

Nickel mining activity accelerates

By TOM BRENNAN
of The Oregonian staff

Development of Southwestern Oregon's mineral resources — nickel and several other ores — has been painfully slow. Nickel ore was discovered around the time of the Civil War, but not until 1954 did the first major mining and smelting operation get under way.

The tempo may pick up in the next few years, however. In the past few months there has been increased activity by prospectors taking samples out of shallow diggings. Less visibly, stock promoters and lawyers up and down the West Coast have been talking about and stitching together deals involving Oregon's nickel.

Investors who probably haven't stepped foot in Oregon have caught the fever. The stock of one Canadian company tied to the state's nickel action has skyrocketed from 60 cents a share to \$17 since it came out in 1976.

Even a six-week shutdown of Hanna Mining Co.'s nickel mine and smelter at Riddle near Roseburg earlier this year didn't halt the buildup of interest. Hanna's operation, the only nickel smelter in both Oregon and the United States, closed because of an oversupply of nickel in the world market.

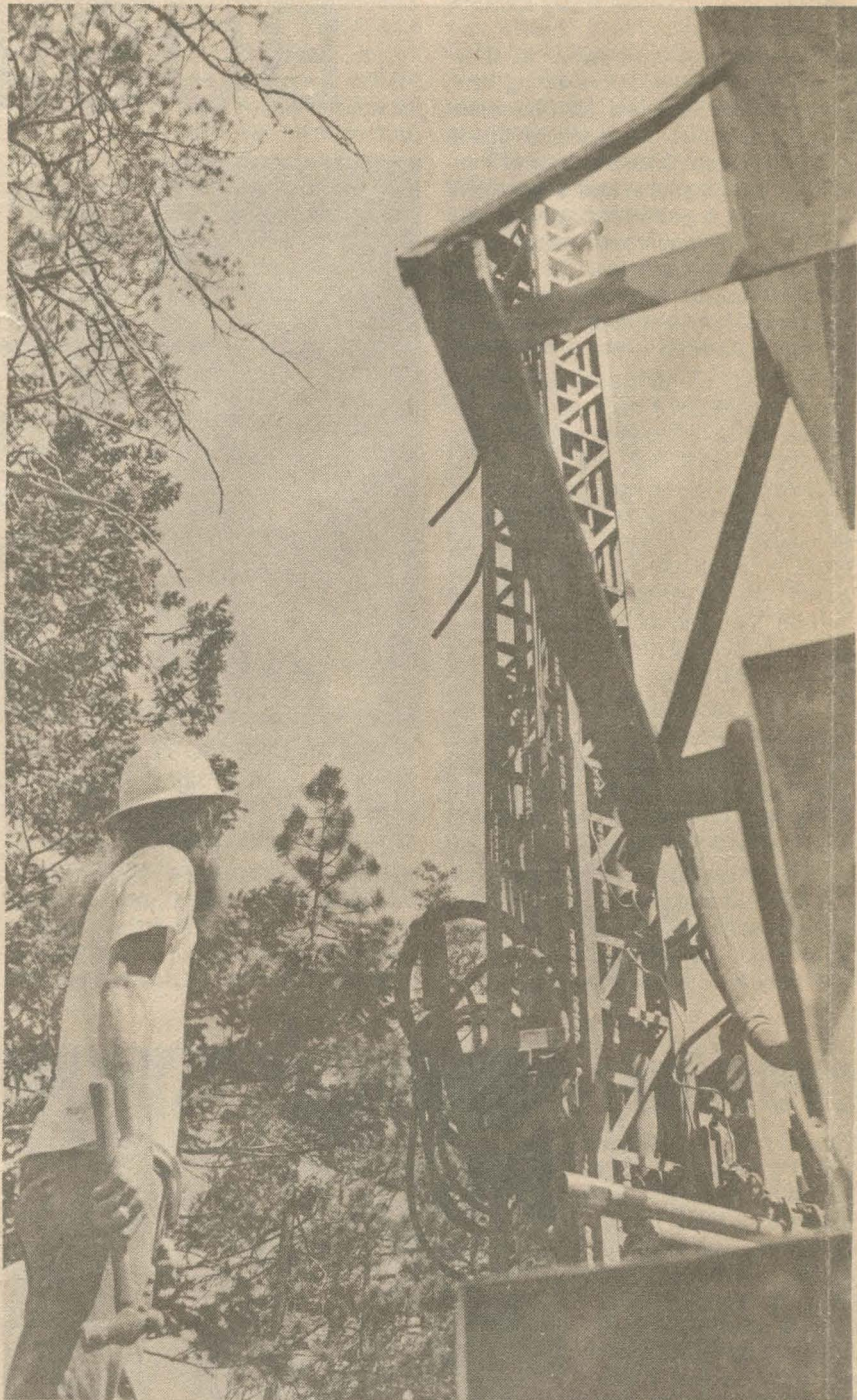
Mineral men say that oversupply and the consequent low price of the commodity could change relatively quickly. Further, any new mineral operation has a gestation stage of five to 10 years, authorities add.

