

# UKMO OILFIELD

# Magazine

2<sup>nd</sup> Edition

April 2015



Conscious Youth Club



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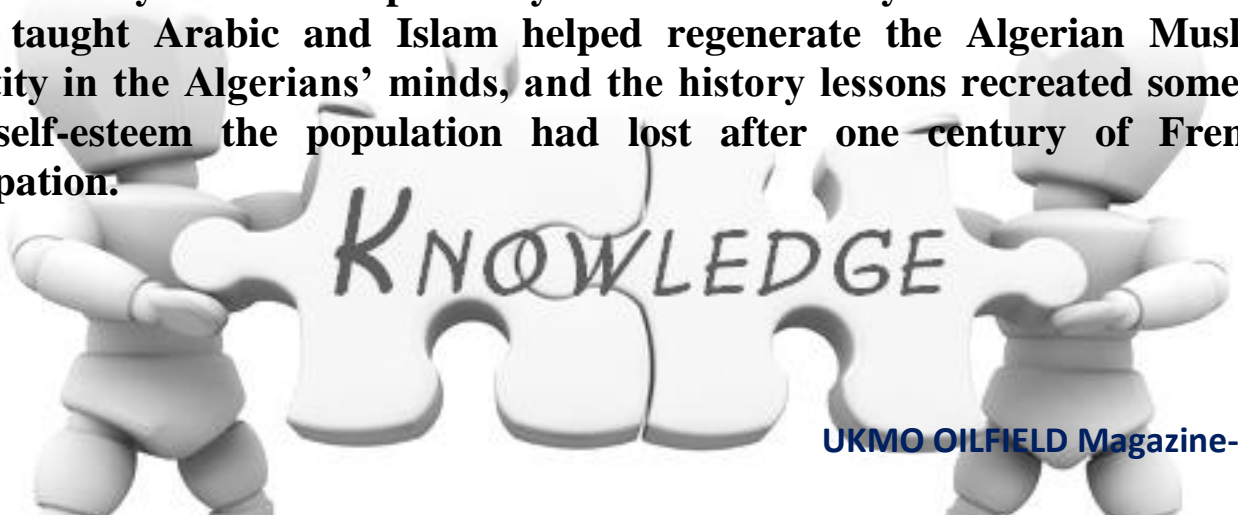
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Every year, on April 16th, Algeria celebrates the day of knowledge. The founder of the Algerian Islahist movement, Abdelhamid Ben Badis having prematurely died on that day. This choice of date for such a celebration always leaves me with a peculiar and bitter taste of irony. The Algerian authorities agreed to establish the 16th of April as the official Day of Knowledge in acknowledgement of IbnBadis's leadership of the reformist movement who sought and taught knowledge in the hardest of circumstances.

There is a lot to say on Ben Badis's vision and activity, and on his association's actions, successes and failures or mistakes. But I am not going to talk about them. I will just say that despite all the mistakes they made, Ben Badis and his friends have started something in Algeria, without which history would have probably evolved differently. Their schools where they taught Arabic and Islam helped regenerate the Algerian Muslim identity in the Algerians' minds, and the history lessons recreated some of the self-esteem the population had lost after one century of French occupation.





Billel TALBI is a young Algerian, invented a small device analyzes the physical properties of the discovered reservoir (incubator it), without the need to do in the oil well which is discovered, as is the case usually with various oil companies in the world. This young man, who graduated from Kasdi Merbah University, Ouargla

Algeria, hopes to extend a helping hand from the authorities to manufacture the device in order to fill the needs of the local researchers and oil companies and export it to overseas.

### *The idea of invention*

When Billel joined the hydrocarbon major in Science and Engineering Faculty, he hadn't the idea of invention and innovation in mind, despite his penchant for inventions from a young age, but since that necessity is the mother of invention, as they say, he felt the need to invent a device ends the suffer of hydrocarbons students in going to different oil wells, which abound in this region to study the physical properties of the reservoir; especially porosity and permeability, and began working two years ago to accomplish this device and put the design on paper, and it was at every stage carries several experiments proved all its effectiveness, and was presented also at the Rector Prof. Ahmed Bouterfayah, who saw an extraordinary and unique invention, he supported him with all his strength, financially and morally, to be fully completed and after that he received the patent of «Algerian Institute for the Protection of Industrial Property» in January 2013.



