

**USC CENTER FOR GEOTHERMAL STUDIES (CGS)
DISTINGUISHED LECTURE PROGRAM (DLP)**

Presents

Wireline & LWD Fracture ID & Analysis

By

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Webinar**

ABSTRACT:

Many geothermal reservoirs are in fractured volcanic rocks. The petrophysical issues involved with these reservoirs are (1) Identifying the fractured intervals from wireline and logging while drilling (LWD) measurements, (2) Determining the fracture orientations (dip and strike), and (3) Determining if the fractures are open, closed, or healed with precipitated mineralization. Fractured interval depths can often be inferred from normal drilling operation observations, as well as, from common Wireline and Logging While Drilling measurements. Fracture orientation can also be determined from dipmeter logs. The most complete fracture analysis, however, is via the various borehole imaging technologies. These technologies, not only provide information on fracture occurrence and orientation, but also whether or not the fractures are open.

BIO:

Donald G. Hill, PhD, is a Consulting Petrophysicist and Adjunct Professor of Petrophysics at the University of Southern California. He holds a Doctorate in Geology and Exploration Geophysics and has over 40 years' experience developing and conducting innovative petroleum, mining, and geothermal exploration and production (E&P), as well as, geotechnical and environmental projects in US, Canada and 33 other countries exclusive of North America. Dr. Hill has worked with multinational E&P mining, geothermal and petroleum firms, E&P research laboratories, large and small independent and junior E&P firms, engineering firms, national laboratories, major universities, law firms, and technical service organizations. He has developed training courses for corporations, national laboratories, training organizations, and universities. Dr. Hill is an active member of several international professional societies and a published author in the fields of geophysics, petrophysics, enhanced oil recovery, geothermal exploration, and environmental restoration.



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