

Front Page

Today's News

Today's Sports

Advertising

Subscribe

Archives

Staff

Local Realtors

Published every

weekday in

Whitehorse, Yukon

18888



Gentleman geologist named top prospector

by Jane Gaffin

A **Whitehorse Star** Archive story originally published November 2, 2001

Jim Dodge's varied career as a mining engineer and geologist has taken him to every corner of the Earth.

Yet it is his independent prospecting efforts which were singled out for recognition by the Yukon Prospectors Association.

The 81-year-old Dodge will be presented with the Prospector of the Year award during the annual Geoscience mining conference's banquet at the Westmark Hotel on Nov. 18.

Although his list of credentials is long, two special endeavours came to mind when the association membership selected Dodge to honour this year.

One project was Dodge's insight to pursue rare earth elements in the Yukon; another was his earlier dedication to develop the Tea claims near MacMillan Pass into a producing barite mine. The Tea story dates back a bit before 1977, when Dodge was interviewed for inclusion into *Cashing In*, a book profiling prominent mining people who have made valuable contributions to the Yukon.

Dodge and his late wife, Lee, had just optioned the Tea barite claims from the Vancouver-based Welcome North Mines Ltd. The small deposit, located up the North Canol Road near the Northwest Territories border, hosts virtually-pure barite that exceeds maximum oil-gas drilling mud specifications and also could be used as a fire suppressant at wellheads.

In a complicated chain of events, an unscrupulous representative of an Alberta-based investor-"partner" barite company attempted to take over complete control.

Litigation ensued. Yukon Barite was silent at the exact time it should have been grinding and bagging barite in a mill near Ross River for delivery to the Arctic.

By the time the expensive dispute was settled in the Dodges' favour, drilling activity had ceased in the Beaufort. Besides losing their sales contracts, they lost a home near Aspen, Col., plus their investment.

A few years ago, life was breathed back into the oil patch. And H. Coyne & Sons of Whitehorse took over, mining the barite property whenever oil companies need the product.

Meanwhile, Dodge's time was divided between researching

mounds of technical data and roaming the hills alone, armed with bear spray and mosquito dope, whacking rocks.

He had found an old assay report written by Archer Cathro. The once Whitehorse-based geological consulting firm had been searching for uranium in the 1970s.

Uranium was right up Dodge's alley. One hands-on experience saw him and his wife operating a uranium mine in the Colorado mountains.

Dodge, knowing that rare earth elements (REEs) are closely associated with uranium, pursued the possible and probable angle that REEs existed in abundance in the Yukon.

His research led to staking the "Lancer" in 1990 at the headwaters of the Ketz River, a few miles southwest of Ross River. The "Lan" part of the name stands for lanthanum. "Cer" is for cerium, the most abundant of the 16 rare earth elements. Paradoxically, many rare earth elements aren't really rare. The rub is usually finding rare earths in sufficient quantities to render mining commercially feasible.

Several showings outcrop in various Yukon locations. REE deposits also are found widely throughout the Earth's crust in places like California and Brazil. But China controls 70 per cent of the world supply and drives the market, he said.

Brazil is supposedly the sole source of niobium concentrates, used in high-temperature applications. And Dodge later came across a Maryland-based company that needs niobium.

The world consumption for rare earths is only about 20,000 tonnes a year, advised Dodge in a 1997 interview. One of the biggest markets is magnets, which are used in all computers and electronic equipment.

Another use is for catalytic converters that help reduce gas emissions generated by diesel engines. Niobium is used to make turbine-engine steel for aircraft more heat-resistant.

Dodge conducted detailed ground geology on the Lancer property and found an important extension to the vein. His findings, published as Mineralogy Analysis of Ore Specimens from the Rare Earth Deposit of Dodgex Ltd., a paper on open-file with Northern Affairs.

"The results of the report indicated it looks feasible to do very fine grinding, using a gravity-separation-type equipment. It doesn't introduce any chemicals into the drainage," he said.

"You merely add water and use centrifugal gravity methods to concentrate these fine-grained minerals that contain the light rare earths and yttrium."

Yttrium is technically not a rare-earth element but often occurs with them and has similar chemical properties.

He submitted a proposal to the Maryland company that wanted to see the deposit go ahead. Due to past experiences, Dodge was adamant about not wanting to develop the deposit himself. "Even if somebody handed me the money," he declared.

He allowed the claims to lapse recently on the belief the project needs a young, energetic prospector like Ron Berdahl to push it forward.

Now, Dodge is paying attention to his other mineral claims dotted around a Yukon Territory where he made his debut about 1963 as a scout sniffing out investment potential for Mitsui Mining, a Japanese company.

He was on the scene during the exciting heydays in the Anvil Range where penniless prospectors were on the trail to finding the giant Faro lead-zinc-silver deposit in the mid-'60s that put the Yukon on the world map.

In 1968, Dodge gave up scouting in favour of vice-president of explorations with the newly-formed Spartan Explorations that was engaged in elaborate exploration programs covering vast amounts of Yukon ground.

Dodge wound up overseeing geologic administration in field camps, which wasn't the best thing for a person who wanted to be out doing things on his own.

A short time later is when he gambled on the barite project. Yet taking risks flew in the face of everything he'd been taught nearly from the day he was born in Manhattan in 1920.

When two years old, the family moved to Pittsburgh, where his father was an 8-to-5er for a large glass company. Dodge remembered his dad leaving the house at the same time every morning and returning up the walk the same time every night. His mother's Amish philosophy was "be secure". It was engrained in young Dodge's head to achieve a college education, join a major company, climb the ladder, stay for life. Without any other experience to draw on, Dodge was headed down the same rut in the road.

After graduating from the Missouri School of Mines in 1941, he was working as an Anaconda geologist at Butte, Montana, when drafted by the U.S. Army. He was dispatched for training to the Pacific.

What he'd been taught in his formative years shattered like glass when he gazed at the smoking, radioactive devastation done by atomic bombs to Nagasaki and Hiroshima, Japan.

He was jarred into reassessing life's cozy pattern where everybody moved along the same cushy path, heading in the same direction to achieve the same goal.

On the day before he was scheduled to depart Japan, he accepted a job as a U.S. government geologist. He stayed three post-war years in Tokyo during the American occupation. He evaluated restoration needs of the Japanese mining industry and prepared geological and mining reports on mines shut down or bombed out to decide where money should be spent to rebuild the nation's raw material sources.

While climbing mountains, he met Lee, a political science major who had a passion for travel. She had come to Japan from California to work for military intelligence.

They returned to the States and married at Stanford University in Palo Alto, Calif., where Dodge earned a masters degree in economic geology, followed by more academic studies in Freiburg, Germany.

Then his task was to hunt for uranium under auspices of the Atomic Energy Commission in Washington, D.C. The couple later looked for lead and zinc throughout Europe, prospected for emeralds in Rhodesia and throughout North and South America, as well as chased copper in Mexico.

One might think anything else would pale in comparison to Dodge's past adventures, which haven't even been fully chronicled here.

Yet Dodge volunteered that one of this year's highlights was to hike the Chilkoot Trail.

"Just to be able to say I'd done it," offered the geology gentleman, who, during an earlier meeting, revealed the secret to his fountain of vigour and youth.

"There is a camaraderie among mining people that keeps us young," he said. "I wouldn't do anything else."