



Geonik Research and Production Company

Multi-Reservoir Injection Systems

Smart Automated Solutions for Enhanced Oil Production
with Downhole Remotely Controlled Electric Valves



Geonik was founded in 2004.

The company develops, manufactures, tests and launches smart downhole systems for

- Multi-reservoir production (MRP)
- Multi-reservoir injection (MRI)



The main advantages of our systems are separate measurement of flow parameters for each reservoir and remote control of reservoir performance with submersible electrovalves





- Separate fluid injection into separated reservoirs and control of injection fluid volume and pressure for each reservoir;
- Pressure build-up measurement for each reservoir;
- Injection through a single-pipe system;
- Proprietary technologies, equipment and assembly tools;
- Both surface and downhole equipment is designed in house and manufactured in our high-tech facilities;

Our process flows and systems are patented

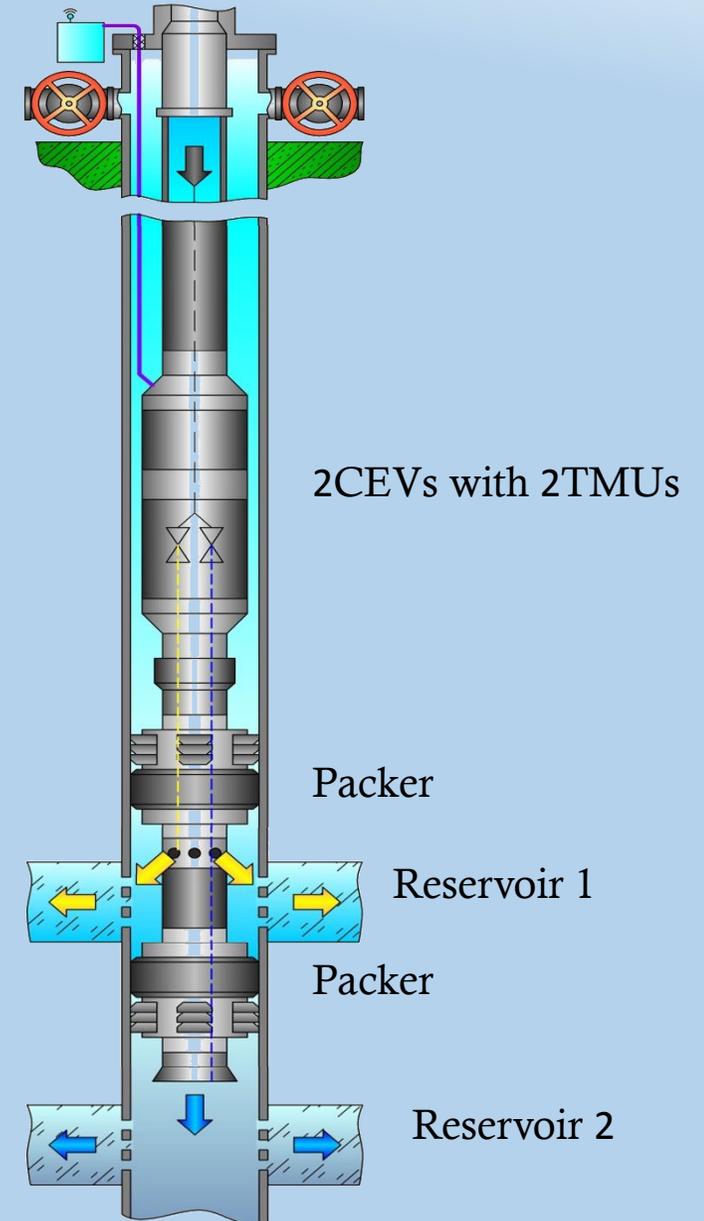




This remotely controlled completion system used in waterflood injection wells for reservoir pressure maintenance includes two packers and two controlled electric valves (CEV) for simultaneous multi-reservoir injection (MRI) into two reservoirs through a single tubing string. The reservoirs are isolated by two mechanical packers, and a reagent is injected through the wellhead and a single tubing string into two controlled electric valves (CEV) with two telemetry units (TMU) for real-time measurement of pressure, flow rate and temperature (P, Q and T) and flow-rate control separately for each of the two reservoirs.

