Oregon Journal Feb. 19 1939

MOUNTAIN OF ROCK PROVES VALUABLE

Silica Deposit Discovered by Michigan Man

GRANTS PASS, Feb. 18 (Special)—A mountain of white rock, for years ignored by miners who searched southern Oregon successfully for gold, copper, cinnabar, lime and chrome, has been proved by a year's operation to be the million-ton core of a new industry which finds a market both in poultry and manufacturing.

The mountain is silica, which meant little to most miners until Fayette I. Bristol, who came here from Michigan and helped operate a lime products plant in Josephine county, discovered the deposit.

One year ago this month construction of the Bristol silica plant was begun at Rogue River, old-time community east of here.

The market for the present product is between 2,000,000 and 3,000,000 Oregon turkeys, as well as other domestic poultry of the state. The crushed silica forms poultry grit claimed to be superior because of its intense whiteness and the fact that it is practically insoluable.

Possibly even a greater market lies in the prospective development of Bonneville dam industries, for it has a multitude of commercial uses, in cleaners, paints, glass, pottery, bricks, in paper mills, and as a flux in the making of steel.

Several Deposits Reported

Silica is an abrasive white rock whose hardness is next to that of precious stones. It is the chief component of glass. It is found in sands and in fused forms.

There are several silica deposits in the northwest, both quartz and quartzite. But the only ones approaching the southern Oregon property in purity and magnitude, as stated by Dr. Edwin T. Hodge for the United States corps of army engineers in reports compiled before Bristol recognized the local white rock as silica, are north of Spokane. That is a distance by rail of more than 100 miles farther from Portland than the Bristol deposit.

The white rock crops out of an area covering 80 acres and estimates run as high as 10 to 15 million tons in the deposit.

Grants Pass Courier Feb. 10 1939

Silica Industry Marks Its First Anniversary

This week marks the first anniversary of the Bristol Silica Co. whose plant is located in the town of Rogue River and whose offices are here in Grants Pass. Just a year ago this week, the first structure for the plant was erected although goods were not shipped until the middle of August.

Although there are several silica deposits in the northwest, both quartz and quartzite, the only ones approaching the Bristol property in purity and magnitude are north of Spokane, Wash., a distance by rail to Portland of more than a hundred miles farther than the local deposit. Dr. Edwin T. Hodge, consulting geologist for the corps of engineers, U. S. army, after a detailed study of the silica deposits adjacent to the lower Columbia river industrial area, published two volumes under the date of January, 1938. No mention was made of the Bristol deposit as it had not been discovered at that date.

Silica is an abrasive rock, white in color and next in hardness to that of precious stones. The industrial applications of silica are numerous. Glass and pottery are compounds of silica with various metallic oxides. It is used extensively in metallurgical operations as a flux. With the coming of Bonneville power, silica takes on added importance as it is a necessary ingredient in large industrial plants.

In addition to industrial silica, the Bristol Silica Co., produces Crystal grit, a poultry grit.

5018

PAUL FATTIG/Daily Courie

The Bristol silica mine has tons left to quarry, observes general manager Al Starkey.

Worth its weight in gold

Silica mine yields wealth of materials

quarry.

"I haven't been up here sin
about 1968-69," she muses. "
was December and snowing.
was so pretty."

Bristol has a degree in r
mance languages from Missou
University and a minor
sociology

By Paul Fattig
of the Daily Courier

GOLD HILL — Esther Bristol, 82, gazes down from the cliffs of the quarry with its shiny white rock walls, glistening in the golden winter sun.

A steady stream of cars flows silently along Interstate 5 in the valley far below, paralleling the silvery Rogue River.

"There was another silica mine like this is in Australia," she recalls. "And it had gold in it. Every time we blasted, we thought we were going to hit gold."

There was no gold, but the high-grade silica mine discovered nearly half a century ago continues to produce today.

It was on another sunny day in 1937 that her former husband, Fayette Bristol, was driving along the south bank of the river when he noticed the glint of white rocks shining near the head of Miller's Gulch.

"He saw this white outcropping so he parked his car and walked up here," she says.

It was worth the two-mile uphill hike through thick brush. The miner had discovered a rich outcropping of silica, a high-grade quartz.

