Portable Fid

The portable fid is often seen as the field work horse for hydrocarbon monitoring.
It allows the operator to build a quick picture of the total hydrocarbon count in the immediate environment

There are a range of approximately half a dozen portable unheated fids available in the uk market

In order to achieve satisfactory results we have laid down a few simple guidelines:

1, Ensure you have read the manual of your fid
2, Make sure the batteries are fully charged prior to use
3, Prior to going out in the field with your equipment, check the validity of the calibration certificate.
4, The day before you go into the field check the operational status of the fid – does it light ok , does it respond to gas,
5, Going into the field, there are two issues that all fids suffer from and awareness of these issues means they can be minimised:
A, portable fids are not heated and so don't like the cold. This means they are difficult to ignite in cold conditions
B, Moisture, water. It must be ensured that moisture / water is never allowed to enter the fid

6, Keeping the instrument clean and working . A portable fid is an expensive analytical tool. It needs to handled carefully and treated respectfully. An instrument that is covered with mud can hardly be expected to provide reliable data

Good Practice:
Use a controlled gas source of known concentration to validate your readings before and after a test.
Datalogging: most fids have built in loggers use these to provide proven data. Fids with no in built loggers can often have external loggers attached

Sample Frequency: Make sure the fid logging matches the change in rat of your process. i.e you are not missing any emission points.

Monitoring range : Ensure you are working in a range of the fid that you can validate
                     If your using dilution make sure your not in the noise area of the signal

Post Monitoring : Pull clean dry air though the analyser to get a stable zero
          Download and analyse date
          Clean , calibrate and charge the fid. Make sure it is run every 2-3 weeks

The basic fid is one of the simplest and most reliable units to use