

**GROUND-SOURCE HEAT PUMPS AND
GEOTHERMAL DIRECT USE WORKSHOP**
Quality Inn Airport, 1659 W. North Temple St., Salt Lake City, Utah

Agenda

Day 1 (March 22, 2006) – Geothermal Heat Pumps

- 8:00 a.m. Registration – 30 min.
- 8:30 a.m. Welcome and Introductions – 15 min.
- 8:45 a.m. Ground-source heat pumps (GHPs), concepts, practices, history, and industry status – Cary Smith, Sound Geothermal – 45 min.
- 9:30 a.m. GHP case studies in the western U.S. – Gordon Bloomquist, WSUEP; Andrew Chiasson, OIT – 45 min.
- 10:15 a.m. Break –15 min.
- 10:30 a.m. Operation and maintenance experience of GHPs - local perspective – Duane Devey, Fort Herriman Middle School; regional perspective – Gordon Bloomquist, WSUEP – 30 min.
- 11:00 a.m. Technical aspects of GHP design: thermal-conductivity, sizing, etc. – Andrew Chiasson, OIT – 1 hr.
- 12:00 p.m. Utah Power GHP incentive programs – Trig Soleim – 15 min.
- 12:15 p.m. Working Lunch (provided) discussion of the field trip – 45 min.
- 1:00 p.m. Field trip to GHP facility (Herriman School) – 2 to 3 hrs. (transport provided)

Day 2 (March 23, 2006) – Geothermal Direct Use

- 8:00 a.m. Registration – 30 min.
- 8:30 a.m. Welcome and Introductions – 15 min.
- 8:45 a.m. Nature and occurrence of geothermal resources – Joe Moore, EGI – 15 min.
- 9:00 a.m. Exploration for low- and moderate-temperature resources – Rick Allis, UGS – 15 min.
- 9:15 a.m. Geothermal drilling – Jim Witcher, Witcher and Associates – 30 min.
- 9:45 a.m. Geothermal resources in Utah – Bob Blackett, UGS – 15 min.
- 10:00 a.m. Break – 15 min.
- 10:15 a.m. Economic factors affecting direct-use development – Gordon Bloomquist, WSUEP - 30min.
- 10:45 a.m. Geothermal direct-use applications – Gordon Bloomquist WSUEP; John Lund, OIT; Toni Boyd, OIT – 1 hr. 20 min.
 - Industrial uses
 - Agribusiness
 - Aquaculture
 - District heating
 - Retrofit
- 12:05 p.m. USDA-Rural Development programs for renewable energy and energy efficiency – Richard Carrig, USDA; also a Working Lunch (provided) – 55 min.
- 1:00 p.m. Geothermal template for USDA Farm Bill Section 9006 – Andrew Chiasson, OIT – 15 min.
- 1:15 p.m. Facilitating geothermal direct-use startups in agriculture through business incubators. – Jim Witcher, Witcher and Associates – 15 min.
- 1:30 p.m. Geothermal websites – Toni Boyd, OIT – 15 min.
- 2:00 p.m. Field trip to Crystal-Bluffdale area (Utah State Prison project) – 2 to 3 hrs. (transport provided)