

rate may need to be increased. Most loop design software programs include a range of antifreezes and take into account the change in properties.

Ground Temperature

Undisturbed ground temperature is best obtained from local water well logs and geological surveys. Figure 9 shows the approximate ground water temperatures in the USA. The undisturbed ground temperature will remain constant throughout the year below 30 ft. Above 30 ft., the ground temperature will change with the season. *Appendix 1 – Ground Temperatures*, page 36, has the ground temperatures for many locations around the world.

Figure 9 – Approximate Ground Water Temperatures in the USA⁷

