



RUSSIA'S OFFSHORE OIL PRODUCTION IN THE CASPIAN SEA: THE CASE OF THE FILANOVSKY AND KORCHAGIN FIELDS

Nowadays, Russia is strongly interested in developing its continental shelves in order to enlarge the oil and gas potential of the country. As one of the major hydrocarbon exporters in the world, Russia is in search for a viable alternative to replace its aging Western Siberian fields, which are experiencing a gradual unavoidable decline in production. Therefore, the Russian government launched large-scale programs for conducting additional geological exploration in other parts of the country, including the Caspian shelf, intended for the further expansion of the oil and gas production.

It is worth mentioning that unlike Azerbaijan, Kazakhstan and Turkmenistan, Russia is a latecomer regarding the development of its offshore oil and gas fields in the waters of the Caspian Sea. In fact, during the Soviet times, the Northern and Central parts of the Caspian basin, where Russia has sovereign rights and exclusive jurisdiction over hydrocarbon exploration, were considered to be of little promise. Therefore, the only Russian energy company that in 1995 took a risk and started geological research in the North and Central Caspian under the governmental program was Lukoil. It took four more years for the company to launch exploratory drilling using an Astra semi-submersible jack-up rig. The first success of oil exploration in the Russian sector of the Caspian Sea was marked in 2000, when Lukoil reported about the discovery of the Yuri Korchagin field. This success was followed by seven other fields discovered within eight years: Rakushechnoye and 170th Kilometer in 2001, Khvalynskoye and Sarmatskoye (renamed to Kuvykin in 2012) in 2002, Vladimir Filanovsky in 2005, Morskoye and Tsentralnoye in 2008. It is expected that the mentioned 8 fields and 16 more perspective structures contain over 4.7 billion barrels of oil equivalent.

In order to encourage the energy companies to engage in the wide-scale geological survey in the region, the Russian authorities provided a favorable internal fiscal regime. For instance, the current policy of maintaining tax breaks for the Caspian projects includes a zeroing out of export duties and a reduced mineral extraction tax for the first seven years of oil production. As a result, the leading Russian oil and gas companies have joined the race for the resources of the Caspian Sea. For instance, Russia's state-owned gas giant Gazprom joined Lukoil in the development of the Tsentralnoye field, while the Russian oil producer Rosneft acquired the Laganskiy drilling block in 2013 and began joint drilling operations with Lukoil on the Rybachya structure a year later. However, it should be admitted that a number of challenges, such as severe climatic fluctuations (the Northern Caspian freezes in winter, while in summer there are desert-like conditions) and the shortage of both special equipment and qualified personnel in the region to build and to operate the offshore rigs, prevent the newcomer companies from boosting the development of the Caspian offshore fields. Therefore, to date Lukoil maintains its lead in implementing projects to develop hydrocarbons on the Caspian shelf.

After the Russian government's 2012 decision to introduce tough anti-flaring rules, which caused

further raising of the Caspian gas project costs, Lukoil decided to suspend the development of the large gas-bearing deposits in favor of expansion of oil production. As a result, the development of the Sarmatskoye/Kuvykin field, as well as the production at the Khvalynskoye field (initially planned to be put into operation in 2016) was postponed. The second reason for choosing the oil production-oriented strategy is that the Russian Caspian oil has lower sulfur content compared to the offshore Caspian oil produced by Kazakhstan and could be classified as extra light. This makes it possible to transport produced oil via the Caspian Pipeline Consortium (CPC) to Novorossiysk and further to the European markets together with Kazakhstan's Tengiz Light as the CPC Blend.

Lukoil finished outfitting the \$1.4 billion Yuri Korchagin oil field in 2009 by launching the LSP-1 ice-resistant stationary platform for drilling and oil production, along with the LSP-2 residential platform and the 58-km long underwater pipeline for shipping oil to the marine transportation complex consisting of the floating storage offloading system and the tower mooring system for tankers. During the first phase of the Yuri Korchagin field exploration it was decided to ship oil to onshore facilities of the Makhachkala port using shuttle tankers with deadweight of 6 to 12 thousand tons with further pumping via the Transneft pipeline system. Located 180 kilometers away from Astrakhan at the sea depth of 11-13 meters, the Yuri Korchagin oil field's reserves are estimated at 120 million barrels of oil equivalent. As of December 2016, 23 out of 26 oil production wells were commissioned at the field.