## Trade shows and interesting

After receiving a patent in January 2013, he was thinking about the ways to promote his invention, perhaps he will meet the necessary support which will enable him to be manufactured and marketed, he participated in two exhibitions of international petroleum equipment organized by the Algerian oil company «Sonatrach» in February and March, and there where Billel TALBI shown his invention between a large number of art facilities offered by the giant oil companies known in the world.



However small the machine was, it caught the attention of more than a global company which admitted the accuracy and usefulness of the process



But the Algerian researcher expressed his reservations and preferred to wait until the connection with the Algerian companies and the relevant authorities, particularly the Energy Ministry, Billel found strong support from Ouargla University director, who honored him on April the 16, on the

occasion of «Knowledge Day», then display it to the Wali of Ouargla Nasser Maâscar who intended to support the camp, so he wrote to Energy Ministry in May to ask them to support Billel's invention and manufacture it locally.



# What is the Career Center?

The career center at the University of Kasdi Merbah, Ouargla, is a collaboration with the organization of World Learning, USAID, the U.S. Embassy in Algeria and the University of Ouargla Kasdi Merbah. It was inaugurated on January 25<sup>th</sup>, 2012.

## Mission:

The mission of the Career Center is to assist students to successfully integrate into the workplace by improving their employability.

## Objectives:

- To enable students to identify and implement their career plans and job search.
- To provide timely and updated information on the possibilities of employment opportunities and trends in the labor market.
- Create places for interviews with potential recruiters and also organize annual job fairs.
- To help matching students skills with the demands of the labor market.
- Contribute to the Centre's success by becoming a sponsor for one or more of its activities.

## Activities:

- Training at the center is provided through workplace workshops in order to prepare students for their initiation into the world of work.
- Organizing internships in different companies
- Organizing Employer's Forums by sectors of activities and meetings to develop partnerships between UKMO and the socio-economic sector.
- Collecting information on the employers and about the quality of their training needs to build a database for the university to adapt academic programs to the requirements of employers
- The launching of a newsletter and the creation of a website to the attention of employers and students.
- Organizing an Annual Career Fair.
- Contribute to the Centre's success by becoming a sponsor for one or more of its activities.

Latifa DEHANE

# The networking workshop at Anadarko



In the framework of the partnership contract signed ... the organization of “**World learning**” with the support of **Anadarko** and coordination of Kasdi Merbah University **Career Center** organize another workshop for students enrolled in the educational program of the English language by **Anadarko** after the first workshop last month ...

The workshop is scheduled on Monday, March 30<sup>th</sup> 2015; unlike the first workshop this one was held in Algiers. The workshop was about people’s perception of money where Tracy Badham (Anadarko Social Responsibility for North Africa and the UK and the supervising major of the workshop) asked us to help her on that subject. We had great fun on doing the activities, the first one is to try taking money and the second one is about giving money. We conclude that Algerian works with budget and we use the money for essential things like food, clothing, transportation and paying bills.



We were 17 students who came from different department and we met our lovely “World learning Organization” trainer Aziza Alkolei at Algiers Airport... However, the bad quality of “Air Algerie” services and the delay of its flights were a reason for being late about the schedule; some students waited so long for their colleagues. We did the workshop and we went to a great hotel in “Bordj Elkifane” for the night where we had a lot of fun and we became more integrated as one group. This made a positive impression and made us forget to all the bad things that happened.

