








PolyGHE TRNSYS Types for simulating bore fields
(work performed in Professor Bernier's research group)

January 2024_v2

	TYPE	Number of boreholes	Number of pipes in borehole	number of independent circuits in borefield	Ground model		Borehole model	
					Model	Load Aggregation	Model	Borehole thermal capacity (Y/N)
 Type201	201	1	2 or 4	1	User has choice: ILS/CHS/FLS	Liu	Steady-state borehole thermal resistance entered by the user	N
 Type203	203	1	4 pipes - 2 independent circuits	2	User has choice: ILS/CHS/FLS	Liu	Eslami-nejad's model (which accounts for thermal short-circuit)	N
 Type243	243	1	2	1	User has choice: ILS/CHS	Liu	8 nodes - 20 axial segments - Rb evaluated at each time step	Y
 Type204	204	>=1	2	1	g-function	Liu	multipole order zero	N
 Type261	261	2 boreholes in series	2	1	FLS	Liu	Steady-state borehole thermal resistance entered by the user	N
 Type262	262	"n" boreholes in series - position entered by user	2	1	FLS	Liu	Steady-state borehole thermal resistance entered by the user	N
 Type263	263*	"n" boreholes in series with "m" independent circuits - position entered by user	4 pipes - 2 independent circuits	n<150, m<50	FLS	Liu	Steady-state borehole thermal resistance entered by user	N

* Type 263 prints the borefield temperature field at the end of the simulation (time consuming if the number of grid points is large)

ILS: Infinite Line Source
CHS: Cylindrical Heat Source
FLS: Finite Line Source