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ИНОСТРАННЫЙ ЯЗЫК (АНГЛИЙСКИЙ)

НЕФТЕГАЗОВОЕ ДЕЛО

Методические указания к практическим занятиям для студентов магистратуры направления 21.04.01

САНКТ-ПЕТЕРБУРГ
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Основной целью методических указаний является развитие иноязычной коммуникативной профессиональной компетенции. Особое внимание уделяется формированию активного словарного запаса, который включает наиболее употребительные термины по нефтегазовому делу. Предлагаются разнообразные виды упражнений, позволяющие активизировать познавательную деятельность студентов и развивать коммуникативные умения на английском языке.

Методические указания предназначены для студентов направления 21.04.01 «Нефтегазовое дело» направленность (профиль) программы «Разработка нефтяных месторождений» и «Эксплуатация скважин в осложненных условиях» и согласованы с программой по иностранному языку для студентов неязыковых вузов.

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Оглавление

ВВЕДЕНИЕ

Методические указания предназначены для студентов направления 21.04.01 «Нефтегазовое дело» направленность (профиль) программы «Разработка нефтяных месторождений» и «Эксплуатация скважин в осложненных условиях», изучающих английский язык. Основной целью настоящих указаний является формирование иноязычной коммуникативной профессиональной компетенции.

Тематика текстового материала пособия широка и охватывает такие темы как «Ведущие компании нефтегазовой промышленности», «Цифровое месторождение», «Инновационные разработки» и «Турецкий поток».

Текстовый материалом взят главным образом с сайтов ведущих мировых нефтегазовых компаний (Shell, Schneider Electrinic, BP). Авторами разработан целый ряд заданий коммуникативного характера, которые призваны подготовить будущих специалистов к реальному общению в профессиональной среде.

Методические указания составлены на основе программных требований по иностранным языкам для студентов неязыковых вузов и в соответствии с рабочей программой, разработанной кафедрой иностранных языков для направления подготовки 21.04.01.

PART 1

Text 1
Introduction

Task 1.
Getting to know each other

Our presenters Alice, Amith and Sophie have got together to ask each other some questions. Watch the video and listen out for the things that they like and dislike. https://www.youtube.com/watch?v=zZpx6uSh0Ck

Complete the table.

Name	Question	Answer

How would you answer the questions? Work in small groups and interview your neighbors.

Task 2.
Have you ever heard of TED talks? What does TED stand for?

TED (Technology, Entertainment, Design) is a media organization which posts talks online for free distribution, under the slogan "ideas worth spreading". TED was founded in February 1984 as a conference, which has been held annually since 1990. TED's early emphasis was technology and design, consistent with its Silicon Valley origins, but it has since broadened its focus to include talks on many scientific, cultural, and academic topics.
More information you can get on https://en.wikipedia.org/wiki/TED_(conference)

Task 3.
Watch the video https://www.youtube.com/watch?v=UNP03fDSj1U
and choose which 4 things Matt Cutts says he learnt from the challenges.

A. Doing a challenge helps him to slow down and appreciate his life.
B. Achieving something new made him feel better about himself.
C. He is not really a very adventurous person.
D. Anything is possible for a short period of time.
E. He has the ability to be a great novelist.
F. It isn't a good idea to try to do something very difficult.

Task 4.
Look at some examples of idiomatic language from the video. Can you guess the meaning?

1. A few years ago, I felt like I **was stuck in a rut**….
2. So I decided to follow **in the footsteps** of the great American philosopher, Morgan Spurlock* and try something new for 30 days.
3. …instead of the months **flying by**, forgotten, the time was much more memorable.
4. Every November tens of thousands of people try to write their own 50,000 word novel, **from scratch**, in 30 days.
5. So why not think about something you have always wanted to try, and **give it a shot** for the next thirty days?

Task 5.
Think of a 30-day challenge that you would like to do. Make notes under the following headings:

1) What the challenge is
2) Why I have chosen it
3) What my previous experience is
4) How I intend to go about it
5) How I think it might change me

PART 2
LEADING COMPANIES IN OIL AND GAS INDUSTRY

Text 1
Shell

Task 1.
Work in pairs. Discuss what you know about Shell.

Task 2.
Watch the video and answer the questions.