Yasser BOUABELLOU



# Conscious youth club activity about

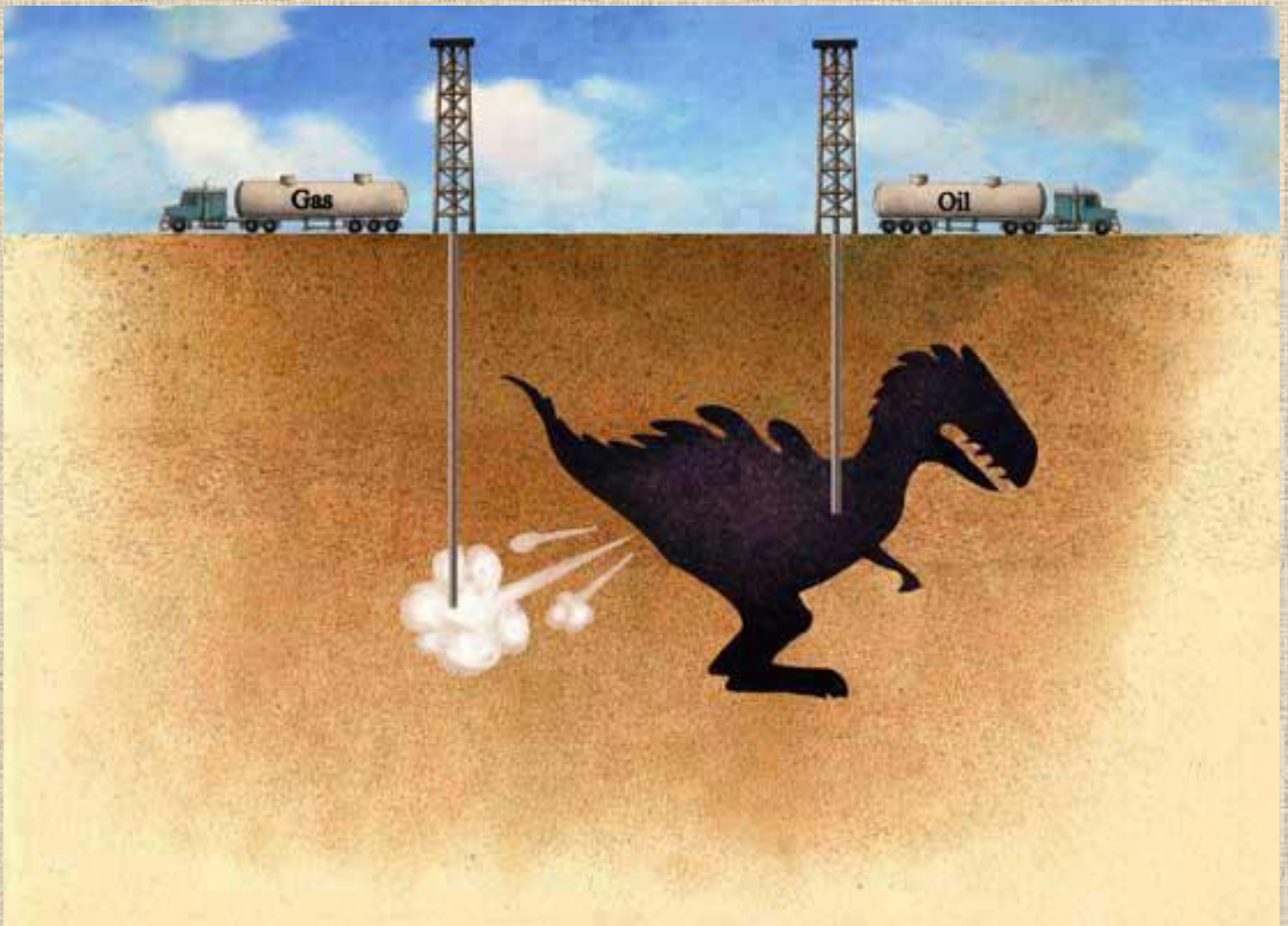




# out hydrocarbon nationalization



# Now i understand where oil & gas come from!

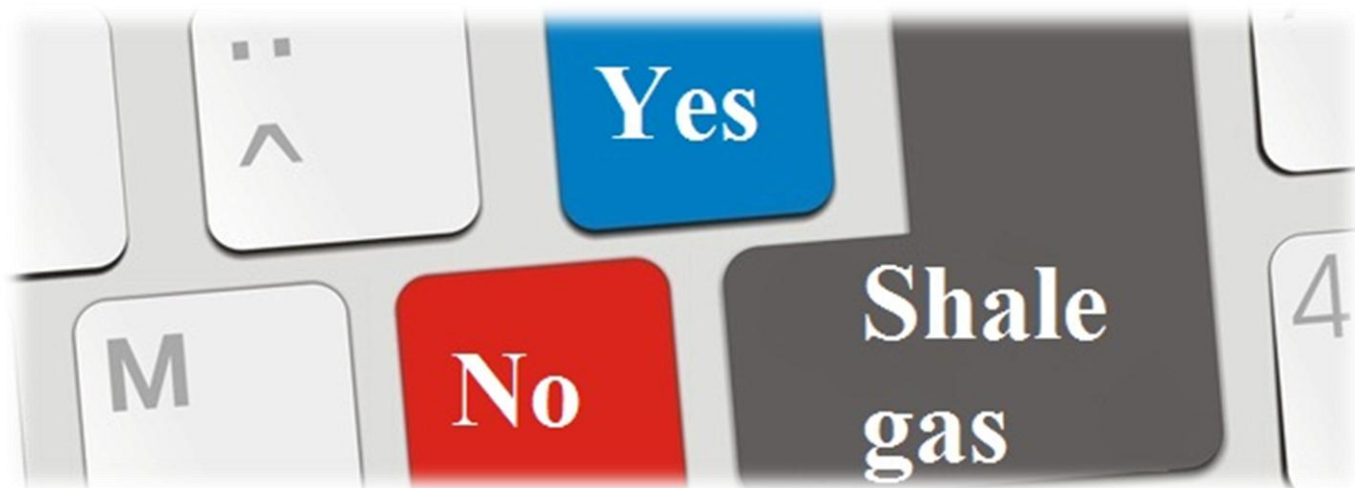


2	+		+	4	=	
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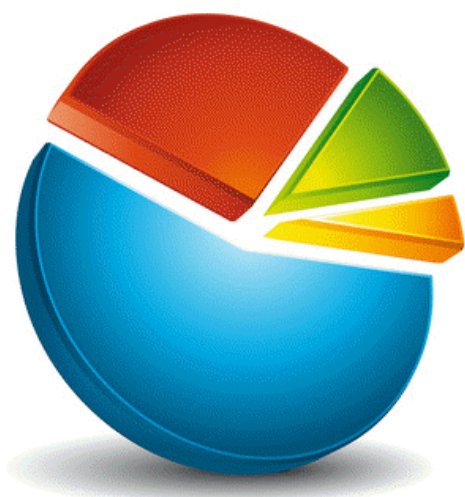
## SCHOOL LiFE:

- Most Irritating Moments
  - Morning Alarm
- Most Difficult Task
  - To find Socks
- Most Dreadful Journey
  - Way to Class
- Most Lovely Time
  - Meeting Friends
- Most Tragic Moments
  - Suprise Test in 1st Period
- Most Wonderful News
  - TEACHER IS ABSENT





### Over 90% of students are against the exploration of shale gas



A large majority of students at Kasdi Merbah University oppose approval of shale gas in Algeria. According to a survey which was done on April 9<sup>th</sup>, 75% of respondents are totally opposed to its extraction; it is possible the fracturing fluids which frequently contain chemicals will accidentally contaminate natural aquifers that supply drinking water. Moreover, the large quantities of water which are pumped in wells can reduce the drinking water supply; furthermore, its impact on the environment is