Fayette Bristol, who died in 1984, promptly filed a placer claim Aug. 2, 1937, on 20 acres of what is now Bureau of Land Management property.

The silica was first rate: 99.9 percent pure.

The Bristols sold the firm in 1976 after operating it for nearly four decades.

Al Starkey, the general manager of Bristol Silica & Limestone Co., says a survey made in 1983 found there were some 12 million tons of silica yet to be mined along with about 20 million tons of dolomite limestone, a magnesium-bearing limestone. The silica now being mined is about 98 percent pure, he says.

PAUL FATTIG/Daily Courier

Esther Bristol recalls the mine's discovery 50 years ago.

The firm, now owned by Ed Young of Anchorage, produces silica grit for chicken and turkeys, decorative rock for rock gardens and fish tanks, filters, gravel and sand blasting. The higher grades of the mineral can also be used to make silicon metal.

The firm now owns 160 acres at the quarry site, and has claims on 100 acres of BLM land. The processing plant is located just west of Gold Hill.

Len Ramp, resident geologist in Grants Pass for the state Department of Geology and Mineral Industries, says the Bristol mine and another silica deposit on Quartz Mountain in southeastern Douglas County are the principal silica mines in the state.

"There aren't too many sites that can be mined because of the necessity of high purity for most uses," he explains.

Half a century ago, the fledgling firm started out by offering silica gravel as chicken and turkey grits. The Bristols hit the road, selling the "Chicken Teeth" to area poultry farms.

She still has a 1938 package advertising "Chicken Teeth," actually silica gravel for the fowl.

"There had never been anything like it on the market before and we were scared to death some horrible disease would come on the turkeys and kill them all," she says, laughing.

The Bristols also sold railroad cars full of silica, shipping it out to metallurgical plants for two decades.

She can tell you about the days when workers had to stop at noon because of the intense heat reflecting off the shiny rocks.

For a few hours, Bristol stepped back in time atop the

But her plans to become a social worker changed when she met a young man who had majored in geology at Michigan State University.

They married and headed west, where her husband had a job working at the limestone quarry in Williams from 1934-36. Limestone from the Williams quarry was used in building the Washington Monument, she notes.

Her husband wasn't the first one to find the white rock atop Miller's Gulch.

Two huge silica boulders folded together like praying hands near the top of the silica outcropping have long been a place for folks marking their passing.

Jack Frost scratched his initials there in 1933; C.R. Boyd was there in what appears to have been 1916.

And there were once petroglyphs on those rock walls, apparently made by North American Indians, she recalls.

"They were so old the lime had covered them," she says. "But people came up and chipped them all off. People came down from the University of Oregon but they couldn't decipher them.

"I knew an elderly lady who remembers the Indian wars they had here when she was a little girl," she adds. "She remembered the Indian chief was killed and slung over a horse when he was carried over this gulch. We always thought he was buried here because when they came down over the other side they didn't have him."

The silica deposit is about 2,300 feet above sea level now. But a million years ago it was below the ocean, geologists believe.

Seams of clay thread through the outcropping. A silica pinnacle juts skyward, frozen in time.

"Can you imagine the forces which caused this?" she asks. "It's just incredible."

"Plan A" -- What Is It?

Reprinted from Grants Pass Bulletin, Feb. 17, 1949

By F. I. BRISTOL

EDITOR'S NOTE: F. I. Bristol, chairman of the publications committee of the of the Grants Pass Rotary club, for the past several weeks has been making a detailed study of the Rogue River Basin program and in the last three issues of the COGS, weekly bulletin of the club, commented on recent developments of the plan. Following numerous discussions of the program he came to the conclusion this week that for "a number of well-informed people, including the mayor of one of our valley towns, plans for reclamation in the Rogue River valley were not only vague in the minds of many persons, but might be said to be nebulous" In order to at least partially clarify the issue, the Bulletin here reproduces the third in the series of Mr. Bristol's analysis.