Advantages:

- Separate fluid injection into two reservoirs;
- Control of fluid injection pressure and volume without well shut-in or any additional equipment;
- Data acquisition and control of electric valves by a telemetry system through a logging cable remotely or from a surface recorder;
- Equipment is assembled and run into the well in two stages for easy disassembly and repair;
- Dynamic testing with pressure fall-off (PFO) measurement for each reservoir by shutting in one of the reservoirs

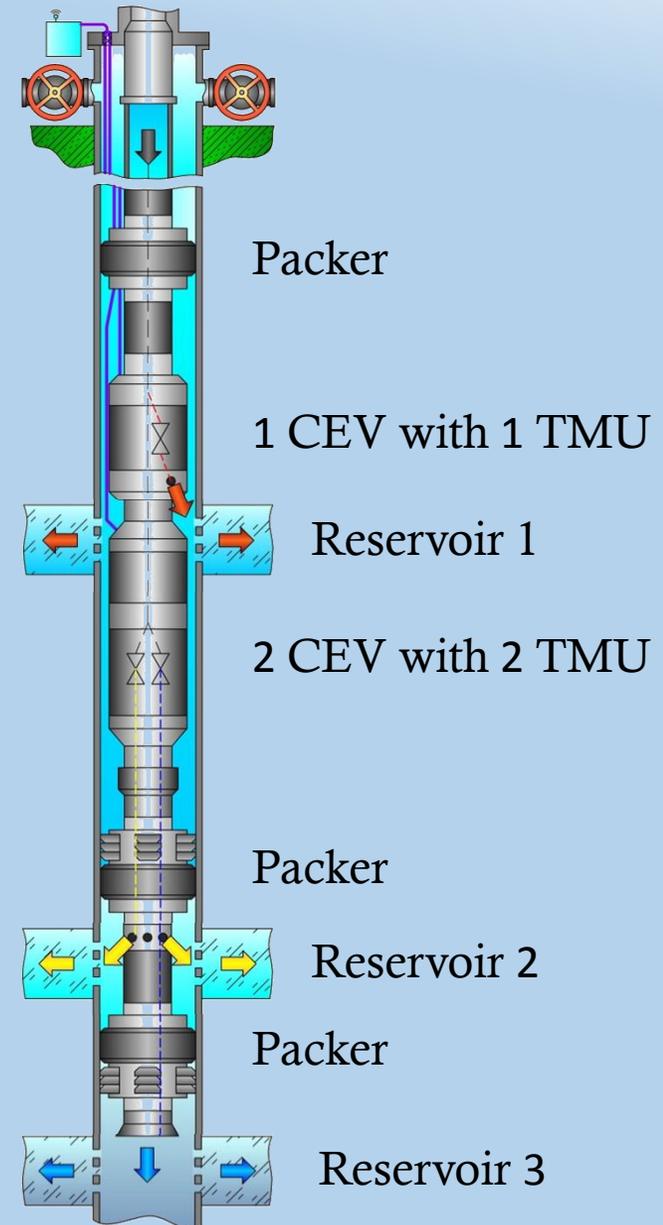




This remotely controlled completion system used in three-reservoir injection wells includes three mechanical packers with their controlled electric valves (CEV) for simultaneous multi-reservoir injection (MRI) into three reservoirs through a single tubing string. A reagent is injected through the wellhead and a single tubing string into the upper controlled electric valve (CEV) with its telemetry unit (TMU) and two lower CEVs with two TMUs for real-time measurement of pressure, flow rate and temperature (P, Q and T) and flow-rate control separately for each of the three reservoirs.

Advantage:

Separate fluid injection into three reservoirs.

