

ENERGY

Sweden taps a gas bonanza

THE astounding promise of energy for as long as humanity exists on this planet is being made by scientists who believe they have discovered natural gas in Sweden.

The scientists, led by Professor Thomas Gold, a Cambridge University astrophysicist, were almost laughed at when they started drilling in the Siljan Ring, a geological formation in the Grävberg area of central

cause of his controversial theory that natural gas and oil are not, as geologists believe, made from the decayed remains of organic matter (what he calls sarcastically "the squashed fish theory"), but instead are natural products which originated at the formation of the earth and are present at great depths in quantities so vast that they would supply humanity for millions of years.

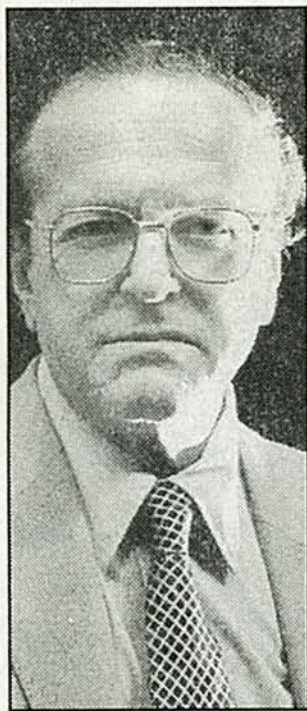
Gold now believes he has been proved right and that the volume of gas at Grävberg is 6,000-14,000 billion cubic metres. The gas field is so large that although Sweden is now believed to have perhaps as many as seven other large gas fields, Grävberg alone will suffice for Sweden for as far ahead as anyone today can plan.

Gold also believes that if his theory is proven by the Grävberg discovery then the earth may contain 2m times more hydrocarbon fuel than previously thought. "There could be enough accessible oil and gas to change the world's energy economics forever," he says.

At Grävberg, the Swedes drilled down over 6km and, against conventionally-held geological beliefs, discovered traces of natural gas. Then the drill hit an area where there was either no rock or very soft, highly porous material. This, geologists had said, would be impossible, but when the drillers lost 128 tons of drilling fluid (used to lubricate the boring gear) they knew that they had found huge holes. Because of the gas traces they now believe these caverns are full of natural gas.

The first gas is expected to be recovered in the next week. Nobody yet knows whether the region will produce commercial amounts of gas but the existence of the field has been demonstrated and several more wells are planned. It should not be too long before "they ignite the gas flame at the top of the drill rig", says Gold, who believes his dream for a world with limitless energy is now coming true.

Robert Temple



Gold: huge gas discovery

Sweden. The joke among geologists was that if natural gas was found then it would go against many of their long-held beliefs about the structure of the earth.

However, one of the world's deepest holes has now been dug through more than 6km of solid granite and Gold believes that a natural gas field "as large as the large gas fields in Siberia and more than all the gas fields in the North Sea put together" has been discovered.

Gold is acting as a consultant on the \$14m drilling project for the Swedish power board. The board began searching for alternative energy sources following enormous public pressure to rid Sweden of its nuclear reactors.

He was approached be-