This short video provides an overview of the history of the Shell brand and communications over the last century. The film elaborates on the various ways in which the Shell brand has been expressed in advertising, experiential initiatives, and music, to name a few.
https://www.shell.com/about-us/our-heritage/our-brand-history.html

1. What is the main aim of the Shell brand?
2. How long has the company used the brand?
3. What helps the Shell brand to connect the customers?
4. What are the customers inspired to by the brand?

Task 3.
Read some interesting facts about Shell, more information you can find on the official site of Shell (https://www.shell.com/about-us/our-heritage/did-you-know.html).

Did you know Shell was a roadmap pioneer?
Sat navs might be consigning road maps to the history books these days, but Shell was one of the first to create these guides for the early motoring community. Fortunately, lots have been preserved and our archive has a great stock of examples extending from 1931 to 2010. The earliest is Shell Autokaart van Nederland – a real collector's item. It was published in July 1931 and is a masterpiece that covers 19 cities and national and international routes in the Netherlands. We also have less rare items. Like

the Het Honderdduizend Stratenboek, which was so popular in the Netherlands from the 1980s that it became known as the Road Bible.

Did you know that the Troll A platform was the biggest thing ever moved by mankind?

Nearly 500 meters tall – that's taller than the Eiffel Tower – Troll A is the tallest and heaviest structure that has ever been moved to another position, and also the largest concrete structure constructed offshore. An offshore natural gas platform, Troll A was built in the early 1990s and cost approximately US$650 million at the time. The base and the deck were built separately, and the platform was towed over 200 kilometers to the Troll field over a period of 7 days. Since harsh weather conditions prevented it from being built on-site, a deep fjord in west Norway provided the ideal location for construction.

Text 2
Careers

Task 1.
Read job descriptions. What attracts you? What would stop you to choose this job?

HSE Manager. Health, safety and environmental (HSE) managers are responsible for developing and implementing organizational safety programs. These specialists review and update institutional HSE policies and conduct risk assessments to detect potential hazards and plan precautionary measures. To join this profession, you must earn at least a bachelor's degree in occupational health, safety management or environmental science. You can work in a variety of settings, including offices, mines and factories.

Drilling Supervisor. Drilling supervisors are in charge of the drill operations and make sure drilling is completed on time. Unlike most of the other top jobs in the oil and gas industry, drilling supervisors often do not need a bachelor's degree. However, years of experience are usually required. Some employers prefer degrees in drilling technology or mechanical engineering.

Mudlogger. Mudloggers are employed by the oil and gas extraction industry. Their role consists of supervising drilling operations, keeping records, analyzing geological samples, implementing safety guidelines, preventing dangerous situations, and handling on-site maintenance. The mudlogger ensures that accurate samples are taken at the right intervals and records any issues encountered during the drilling. They mainly work offshore and are contracted to an oil company via a service company. Less commonly they work in water well and mineral exploration. Mud loggers may also be known as logging geologists, mudlogging geologists or mudlogging technicians. Mudlogging is also known as hydrocarbon well logging.

Task 2.
Listen to the chairman of the Department of petroleum engineering and geology at Marietta College.
https://www.youtube.com/watch?v=4_QT7NQokTk&feature=emb_title

Task 2.
As a petroleum engineer you can work in one of three different areas: drilling engineering, production engineering and reservoir engineering.

Choose who of the professionals is responsible for:

a) evaluating the quantities of hydrocarbons;
b) supervise the drilling borehole;
c) figuring out which rock formation has the oil and gas in it;
d) design and maintaining;
e) figuring out the most effective way to produce oil and gas;
f) computer work and calculations;
g) doing a lot of simulation look to an optimum way to get oil.

What equipment is used in each area?
What are working hours of drilling, production and reservoir engineers?
What skills does production engineer need:

a) strong business awareness;
b) laboratory skills, such as general technical ability and safety awareness;
c) analytical and creative skills;

d) intellectual and personal flexibility;
e) managerial potential;
f) ability to motivate staff at all levels;
g) ability to work internationally and in offshore environments;
h) teamworking skills;
i) the ability to absorb a range of technical information in areas such as geology, chemistry, mechanics, electricity, electronics and computer science;
j) ability to solve complex problems, regardless of location and circumstances;
k) a methodical approach to work for analyzing samples and collating data;
l) computer literacy;
m) strong mathematical skills.

What subjects are taught in Marietta College? Which of them are new for you?

Task 3.