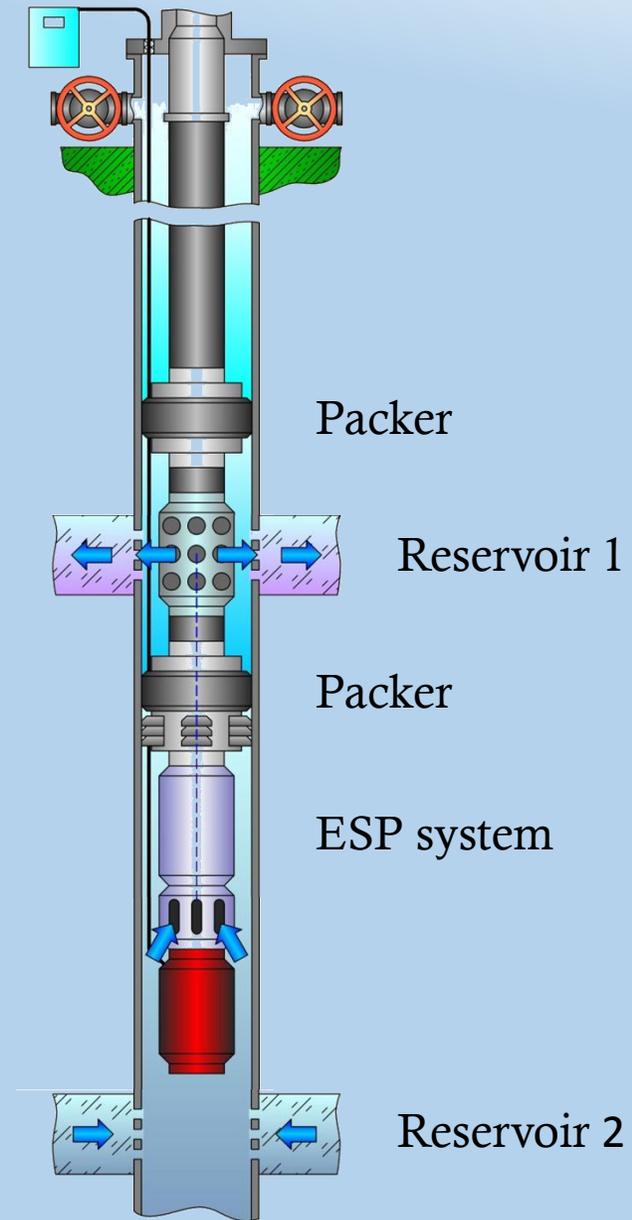




A two-packer intra-well injection (IWI) system for withdrawal of water from the lower reservoir and its injection into the upper reservoir in one well using an ESP system. The reservoirs are reliably isolated by two cable feed-through packers for use with an electric submersible motor (ESM) and fluid pumping directly between the reservoirs.

Advantages:

- Pumped fluid rate measurement
- Use of a reservoir pressure maintenance system without installation of high-pressure water lines or construction of pumping stations
- Use of a standard ESP system
- The system is run and set in the well in one stage

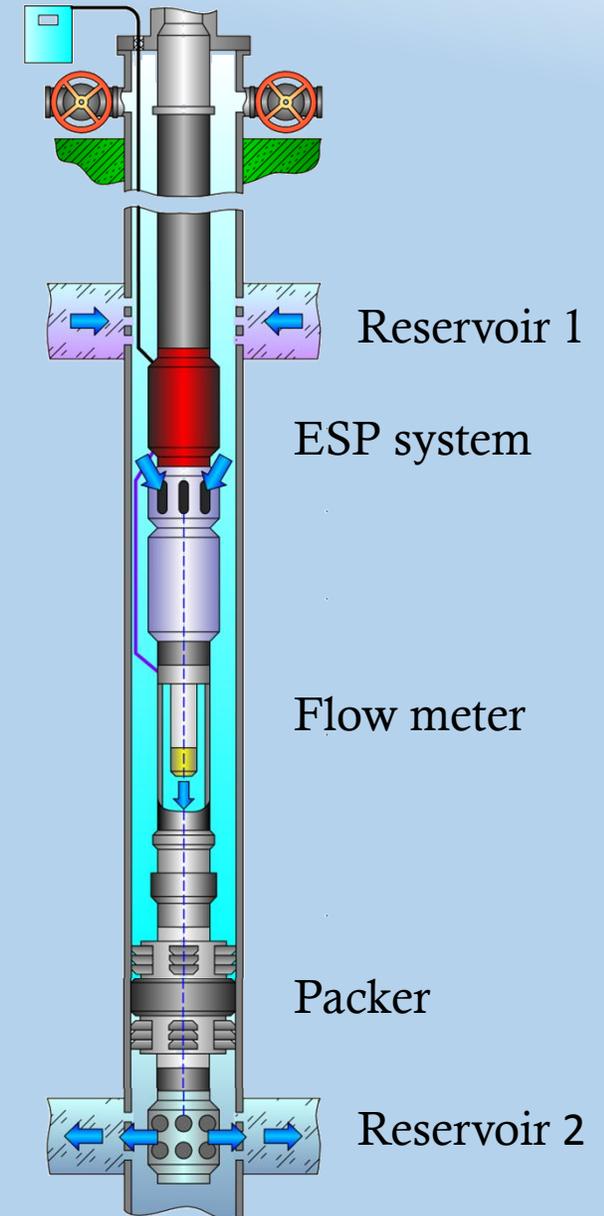




This system contains a packer and a reversed ESP system for withdrawal of water from the upper reservoir and its injection into the lower reservoir in one well. The reservoirs are reliably isolated by a mechanical packer. A TMU is installed in a tubing sleeve below the ESP to measure flow parameters (P , Q and T).

Advantages:

- Pumped fluid rate measurement
- Use of a reservoir pressure maintenance system without installation of high-pressure water lines or construction of pumping stations
- Use of a standard reversed ESP system
- The system is run and set in the well in two stages for easy disassembly and repair





- Selection of candidate wells
- System design
- Manufacturing and delivery
- Installation supervision at the well site
- Engineering support throughout service life
- Equipment rental



Our specialists will be happy to answer your questions and set up your system according to your requirements. Please contact us at

GNKoverseas@geonik.com

Thank you!



Contact info:

Tel: +7 843 2100333

E-mail: GNKoverseas@geonik.com

Kazan

Октябрьский

Volga river

We look forward to meeting you!

Пустые Моркваши

Набережные Моркваши

Пятидворка

GEONIK
Research and production firm



Десятидворка

5 Pokrovskaya St.

Naberezhnye Morkvashi

Tatarstan

Russia

Tel: +7 843 2100333

E-mail: GNKoverseas@geonik.com

