UNIT 1

Careers in oil and gas

Task 1. Read the text and choose the correct job category for each option.

There are many different jobs within the oil and gas industry, each requiring

different skills and qualifications and sometimes travel.

Working as a labourer is physically hard. You have to be strong and willing to

work very hard. You work outdoors on site, perhaps for a drilling or pipeline company. You only need qualifications from school and, of course, health and safety qualifications. You get the chance to travel and often get paid overtime so you can earn

good wages.

An apprentice begins work after leaving school, working together with a qualified person such as a technician, electrician, or welder to learn the job. At the same

time, an apprentice spends time at college to get a recognized certificate or diploma.

It can take three to four years but there is the chance to travel and get paid for overtime too.

Technologists usually study at college for two or three years and have a qualification before they begin work in specialized fields. Their job is to decide which

equipment to use on site, know how to install it, and use it. Some technologists have

an office job, but others work in the field and have to travel.

Engineers have a university degree and are often expected to do more study

while working. They earn a good salary but have a lot of responsibility and have to

know and follow regulations. There are usually good chances of promotion and many

engineers work their way up to jobs as managers. Engineers work in the office and

also travel to work sites.

Of course, not all the jobs in oil and gas are technical jobs. There are many

people who work in transportation, health and safety, or customer relations. There are

also people who have to negotiate with land owners and draw up contracts. It’s an

amazing industry! There are millions of people working in almost every country in

the world so there are lots of opportunities.

a. You need a higher education.

b. You can get on-the-job experience.

c. No college qualifications needed.

d. You need a diploma or certificate.

Task 2. Listen to people talking about their jobs and match the speaker to his job. Before you listen, check the meanings of the words and phrases.

−plan the pipeline route

−measure distances

−above the sea level

−dig a trench

−lay the pipe

−operate heavy equipment/machinery

−obstacle

−section of pipe

−helmet

−lift heavy equipment

−work site

a. pipeline engineer

b. surveyor

c. welder

d. earthmoving machine operator

e. truck driver

f. crane operator

Task 3. Read about three more pipeline jobs, then listen to the people

and match them to their jobs.

1. A pipeline walker is responsible for carefully walking along the many miles

of oil or natural gas pipeline searching for visual clues of pipeline leaks, breaks, washouts or other damage to the pipeline. Sometimes on foot, but more often by truck or

four-wheeler, the pipeline walker must be ever vigilant for the signs of oil or natural

gas leaks along the pipeline. Oil stains, odors or dead vegetation are sure signs that

there's most likely been a gas or oil leak in the pipeline. The pipeline walker becomes

very adept at spotting these signs of pipeline damage. When problems are suspected

or found, the pipeline walker may take steps to repair small leaks using tools for

caulking, hammers, clamps and wrenches. Large leaks and washouts are reported to

the district office and work crews are sent out to assess and repair the damaged areas.

Any problems with telephone or telegraph lines including fallen poles and wires are

reported to the proper authorities for repair. The operations of automatic drip bleeders

on gas lines to detect malfunctioning valves also become the responsibility of the

pipeline walker.

To do this sort of work, you must be good at working on your own as much of

the work is done alone. The inspection work is generally just you and your tool kit

and your motorized vehicle, whether it's a truck or a four-wheeler. You must be very

good at problem solving and being able to track back where any problem may have

occurred even though it may take some time. An eye for detail and being physically

fit are also two good traits for a good pipeline walker. Having some specialized training in survivalist procedures also wouldn't hurt as many of the sections of pipeline are

in very remote wilderness locations. It's good to be prepared for any sort of trouble

that may arise out in the wild, when you're on your own. The work is very detail

oriented and requires a lot of on-site inspection. Compensation depends on experience but is often $18.00 to $21.00 per hour or more.

2. A pipeliner is essential to the successful operation of any pipeline project.

Although it's an entry-level position, the pipeliner performs almost all the general

maintenance of the equipment and pumping stations, which are located along the

many miles of the pipeline and keep the oil flowing smoothly and evenly. This is a

good position to try and get if you're wanting to start in the oil and natural gas industry but don't know what you want to specialize in. Many personnel in upper management with oil drilling companies began working as a pipeliner and steadily moved up

in the ranks as the experience built up. Some of the duties of a pipeliner can include:

• The removal of rust and other substances from gauges, meters and

valves using sand blasting equipment

• Using anti-corrosive paint to cover pipe and other metal parts

• Wrapping pipe with anti-corrosive material to prevent leakage

• Operates a variety of motorized vehicles such as backhoes and

bulldozers

• Lays pipe along with the other members of the team

• Cleaning of storage tanks

• Dismantling fences, gates and water lines that are in the way of

pipeline work, using heavy equipment and hand tools

• Clearing of trees and brush with heavy equipment or motorized

tools

• Ditch digging and other manual labor tasks

Sometimes, pipeliners are used to walk the pipeline to find leaks or operate

pumping equipment. The list of jobs is very long as the pipeliners must do a lot of the

jobs, which are required of them on a daily basis. Pipeliners are responsible for performing maintenance and repair work on pipelines and the infrastructure supporting

them such as storage tanks and pumping stations.

Pipeliners need to be physically fit, conscientious, able to be part of a team of

workers, and handle working long hours. They can generally expect to earn $15-$20

per hour but this number can vary depending on the amount of training or experience

and the scope of those abilities.

3. A pipelaying fitter is responsible for helping with the alignment of pipes being laid to form the pipeline. The alignment is necessary to ensure that the pieces are

in the proper position before the pipeline welders get to work. Failure to align the

pipes correctly before welding can result in lost time and possible leakage when oil is

finally run through the pipeline.

Pipelaying fitters are responsible for making sure that the crane operators lowering the sections of pipe into the trench are signaled when a new piece of pipe is

needed or when one in the trench needs to be moved slightly into alignment.

A cursory inspection of the joined sections is also carried out by the pipelaying

fitter as the work progresses. Personnel in this position may also be asked to install

equipment, machines or wiring as related to the laying of the pipeline sections.

Someone looking to get into this position should have a good knowledge of machines, including their design, uses, repair and maintenance procedures.

Persons looking to become good pipelaying fitters should have the ability to

quickly move your hands and feet and manipulate various objects quickly and easily

with both hands at once.

A high degree of flexibility is also required to get into and move around the

pipeline trenches easily and without any problems. You must also be able to hold

your hands in one position for long periods of time (while the crane operator lowers

another section of pipe for example).

You should have good lower body strength so that your body doesn't get tired

too easily from standing in one spot or lifting objects repeatedly during your shift.

Because this is an entry-level position the salary is among the lower scale on an oil

field project with pipelaying fitters generally earning $45,000 to $70,000 annually,

depending on the location of the work.