Make a story about your future career. What profession would you like to have? What will be your responsibilities and working hours? What skills, experience and education do you need to get the job of your dream?

Text 3
Presentation

Task 1.

Work in small groups and discus the questions.

- Have you ever listened to a presentation?
- What was it about?
- What did you like and dislike in it?

Task 2.

Watch the first part of the video.
https://www.youtube.com/watch?v=V8eLdbKXGzk

- Write down the mistakes Ranjit made.
- Describe your attitude to his first presentation.

- What comments did the teacher and Ranjit's classmates do?

Task 2.
Watch the second part of the video. Why does the presentation sound more interesting?

Task 3.
Answer the questions.

1. Have you ever done a presentation?
2. Did you do any of Ranjit's mistakes?
3. What advise from the video is useful for you?
4. What other tips how to do a presentation better you know?

PART 3
DIGITAL OILFIELD

Text 1
Future trends

Task 1.
Work in pairs and discuss what you know about digital fields and if there are digital technologies in Russia.

Task 2.
Read the text. What opportunities does digital field present? Make notes, discuss them with a partner.

Great strides have been made over the past ten years in the design, deployment, and use of digital oilfields. Although the basic technology integration elements required to deploy a modern digital oilfield are generally available, the rapid and constantly-increasing pace of technology change now presents unique challenges—and opportunities. For instance, whereas at the turn of the century a challenge was instrumenting wells and facilities in order to obtain usable production data, today's challenge is developing simulations and optimization workflows that can consume the massive rate of incoming data, filter it, process it, execute models, perform analysis, and

recommend actions to decision-makers—all in real-time. The "data revolution" also now makes it possible to construct many new types of models, data-driven or "proxy" models that enable engineers to predict system behavior for which trusted physics-based models are either too time-intensive or perhaps even non-existent.

Additional scope for digital oilfields is expected to eventually encompass closed-loop, autonomous control of operating facilities, a practice that is widespread in most manufacturing environments, and even in the downstream sector of the industry. Rig automation and drilling automation will be used for oil field manufacturing. Clearly, attention to health, safety, and the environment will be top of mind issues for operators who lead this transformation of the industry. As such, digital oilfields will become increasingly concerned with operational efficiency and the optimization of processes that are not directly related to the core petroleum engineering activities for which they are currently used.

Text 2
Smart oil and gas field solution by schneider electronic

Task 1.
Visit the official site of Schneider Electric and watch the video you'll find there
https://www.se.com/ww/en/work/solutions/for-business/oil-and-gas/offshore/?videoid=VAr6xIEGY6E

What smart oil and gas field solution does the company offer?

Task 2.
Read the text and translate parts, given in Russian into English in writing.

The challenges of oil and gas production are greater and more costly than ever. *Эффективность стала решающей для обеспечения безопасности и прибыльности операций по добыче.*

Schneider Electric's smart oil and gas field solutions boost efficiency by integrating everything from automation production, process

and energy management to safety training and security. *В результате производители нефти и газа получают больший контроль над добычей, сохраняя при этом под контролем эксплуатационные расходы.* Data collected throughout the field is sent in real-time to centralized monitoring and control centers *где вся ключевая техническая оперативная и административная информация доступна через интеллектуальные адаптируемые под требования заказчика панели.*

Schneider Electric Smart O&G Field solutions address your most critical challenges — from the specific risks of offshore operations, to the high costs of downtime and staffing, to motivating your workforce to embrace new technologies.

Task 3.

Do you know any other companies developing new technologies for smart oil and gas fields?

Find the information online and tell your classmates about it.

Text 3
Heavy oil

Task 1.

Translate into English.

Разложение	
Трудноизвлекаемая нефть	
Передовые методы добычи	
Плотность	
Сера	
Смола	
Вязкость	
Традиционная нефть	
Нарушение почвенного покрова	
Выбросы парниковых газов	
Безопасность	
Оценка рисков	
Добывать, извлекать	
Примеси	
Разведка	

Task 2.

Work in small groups.

What do you know about heavy oil?
What is the difference between conventional and unconventional oil?
What characteristics of heavy oil you can name?

Task 3.
Read and translate the text. What information was new for you?

What's heavy oil?

