The injector wells completed during 2009 and 2010 used conventional perforating followed by hydraulic fracture and acid stimulation to increase the injection rates. The results were satisfactory in terms of injection rates per unit but the costs were high to the project. For the same reason it was not possible to complete all the units to achieve an uniform injection profile. It was necessary to find alternatives to reduce the completion costs and maximize injectivity in all the units.

Implementing advanced TCP perforating technologies the total injection rate was doubled (during the initial injectivity tests) and the associated costs were reduced by 65%

Through optimized perforating it was possible to:
- Open to injection all the units
- Stimulation for all intervals with dynamic underbalance
- Simple and faster operation
- Preserve the injection selectivity with dynamic underbalance

The recommended technology is to continue using High shot density systems (12 spf) with Dynamic Underbalance Technology. And continue with the injection evaluation in the long term when the injection facilities are fully implemented.