## Creating Value Beyond Energy

## NEWS LETTER KNOC

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2 Million Barrels of UAE Oil Stockpiled in Korea



Participation in the 5th Asian Ministerial Energy Roundtable



CEO Suh Engages in MBWA



## Oil Discovered in the Zhambyl Block of Kazakhstan



Crude oil has been found at the first offshore exploration well, ZB-1, of the Zhambyl block in the Caspian Sea of Kazakhstan. With a size of 1,935 km<sup>2</sup>, the Zhambyl offshore oil block is located three to eight meters below sea level at the Northern coast of the Caspian Sea. A Korean consortium that consists of eight companies including KNOC holds 27% equity in the project, while the remaining stake is held by KazMunaiGas (KMG), the state-owned oil and gas corporation of Kazakhstan.

KNOC'S TOP NEWS

**▶▶** continued

## Oil Discovery in the Caspian Sea\_ A KNOC's Success Story for the Future





The first offshore exploration well ZB-1 in the Zhambyl block where oil has been found, embarked on drilling in mid-May 2013, reaching the target depth of 2,200m in July 2013. At two reservoirs in sandstone beds, a drill stem test has been completed on a daily maximum of 843 barrels of oil. Also, a barge-type submersible drilling rig built in July 2013 by DSME, one of the participants to the consortium, has been deployed, contributing to the success of the discovery. The Korean consortium and KMG plan to carry out additional exploratory drilling on other prospective blocks in 2014 in order to identify contingent resources and economic feasibility of the region. This is the second time that KNOC has achieved success in an overseas exploration project in 2013, following the discovery of oil in the Hawler block of Iraq in February. The accomplishment is meaningful considering KNOC's on-going efforts to improve exploration success rates.

In the meantime, around one hundred oil companies including global majors have been operating in the Caspian Sea region. As of 2012, confirmed reserves amounted to 38.2 billion barrels and daily production stood at 2.89 million barrels.

Moon-kyu Suh, President & CEO of KNOC has gone on two business trips in August 2013. He has been busy lately due to the success in Kazakhstan including the discovery in the Zhambyl block. On August 5, 2013, he visited the Zhambyl drilling site and the local office to encourage and motivate the field staff. On August 27, 2013, on his second trip to the country, he participated in meetings with high-level officials including Uzakbay Karabalin, the Minister of Oil and Gas, Nurlan Kapparov, the Minister of Environment Protection. During the meeting, CEO Suh emphasized the fact that the Zhambyl drilling had been completed without any accident related to health, safety and environment. He also thanked the Kazhakstan government for its support to KNOC. In response, Minister Karabalin committed proactive cooperation in relevant issues including the acquisition of new mining blocks in the country and the extension of the contract on Zhambyl exploration.

## Meeting with the top management of KMG, Kazakhstan

On August 28, the CEO also held business-related discussions with Chairman Sauat Mynbayev and Deputy Chairman Kurmangazy Iskaziyev of KMG. KMG congratulated KNOC on the completion of drilling in the first exploration well of the Zhambyl block and the discovery of oil. KNOC asked for KMG's cooperation in the additional drilling in Zhambyl and securing of work in other oil blocks for the Caspian Explorer, the barge-type drilling rig deployed in the Zhambyl block.

In return, KMG expressed hopes that mutual collaboration could lead to safe operation in the additional drilling. KMG responded that it will cooperate as much as possible so that the Caspian Explorer could be deployed to other blocks. Moreover, the two parties discussed the need for a three-dimension physical exploration of Zhambyl.





## Harvest Operation Secures Recoverable Reserves of 6 Million Barrels from Exploration

Harvest Operation, a Canadian subsidiary of KNOC, secured a recoverable reserve of 5.9 million barrels by drilling the well in the Royce Block, laying the foundation for the corporation's sustainable growth in North America.

The onshore block in the Canadian province of Alberta is located south of the Cecil oil field, from which the Harvest Operation has been producing oil.

The exploration well, Royce 9-4, embarked on drilling early-September of 2013 and ran a production test on September 20, 2013 that resulted in a daily output of 630 barrels of oil and 988 mcf of gas.

The discovery of a new oil pool in Royce has enabled the development of a further 30 to 40 drilling sites in the area. The estimated recoverable reserve is 5.9 million barrels at minimum, which will reach around USD 470 million in asset value.

The economic feasibility of Royce is deemed substantial considering the fact that its depth is a mere 1,200m, which will save development costs.

