



DEEP | EARTH | ENERGY | PRODUCTION

**For Immediate Release**  
**Saskatoon, SK, November 24, 2020**

## **DEEP ACHIEVES OUTSTANDING FLOW RESULTS IN HORIZONTAL WELL TEST & TOM KISHCHUK APPOINTED COO**

DEEP Earth Energy Production Corp. (the “Corporation” or “DEEP”) is pleased to announce the results of the Border-5HZ horizontal well. This is the deepest horizontal well in Saskatchewan’s history and the first 90° horizontal fluid production well in the world to be drilled and hydraulically stimulated for geothermal power generation purpose.

The open hole well was tested using a coil tubing nitrogen lift test, which indicated high permeability and flow capability with an absolute open flow capacity in the order of 20,000 cubic metres per day (m<sup>3</sup>/d) or a productivity index of 0.55 m<sup>3</sup>/day/kPa. Successful mechanical stimulation and production modeling indicate a highly productive well - twice the productivity of an unstimulated well. This well will sustain commercial production rates (100 litres/sec), while minimizing fluid drawdown. Future production rates will be constrained by well design and pump capacity.

The horizontal well was spudded on September 11<sup>th</sup> and completed on October 24<sup>th</sup> using Horizon Rig #33. The well was drilled to a total measured depth of 5,672 meters (3,450 total vertical depth) with a 2,000-metre horizontal section. No significant issues were encountered during drilling and the geological, operations and Weatherford directional staff were able to maintain the well trajectory in the reservoir target zone for a significant portion of the lateral length. This demonstrates the viability of horizontal drilling, supports the geophysical analysis, and further demonstrates reservoir continuity. The highest temperature measured during open hole logging was 127° Celsius (261° Fahrenheit).

The well was completed using a 20 stage NCS Multicycle stimulation sleeve system and cemented liner, and subsequently hydraulically stimulated with Element Technical Services as per standard horizontal well completions procedures. Extended testing of the geothermal system will commence in late December/January using the Border-5HZ well producing from a 171-millimetre Halliburton/Summit electrical submersible pump (ESP) with produced fluids injected into Border-1 and Border-3 wells. This large volume production and injection loop test is required to refine the reservoir model and finalize the subsurface well design and spacing necessary for completing a Bankable Feasibility Study. Well design details:

Section	Depth (m)		Diameter (mm)		Description
	mMD	mTVD	Hole	Casing	
Surface	355	355	444.5	339.7	Full string
Intermediate 1	2010	2010	311.2	244.5	Full string
Intermediate 2	3681	3450	222.3	177.8	Liner
Lateral	5672	3450	155.6	114.3	Liner/tieback

Tom Kishchuk has been appointed Chief Operating Officer effective November 25, 2020. Tom joined the DEEP team in September 2020 as a special advisor to the management team. Using his more than 30 years of technical and business management experience in the energy industry he will provide leadership to the surface operations and engineering teams as the project advances to achieve commercial operation of Canada's first geothermal power plant. Prior to DEEP, Tom was the President and Chief Executive Officer of Mitsubishi Hitachi Power Systems Canada, Ltd., and Vice-President Operational Support for Federated Co-operatives Limited.

