

# Introduction to Drilling One Day Course

## **The rig**

Identifying parts of the rig

Terminology

Land rigs versus offshore rig types

## **Drilling methodology**

Drilling mud – What is it? Why use it?

Blow outs – why do they occur?

Fishing tools

## **Casing**

Types of casing

Conductor pipe, surface, intermediate, production

Why use casing?

Identifying pressure changes

## **Drill bits**

Types and purpose of different drill bits

## **Drilling measurements**

WOB, ROP, Chromatograph, mud weight, etc.

Time vs. depths curve, time vs. cost curves

Deviation Surveys

Well header information

## **Reading a drilling report**

Data

**Mudlogger – reading a mudlog**

Drillcuttings

Wireline vs. MWD logging

Cement Bond Logs (CBL)

**Coring**

Whole core vs. sidewall core

**Testing**

DST vs. RFT vs. setting pipe

**Well completions**

Cementing, setting production string, perforating

**Drilling risks**

**Planning a well**

Geological/geophysical data (tops, pressure)

Nearby wells

Reading scout ticket info

Borehole diagrams

Costs

Data collection (types of logs, cores, cuttings)

Well permitting

**Horizontal drilling**

**Optional – trip to Galveston to see Ocean Star rig (6 hours with lunch)**