Mining on the whole hardly constitutes a bump on the Oregon economy. But Hanna's operation since 1954 furnishes rock-hard proof that Oregon has mineral lodes worth tapping given the right combination of circumstances.

According to Hanna's latest annual report, the company processed 23.9 million pounds of nickel worth about \$50 million last year at Riddle.

The surge of exploration activity centers along U.S. 199 between Grants Pass and Crescent City, Calif. Areas said to have deposits of nickel laterite ores are Josephine and Curry counties in Oregon and Del Norte County, just across the border in California. As high-grade ore bodies in Canada and elsewhere are exhausted, low-grade deposits become more attractive.

Exploration crews are at work at various sites in this three-county belt, two of the major exploration companies in the region are reported close to a merger and some residents wonder if development would scar the landscape or ruin wells.



ORE HUNTER — One place in Southwestern Oregon where nickel-bearing ores are being sought is on Eight Dollar Mountain six miles west of Selma. Crew has drilled 60 holes and reported finding indications of nickel ore.

One of the digging sites is at Eight Dollar Mountain, a 4,000-foot peak 20 miles north of the California-Oregon border.

Doug McLenna, resource specialist for the U.S. Forest Service at nearby Cave Junction, said a small crew work-

ing for geologist Lloyd Frizzell is prospecting with a backhoe and drilling rig on Eight Dollar.

Oregonian correspondent Mark Kirchmeier, taking pictures of the drilling this past week, was told by geologist Charlotte Kautzer that 62 holes

ting in Southwestern Oregon

have been drilled and 40 more will be drilled, with some positive indication of nickel laterite ores to date.

She is employed by Frizzell's Grants Pass-based mineral exploration firm, which has done work for a number of companies in the region.

McLenna said another crew has done sampling a few miles to the south for an Arizona-based mining firm while another person estimated as many as 10 companies are scouring southwest Oregon for nickel-bearing ores.

McLenna said a group of residents of the Eight Dollar Mountain area recently called a meeting in an attempt to learn what might happen to their area.

One of those who spoke at the meeting was Jack White, a mining man who has spent six years checking out local mineral prospects.

White now lives in Oregon about seven months a year but in the winter returns home to Vancouver, British Columbia, because "you can't work on those slippery hills when the weather is bad."

In a telephone interview, White styled himself "an amateur geologist" who first learned about nickel laterite ores during some years spent in Colombia, South America. White said he formed Inter American Nickel Inc. and "owns a good part of the stock" in the company.

Inter American, which is incorporated in Nevada but retains a Portland legal firm, owns 170 mining claims in the three-county region, White said.

White told the Cave Junction group his company is doing preliminary research on opening up a \$100 million nickel plant in the area. He said his company may buy 100 acres and built a plant at Eight Dollar Mountain or at another site, Woodcock Mountain.