Plan A is the result of years of tudy. This study was brought bout through the cooperation of ocal groups and the state and fed- ral government. All parties sup- lied the necessary money. The irst work was started in 1913. In 936 the army engineers started heir study of flood control and ater, in 1939, the Bureau of Re- amation undertook a continuing tudy and issued its first report in 948. The money for these surveys ame from the irrigation district f the area, from Josephine coun- y, Jackson county, Oregon state egislature and the Congress of the nited States.

Object of the study was to find way to do the following things: ontrol floods, supply water for and, supply power for the area nd, if possible, to maintain or in- rease the fish life and recrea- ional advantages of the Rogue iver valley.

Starting in 1938, with the re- ords of the valley as to rainfall, loods and the results achieved by he present irrigation development, he Bureau of Reclamation estab- ished an office in the valley and ent to work. They found there as plenty of water that was asted every year in the spring unoff. They found that the soil, ith water, would grow fine crops. hey found that the land that was evel enough to be irrigated had, n most cases, been cleared. They ound that many former fishing treams and spawning beds were ow dry in the summer. They ound that the flood danger would increase every year through the cutting of the timber and the building now going on in the flood affected areas.

Analysts Experienced

The men making the study were civil engineers, soil scientists, biologists—men with experience in the building and construction of projects of this type. They went up every creek, over every hill, they took samples of every soil, studied the fish life of the stream, They talked to everyone to find out all the local problems.

The dam sites were investigated. A dam can't be build just any place. The ground has to be strong enough to hold it. Investigation work included diamond drilling to be sure good sites had been selected.

Here is the plan that was submitted—Plan A, the only one that includes all the objectives of the original study:

To supply flood control, power and irrigation, a high dam is to be built at Lewis Creek near Trail. This dam will control floods on the Rogue River.

It will supply the Medford valley with irrigation. Clawson reservoir will supplement the irrigation below Ashland. Ruch reservoir will supply the Applegate and Williams valley with water. Meadows reservoir will supply Evans Valley with water. Pease Bridge reservoir will supply Grave Creek and Merlin area voir will supplement the lower Applegate valley. Deer Creek reservoir will supply the Selma area, and the Indian Hills reservoir will supply the rest of the Illinois Valley with water.

Power Dams Included

Now these are all the storage dams in the plan. There are several power dams in the plan above the big Lewis Creek dam, but they will have little effect on any part of the river, scenery or fish life.

Here is the effect that Plan A will have on the Rogue River valley: It will put all the land in the Rogue River valley that is level and cleared under irrigation water. So, instead of driving through that dry land north of town, one will be driving through a green valley. The same is true throughout the area: Sams Valley, Table Rock area, Starvation Heights up Evans Creek, Missouri Flat. Just think what Cave Junction would be like if the land had water like the Redwood highway area that is now under irrigation.

The plan would increase the irrigated land from 40,444 acres to 113,840.

Flood control is of great importance to us. In 1927 the water was over highway 99 south, almost all the way from Gold Hill to Grants Pass. Since that time some thousand homes and businesses have been built below that high water mark. About half the land under the Grants Pass Irrigation District was under water. The dam at Lewis Creek will control this. It will keep the high water of the big flood of 1861-1862 down to the high water of 1947-1948 season. This 1861-1862 flood was a dandy, came up to where the Del Rogue Hotel is now, covered the upper river road.

Fish Advantages Noted

It is true that the high dam at Lewis Creek would stop fish from going further up the Rogue—but it has some advantages for game fish life. The river would be cooler. The other dams would bring back to life the Illinois River, Grave Creek, Jump Off Joe Creek, Deer Creek, Wolf Creek and, most important of all, the Applegate. Fifteen years ago, there was a fish hatchery near Murphy. This was closed as the Applegate river is short of water in the summer for game fish. We would have spawning beds for many more fish than are now in the Rogue River.

Since the declamation report was started, the power situation has changed. We can use much of the power that will be developed When the irrigation loads off in the fall, it will leave a power surplus that can be used to heat our homes. The firm power can be sold.

This project would be paid for as follows: farmers will pay for the water; power companies will pay for the power; federal government will write off a large part of the cost as flood control.

Legislature Must Act

Now what is standing in the way of this deveolpment? This month, our legislature must give permission to build a dam eight miles farther down the Rogue River than is now allowed. Several years ago, when the salmon seemed to be disappearing in the Rogue, the Oregon state legislature passed a bill that no dams could be built on the Rogue River below an arbitrary point. The Lewis Creek dam would be eight miles down river from this point.