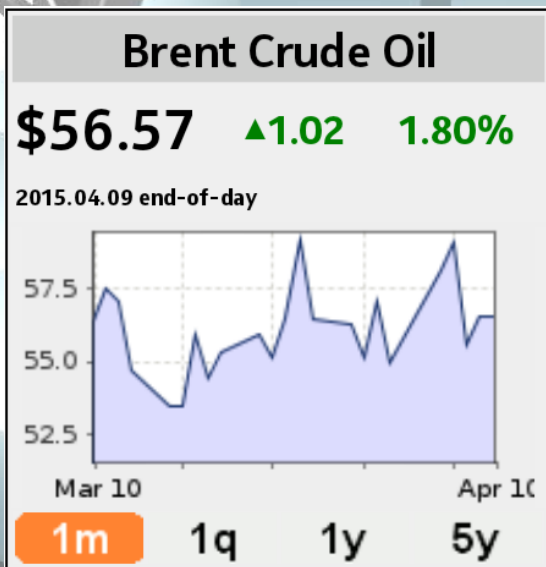
controversial. If natural gas is burned instead of coal, then there can be less harm to the environment, Methane is more harmful to global warming than carbon dioxide

About 20% of respondents are neither against nor with the extraction of shale gas. The last 5% are with its exploration and extraction because it seems to improve the energy status-quo or a job opportunity for them. Shale gas is a new source that has a great potential, and this new source of fossil fuel could help to keep the OPEC countries from creating a monopoly on fuel prices.

By: Manel SENOUSI

# What about oil prices?

You would have read that oil producers and refineries use the Brent Crude Index and the West Texas Intermediate Index (WTI) to settle contract prices for oil delivery. The real-world contract price for oil can vary widely, despite whatever the current price of WTI and Brent Crude is at the time of contract negotiation.



The basic mechanism for settling a price in any market is the principle of supply and demand. If people want more of a commodity than suppliers have available, then the price goes up; if there is more of a commodity available than people want to buy, then the price goes down. Delivery times, delivery costs, storage availability, the weather, the economy, market "sentiment," and the availability of money and credit can all influence the price of oil.

Zakaria DAOUD

# NLP ?



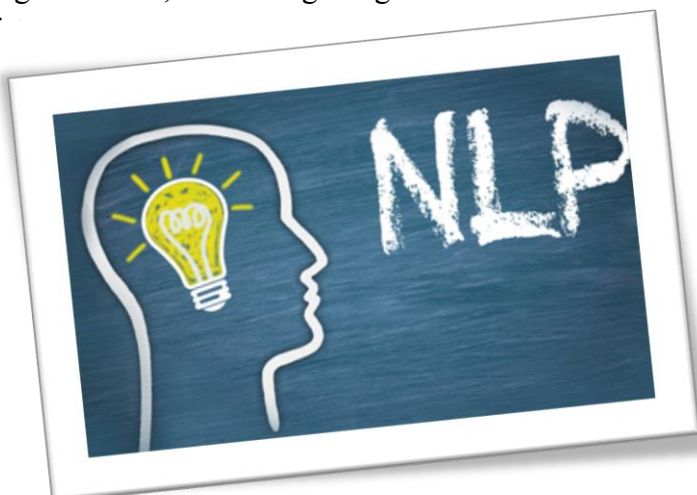
You know we are all longing to be happy, great, and admirable and appreciated by others. But when we talk about success and achievements, leaders and so on, too many people are like:” what are you talking about, we can’t be like them, they have acquaintance, they have money , they are smarter than us, we have to have those things to achieve goals and be successful”, but success does not happen just by chance, it needs hard work, commitment and willing to be realistic, and to be honest there is no specific road that you can follow to success, you are to create your own way .

However, have you ever wondered why some people are more successful than others, have better jobs, better relationships and seem to get formal out of life? and you know something, this is one of the most studied subjects in the world, that there is more information available on it today then there is ever been before. Today we can say with complete confidence that success is as predictable as the sun rising in the East and setting in the West, today you can be more successful, faster than you’ve ever dreamed possible if you’ll do two basic things; number one is : make a decision to be successful and to accede all your previous achievements, here most of people will say that’s easy ok we’ll do it, no it’s not easy at all, you have to make a real decision to be the person that you always wanted to be and to achieve goals whatever you concerned to be. And number two is: learn how, in those coming pages we’ll learn together how, it’s like getting a blank check on the