Several days ago White estimated that such a plant could be built and operating in three to four years if various studies prove it is feasible.

White explained that a new electrochemical processing system would be used to extract the mineral from the ores, a system he called self-contained and non-polluting.

With the ores said to be 30 feet or less below the ground, the company would employ surface mining methods, stripping the soil and later reclaiming the land.

Len Ramp, state geologist for the Grants Pass mining district, put the development prospects in a longer time perspective.

"This mining operation is not going to happen in the next couple of years," Ramp said. "There are too many things that need to be proved up. All the exploration crews are doing now is trying to check the tonnage available and the grade of ore."

"I'd say this is in the distant future," Ramp said.

The state geologist said chromium and cobalt are found along with the nickel and these could turn out to be even more valuable. He figures there are four potential mining sites in Josephine and Curry counties.

Ramp discounted fears of pollution of wells in the Eight Dollar Mountain area, saying the springs that feed wells flow from bedrock well below planned mining levels.

"The only problem would be the visual pollution of the surface mining but this would be temporary as state law requires eventual mining reclamation," he said.

The need for a new method metal from ore rocks was confirmed by Don Hull, director of the state Department of Geology and Mineral Industries.

"It is quite likely that future nickel processing operations will be different than those at the Hanna Smelter," Hull said, "because of the high energy consumption of present methods."

Hull said a pilot project under development at the U.S. Bureau of Mines research laboratory at Albany may furnish the answer. "It would be a more energy-economic way of processing the ores," he said.

Richard Siemens, leader of the project at the Albany lab, said the bureau has been working on the new process for seven years. The bureau has run a one-ton-daily capacity pilot plant using the new electrochemical technology and "the results are encouraging."

The next step, Siemens said, is to build a plant to run five tons daily, a project now in the bid advertising stage. Target date for starting up the bigger plant is early next year, with two more years after that needed for a feasibility study.

If the new method proves to be a breakthrough, the idea could be adapted by private industry for a plant that could process up to 5,000 tons a day, Siemens said. But the cost of such a plant could be \$150 million to \$200 million, he predicted, or up to twice the cost mentioned by White.

A sidelight is that White's company owns foreign patent rights to the process being developed with federal money

at Albany. That was disclosed by Portland attorney Thomas Landye and confirmed by White.

White explained that U.S. patent rights will be in the public domain because a federal agency is doing the research.

Landye is a partner in the Portland firm that represents Inter American, the firm of Keane, Harper, Pearlman and Copeland.

White's patent rights and the 170 mining claims apparently are factors in the speculative boom of a mining stock of a Canadian-based company. The company is Ni-Cal Developments Ltd., and its stock is traded on the Vancouver (British Columbia) Stock Exchange, a hotbed of North American mining stock speculation.

The Inter-American-Ni-Cal connection was cited by both Landye and White and also outlined in documents on file with British Columbia provincial authorities. The connection is simply that Ni-Cal has an agreement in principle to acquire Inter American in exchange for 380,000 shares of Ni-Cal stock.

That would make it a deal worth about \$6.5 million at the current stock price, a tidy sum of money considering that neither firm has any operating mines.

There has been a fast run-up in the price of Ni-Cal. It came on the market in September 1976 for 60 cents a share and now sells for about \$17 a share, White said.

White said five legal firms are involved in the negotiations over sale of Inter American but he is hopeful the transaction will be completed in a matter of weeks. The man who would then be in charge of the nickel venture would be Los Angeles financier William H. Carter, the Ni-Cal founder who was described by a Vancouver source as a veteran promoter of Canadian mining stocks.

Ni-Cal has options to purchase two sizable blocks of mining claims in the area and plans to spend \$1 million this year on claims exploration and sample testing. Carter, contacted by telephone, declined to discuss his plans "just yet," but White said a combined company should find no problem raising capital to open a mine and build a plant.

