Gold in Newfoundland

The Selco division of British Petroleum Canada Inc. of Calgary has discovered what company officials call a "significant" gold mineralization near the Chetwynd copper prospect about 80 kilometres east of Port aux Basques, Newfoundland.

The gold discovery has been tested by a series of shallow diamond drill holes spaced about 100 metres apart. The company said the drill intersections are too widely spaced to enable any grade or tonnage calculations to be made. Further drilling is proceeding.

Test results from the latest nine holes drilled showed grades ranging from 0.79 grams of gold a tonne to 19.5 grams a tonne. At current market values, an open pit mine requires a grade of 2.06 grams a tonne to be profitable while an underground mine requires a grade of 6.86 grams a tonne.

The mineralization is close to the surface but the company says the property is in too early a stage of development to determine whether it will be an open pit operation.

Waterloo's 'Waterloop': First systolic loop supercomputer

Computer scientists at the University of Waterloo, Ontario, have built what they believe is the world's first working systolic loop supercomputer.

The prototype machine – dubbed "Waterloop" by its creators – uses 64 microprocessors connected in a loop that allows data to be automatically recycled in repetitive calculations.

"We've designed Waterloop for high speed, repetitive computations. It will be ten times faster than a comparable VAX machine, and only about one-quarter of the cost," said Peter Pfister, a research assistant to Professor Neil Ostlund of Waterloo's computer science department.

Mr. Ostlund, designed the machine's architecture with two US collaborators at Carnegie-Mellon University in Pittsburg.

The computer's main application is expected to be in performing mathematical simulations of molecular motion for physics, biology and chemistry research, although other applications involving large amounts of data (such as weather forecasting) are also possible. Most currently available mainframe computers use only one large microprocessor.

Mr. Ostlund predicts computers of the future will contain multiple microprocessors. The Waterloo prototype is one of the largest multiple microprocessor systems in the world, he said. It has an additional advantage of flexibility because additional microprocessors can be easily added to increase the system's power.

It is also easier to write operating systems and applications software for Waterloop than for computers that use a single microprocessor, the research group said.

Meanwhile, the university's researchers are already working on a successor to Waterloop. Graduate student Scott Darlington is trying to add high speed floating-point processors to the machine's central processing units to increase the computer's speed to 100 times faster than its current operation.

Around-the-world travellers raise money for cancer

Stan Guignard, a 64-year-old retired businessman from Callander, Ontario, and his wife Hazel, recently completed a round-the-world odyssey for cancer research. They raised more than $300 000 for the cancer societies in the countries they visited.

Driving a 1928 Model "A" Ford called *Gladys* after his first wife that he lost to cancer, Stan Guignard left Canada 15 months ago on his fund-raising journey. He had also lost his mother to cancer.

The journey started on June 1, 1983 in Toronto, Ontario, from where Mr. Guignard travelled westward taking collections at shopping malls and antique car rallies for the Canadian Cancer Society. From Vancouver, he and the car were transported to Japan in a Canadian Pacific Airlines *Boeing 747*.

Mr. Guignard drove through Japan collecting for the Japanese Cancer Society and then continued his travels in Hong Kong and its territories where he collected funds for the Community Chest there. In the Orient, he became a celebrity and donations were very high, sometimes up to $5 000 a day. In Hong Kong, he had to empty his collection box three times as people crowded around him throwing money into the car.

Hong Kong was also the place he met his wife Hazel and they married later in Australia. The trans-Australia section of the campaign began in Perth and ended in Sydney. The money collected at the shopping centres of the many cities and towns visited, was given to the state cancer societies.

After touring Belgium, Germany, France, The Netherlands, Luxembourg and Britain, Mr. and Mrs. Guignard started their home stretch in Halifax on July 9, 1984. The odyssey ended in North Bay near Callander on September 1. They were met by a parade of antique cars and honoured at a civic reception and a fund-raising dance.

The Model "A" Ford bears stickers from all the places through which it passed. It is Mr. Guignard's intention to place the car on display now as an attraction to help him fulfil his ambition to raise $1 million to build a cancer hospital in Canada.

Michael Creagen

Stan Guignard and his wife, Hazel, stand beside their 1928 Model "A" Ford. The Guignards recently completed a round-the-world trip to raise money for cancer research.