

HALLIBURTON

Halliburton Overview

Christian Kiesel

Managing Director Halliburton Company
Germany GmbH

Halliburton Global Footprint



Founded

1919

Employees

50,000*

140 Nationalities

Operational Countries

80

Research Centers

15

Corporate Headquarters

Houston
Dubai

**approximate estimate*

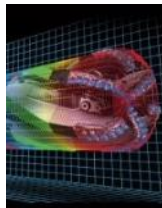
Product Service Lines

HALLIBURTON

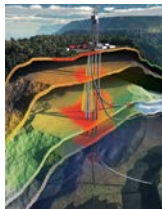
Drilling and Evaluation



Baroid



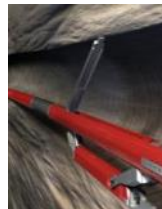
**Drill Bits
& Services**



**Sperry
Drilling**



**Testing
& Subsea**

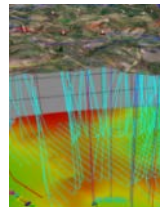


**Wireline &
Perforating**

Supporting All Product Service Lines

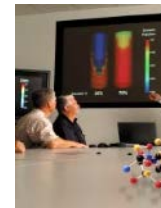


**Consulting
& Project
Management**

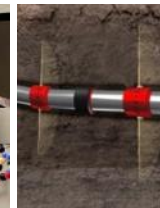


Landmark

Completion and Production



Cementing



**Completion
Tools**



**Production
Enhancement**



**Artificial
Lift**



Multi-Chem



**Pipeline &
Process
Services**

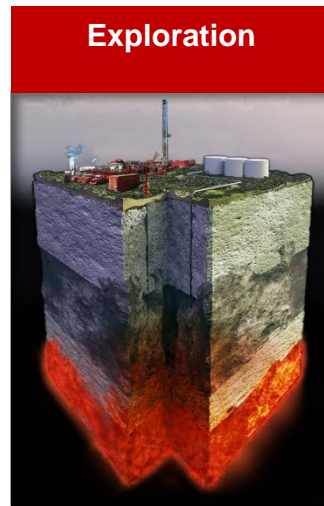


**Production
Solutions**

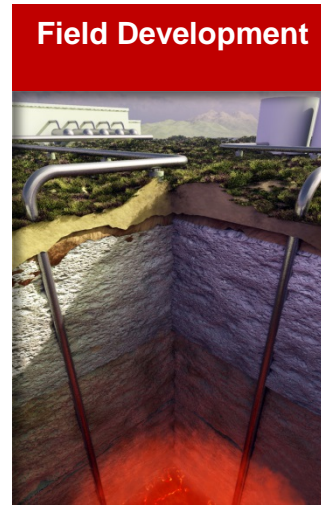
Halliburton capabilities in the geothermal lifecycle



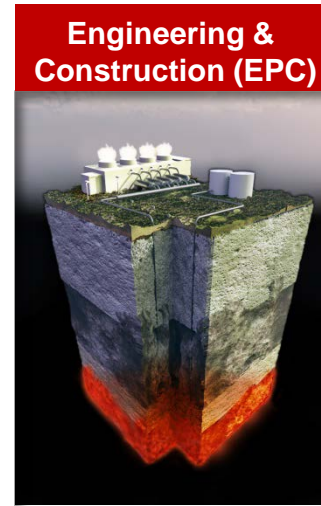
- Surface exploration starts with resource evaluation
- Permitting



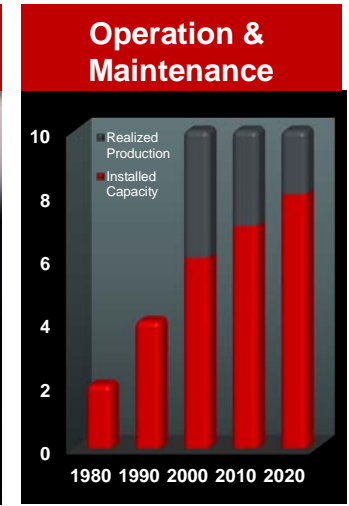
- Geology, geophysical, geochemistry, MT/TEM studies.
- Drill exploration wells, well testing,



- Drill production and injection wells
- Drill cooling water wells
- Perform reservoir



- Construct steam/hot water pipelines
- Power plant & cooling
- Substation & transmission