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### Partnership with UAE, a Major Oil Producer

### 2 Million Barrels of UAE Oil Stockpiled in Korea

On September 27, 2013, 2 million barrels of oil from the United Arab Emirates (UAE) was delivered to Korea. It was the first shipment made under the joint-stockpile project to store UAE's oil in Korea's storage base.

A ceremony was held at the KNOC Yeosu office to celebrate the calling of the oil tanker from UAE to the Korean port. CEO Suh, Sang-jik Yoon, the Minister of Trade, Industry and Energy and CEO Abdulla Nasser Al Suwaidi of Abu Dhabi National Oil Company (ADNOC) joined the event held to strengthen cooperation between Korea

and the UAE in the oil business.

In November 2011, the two governments agreed to a project to stockpile 6 million barrels of oil from the UAE in storage base located in Korea. The shipment of the first 2 million barrels arrived on September 27 in Korea. The remaining 4 million barrels will be delivered within the next six months. KNOC has been operating an indirect stockpile system to rent reserve oil storage facilities to oil producing nations in exchange for preferred purchasing rights in emergencies. Among this year's stockpile target of 141 million barrels

of oil, 40 million barrels is from jointstockpile projects. As of August 2013, the corporation has been implementing the project with 12 oil companies from oil producers including Norway, Algeria, Azerbaijan, the Netherlands, as well as the ADNOC of the UAE.

Thanks to the project, KNOC has reinforced the capability to meet oil demand in a crisis by securing the preferred purchasing rights. The 6 million barrels to be stored in Korea by ADNOC is equivalent to 2.7 days worth of the domestic average daily oil consumption in 2012.

As of August 2013, the amount of oil stored by the Korean government is worth 37 days of average daily consumption and 110 days based on the International Energy Agency (IEA) standard. Meanwhile, the successful first step taken for the project is expected to strengthen the momentum for the Northeast Asia Oil Hub Project that has been a priority of the incumbent administration of Korea.



### 한 - UAE 국제공동비축 기념행사 احتفال بوصول شحنة النفط الافتتاحية من الإمارات العربية المتحدة

27th Sept. 2013 KNOC Yeosu Office

## University Honor Students Selected by the Abu Dhabi Crown Prince Court of the UAE Visit KNOC

A total of 31 university honor students selected by the Abu Dhabi Crown Prince Court of the UAE paid a visit to the Yeosu branch office on July 5, 2013 as part of their overseas field trip. They engaged in a variety of programs prepared by KNOC to introduce projects including the stockpile project and its technology.



### **Reorganization of Structure**

### **Inauguration Ceremonies for Senior EVP and Group Heads**



### Director & Senior EVP

#### Profile

- Joined KNOC in 1979

 -Worked in the Construction Department, Construction Engineering Department and Stock Engineering and Construction Department
 - Executive Vice President for Administration Group

KNOC underwent a leadership change under the organizational restructuring that took place on July 29, 2013. On August 1, 2013, an inauguration ceremony for newly appointed Director & Senior Executive Vice President (EVP) Joong-hyun Kim was held. In his speech, he emphasized that every employee must share an understanding on the current challenges facing KNOC and to seize opportunities in order to make a new leap forward. Adding that achieving close

coordination within the organization is essential to this end, he revealed his commitment to facilitate communication across the board by tapping into his experience in human resources management and welfare.

On August 5, 2013, an event to congratulate the incoming EVP for Exploration Group, Dong-hee Kim, took place. Mr. Kim mentioned that his top priority is to identify commercially viable resources in oil blocks where KNOC has been participating. He added that the Exploration Group will carry out meticulous reviews and screenings to increase exploration success rates

On August 19, 2013, Kang-hyun Shin took office as the new EVP for Petroleum Stockpile Group. He remarked that the group will serve as the solid foundation for KNOC to develop into a world-renowned energy company. He shared his commitment to reaping success in on-going projects including the economical gas station project, Northeast Asia Oil Hub Project and the construction of an underground stockpile terminal in Ulsan. On September 6, 2013, an inauguration ceremony was held for Chang-seok Jeong (EVP for Production Group), newly appointed as the standing director. Mr. Jeong emphasized the need to solidify the culture of working as "Us instead of you and I" in order to become a global oil company that stands shoulder to shoulder with major oil companies around the world. He asked each and every one of the employees to take charge of their tasks in a responsible manner.