So the current session of the legislature must change this if we are to proceed with plans for flood control on the Rogue River.

The people of the Rogue River valley must insist that the Bureau of Reclamation continue its study and plans in line with the Barrows report. This report is the result of the hearings held in Medford last year. Barrows reports that the plan is good, but recommends that details be worked out through further study.

The Rogue River and its tributaries must be rid of its sewerage pollution. This is the problem of every party living in the valley.

We are now at the cross roads. We can drift along with our squirrel ranches and polluted river, or we can go ahead.

It is up to you to decide.

Jury indicts businessman over $3 million venture

A federal grand jury has charged a Southern Oregon businessman with 12 criminal counts alleging that he fraudulently convinced people to invest in his gold-recovery venture from 1988 to 1990.

The Portland indictment said about 600 people invested approximately $3 million in the venture.

Theron D. Mitchell, 60, is to appear Feb. 26 in U.S. District Court on the charges.

Mitchell owned and operated a Nevada corporation called M-3 Hydrotech Ltd., which was involved in the business of fine-particle gold recovery in the Gold Hill area.

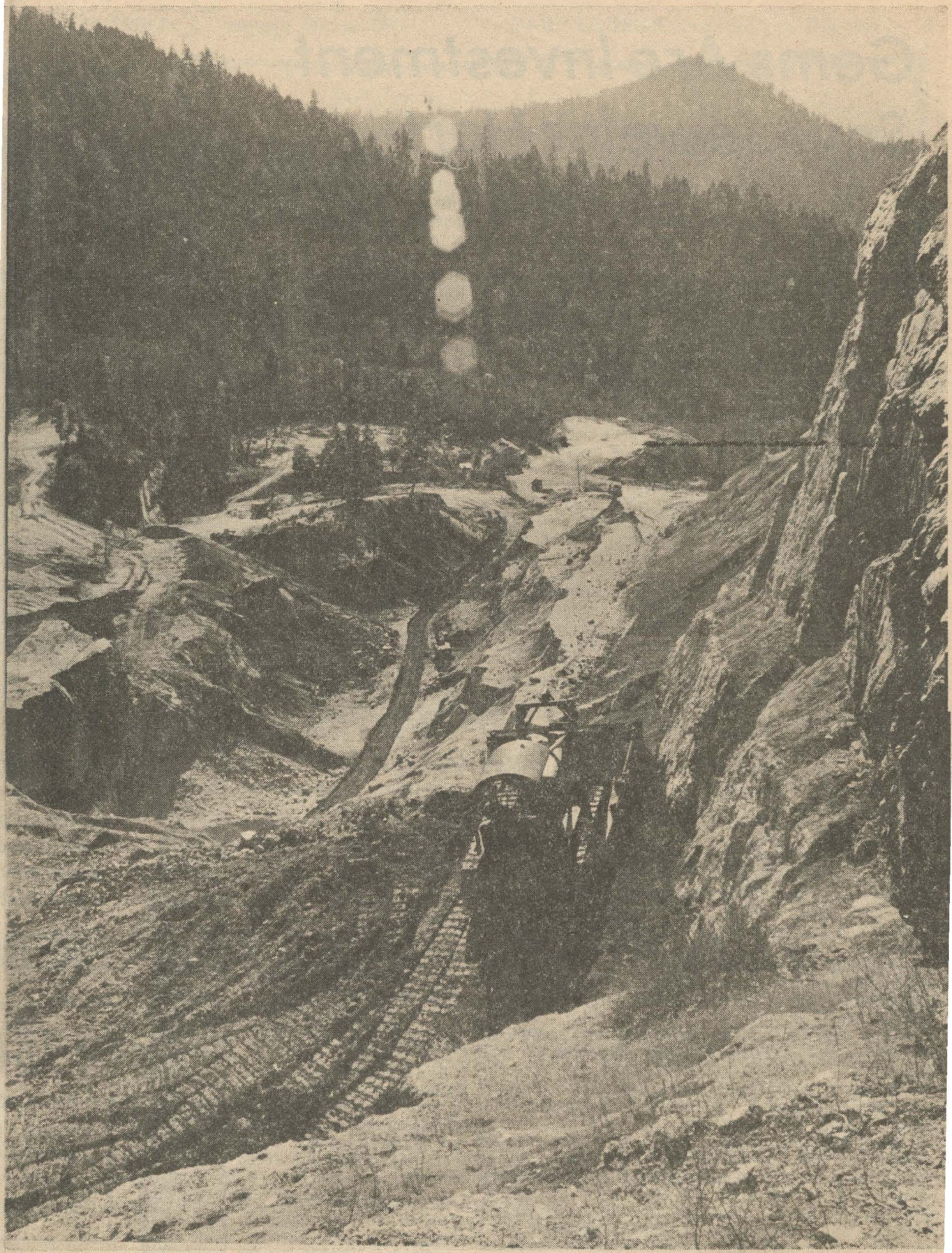
Mitchell claimed he was raising capital for an ore-processing plant to recover gold. To do that, the indictment alleged, he sold certificates of beneficial interest and certificates of ownership transfer that gave investors an interest in the company.

