

## Mudlogger

Mudloggers collect samples of drilling fluid (mud) taken from a gas or oil well, and record these in sequence (known as a mudlog) for analysis. Mudlogs are used to calculate if oil or gas levels make a well profitable.

Also known as Logging geologists, they are responsible for detecting any dangerous issues that would affect work at the well site.

### The Work

A mudlogger details all drilling activity at the well, such as drill cutting rate, speeds and times, depths, mud characteristics and the presence of gas and oil. Mudlogging is also known as hydrocarbon well logging.

You could be:

- regularly collecting samples from a 'mudshaker' (situated at the surface of the drill) which separates rock cuttings from the mud, and recording the time and depth at which they were taken
- washing and dividing the cuttings into portions to produce a chart showing each sample according to depth drilled, for client approval
- examining cuttings under a microscope with UV light to classify the rock type, for example limestone, sand or shale
- recording any gas and oil present in the samples (a 'show') and noting chemical properties of the fluid, such as viscosity, weight and salinity (salt and water content)
- using gas chromatography to detect the presence of hydrocarbons such as methane or propane, or calculating how much natural gas is present
- monitoring site conditions using a computerised logging unit, detecting potential dangers such as gas bubbles travelling up the drill pipe which could cause a blow out, and informing the drilling team
- following all health and safety procedures on the site, and promoting them to others
- maintaining or repairing equipment at the site, calibrating gas equipment, and maintaining a stock inventory
- providing daily reports and logs to clients, and writing a summary report when the well is finished.

### Pay

Starting pay for Mudloggers is around £25,000 to £30,000 a year, rising to around £45,000 a year with experience. With substantial experience earnings can rise to around £70,000 a year.

Food, travel and accommodation expenses are usually covered by employers.

### Conditions

- You work from an office or laboratory, usually at a remote drilling site offshore.
- Work is usually on a rotational system of between 2-4 weeks on, 2-4 weeks off, with longer times off between jobs. Work ends when the well is finished.
- When offshore, you would normally work a 12-hour shift, including rest and meal breaks, with 12 hours

off duty.

- Employers provide free accommodation and meals and there are usually good recreational facilities. You would usually share a cabin with a colleague.
- Alcohol is banned on oil rigs, and there is random alcohol and drug testing.
- When working on the drilling site, you would wear protective clothing. Employers provide all necessary safety equipment, such as thermal suits, gloves, boots and a hard hat.
- You normally work in small teams of 2 or 4, consisting of mudloggers and drilling engineers.
- You have to fly by helicopter between the rig or platform and onshore.

## Getting In

- Most entrants have a degree in geology, or in a relevant subject as physics, mathematics or chemistry. Other relevant specialisms include geoscience, petroleum geology and earth sciences.
- Entry requirements for science degree courses are normally 4-5 Highers including Maths and Physics, plus English, Maths and Chemistry or Physics at National 5.
- You may possibly get in with an HND (SCQF Level 7) in a relevant subject, coupled with relevant practical work experience, but most employers want a graduate due to the scientific nature of data that needs to be analysed.
- To work offshore, you must pass an offshore survival course such as the Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET). Contact OPITO for more details. Some people complete the course at their own expense before looking for work. In other cases, some companies sponsor new employees through the course.
- You may also have to undertake the Minimum Industry Safety Training (MIST) course.
- You should be fit, as this job involves climbing, lifting and using heavy equipment.
- You have to pass a medical examination at the start and then every 2 years.

Mudloggers work mostly for smaller companies who are subcontracted by larger oil and gas companies. There are opportunities on North Sea oil rigs and in the Middle East, South America or Africa.

Jobs are usually advertised on specialist sites such as [Oil and Gas Job Search](#), [myOilandGasCareer.com](#), [Rigzone](#) and [Energyjobline](#).

## What Does It Take

You will need:

- a strong interest in geology
- excellent IT skills
- good decision making skills
- strong mathematical skills
- excellent written and verbal communication skills.

You need to be able to:

- analyse and record data accurately
- cope under pressure

- understand and interpret complex information
- multitask
- think analytically
- work as part of a team, and alone.

## Training

- You would normally receive on the job training whilst attending specialist training courses.
- This would cover using specialist computer equipment and drilling well techniques.
- Your training would also include offshore survival and safety training.
- The Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET) course takes three days and is valid for four years.

## Getting On

- Mudlogging can be an excellent entry level job with the opportunity to learn about the oil and gas industry, qualifying you to apply for other jobs.
- With further knowledge and training you could move into roles such as data engineer or crew chief.

## More Information

The Subsurface Task Force have produced a useful guide for those interested considering studying geology and earth science, covering Higher through to Postgraduate level. [Energy Geoscience - Career Pathways](#)

## Contacts

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### SPE Aberdeen

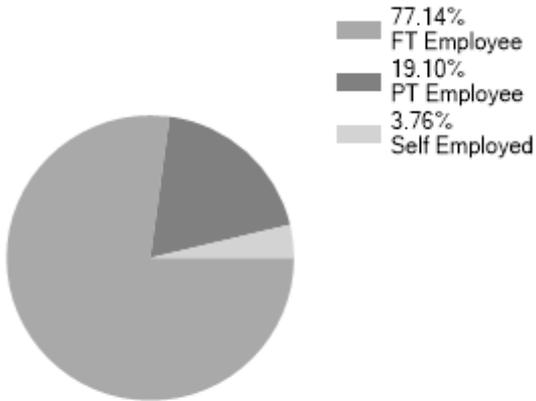
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**Statistics**

Employment Status UK %



**Past Unemployment - Scotland**

No Claimant statistics available for Scotland.

LMI data powered by [LMI for All](#)

Predicted Employment Statistics : Not available this career.