

## GEOHERMAL SERVICES

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### Exploration

- Geochemical exploration surveys, mapping, geology and geophysics
- Comprehensive in-house laboratory geochemical analysis services
- Multi-disciplinary, integrated resource conceptual modeling
- Preliminary resource assessment, well targeting, risk assessment

### Well Testing

- Well injection tests including pumping and logging services
- Turn-key well testing services and surface facilities including two-phase pipelines, Low Emissions Compact Muffler, injection pumps
- Downhole logging services including Pressure-Temperature-Spinner (PTS), Two-phase Downhole Sampler (DHS), Acoustic Borehole Image (ABI) tools
- Tracer Flow Testing (TFT<sup>®</sup>) services for two-phase flow and enthalpy measurement
- Comprehensive in-house laboratory analysis services
- Injection and flow-test data processing, interpretation, wellbore simulation modeling and well capacity assessment

### Resource Assessment

- Multi-disciplinary, integrated resource assessment and conceptual model development
- Comprehensive geochemical modeling, including reactive transport models
- Reservoir simulation by numerical modeling

### Power Generation

- Power plant chemical process simulation modeling for feasibility analysis and power cycle optimization (to maximize generation and minimize scaling)
- Pilot testing services, including equipment design and fabrication, for feasibility analysis and power cycle optimization (to maximize generation and minimize scaling)
- Steam purity and quality measurement; Power plant performance testing services, third-party verification of contractual compliance and process optimization
- Corrosion and scale deposition testing and consulting services
- Comprehensive in-house laboratory chemical analysis services
- Environmental emissions testing and emission control system design and optimization

## GEOTHERMAL PRODUCTS

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### Well Testing Equipment and Instrumentation

- High-temperature Pressure-Temperature-Spinner (PTS) wellbore logging tools
- High-Temperature two-phase wellbore sampling tools with PTS capability
- Portable, high-accuracy, Low Emissions Compact Mufflers (LECM)
- Surface instrumentation with data-logging, processing and communications
- Tracer Flow Testing (TFT<sup>®</sup>) equipment for two-phase flow and enthalpy measurement
- Chemical treatment skids for corrosion, scale and H<sub>2</sub>S emissions control

### Fluid Sampling Equipment and Instrumentation

- ASTM two-phase sampling separators and coolers
- Retractable sampling probes
- Field analysis instruments for on-site geochemical measurements

### On-line Steam Purity and Quality Management Equipment

- Multi-Nozzle isokinetic probes and coolers for permanent on-line applications
- Trace analyzers with sample pre-treatment for on-line silica, sodium and chloride
- Total Noncondensable gas monitors for permanent on-line applications
- Steam quality monitors for permanent on-line applications

### pH-Modification Equipment and Instrumentation for Well Fields and Plants

- Acid-dosing skids for precise and reliable pH-modification with in-line dilution
- High-alloy static chemical mixers for acid treatment of brine
- On-line automatic pH-monitors for highly-accurate pH control

### Corrosion Control Equipment and Instrumentation for Well Fields and Plants

- Chemical treatment skids for precise and reliable inhibitor delivery
- Downhole inhibitor and caustic injection systems for acid-wells (steam or brine treatment)
- Wellhead and power plant treatment for HCl in steam using wet or Dry Steam Scrubbing (DSS)