Heavy oil is a type of crude oil that is very viscous, meaning that it is thick and does not flow easily. This is caused by both a low hydrogen to carbon ratio in the molecular make-up and the presence of other minerals such as asphaltenes, resins, sulfur and metals such as vanadium and nickel, which all increase its density.

Nearly all the deposits of heavy oil are degraded remnants of conventional oils. Degradation begins when oil migrates toward the earth's surface and encounters water containing oxygen and bacteria. A tar-like material is formed at oil-water contact that eventually invades the entire oil accumulation. A process known as "water washing" removes the more water-soluble, light hydrocarbons, leaving a heavy oil accumulation. Heavy oil accumulations may represent as little as 10 percent of the original conventional oil.

Due to their high density and viscosity, special extraction methods are needed to recover heavy oil efficiently. These methods include: surface mining, cold production and thermal recovery. Heavy oil may also require additional processing, usually referred to as upgrading, after being produced in order to be transported and refined. Large amounts of energy are put into the extraction and production of heavy oil – about 20% to 30% of the energy that is actually produced.

Task 4.
Watch the video and answer the questions.
https://www.youtube.com/watch?time_continue=120&v=AuSJSRL4sjA&feature=emb_logo

1. Can conventional drilling techniques be used on heavy oil?

2. What steps of bitumen sands open-pit mining were mentioned?
3. When must in-situ methods be used?
4. Describe a method called steam assisted gravity drainage.
5. Where are the largest oil sands resources located?
6. Why does oil sands development pose environmental and social challenges?

Text 4
Oil sands mining – how it works

Task 1.
Watch the video and answer the questions.
https://www.youtube.com/watch?v=cxiA40XHF0I

1. What are the main methods of oil sand recovering in Canada?
2. What stages does the mining method include?
3. What methods of transportation are usually used?
4. What happens in extraction vessel?
5. How is the water from tailings pond used?
6. What is bitumen refined into?

Task 2.
Read the text. What information was not mentioned in the video? Discuss it with your classmate.

Tar Sands

Though concentrated in North America, the production of oil from tar sands has broad implications for the global oil market. Tar sands, which are also known as oil sands, are a combination of clay, sand, water and bitumen (a heavier form of oil). Tar sands are mined and processed to extract bitumen, which is then refined into oil. Two tons of tar sands are required to produce one barrel of oil. This process is more complex and capital-intensive than conventional oil extraction.
There are two primary extraction methods for tar sands:

1. Mining: Open-pit mining is the most common form of tar sands extraction. This method requires the use of large hydraulic shovels to dig up tar sands and load them onto trucks carrying up to

320 tons per load. The oil is finally extracted from the bitumen through a combination of heat, water, chemicals, and constant movement.

2. In-situ: This method is used when bitumen deposits are buried too deep for mining to be economical. The in-situ method relies on steam injection to heat buried tar sands and facilitate extraction via conventional wells.

It is estimated that over 2 trillion barrels of oil reserves exist in the form of tar sands, although not all of these resources are economically or technically recoverable. The largest tar sand deposits are found in Canada (primarily in Alberta), Venezuela and several countries in the Middle East. The majority of U.S. tar sands resources are located in eastern Utah, with an estimated 12 billion-19 billion barrels of reserves.

Although the tar sands industry is underdeveloped worldwide, Canadian tar sands already represent 40% of total oil production. The proposed Keystone XL pipeline would deliver Canadian tar sands from Alberta to refining facilities in the Gulf of Mexico. However, environmental opposition has caused significant delays in the project. The development of tar sands around the world could face a number of environmental and technical challenges. However, if exploitation of this resource ramps up, the global oil market would become more diversified and resilient to price shocks from supply disruptions.

Task 3.

Find the English equivalents of the words in the text.

активизировать	
техническая проблема	
подземный, внутрипластовый	
разнообразный	
гидравлический экскаватор	
традиционная нефть	
сбой поставок	

Task 4.

Find out more information about Canadian tar sands and make a short presentation.

Text 5.
Horizontal Drilling

Task 1.
Work in small groups. What you know about horizontal drilling and when it is used.

Task 2.
Read the text and find out the translation of the following word collocations.

Направленное бурение	
Стандартная, одинарная скважина	
Ствол скважины	
Кустовая площадка	
Оборудование и сооружения для добычи	
Экологические последствия	
Неоднородный коллектор	
Конус обводнения скважины	
Вращательное бурение	
Колонна бурильных труб	
Погружной (забойный) двигатель	
С автоматическим управлением	
Показания датчика	
Метод кабельной сьемки	

Task 2.
Read and translate the text in writing.