"Both companies are in the exploratory phase of mining development," Landye remarked. "But it's fair to say there is a great deal of interest in mining by a number of people on both sides of the California-Oregon border."

Questions About Effects of Mining Unanswered

By BECKY NELSON
Of the Courier Staff

CAVE JUNCTION — Questions about the effect of possible Eight Dollar Mountain mining on the environment were not answered at a gathering of residents and geologists Thursday in Cave Junction.

Jeff Garcia, a geologist with U.S. Nickel Corp. said his

company is drilling test holes to see if the concentration of nickel is enough to make mining worthwhile. He said tests probably would be finished by the end of the summer, but he was not certain when a decision would be made on whether to mine the mountain.

Eight Dollar Mountain, along with several other mountains in the area, has

known deposits of nickel, cobalt and chrome. A new mining process developed by the Bureau of Mines and private industry may mean the deposits in Southern Oregon could be mined.

The process is still in the research stage. A pilot plant using the new process is planned.

Garcia said the firm had

been drilling holes in the clay soil on the southeast side of the mountain. Some of the holes have been as deep as 118 feet, but more are in the 20-to-40 foot range.

The nickel on Eight Dollar Mountain is in laterites, which are on top of the base rock. Garcia said that if the mountain is mined, the clay would be scooped up, and the nickel,

cobalt, copper, chrome and zinc, would be leached out with ammonia. Magnesium, iron and silica would be left in the clay, which would be replaced and re-seeded.

The clay would be surface mined. Several residents wanted to know what would stop the soil from washing down the mountain.

The geologist said CH2M

Hill, a consulting firm in Portland, had been hired to do an environmental impact study.

"I just came here to find out if my well will go dry or become contaminated if there is mining," one resident said.

Garcia said he did not know, because he was hired only to investigate the feasibility of mining.

He said that now, the only noise from the operation comes from a well-drilling rig with a muffle and a backhoe.

"I don't think the noise we're making is going to rival the log trucks coming down the pass," Garcia said.

The geologist said he hired six local people to help in the exploration. He said that if the mountain were mined, most of the miners probably would be hired locally.

"What happens in the future is not for me to say. Nobody knows if the mountain will ever be mined, and what way would be used to get the minerals," Garcia said.

The meeting was called by Josephine's Environment Matters, a group of residents from the Eight Dollar Mountain area. A spokeswoman said the group was concerned about the situation, and wanted to know what is happening on the mountain.

The group planned another meeting for May 24. The Josephine County water-master will be asked to attend.

More use controls urged for mountain

SELMA — More environmental controls on Eight Dollar Mountain were strongly favored in letters to the Bureau of Land Management.

Eighteen of 21 writers agreed the BLM should further regulate or prohibit mining and logging. The agency's Medford District manages 1,240 acres on the east side of Eight Dollar, three miles south of Selma.

District officials say it should be an Area of Critical Environmental Concern.

Miners would have to file detailed plans for all operations, as opposed to the current exemption for activities involving five or less acres. And the plans would have to further consider environmental effects.

Protection of 11 possibly rare species of plants goes to the root of debate over Eight Dollar. Defenders say logging or mining could destroy fragile habitats.

"I believe the protection of these threatened and endangered species is of primary importance," wrote Louise Nicholson of Applegate. "Rarely is one scenic area so abounding in rare plants as these."

Marjorie and Ogden Kellogg of Gold Hill favored the Critical Concern designation, saying in a letter that the mountain has unique botanical assets.

Also supporting the designation — as a second choice — were Bill and

Bea Newby of Selma. They favored a national natural landmark, which would close the area to logging and new mining claims.

The BLM's recommendation is "a forward move," they said.

"... because of unprecedented population growth, the earth is getting smaller, with less beauty remaining," wrote Melody Inchumuk, who lives at the base of Eight Dollar.