## Once a man said:

**“If you cannot do great things, start doing small things in a great way”**

Now in studying the subject of success, first we have to put some preconceptions to side, and one of the things that people have thought is in order to be successful you had to be specially intelligent or you had to have great education or you had to be terrific looking or you had to have contacts and so on. You know what, these items have been examined thoroughly and there is no correlation at all between success and intelligent, education, appearance, and contacts, they are kind helpful in some cases but there’s no direct correlation; success is based on other things. Before we go any further, let’s talk a bit about what we mean by success, you know we are as human beings have what it might calls : successing instincts that means we are driven entirely to succeed and to want to be a success as it is natural for you to bread in and to bread out, that success the drive to be in heaven doing more to fulfill your potential as human being is absolutely an essential part of your being, that we never are satisfied as long as we’re alive: always want to have more, always to be more, to do more, but what should you do to get to that level?



Let's talk about what the success instinct embraces, a psychological scientist, after a life time of searching, have found that success can be broken down and put under seven essential categories, it means that there is seven ingredients of success and if you have these seven everything that could you want in life can be put in one of these categories, so when we take a look at them we find, number one: starting point of success and top of the hyper rate during all the human history it is the "**peace of mind**" which means that you feel content, at peace, relaxed inside, in great meaning it means freedom, freedom from fear, stress ,anxiety, guilt, and freedom from negative emotions. It is indispensable to have your peace of mind because if you get anything else in life but you don't get your peace of mind you will not even enjoy it.

Number two ingredient of success is health and energy; health means that we have the power to do our daily activities, it means also that we are free from sickness, disease, pain, illness and so on but also energy; we mean vitality and today we know as a result of exhausted research in medicine and psychology that there is so many correlation between peace of mind and health & energy, it is from 80 to 90 percent of all the illness in the human body suffers including most of the reason why we die before our time have to do with disrupted peace of mind, know that as we strike for levels of peace of mind we almost automatically have better levels of health & energy. ...to be continued.

Ilyes DRARJA

## Seven ideas to live by:

# 7

- ✓ **If you change your thinking, you will change your life.**
- ✓ **It doesn't matter where you come from; the only important thing is where you are going right now.**
- ✓ **The more reason you have for achieving your goal the more willing and determined you would become.**
- ✓ **Decide what you want to become, and then act as if it were impossible to fail.**
- ✓ **There are no limits on what you can achieve with your life, except the limits you accept in your own mind.**
- ✓ **Sleep less, this one of best investments you can make to make your life more productive and rewarding, and remember it's the quality of sleep that does matter not the quantity.**
- ✓ **Your success will be largely determined by your ability to concentrate single-mindedly on one goal at a time.**

# The campus life

The campus life, a life which no one can judge it or feel it except who lived its pain and misery, to know this life just ask those who lived there, however as I said words are never enough to describe what students are going thought and I will let my pen transform it because it did not get used to put those feelings between the words.

If we speak about the campus life we should speak about the level of feeding, cleanliness and sporty activities and cultural, let's start talking about feeding level if there is a level, the odd thing is that students hate talking about this subject because it come truth to them that this situation will never change in Algerian campus especially in Ouargla, where you find yourself having some weird kind of soda, cheese and other stuff that you'll never find in the Algerian market, this situation obliges some students to make extra effort in cooking or spending money on restaurants, honestly the words betray me to express the students misery.

Now we have to talk about cleanliness but why should we bother ourselves talking about something doesn't exist, even though our religion emphasizes on it so where is this concept in most of Algerian campus if not at all, one exception was found in the campus of Ouargla I'm talking about "Chahhid Mouhamed Ben Mossa Campus" the grace return to the responsible and workers there, who did their best effort in maintaining cleanliness so all the best for them.



In fact there is sever differences in the sporty and cultural activities between the campus of males and the one of females, the last contains several means of entertainment such as coffee net, wifi network and trainers of different kind of sport that doesn't exist in male's campus, honestly we don't know the reason for this situation in Ouargla but we have to thank the student's organization that has a great role in planning and organizing of many sporty series and trips for the students.

