison term. After his release, he retired to his ranch near Kingman, where he died at the age of 71.

During the late 1970s, members of the Lost Dutchman's Mining Association (LDMA) began to routinely visit the area and pan for gold along Antelope Creek. They would camp among the historical ruins of the town of Stanton. The members of the LDMA were not looking to get rich and considered themselves recreational prospectors. They were drawn to Stanton as much for the beauty and solitude of the area as for the

FIG. 7

The old church at Octave. It was temporarily occupied by the "Hallelujah Boys" during the 1970s.



rich gold deposits. The group purchased the town and mineral rights to some of the surrounding areas in 1978. Seventy recreational vehicle hookups and dry camping for 125 people was constructed, and the original buildings were restored (Figure 8). Without the LDMA's efforts to preserve this historic town from vandalism, it is likely that nothing would remain today.

Rich Hill electronic gold rushes

Very low frequency (VLF) coin detector machines were found to be useful for hunting gold as early as 1978.

Table 1

Listing of some of the major nuggets documented to have been found in the Rich Hill area.

Weight g (oz)	Date reported	Source	Notes
2,528 (81)	1860s	Many sources	A conservative estimate of a nugget the size of an "Irish potato."
1,568 (50.4)	Before 1899	Blake, 1899	Reported as three nuggets worth \$1,008 with gold at \$20/oz.
778 (25)	2000	Griffith, 2000	Found with metal detector by Jan and Jess Harkness near Stanton LDMA camp, March 2000.
700 (22.5)	Before 1899	Blake, 1899	Reported as \$450 nugget with gold at \$20/oz.
700 (22.5)	Before 1932	Hosford, 1932	Reported as two quartz-gold specimens worth \$450 with gold at \$20/oz.
616 (19.8)	Before 1932	Hosford, 1932	Reported as \$396 nugget with gold at \$20/oz, from Upper Weaver Creek.
467 (15)	Before 1918	Watson, 1918	Reported as nuggets ranging from \$150-\$300 with gold at \$20/oz.
465 (15)	1999	Author's observations	Found with metal detector by Bob K., quartz-gold specimen that was part of a 25-oz patch of nuggets.
373 (12)	Before 1932	Sawyer, 1932	Reported as "pieces over 1 lb."
323 (10.4)	Before 1921	Nevius, 1921	Found on the Octave Mine site in a placer deposit. Reported as \$207 nugget with gold at \$20/oz.
257 (8.25)	1918	Watson, 1918	Reported as \$165 nugget with gold at \$20/oz, found by Ernest (Gus) Reissman.
252.38 (8.1)	1931	Wilson, 1952	Shaped like a tooth, 53 x 47 mm, contains 18.52 g of iron-stained quartz, and 22.71 g of silver.
237 (7.6)	1992	Author's observations	Found with metal detector by Bob Gatowski.
>156 (5)	1932-33	Wilson, 1952	Two nuggets, each one weighing more than 5 oz, Upper Antelope Creek.
140 (4.5)	1998	Author's observations	Found with metal detector by Chris Gholson.
>93 (3)	1932-33	Wilson, 1952	"A few" nuggets more than 3 oz each, Weaver Creek.
78 (2.5)	1995	Author's observations	Found with metal detector by Chris Gholson.
69 (2.2)	1992	Author's observations	Found with metal detector by Bob Gatowski.

**FIG. 8**

The original Butterfield State Stop. This was where Charles Stanton was gunned down. It now serves as the Lost Dutchman Mining Association's main office in Stanton, AZ.

**FIG. 9**

Fifteen gold nuggets totaling more than 46.6 g (1.5 oz) were found with metal detectors in the Devil's Nest area at Rich Hill. From the left: a 15.5-g (0.5-oz) "L" shaped nugget, 10 smaller nuggets totaling more than 31 g (1 oz), four nuggets totaling more than 15 g (0.5 oz) with the largest weighing 9.3 g (0.3 oz).

**FIG. 10**

A 140-g (4.5-oz) nugget at Rich Hill at a depth of 0.4 m (1.5 ft) with a Minelab SD 2100 metal detector.



In 1983 and 1984, Fisher Laboratories and White's Electronics released metal detectors that worked well for large targets but not for small nuggets. These detectors (the Mother Lode 660 and Coinmaster 4900/D) were responsible for finding many large nuggets. However, only the large, shallow gold was found in those days. Most nugget patches would go undiscovered until the late 1980s and early 1990s.

When gold skyrocketed to \$25/g (\$800/oz) in the mid-1980s, Rich Hill became a hive of activity. Amateur prospectors swarmed the

slopes and gun-toting claim owners patrolled their property. Heated disputes about ownership and boundaries were common. This was the first of the great Rich Hill electronic gold rushes.

Professional detectorists were swinging the newly improved VLFs, (Fisher "Gold Bug" and Minelab GT 1600) and thousands of gold nuggets began turning up. Most of the known nugget patches at Rich Hill were "found" at this time.

During the mid-1990s, nuggets were being found at Rich Hill with less frequency. This changed with the release of Minelab's Super Detector 2000. The first to hit the slopes of Rich Hill with the SD 2000 were rewarded with handfuls of nuggets. This unit was the biggest detector breakthrough since the invention of the VLF. Floyd Allen, a seasoned Rich Hill detectorist commented: "It was almost as if the hill had never been hunted before."

However, this rejuvenation was short lived. Once the known nugget patches were picked over, the excitement slowly dwindled. Minelab's SD 2100 made its debut in early 1997 and only five units were operating in the entire state of Arizona. One of the authors was among the first to swing a 2100 over Rich Hill. In just three hours, a half-ounce worth of nuggets was recovered, and within a few months, several pounds of gold nuggets were plucked from the hill, many weighing in the 93-, 124- and 155-g range (Figs. 9, 10 and 11, Table 1).

The people who owned the 2100s did little to publicize its improved capabilities. Eventually, the word leaked out. Minelab and other companies have released a number of improved detectors since then and operators have uncovered a sizable amount of gold. Probably the most famous recent find is the 0.9-kg (2-lb) Tongue Nugget.

With thousands of metal detector and drywasher hobbyists annually producing hundreds of ounces of gold in the Rich Hill area, this revitalized district is a dramatic example of a modern gold rush. (References are available from the authors.) ■

**FIG. 11**

Eight large nuggets between 7.8 g (0.25 oz) and 15 g (0.5 oz) found in the Rich Hill area. Clockwise from the top: Weaver Creek, Johnson Mine area, two from Potato Patch, three from Devil's Nest the center one from south of the Octave Mine.