While Mitchell represented that the funds would be used solely for the ore-processing plant, the charges allege he also used the money for other purposes such as paying his personal expenses and making loans to his friends and family members.

The indictment also charged him with selling unregistered securities and interstate transportation of money that had been obtained fraudulently.

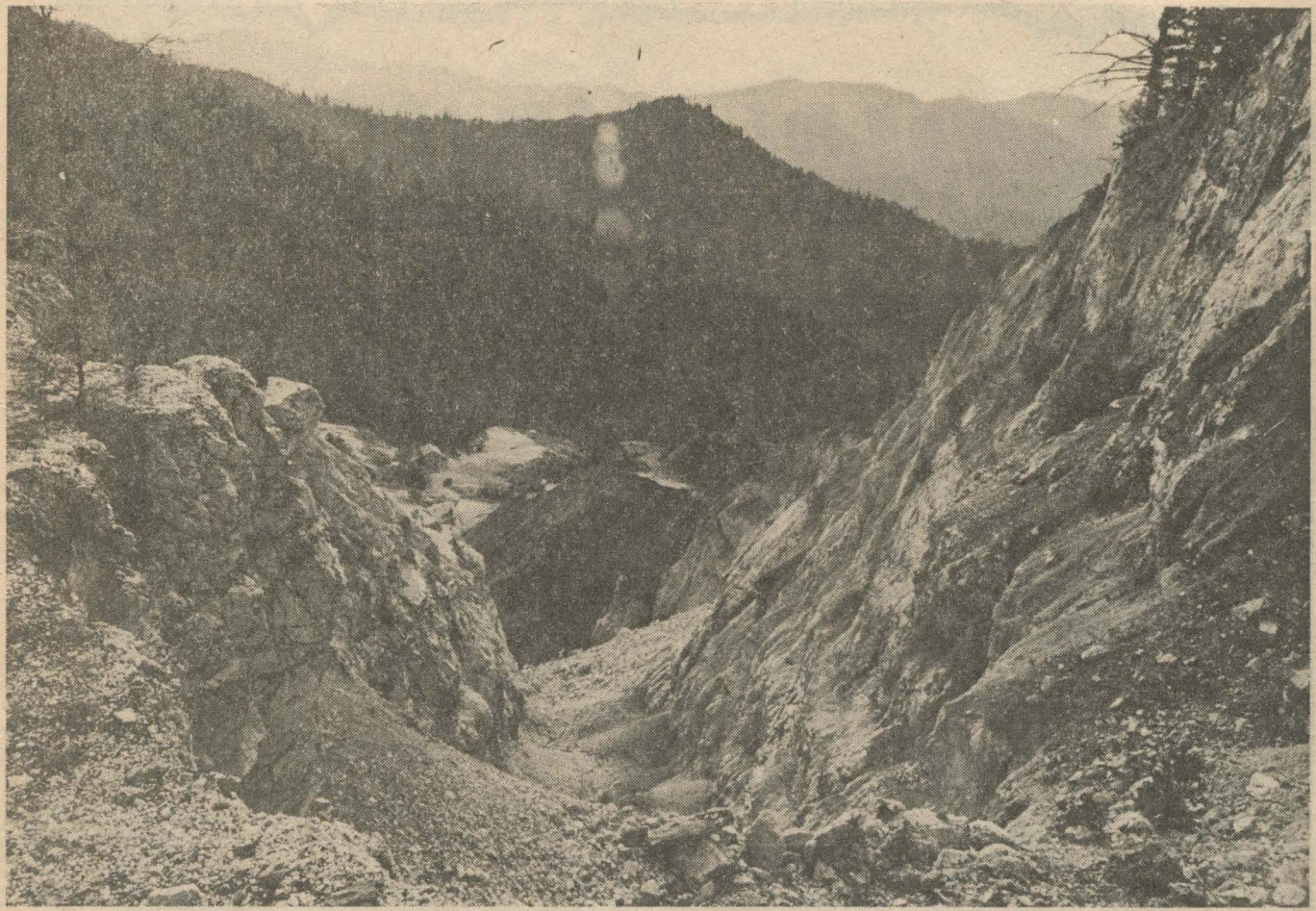
Most of the investors lived in the Seattle area, and fewer than five of the investors were Oregonians, said Assistant U.S. Attorney Neil Evans.