Horizontal drilling is a directional drilling process aimed to target oil or gas reservoir intersecting it at the “entry point” with a near-horizontal inclination, and remaining within the reservoir until the desired bottom hole location is reached.

While the construction of a directional well often costs much more than a conventional well, initial production is greater of a conventional well.

Horizontal drilling provides more contact to a reservoir formation than a vertical well and allows more hydrocarbons to be produced from a given wellbore.

For example, six to eight horizontal wells drilled from one location, or well pad, can access the same reservoir volume as 16 vertical wells.

Using multi-well pads can significantly reduce the overall number of well pads, access roads, pipeline routes and production facilities, minimizing habitat disturbance, impacts to the public and the overall environmental footprint.

Horizontal wells are usually drilled to enhance oil production and in some situations the improvement may be dramatic – enabling development of a reservoir which would otherwise have been considered uneconomic.

There are many kinds of reservoir where the potential benefits of horizontal drilling are evident:

- *in conventional reservoirs*: thin reservoirs; reservoirs with natural vertical fractures; reservoirs where water (and gas) coning will develop; thin layered reservoirs; heterogeneous reservoirs;
- *in unconventional reservoirs*: shale gas/oil, tight gas/oil, CBM, heavy oil, oil sands, etc.

The initial vertical portion of a horizontal well is typically drilled using the same rotary drilling technique that is used to drill most vertical wells, wherein the entire drill string is rotated at the surface (the drilling of vertical sections is also possible by the use of downhole motor just above the bit, like the VertiTrak or TruTrak, where only the bit rotate while the drilling string remains firm).

From the kickoff point to the entry point the curved section of a horizontal well is drilled using a hydraulic motor mounted directly above the bit and powered by the drilling fluid.

Steering of the hole is accomplished through the employment of a slightly bent or “steerable” downhole motor (today the technology of directional drilling has improved by the use of the “RSS: Rotary Steerable System” that permit to steer a hole continuing the rotation of the drilling string. The RSS increase the safety and the drilling efficiency).

Downhole instrument packages that transmit various sensor readings to operators at the surface are included in the drill string near the bit.

Sensors provide the azimuth (direction versus north) and inclination (angle relative to vertical) of the drilling assembly and the position (x, y, and z coordinates) of the drill bit at all times.

Additional downhole sensors can be, and often are, included in the drill string, providing information on the downhole environment.

They may also provide any of several measures of physical characteristics of the surrounding rock such as natural radioactivity and electrical resistance, similar to those obtained by conventional wire line well logging methods, but in this case obtained in real time while drilling ahead.

The information is transmitted to the surface via small fluctuations in the pressure of the drilling fluid inside the drill pipe.

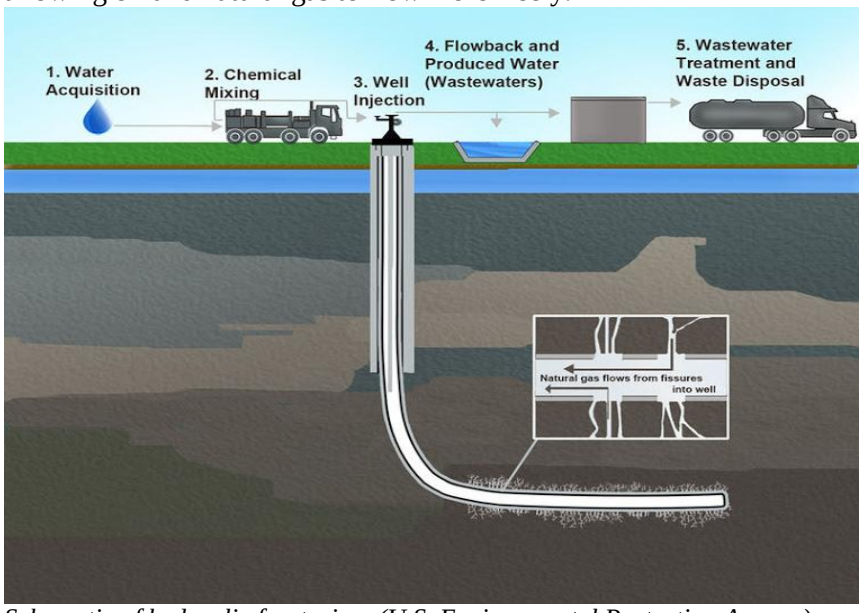
Text 6.
Hydraulic Fracturing

Task 1.
Read the text and fill in the gabs with the given information.

a) water depletion and contamination;
b) a mixture of pressurized liquid;
c) eventually;
d) the diffusion of hydraulic fracturing;
e) controversial;
f) a well stimulation technique;
g) to create cracks.

