Thermal Well Design & Integrity Course for Geothermal Applications (1 Day)

January 12, 2018, SMU Campus, Dallas TX

Course Overview
This course provides an overview of the considerations, key factors, industry guidelines and practices, examples, and field experience related to the design and integrity of geothermal wells.

The course content was developed based on C-FER's extensive experience with thermal well design and integrity topics associated with the heavy oil and bitumen recovery methods of Steam Assisted Gravity Drainage (SAGD) and Cyclic Steam Stimulation (CSS). While the majority of the principles presented are general to thermal wells, where applicable, differences and examples of geothermal wells will be presented to tailor the course to well designers, operators and other stakeholders in the geothermal energy industry.

Topics Covered
This introductory, one-day course will cover the following:
- Overview of key material properties and damage mechanisms of casing and liner tubular steels, and wellbore cements;
- Casing and liner design approach and basis (materials, connections);
- Cement blend options;
- Thermal wellheads, options;
- Impacts of production/injection completion design;
- Well integrity management programs;
- Inspection and condition monitoring, damage, mitigation and repair options and experience; and
- On-going challenges, industry initiatives, and areas of research and development.

You Will Learn
At the end of this course, students will gain an improved understandings and appreciation for:
- Key factors and considerations involved in the design, construction and integrity management of thermal wells;
- How various aspects of a geothermal well's life impact and influence thermal well design and integrity; and
- Experience based on thermal enhanced oil recovery challenges, areas of advancement, current industry initiatives and areas of research.

Agenda at a Glance
- Thermal Well Design, Regulatory Requirements & Industry Practices
  - Thermal Well Design and Equipment Selection
- Thermal Well Construction, and Integrity Management
  - Casing, Tubulars and Liners
  - Wellheads and Other Completion Equipment
  - Wellbore Integrity: Overview
  - Wellbore Integrity: Mitigation and Repair
  - On-going Research and Industry Initiatives

Who Should Attend
This course has been designed for anyone looking for an overview of thermal and geothermal well design and integrity.

To register, please visit: [http://www.smu.edu/geothermal](http://www.smu.edu/geothermal)