- Start-up & Commissioning
- Operation & maintenance of system

Halliburton

Halliburton Geothermal Solutions

Delivering the Lowest Cost per Megawatt (MW) in Well Construction

Increasing Wellbore Integrity

Enhancing Drilling Efficiency

Managing Ultra-high Temperatures

CROSS-DIVISIONAL

- Integrated Project Management

WELL ENGINEERING

- iCem® Service
- WellLife® Software Analysis
- Drilling Engineering Solutions (DES)
- WellCat™ Wellbore Stress Analysis Software
- WellPlan™ Software Suite
- MaxBHA™ Design Software

WELL INTEGRITY

- CAST-M™/CBL-M/MFC Casing and Cement Evaluation Tools

DENSITY

- Foamed Cement
- ZoneSeal® Isolation Process
- Tuned® Light Cement

LOST CIRCULATION

- SentinelCem™ Cement
- Bridgmaker™ LCM Spacer Fluid
- BaraLock®-666 Loss Circulation Material

CORROSION

- ThermaLock™ Cement
- CorrosaCem™ Cement
- WellLife® Family of Additives
- Latex 3000™ Cement Additive

RESERVOIR CHARACTERIZATION

- DecisionSpace® Software Suite
- Exploration Insights
- XRMI™ Water Based Mud Imaging Log Service
- Borehole Fluid Sampling
- AFR™ Azimuthal Focused Resistivity Sensor
- Logging-while-Drilling (LWD) Services

DRILLING OPERATIONS

- Halliburton Free Point Tool
- Radial Cutting Torch (RCT)
- Electro Magnetic-wave Telemetry (EMT) system
- Turbopower™ Turbodrills
- SperryDrill® Motors
- SledgeHammer™ Drilling Jar
- Pressure-While-Drilling (PWD) Services
- StrikeForce™ Roller Cone Drill Bits
- MegaForce™ and GeoTech™ Fixed Cutter PDC Drill Bits
- Rock Strong™ Coring System
- XR™ Reamer

DRILLING OPTIMIZATION

- DatCiSM Process
- DFG™ Drilling Fluids Graphics Software

FORMATION EVALUATION

- Quasar PulseSM M/LWD Service
- SOLAR® Suite of MWD/LWD Service

DRILLING FLUIDS

- BaraXtreme™ HPHT Water-based Drilling Fluid System
- N-SOLATE®-600 Aqueous-based Insulating Fluid

RESERVOIR MANAGEMENT

- FiberWatch® DTS Service Interrogators
- Pressure Temperature Spinner Tool (PTS)

WELL INTERVENTION

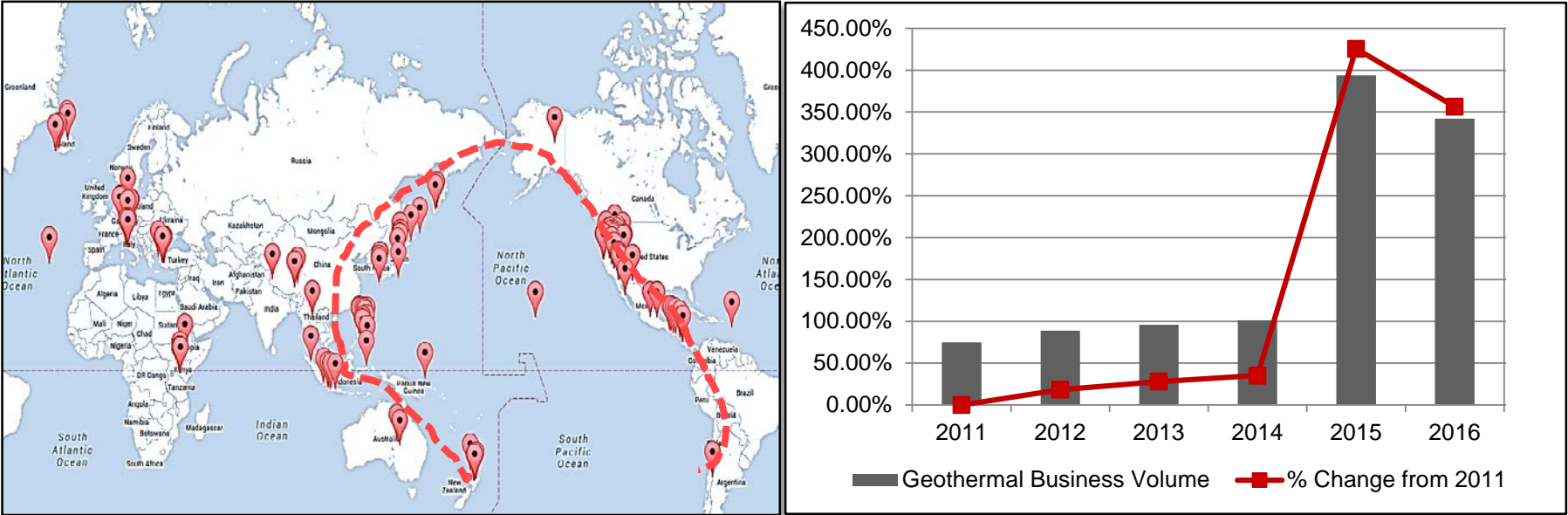
- CoilSweep® Wellbore Cleaning Service
- Pulsonix® TFA Service
- Hydra-Blast® Pro Service
- Coiled Tubing; Hydraulic Workover
- KelaStimSM Acid Stimulation Fluid Service
- SandStimSM Acidizing Chelating Fluid Service