Hydraulic fracturing is **___1___**that allows energy producers to tap into challenging geographic formations. This technology has been around since 1947, hydraulic fracturing — in combination with horizontal drilling — has spurred the Shale Revolution in the United States. There are over one million hydraulically fractured wells in North America, and the National Petroleum Council estimates that this technology will **___2__**account for 70% of natural gas production in the United States. To hydraulically fracture a well, producers inject **__3__**containing water,

chemicals, and a proppant inside a wellbore **__4__**in the rock formation, allowing oil and natural gas to flow more freely.



Schematic of hydraulic fracturing. (U.S. Environmental Protection Agency)

Hydraulic fracturing has been **__5__**due to the nature of the technology and its environmental impact, including **__6__**, increased surface pollution, and the potential for induced earthquakes. While these challenges are being addressed at the state and local level in the United States, environmental risks could delay **__7__**to other countries.

PART 4

Text 1
TURKSTREAM

Task 1.

Work in pairs. Answer the questions.

- Have you ever heard of TurkStream pipeline project?
- If yes, what do you know about it?
- If not, can you guess the aim of the project?

Task 2.
Work in a group of 4 students. Read one of the 4 parts of the text. Then share the information you read with the partners.

Project

TurkStream starts on the Russian coast near the town of Anapa, runs over 930 km through the Black Sea and comes ashore in the Thrace region of Turkey. TurkStream directly connects the largest gas reserves in Russia to the Turkish gas transportation network, providing reliable energy to Turkey, South and Southeast Europe. The offshore component of the system consists of two parallel lines running through the Black Sea. The pipelines enter the water near Anapa on the Russian coast, and come ashore on the Turkish coast in the Thrace region, near the town of Kiyikoy. From the receiving terminal in Kiyikoy, one of the two underground onshore pipelines connects to the existing Turkish gas network at Luleburgaz. The other pipeline continues to the Turkish-European border, where it ends.

A Unique Project

As the first 81 centimeter diameter system laid at depths exceeding 2 kilometers, TurkStream advances the technical boundaries of the industry. Each of the two offshore pipelines of TurkStream is made up of thousands of individual pipe joints of 12 meters length. The pipes have been made from 39 millimeter-thick specially designed carbon manganese steel plates that allow them to withstand the huge pressure under the sea. Pipes laid in shallow waters closer to the shore have been coated in concrete for added stability and protection against marine activities. TurkStream, which has become operational on 1 January 2020, offers a reliable energy supply for Turkey and Europe with its annual capacity to deliver 31.5 billion cubic meters of natural gas.

Finding the Best Route

Thousands of kilometres of offshore surveys have been performed to find the most suitable path to lay the pipeline across the Black Sea. After assessing different options, a route was chosen from Anapa in Russia to a site near Kiyikoy in Turkey, and further surveys were conducted to optimize this route. Using modern survey techniques, engineers created a detailed profile of the seabed and analyzed the different soil types. Near the coast, the pipeline runs along the relatively shallow part of the sea called the continental shelf. At the so-called continental shelf break the Black Sea suddenly becomes deeper and the seabed plunges from about 80 to over 1,500 metres deep, creating a considerable challenge for the pipeline route. We took these challenges into careful consideration in the pipelaying process and successfully implemented the designed route.

Health and safety

To ensure safety at all times, TurkStream follows strict health, safety, security and environmental as well as quality control standards for the design, material, manufacturing, installation, testing, commissioning, operation and maintenance of the Pipeline. Pipes for TurkStream have been subject to a three-level quality assurance system with the strictest inspection standards. Experts from TurkStream, the pipe production facilities and independent certification companies inspected each pipe during manufacturing. At the pipe laying stage, representatives from the responsible contractor and our own inspectors — monitored by certification company experts — checked each and every offshore weld.