**Dong-hee Kim**Executive Vice President for Exploration Group



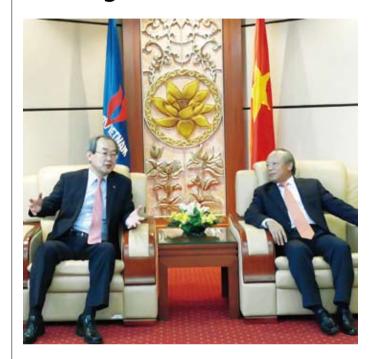
**Kang-hyun Shin**Executive Vice President for Petroleum Stockpile Group



Chang-seok Jeong
Director & Executive Vice President for Production Group

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### **Meeting with the CEO of PVN**



Between September 7 and 10, 2013, CEO Suh joined Korean President Geun-hye Park's overseas visit as a member of the economic delegation. The visit entailed a range of meetings on public-private cooperation and business issues. In particular, CEO Suh met with the CEO of PetroVietnam (PVN), a state-run oil company of Vietnam, to discuss ways for collaboration in the E&P business and oil stockpile project.

A follow-up meeting was held on September 11, 2013, when the Vice President of PVN and his delegation paid a visit to KNOC. The two parties shared an in-depth discussion on mutual cooperation in certain regions of Iraq with high prospects for oil production. The issue was brought up when CEO Suh suggested that KNOC, which has been participating in three exploration blocks of Iraqi Kurdistan, engage in an equity participation and joint-project for the Sangaw South block\*.

KNOC and PVN also dealt with issues such as recovering costs for on-land condensate from the 11-2 block operated by KNOC in Vietnam and the request for a contract regarding the gas field of Sutu Trang in the 15-1 block.

PVN participates in 18 overseas projects on exploration and production in 14 countries around the world. It has been enjoying a close partnership with KNOC as attested by the Memorandum of Understanding (MOU) signed on a comprehensive agreement regarding the petroleum business.

### Talk on E&P and Stockpile Business with SINOPEC

CEO Suh had a meeting with the CEO and six delegates of SINOPEC on August 22, 2013. Referring to the recent discovery of oil in the Hawler block in Iraqi Kurdistan, he proposed a mutual cooperation in the Sangaw South block project that has been operated near the Hawler block and receiving attention for its potential. Showing keen interest, SINOPEC responded that it hopes to review the proposal through a full discussion among relevant teams.

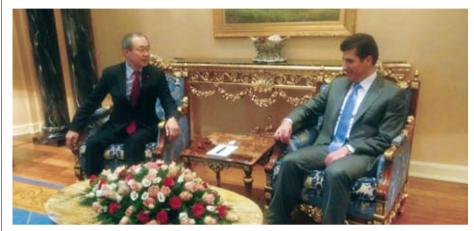
The two parties carried out an in-depth discussion on not only the E&P business, but also the stockpile business. CEO Suh revealed hopes for the success of the Ulsan phase of the Northeast Asia Oil Hub Project, stressing the need to work together with SINOPEC to this end.

He especially expressed hopes to expand the trade volume with SINOPEC for increased investment by SINOPEC. In return, the CEO



of SINOPEC proposed to strengthen strategic partnership by maintaining participation in the joint-stockpile project. He also showed the commitment to carry on with concrete discussion on the Northeast Asia Oil Hub Project in Ulsan.

### **In-depth Discussion on Projects with KRG**



CEO Suh met with Prime Minister Nechirvan Barzani and the Minister of Natural Resources of the Kurdistan Regional Government on July 21, 2013. He paid tribute to the Prime Minister for his leadership that has been driving the economic development of Kurdistan. The two parties held an extensive discussion on projects where KNOC has been taking part such as the Hawler block and the Sangaw South block. Particularly, they agreed to draw up an appropriate

schedule to assess the reserve considering that exploration is on-going for the Hawler, Bazian and Sangaw South blocks. Other issues included the equity participation of a third party to the Sangaw South block, in which KNOC currently holds a 30% stake. On July 20, 2013, CEO Suh visited the Bazian block in Iraqi Kurdistan to motivate the field staff. Currently, drilling in the Bazian block is in its initial stage, with a prospective resources of around 139 million barrels.

## Meeting with the President of the Concord Group

On July 10, 2013, CEO Suh met with Ara Arshavirovich Abramyan, the President of the Concord Group of Russia in the KNOC meeting room. The president visited Korea as a member of the official delegation to the Korea-Russia Joint Committee on Economic, Scientific and Technological Cooperation. The two heads addressed ways for cooperation in oil development projects.