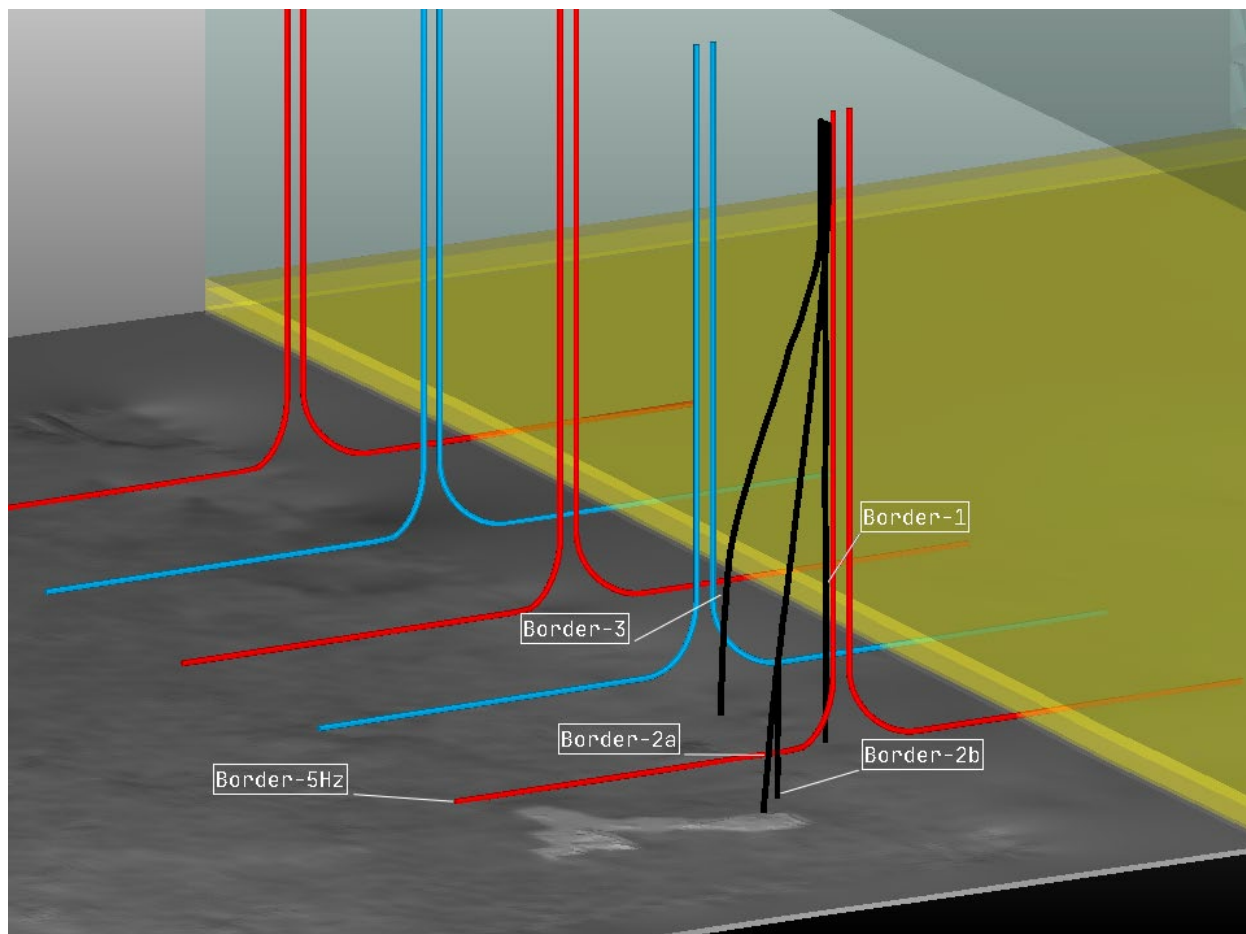
Video of the hydraulic stimulation can be found here <https://youtu.be/8S0BxbB5teI>

Photographs are accessible from Dropbox [here](#).

**For more information, please visit DEEP's website at [www.deepcorp.ca](http://www.deepcorp.ca) or contact:**

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Preliminary 20 MW geothermal field design showing production wells in red and injection wells in blue. Border-5HZ can be found in the lower left of the image. Previously drilled wells are shown in black.

Future Oriented Financial Information Disclaimer:

Some of the statements in this news release may be forward-looking statements or statements of future expectations based on currently available information. Such statements are naturally subject to risks and uncertainties. Factors such as the development of general economic conditions, future market conditions, unusual catastrophic loss events, changes in the capital markets and other circumstances may cause the actual events or results to be materially different from those anticipated by such statements. DEEP, including its directors or officers, do not make any representation or warranty, express or implied, as to the accuracy, completeness or updated status of such statements. Therefore, in no case whatsoever will DEEP or its directors or officers be liable to anyone for any decision made or action taken in conjunction with the information and/or statements in this update or for any related damages. You should consult your professional advisors before deciding to make an investment decision in DEEP.