WELL CONTROL

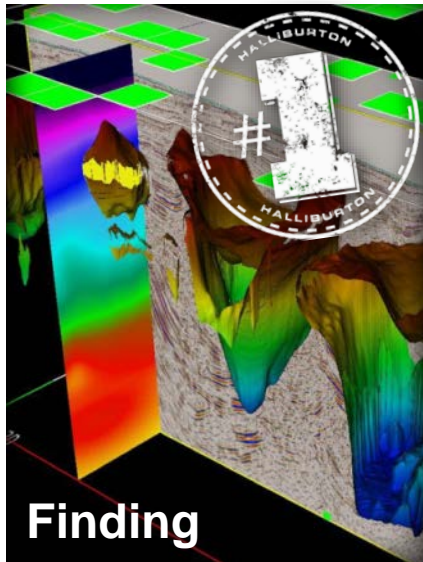
- Boots & Coots Services
- SafeguardSM Services

Halliburton geothermal experience

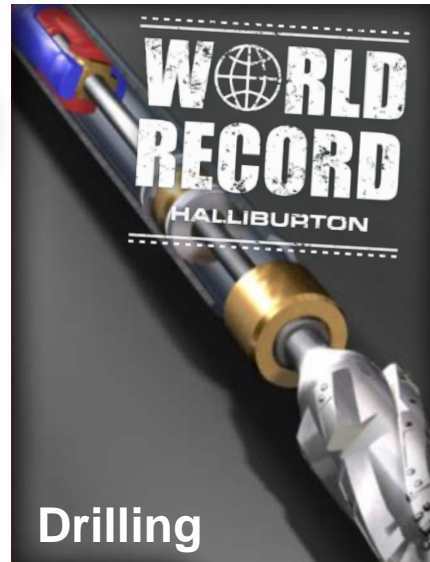
Halliburton Geothermal Experience Halliburton Geothermal Business Volume



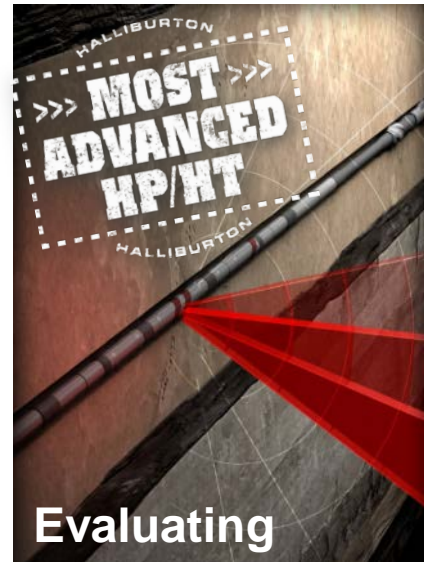
Our **transformational technology** ensures success and ultra-reliability at every stage



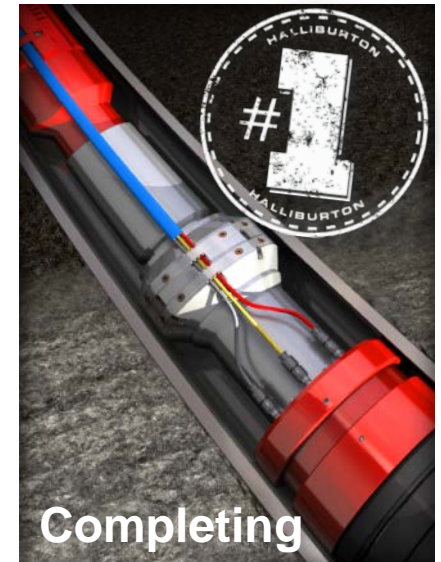
Reduced Uncertainty



Drilling Efficiency



Ultra-Reliability



Maximum Production