Despite all these miserable conditions that the students live in, you find them always happy because there is something more than food and comfortable life. I'm talking about friendship, this word has a huge value for the students, and they feel that this campus is their real home which regroupes them, we should not forget our objectives that made us come here and we should fight to realize it.

Chemsedine DEKHMUCHE



# Geophysics in Oil and Mineral exploration

The extraction at a continually increasing rate of fossil fuels and useful minerals from the earth has raised the spectre of impending shortages that could threaten the economy and way of life of the civilized world

the fossil fuels and useful minerals hold a grant place in economy and the way of life of the civilized world, however their extraction from the earth has created impending shortages, that's why the exploration of this resources become the challenge of earth scientists. To meet the challenge, they developed more and more sophisticated techniques of exploration.

## Geophysics and Geology

It's not always easy to establish a meaningful border line between geology and geophysics, the principal difference dwell in the type of data used. Geology involves the study of the earth by direct observation on rocks, either from surface or boreholes, and the deduction of its structure, composition, or history by analysis of such observations. Geophysics in the other side, involve the study of those parts of the earth hidden from direct view by measuring their physical properties with appropriate instruments, usually on or above the surface It's also includes the interpretation of the measurements to obtain useful information of the structures of earth.

Even as early as the 1600s ferrous minerals are sought with magnetic compass. geophysical exploration is relatively new area of technology, only in the last century special instruments put to use in mining exploration. Geophysics improved

its place in Oil and Gas exploration In 1924 by the first oil discovery.

Over the years, the tools and technics of exploration geophysics have been continually improved, both in performance and economy. Geophysicists find oil, gas and mineral solids by building a clear picture of what is below the Earth's surface, to build this picture, geophysicists use deferent methods

## Geophysical prospecting methods

The most widely geophysical techniques employed for exploration work are the seismic, gravity, magnetic, electric and electromagnetic methods. Most of them may be employed in the search of oil, gas and solid mineralsa. Seismic, magnetic and gravity prospecting are the chief tools of hydrocarbons exploration; seismic and electrical methods are the two chief tools used for mineral exploration. Magnetic and electromagnetic method are employed for both types of prospecting; Seismic Reflecting Method : the structure of the subsurface is mapped by measuring the time required for a seismic wave generated in the earth by near surface shock waves, to return to the surface after refracting from interfaces between formation having different physical proprieties. Gravity Method: this method measure the variation of the gravity from place to another place for the pull of gravity from rocks within the first few miles of the earth's surface. Different types of rocks have different densities, if the higher density is formation are arched upward in a structural high, such as an anticlinal, if the higher-density is formations are arched upward in a structural high, such as an anticlinal, the earth's gravitational field will be greater over the axis of the structure than along it's flanks. A salt dome, which is generally less dense than the rocks into which it is intruded, can be detected from the low value of gravity recorded.

Magnetic Method: Magnetic prospecting maps variations in the magnetic field of the earth that are attributable to change of structure, magnetic susceptibility or remanence in certain near-surface rocks. Sedimentary rocks generally have a very small susceptibility compare with igneous or metamorphic rocks. Electric Methods: based on some electrical property or characteristic of material in the earth. The resistivity method is designed to yield information on bodies having anomalous electric conductivity. This method has been used to map boundaries between layers having different conductivities; it's used to map bedrock and ground water studies to determinate salinity and the depth to the water table.

Using these methods, geophysicists try to establish a clear picture of the subsurface in order to find a natural resource. Geophysics covers a broad range of earth science and offers a variety of options; in addition in addition to the oil industry and mining geophysics can be applied to evaluate earth proprieties for environmental hazards, civil engineering. Geophysicists study the interne structure and evolution of the earth, earthquake, ocean and other physical features using these methods.

