UNIVERSAL ENERGY, TULSA OKLAHOMA

New recovery technique developed for oilfields

DALLAS (UPI) — Laboratory and computer model tests have been successful and now Uentech Corp. is about to use electromagnetic energy to heat thick heavy oil and bring it to the surface from a shallow field south of Ardmore, Okla.

"We'll be broadcasting radio frequency energy into the ground, into the deposit," President Homer Spencer of Uentech said in a telephone interview. "The energy is absorbed by the hydrocarbons and water in place — as opposoed to the rock and the sand.

"This raises the temperature quite a number of degrees. In the operation of the initial test, we will raise the temperature to just under 250 degrees Fahrenheit."

At that temperature the sluggish oil — about 20 degrees API gravity — will flow to the well for extraction, Uentech believes.

Spencer said Uentech, a subsidiary of Universal Energy Corp. of Tulsa, will spend about $2 million on the experimental project. The original concept was developed by IIT Research Institute of Chicago, which then did further development work on the project for Uentech.

The initial test will be at a wellsite south of Ardmore, Okla., in an area geologists call the Arbuckle Mountain Uplift. The well will be only 300 feet deep.

"This area is dotted with some shallow but relatively heavy oil formations which have been produced at very, very low rates — if at all," Spencer said.

Unetech is confident the test will be successful.

"The computer says it works," said Spencer. "The scale model in the lab says it works."

The basic physics which proves the ability to heat hydrocarbon reservoirs with radio frequency energy also has been tested and demonstrated already, notably in Utah on a tar sands desposit, Spencer said.

He said if the test causes stimulation which triples production from the field, Uentech would consider it a success. Right now wells in the area produce only a barrel or two of the heavy oil per day.

November 15, 1984

Mr. Lloyd Davidson
P.O. Box 2182
Santa Fe, New Mexico 87501

Dear Lloyd:

As we discussed on the telephone, this letter is meant to convey a basis for discussion of a deal for your holdings in the Miguel Creek oil field in New Mexico.

First, we would like to get from you a farm-out on some portion of your property in return for our promise to drill and complete at least one well with the equipment necessary to stimulate that well electromagnetically. This well would be drilled within one year from the date of the farm-out agreement or the property would revert to you. From your description of the geology, we would like to have the 80 acres of the W½ NW¼ of Section 21, subject to inspection of the site for equipment access, power supply access, etc. You would retain a 5% override on this property until such time as a total buy-out price can be agreed upon between us.

Second, we would like an option to purchase the rest of your interests in this field at a price to be agreed upon between us within three years from the date of the farm-out described above. Along with this option would come permission to drill coreholes or to carry on whatever other exploratory work we deem necessary to establish a value for the lease rights.

It would be our intention to complete one or more pilot wells in the most favorable part of the property to establish the effectiveness and economics of our stimulation techniques. If the pilots are successful, we would carry out the additional reservoir definition work and obtain a third party petroleum

engineer's assessment of the recoverable reserves. This report would form the basis of our negotiations for a buy-out price for your total leasehold position.

As I mentioned on the phone, at the appropriate time we would like to buy out as many of the extraneous override positions on this property as possible and would like your assistance in doing so.

We would also like whatever information you have or can obtain on the quality of the oil we could expect to produce, how and where such oil is currently sold, and the price realized by producers net of any taxes, etc.

I have enclosed a report on the status of our project and two recent journal articles on our project, which should serve to explain our technology in general terms. I'll be glad to try to answer any further questions you may have.

Yours truly,

Homer L. Spencer, Jr.

HLS/sep

enclosures