Charges of securities fraud and selling unregistered securities were filed against Mitchell in Jackson County Circuit Court in 1990, but those charges were later dropped.



ACCESS to the blasting site for new excavation at the Bristol Silica mine on Miller Creek is leveled by Bud Ross. The first step is cutting a road through the quartz lens at right to reach limestone outcropppings.

—Courier Photos by Paul Macomber



HEART of the Bristol Silica mine was this canyon from which the purest quartz was taken. Renewed operations will concentrate on the structure at left. A shale face is at right.

Bristol Silica Is Updated

Bristol Silica Co., is undergoing a complete update with new owners, a new name and new market potential.

Oscar Nukka of Forest Hills, Calif., is the new owner who filed corporation papers changing the name to Bristol Silica and Limestone Co., with local attorney Mike Bird, Becky Robertson and Anne Lazaroni of Grants Pass as directors, and E. W. Morris as production superintendent. The changeover became effective Jan. 1 this year.

Nukka also owns the Seattle Bar in the Copper area. Currrently the plant is expanding its product line and is going into agricultural limestone, selling to customers along the south coastal area to Coos Bay, Roseburg and the Willamette Valley.

The silica site is being reworked, new mining leves are being developed and mining safety practices installed. The new owner anticipates reaching additional high grade silica deposits.

The company still is in the poultry grit and "Bermuda Rock" business, with emphasis on updating the firm's image with a new logo and attractive containers.

The former Bristol Silica Co. at Rogue River, was put into operation in February, 1938 by Fayette I. and Esther Bristol.

The very high-grade silica deposit in Jackson County was discovered by Bristol the previous year. The original crushing plant was constructed in the City of Rogue River at the intersection of Depot Street and the railroad tracks.

Because the operation was in the path of the proposed Interstate 5 Freeway, the plant and office was moved in 1960 to North River Road along the railroad, a mile north of Rock Point Bridge.

The quarry is visible from I-5 above Rogue Valley State Park and is reached via Miller's Gulch Road off old Highway 99.

The silica, a hard white quartz, at first was crushed as turkey and chicken grit and the Bristols visited every turkey ranch in Oregon with their new "Crystal Grit." Later crushed granite from Blackwell Hill and the silica were marketed as "Chicken Teeth."

At the end of World War II, metallurgical plants came to the west coast and the very high grade silica was in demand by Hanna Nickel in Riddle; Carborundum in Vancouver, Wash.; and National Metallurgical Co. in Springfield.

Silica also was shipped to oil companies all over the world for use in their gasoline "cracking" towers.

In later years, after the deposit of the high-grade silica was depleted, the rock was sold for the decorative Bermuda Rock, roadways, aggregate for walls, poultry grit, sand-blasting, and cement.

MINING activity at the reopened quartz mine near Gold Hill will begin with the structure at top right center. Earlier excavation concentrated on a quartz lens terminating in the top center of this photo and extending behind the new dig.