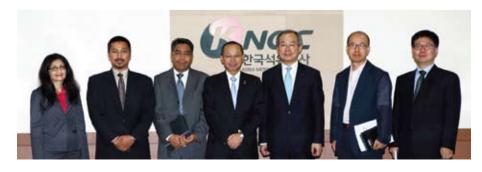


# Consolidating a Relationship between KNOC and Malaysia

CEO Suh held a meeting with Minister Dato' Sri Abdul Wahid bin Omar and the Deputy Director of the Economic Planning Unit under the Prime Minister's Department of Malaysia and two other delegates on September 11,2013. The two parties discussed existing and potential projects for collaboration with Petronas,

the Malaysian state-owned oil company. CEO Suh took the opportunity to ask for support from Malaysia in offshore projects jointly implemented with Petronas and bidding planned for new projects. Joint-projects with Petronas include the block

2B project (closed deal) and the SK318 and DW2K blocks, in which KNOC is planned to participate. The two parties talked about specific ways to work together to establish a comprehensive and strategic partnership.



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<sup>\*</sup> Currently, a review is underway on the option to carry out an additional exploratory drilling.

## Signed a MOU on Cooperation for Shale Gas Development with SK E&S

On August 29, 2013, KNOC concluded with SK E&S a MOU on cooperation in the development of shale gas in North America and its adoption to Korea.

The gist of the MOU is to join hands in securing reasonably-priced gas produced in US shale gas fields, producing and domestically-adopting affordable shale gas and identifying methods of collaboration in other relevant areas.

Under the agreement, KNOC will supply gas to SK E&S in a stable manner by harnessing its expertise in shale gas development and production in North America.

SK E&S will liquefy the gas procured from KNOC for domestic adoption. In the meantime, the corporation has been fortifying momentum for the business to develop shale gas, an uncon-

ventional next-generation energy source, by leveraging its expertise in resource development.



## Participation in the 5th Asian Ministerial Energy Roundtable

On September 12, 2013, CEO Suh joined the 5th Asian Ministerial Energy Roundtable held in the Shilla Hotel, Seoul, Korea. The event served as an opportunity to deal with energy issues including cooperation between Asian oil producing and importing nations. It was jointly-held by Korea and Qatar with the largest turnout since its establishment.

Around 150 participants including ministers of 13 countries, vice ministers from ten countries and representatives from the Organization of the Petroleum Exporting Countries, IEA and International Energy Forum joined the roundtable.

They agreed to improve the efficiency and function of oil and gas trade markets of Asia given the rising intra-regional trade volume of oil and gas.

In his closing remarks, CEO Suh said "The roundtable is a venue to raise awareness on the strengthened role of Asia in the global energy market. I hope essence of this joint declaration is shared in each and every sector of the Asian energy industry."



## Acceleration of the Northeast Asia Oil Hub Project



The Northeast Asia Oil Hub Project, one of the priorities of the Korean government led by KNOC is being implemented in full swing. MOUs were signed with SK Energy on July 17, 2013 and with S-OIL on August 21, 2013, regarding investment cooperation for the Ulsan North Port phase of the project.

Under the MOU, KNOC, SK Energy and S-OIL will take part in the project as equity investors for the establishment of a joint-venture. They will work in partnership to connect the pipelines of the oil hub and SK Energy's tank, study ways to make investment in kind with SK Energy's oil tank, ease regulations and improve institutions. Meanwhile, the project has been carried out since 2008 under the goal of positioning Korea as one of the four oil hubs alongside the US, Europe and Singapore by building a commercial storage facility with a capacity of 36.6 million barrels and an international oil exchange in Yeosu and Ulsan.

#### **Meeting with the CEO of SFF of South Africa**

KNOC held a meeting with WB Gila, the CEO of the Strategic Fuel Fund Association (SFF), a state-run company of South Africa focused on the oil stockpile business, on July 7, 2013, in the KNOC headquarters. The two parties exchanged ideas on collaboration in the stockpile business such as stockpile facility management and trading. SFF has shown efforts to benchmark KNOC in terms of procurement of stockpiled oil, commercial operation of stockpile facilities, relevant laws and stockpiled oil management policy. After the discussion, the SFF delegation paid a field visit to the KNOC Yongin office.