Akli BANDOU  
Geophysical engineer  
SONATRACH Exploration

## Natural gas: Short term energy outlook

- Working gas in storage ended this year's heating season at an estimated 1471 billion ft<sup>3</sup> on March 31.
- Looking ahead to October, EIA projects inventories will end the injection season at 3781 billion ft<sup>3</sup>, which is slightly below the five year average.
- The above level implies overall injections of 2310 billion ft<sup>3</sup> over the injection season.
- EIA expects that increases in drilling efficiency and growth in oil production will continue to support growing natural gas production.
- Increases in domestic natural gas production are expected to reduce demand for natural gas imports from Canada and to support growth in exports to Mexico.
- LNG imports have fallen over the past five years because higher prices in Europe and Asia are more attractive to LNG exporters than the relatively low prices in the US.
- LNG gross imports average 0.2 billion ft<sup>3</sup> in 2015 and 2016. EIA projects that LNG gross exports will increase from an average of 0.04 billion ft<sup>3</sup>/d in 2014 to over 0.79 billion ft<sup>3</sup>/d in 2016.

### Consumption

- EIA projects that US total natural gas consumption will average 76.3 billion ft<sup>3</sup>/d in 2015 and 75.8 billion ft<sup>3</sup>/d in 2016.
- Consumption growth is largely driven by demand in the industrial and electric power sectors, while residential and commercial consumption are projected to decline in 2015 and 2016.
- Industrial sector consumption increases by 4.9% and 2.5% in 2015 and 2016.

### Production and trade

- EIA expects that marketed natural gas production will increase by 5% and 1.9% in 2015 and 2016.

### Inventories

- On March 27, natural gas working inventories totaled 1461 billion ft<sup>3</sup>.
- A 12 billion ft<sup>3</sup> injection for the week ending March 20 was the first net injection of 2015. EIA projects that end of October 2015 inventories will total 3781 billion ft<sup>3</sup> less than the five year average.

# Oil and gas industry announcements: 7 April 2015

## Chevron

Chevron Thailand Exploration and Production, Ltd has announced a US\$30 million commitment to create the Thailand Partnership Initiative (TPI), a five year program to strengthen Thailand's competitiveness and innovation by improving science, technology, engineering, and maths (STEM) education and vocational education across the country. Over the next five years, the TPI will work in partnership with leading non-government organisations, academia, key government organisations in science and education, and the private sector, to increase the quality of science and mathematics teaching in Thailand, establish 18 training hubs nationwide and promote the study of science, technology, engineering and mathematics.

## Excelerate Energy

On 28 March 2015, officials from Engro Corporation, Excelerate Energy and the Government of Pakistan were present for the inauguration of Pakistan's first LNG import terminal in Port Qasim. Located in a channel of the Indus River east of Karachi, the terminal is a result of the fast track LNG import solution built to alleviate the energy shortage facing the country, and was brought into service 11 months from the start of construction. Utilising Excelerate's floating storage and regasification vessel, the EXQUISITE, the facility has the capacity to deliver up to 69 million ft<sup>3</sup>/d of natural gas directly to Sui Southern Gas Company's natural gas pipeline system.

## Pentair

Pentair Valves & Controls is pleased to announce the expansion of its Anseong

manufacturing facility in South Korea. The plant will now also produce trunnion mounted ball valves under Pentair's FCT brand, reflecting the company's commitment to meeting customers' needs in the region while helping to satisfy the demand for Korean manufactured products. The expanded facility enables Pentair to supply ball valves for local projects, offering Korean EPC customers high quality products, shorter lead times and cost savings. Operations at the plant include valve manufacture, assembly and testing for critical applications in the oil and offshore oil and gas, marine and LNG industries.

## Prometheus Energy

Prometheus Energy Group Inc. has entered into a master services agreement with WPX Energy to supply LNG plus related equipment and services for WPX's initiative to utilise clean burning natural gas in its drilling operations. Prometheus will be supplying LNG fuel through its established North American LNG network, and providing onsite mobile LNG storage, vaporisation equipment and technical services. The agreement initially applies to WPX's operations in the San Juan basin and can be extended to Piceance operations as well. WPX Energy has primarily utilised field gas over the past two years but has moved into acreage where field gas was not available. Even with a 50/50 split alternating between field gas and LNG, the overall natural gas solution is significantly below diesel costs, even at currently depressed prices for distillate fuel according to both Prometheus and WPX.

