

# 'Slow & Easy' Stimulation Process for Enhanced Geothermal Systems (EGS)

**Terralog Technologies Inc.™ offers clean energy geomechanics services for geothermal energy applications.**

Terralog Technologies Inc. (TTI) has developed and pioneered the use of an innovative hydraulic stimulation method, called the 'Slow & Easy' stimulation process. The Slow & Easy process offers a proven stimulation solution for enhanced geothermal energy development.

TTI has acquired global field experience and a rigorous database from Slow & Easy stimulation projects in unconventional petroleum resource development. This experience uniquely positions TTI to provide its Slow & Easy stimulation services to the Enhanced Geothermal Systems (EGS\*) industry.

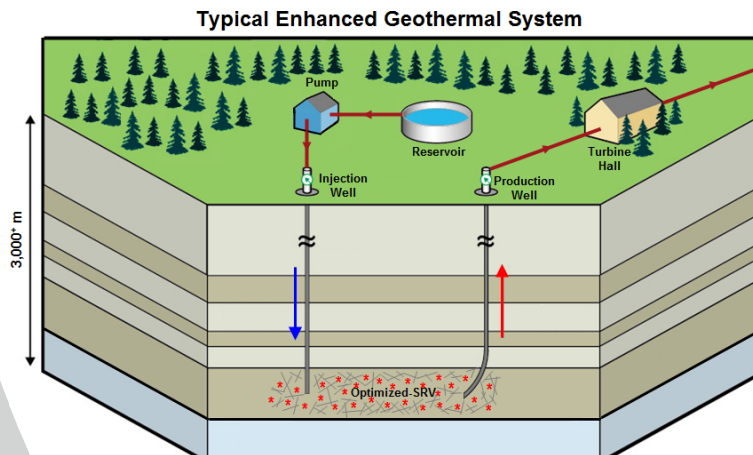
The Slow & Easy process is specifically designed for hydraulic stimulation of tight, stiff rock. An Optimized-SRV (O-SRV) is created in the target formation by inducing complex geomechanics. The O-SRV gives more effective & controlled fluid conductivity enhancement in the target formation.

The Slow & Easy technique is proven to provide more sustained fluid conductivity enhancement results in very tight/stiff rocks vs conventional massive staged hydraulic fracturing.

The Slow and Easy hydraulic stimulation approach is ideally suited for geothermal energy applications.

## Slow & Easy Advantages:

- ✓ **Significantly reduced stimulation & completion costs:**
  - Less field equipment/personnel mobilized to location (reduced traffic, equipment footprint, and noise)
- ✓ **Reduction and mitigation of environmental risks:**
  - Improved wellbore integrity
  - Reduced risk of induced seismicity
  - Use of chemicals and fresh water is typically not required
  - No contamination of groundwater or surface water resources
- ✓ **Sustained conductivity enhancement of the target formation being stimulated for EGS.**
- ✓ **S&E stimulation is the convergence of: environmental sustainability – new geo-stimulation technology development - formation injectivity & conductivity enhancement – improved EGS\* heat extraction performance.**



## Features of the 'Slow & Easy' (S&E) Stimulation for Geothermal Development

- Innovative stimulation of very low-permeability, stiff formations.
- S&E process utilizes a lower injection rate and multi-stage cyclic injection approach for more effective fluid conductivity enhancement *in situ*.
- Induced complex geomechanics improve and optimize overall SRV.
  - Stress and kinematic mechanics to develop an *in situ* Optimized-Stimulated rock Volume (O-SRV).
- O-SRV development provides for progressive and sustained fluid conductivity enhancement of the stimulated target formation.

## Slow & Easy Geothermal Applications:

- \*Enhanced Geothermal Systems: utilization of impermeable rocks for heat energy extraction; via SRV development *in situ* and fluid injection/production.
- SedHeat: extraction of heat energy from production of hot/warm fluids in sedimentary rock basins.

For more information please contact:



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