#### **Korea-Japan Petroleum Stockpile Meeting**

On July 10, 2013, KNOC held the regular Korea-Japan petroleum stockpile meeting at HQ. Naoyuki Hinata, the head of the petroleum stockpile unit of JOGMEC and his delegation joined the meeting. The event has been held on a yearly basis with the participation of executives under the Strategic Alliance Agreement signed by Korean and Japanese companies in the stockpile business in June 2007. It serves as an important venue to share current status and goals. This year, participants discussed issues such as enhancing stockpile facilities against climate change and earthquakes.



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October, 2013

### **FUN management**

### **CEO Suh Engages in MBWA**

CEO Suh and Director & Senior EVP Kim carried out the business practice of Management by Walking Around (MBWA), a corporate culture program, to encourage employees suffering from sultry weather on August 12, 2013. They visited the third floor of the headquarters to give watermelons to employees of the Production Management Department, Research and Development Department and Strategic Resources Department. They also listened to pending issues and difficulties, creating a friendly atmosphere between the management and working-level employees.



### **Fostering Future Leaders - Education**



### **Awarded the Petroleum Development Scholarship**

On August 21, 2013, the ceremony to award the Petroleum Development Scholarship for the second half of 2013 was held in the KNOC headquarters. A total of 28 university students majoring in petroleum engineering and geology received a combined KRW 84 million (US\$ 78.5 thousand), KRW 3 million (US\$ 2.8 thousand) each. The corporation has been contributing to identifying and nurturing potential talents of the future in the oil development business by strengthening their expertise through the Petroleum Development Scholarship that marks its 16th anniversary.

### **Supporting the Construction of a School Building in Vietnam**

KNOC's Vietnam office held a groundbreaking ceremony for the construction of a new classroom building of the Daehwarok Elementary School. The school has signed a sisterhood partnership agreement with the KNOC office in Ben Tre, an area four hours away from Ho Chi Minh. Around one hundred participants including faculty members and public officials from relevant organizations joined the event to wish for a successful and safe construction that will last for nine months.



#### **Training Programs for Local School Students**

Employees of KNOC shared their expertise through a training program on the oil industry held on July 10 and 11 for five hundred students of the Pyeongchon Management High School nearby the headquarters. The goal was to help students easily understand the business and guide their career development. The program includes lectures, club activities and field trips. On September 2 and 3, the training was offered to 120 students in Buan Middle School which is also nearby the headquarters.

### **Contribution to the Local Community**

### **Social Contribution Activities Marking Chuseok**

To celebrate Chuseok, one of the largest national holidays and the thanksgiving day of Korea, KNOC carried out an event to share Korean tradition with multicultural families on September 3, 2013. Employees joined the social contribution relay team organized in cooperation with businesses by the Anyang local municipality to help 120 multicultural family members to enjoy the event.

The activities were aimed at helping families to easily understand and adapt to Korean culture. They included making of Songpyeon, a type of rice cake people eat on Chuseok and a singing competition.

In addition, from September 8 to 17, 2013, the headquarters and branch offices carried out a campaign to donate rice, which is the staple of Koreans, to support underprivileged residents in the local communities. They also joined hands to implement social contribution activities marking Chuseok targeted at 150 low-income families nearby the headquarters in collaboration with the local government of Anyang. Donated rice was purchased in traditional markets that have signed a sisterhood partnership with KNOC, revitalizing the local economy.

Furthermore, 26 volunteering teams from the headquarters and ten teams from local branch offices visited children's community centers, welfare centers for the elderly and the disabled under a sisterhood agreement to provide a helping hand and necessities.







## Social Contribution Award in the 3<sup>rd</sup> Happiness Sharer Event in 2013

KNOC won the 'Happiness Sharing Enterprise Award' presented by the Ministry of Health and Welfare in the 3rd Happiness Sharer event 2013 held at the Sejong Hotel on September 12, 2013 for its efforts in social contribution. The award has been given quarterly since 2011 to share best practices by identifying exemplary organizations and individuals in terms of social contribution.

### Sign an Agreement on Shared Growth with SMEs

On September 5, 2013, KNOC held a ceremony to conclude an agreement on the promotion of shared growth with B&B, a small and medium sized company specialized in preventing corrosion of facilities such as oil tank, under the goal of supporting SMEs in strengthening competitiveness. Under the agreement, KNOC will provide a test bed to improve the quality of coated products, where B&B will turn out samples and run performance tests to achieve reinforced quality competitiveness.



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#### Creating Value beyond Energy