- The pipes were welded to the main string with high precision by automated machines.
- The welds were scanned with ultrasound to verify there are no defects.
- A coating was applied to fill the joint and provide extra protection.
- Our inspectors — monitored by certification company experts — checked each offshore weld.

Text 2
Giant fields

Task 1.
Work in pairs. Discuss with your partner what you know about giant and super giant fields.

Task 2.
Almost 60% of the world's oil reserves and resources come from giant oil fields and a small increase in recovery has a significant impact on production and reserves. Watch here to find out about BP giant fields and what they are doing to maximize recovery from those fields.
https://www.youtube.com/watch?v=Oy4j6c8WFz0

Task 3.
Watch the video again and answer the questions.

1. How many barrels of recoverable resources does a giant oil field contain?
2. What's the difference between giant and super giant resources?
3. What are BP principles which lead to higher resources?
4. Which technologies helped to understand if dynamic fluid distribution is there in the reservoir in Prudhoe Bay field?
5. What are the following technologies used for?

- BP well adviser
- Top down reservoir modeling
- Life of field seismic

6. What other technologies were mentioned in the video?

Task 4.
Choose one of the technologies mentioned in the video, find out more information about it and make a short presentation.

APPENDIX

1. Check yourself (Part 1, ted talk idioms)

1. A few years ago, I felt like I was stuck in a rut (in a situation which is boring and difficult to change)
2. So I decided to follow in the footsteps (do the same work or achieve the same success as someone before you) of the great American philosopher, Morgan Spurlock* and try something new for 30 days.
3. …instead of the months flying by (going quickly-used about time), forgotten, the time was much more memorable.
4. Every November tens of thousands of people try to write their own 50,000 word novel, from scratch (from the very beginning, so you have to do everything yourself), in 30 days.
5. So why not think about something you have always wanted to try, and give it a shot (make an attempt to do something) for the next thirty days?

2. What's the word?

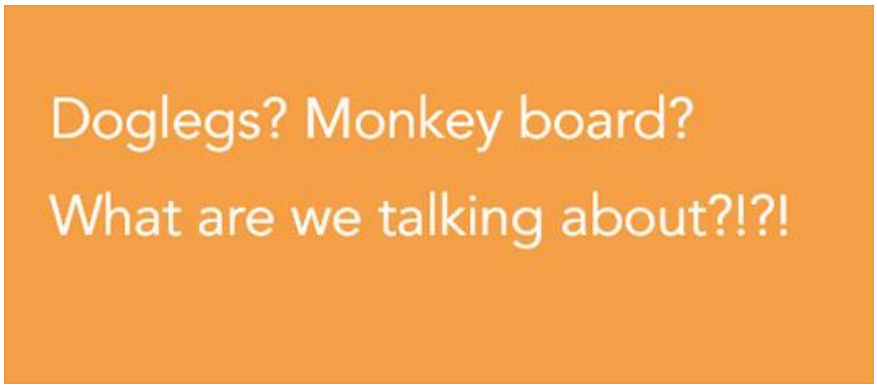
It is a game you can play classroom. It will help you to learn new words and help you speak more fluent. You should choose a word you have met in the text and describe it without mentioning the word or cognate words.
Use phrases like: it is something/someone/somewhere/ a person/ a thing/ a place..
It's a kind of ....(equipment, fluid, substance…)
It's opposite to….
It's similar to….
For example,….

3. Check your translation (part 3, text 3)

1. Efficiency has become crucial to keeping upstream operations safe and profitable. Эффективность стала решающей для обеспечения безопасности и прибыльности операций по добыче.

2. As a result oil and gas producers gain greater control over production while keeping operational costs under control. В результате производители нефти и газа получают больший контроль над добычей, сохраняя при этом под контролем эксплуатационные расходы.
3. where all key technical operational and administrative information is made available through intelligent and customizable dashboards. где вся ключевая техническая оперативная и административная информация доступна через интеллектуальные адаптируемые под требования заказчика панели.

4. Do you know your oil industry jargon?
By Matt Donnelly



Bell nipple. Bottom hole assembly. Blowout.

At first glance these words may appear to be unusual, strange or even rude (depending on your mind set). But read on and you'll find out that they are just a few of the more interesting examples of the rich jargon and terminology that is used on oilfields, rigs and platforms everyday across the globe.