"The earth is all anyone has, as it provides every need man ever had," she said in support of the BLM's recommendation.

Other supporters of the Critical Concern designation included the Audubon Society, the Nature Conservancy and the Southern Oregon Northwest Coalition for Alternatives to Pesticides.

Concern about mining is understandable, "but I believe the laterite deposits could be mined and the timber could be judiciously harvested without any serious or long-term environmental impact to the mountain," wrote state geologist Len Ramp.

"At some time in the future, these deposits could become quite important."

Also opposed to new clamps on mining was Art Oakes of Grants Pass, who wrote that chromium and other minerals on Eight Dollar are vital to U.S. industry and the population.

"Also," he said, "mining has played an important part in the history of Southern Oregon, and it continues to give sustenance and recreation to those who are able to, or desirous of, pursuing it."

State and local BLM officials expect to make a decision in the next two months. Protests may be filed up to 30 days after the record of decision is released.

7-6-83

\$8 Mountain Tax Exemption OK'd

Property-tax exemption for a 3-acre site on Eight Dollar Mountain was granted today by the Josephine County Board of Commissioners.

The Illinois Valley site is owned by the Nature Conservancy of Portland, a nonprofit preservationist group that is using it and two surrounding parcels as a nature reserve that's open to the public.

The exemption was approved unanimously, but under protest by Commissioner Tony Corriea. The board had approved exemptions for the other two parcels earlier this year and Commissioner Bill Ford said the board should be consistent.

Corriea questioned how many more parcels may be submitted for exemption. When more are exempted, the portion of the tax burden on each taxpayer increases, he said.

Jean Patterson of Selma said the land on Eight Dollar Mountain has rare plants that attract naturalists from all over the world. Several colleges use the site for studies, she added.

The group based its request for the exemption on the public use of the land.

\$8 Mining Won't Affect Spring-Fed Wells

What's that

(?)

By JOAN HOWLETT
Courier Correspondent

CAVE JUNCTION — Josephine's Environment Matters (JEM) learned Wednesday from state geologist Len Ramp of Grants Pass that spring-fed wells on Eight Dollar Mountain probably will not be affected by proposed area mining.

Ramp explained bedrock there which forces spring

water to the surface is well below planning mining levels.

Inter-American Nickel Company president Jack White also told the group the two electrolytic processing systems under investigation for use here will be contained and non-polluting.

At JEM's last session two weeks ago, the ammonia leech process was reviewed. That experimental method has the Bureau of Mines' endorsement.

A new mining method evolved by the British also is being considered for this area, White said. Again, still in the testing stage, it would involve locating a small pilot plant here capable of processing a controlled amount of nickel ore each day for experimentation.

White added both experimental processes require construction of a facility which resembles an electronics plant. He added within the last four months President Carter has registered his support for mining operations here.

It will take at least three years to install such a nickel plant in the Illinois Valley at an approximate \$100 million

cost, White said. Plans to begin construction are not in the immediate future, he added.

Although only one acre is needed to locate a plant, Inter-American probably will buy about 100 acres for the facility, White indicated.

Ramp showed the group a resource deposit area map which contains nickel laterite on Josephine Creek, Rough and Ready Flats and Woodcock Mountain as well as Eight Dollar Mountain.

Both he and White noted long-range mining operations would involve stripping an area the first year, mining

there the following year, then reclaiming the land the third year.

About 500 people eventually would be employed at the plant and in the mines, White added.

JEM spokeswoman Sally Beck said the group now is involved primarily in gathering data on proposed mining operations.

A major concern is the amount of electricity necessary to operate a plant as described by White, she

said. JEM also is interested in determining the source for the large amounts of electrical power needed.

JEM also showed slides of Eight Dollar Mountain as it undergoes various test drilling stages. Nancy Congleton photographed the operations and explained the slides.

JEM members will continue to investigate the problems and benefits of area mining with special emphasis on the environment before scheduling another meeting.