HPHT Well Control

There are many factors regarding HPHT Well Control which are different from “standard” well control. Generally, Operators who are about to embark upon HPHT Drilling ask the Drill Crew of the rig they have hired to drill the well to attend a HPHT Well Control Course or a Refresher (if they are HPHT experienced).

They will also typically send their Drilling Supervisors and Drilling Engineers onto the course along with service hands such as Mud Engineers, Mud Loggers and sometimes Directional Drillers etc.

HPHT Well Control issues which should be considered are things like :-

- Enhanced circulating systems
- Pressure control whilst drilling (e.g. MPD),
- ECD
- Early kick detection systems for both OBM and WBM
- Mud handling and management
- Why drill with just one active pit during the HPHT section
- Circulation
- Connection and tripping procedures
- Contingency procedures
- General kick detection
- PWD

- The advantages of the Driller's Method of killing the well
- The advantages of the W & W Method of killing the well
- The Volumetric Kill Method
- Stripping operations
- Undetected influxes especially in OBM
- The effect of bubble point
- Gas expansion
- Choke line friction factor considerations on semis and drill-ships
- Reasons for hard shut-in, estimating gas migration rate etc.
HPHT Well Control

This course can also be made “bespoke” for the Operator’s well and can also be made “bespoke” for the Drilling Contractor’s rig and crew. IDEAS also takes calls from the rig, the Rig Manager or the Operator at any time. As a minimum, all IDEAS’ consultants have a minimum of 25 years HPHT experience and are IADC WellCap Plus / IWCF Certified.

Typically, if the rig’s crew hasn’t been trained regarding HPHT Well Control, the rig and its crew will make errors, as case histories show.

The cost to an Operator in not getting the HPHT Well Control Operations right can run into, literally, millions of dollars. For Drilling Contractor it could also mean loss of contract and reputation. Both are preventable.

Surface BOPE