We've pulled together some of our personal favourites that we've encountered here at Fircroft, so scroll down and have a look at our selection so that the next time a colleague asks you to "Go check the mud weight at the possum belly and write it on the report on top of the

knowledge box in the doghouse" you'll at least have half-an-idea as to what they are talking about...

Bell nipple – A pipe that acts as a funnel to guide drilling tools into the top of the well. It's usually fitted with a side outlet to allow drilling fluids to flow back over the shale shakers to the mud tanks. The name comes from a short length of pipe, also known as a nipple, which is flared out, or belled, to act as the funnel for guiding tools into the hole.
Big bear – Is a hitch that lasts a minimum of 50 straight days. (See hitch)
Blowout - The uncontrolled flow of gas, oil or other fluids from a well occurs if pressure control systems fail – uncapped wells could shoot oil up to 200 feet in the air. A blowout primarily composed of natural gas is known as a 'gas gusher'.
Bottom hole assembly – Is a component of a drilling rig. It is the lowest part of the drill string, extending from the bit to the drill pipe. The assembly can consist of drill collars, subs such as stabilisers, reamers, shocks, hole-openers, and the bit sub and bit.
Derrick - A heavy lifting device supported by a crane structure. The name is said to originate from a 17th century English gallows and the surname of a London hangman.
Derrick Apples - small components of the 'Derrick' that fall to the floor. Including nuts, bolts, and washers.
Doglegs - A particularly crooked section of a well, sometimes created intentionally by directional drillers but more commonly used to refer to a section of the hole that changes direction faster than anticipated. The term dogleg comes from the angle resembled by the hind leg of a dog.
Fish - Once an item is lost down the wellbore it is simply referred to as a 'fish'. The act of fishing is the process of using specialised tools to retrieve a 'fish'.
Ginsel – A 'Roughneck' worker, often someone with no oilfield experience. It's the bottom of the pecking order in seniority terms.
Hitch - Rig employees refer to their working period as a 'Hitch'. Commonly 20 days on followed by 10 days off.
Pig - A device inserted into a pipeline for cleaning purposes (Pipeline Inspection Gauge). The act of using a 'pig' is called pigging. Originally Pigs were made from straw wrapped in wire, the squealing noises they

made whilst travelling through the pipe. This is believed to be what originally led to the name 'Pig'.
Pig launcher – Although a suitable name for an Angry Birds style app, a pig launcher is actually an oversized section of the pipeline which, when closed, pushes the pig down the pipeline using pressure. The pig is pushed down until it reaches the 'pig catcher'.
Roughneck - A manual labour member of an oil rig team. Often part of the drilling crew. The term 'roughneck' has been used as a symbol of hard work and resilience by sporting teams including the Calgary Roughnecks lacrosse team and the Tulsa Roughnecks of the North American Soccer League.
Tour – A working shift. Most workers worked a 10 to 12-hour shift, six days a week.

Slugcatcher- A slugcatcher is the name of a unit in a gas or petroleum refinery in which slugs at the outlet of pipelines are collected or caught. A slug is a large quantity of gas or liquid that exits in the pipeline.
Elephant – An elephant is an oil field that contains more than 100 million recoverable barrels of oil.
Nodding Donkey – Another name for a pumpjack, an overground drive for a reciprocating piston pump in an oil well. Also known as a horsehead pump, rocking horse, grasshopper pump, big Texan or thirsty bird to name but a few.
Fish eye - A slang term for a globule of partly hydrated polymer (gel) caused by poor dispersion during the mixing process (commonly a result of adding the product too fast).
Mule shoe - A Mule Shoe is a small tube that is attached on the bottom of a drill string. Its primary use is to remove mud, sand and other particles from a borehole.
Pony rod – A rod that's slightly shorter than usual, placed below the polished rod and used to make a rod string of a certain length.
Monkey board – A small platform that the derrickman stands on when tripping pipe.
Possum Belly – A metal container at the head of a shale shaker that receives the flow of drilling fluid. It's believed to have derived its name

from the under belly of a female possum as they look similar in appearance.

So there you have it, our favourite selection of oil industry jargon. Are there any terms that we've missed out on this list that you still use today or perhaps used in the past but are now dying out?

https://www.fircroft.com/blogs/do-you-know-your-oil-industry-jargon-62517143527

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НЕФТЕГАЗОВОЕ ДЕЛО

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