The field's first industrial oil was produced in April 2010 and the first tanker with field's oil reached the Makhachkala port in October 2016. After implementing a unique (for Russia) engineering and technological solution, which is drilling of horizontal wells with a length exceeding 5 kilometers, it became possible to raise oil production at the field from 0.793 million tons in 2012 to 1.372 million tons in 2013 with further increase to 1.460 million tons and 1.662 million tons in 2014 and 2015, respectively. At the end of December 2016 Lukoil reported that since commissioning the Yuri Korchagin oil field in 2010 the volume of oil produced at the field reached 7 million tons. It is expected that the oil and gas condensate production at the Yuri Korchagin will peak at 2.5 million tons of oil and 1.2 billion cubic meters of gas per year.

At present, the company works on launching Phase II of the field development, which includes the construction of a conductor-platform with a cluster of 7 production wells and two 9-km long pipelines to transfer produced oil from the new platform to the LSP-1 and to transport produced gas from the LSP-1 to the new platform. It is expected that the total cost of the Phase II will amount to \$118 million and the conductor-platform will be commissioned in 2018.

Launching the commercial oil production at the Vladimir Filanovsky oil field in October 2016 paved the way for Lukoil's Caspian oil to be shipped via the CPC. In fact, Lukoil set out the network of 40-km long submarine oil and gas

pipelines connecting the Vladimir Filanovsky and Yuri Korchagin fields, along with 330 kilometers of subsea pipelines and 350 kilometers of onshore pipelines from the Vladimir Filanovsky field to the onshore storage terminal located in Kalmykia. Therefore, it became possible that the Caspian light oil transported via a subsea pipeline to the onshore storage facilities subsequently fed into the CPC system for further exports. For instance, the oil supplies from the Filanovsky and Korchagin offshore fields to the CPC started on October 1, 2016. As of February 2017, the CPC accepted 1 million tons of oil produced in the Northern Caspian through the Komsomolsk pumping station in Kalmykia. It is planned that in 2017 the total volume of oil shipments from these fields will increase to 5.5 million tons.

Actually, the \$2.37 billion Vladimir Filanovsky oil field is the largest in terms of oil reserves discovered in Russia in the last 20-25 years. Located 220 kilometers away from Astrakhan at the sea depth of 7-11 meters, the Vladimir Filanovsky field's reserves are estimated at 290 million barrels of oil equivalent. As part of the first stage of the field development, Lukoil constructed the ISP-1 ice-resistant stationary platform, the LQP-1 living quarters platform, the central treatment platform (CTP) and the riser unit. It is planned that under the second stage of the field development the ISP-2 and the LQP-2 will be built. In March 2017, Lukoil completed drilling the fourth well at the Vladimir Filanovsky field. Nowadays, the total oil production at the field is approximately 9,000 tons per day. As of January 2017, the first million tons of oil was produced at the Vladimir Filanovsky field. It is expected that Lukoil will extract 4.4 million tons of oil at the field in 2017 reaching the annual volume of 6 million tons of oil by 2019.

It can clearly be seen that Russia is making evident progress in developing its Northern Caspian offshore deposits. Moreover, in 2015, Lukoil approved an integrated field-infrastructure development scheme for the Northern Caspian fields for 2016-2018, according to which it is planned to additionally construct 25 platforms, 1,000 kilometers of subsea pipelines and more than 550 kilometers of onshore pipelines. The total investments will exceed \$5.5 billion. Furthermore, the company announced that two more oil and gas fields in the Caspian Sea would be put into operation in 2022 and 2026, namely, the Rakushechnoye and the Sarmatskoye/Kuvykin deposits. The company's long-term program for the waters of the Northern Caspian calls for further exploration of the region aiming to increase the level of hydrocarbon production to 20 million tons per year.

It can also be concluded that Russia's Caspian shelf is far from being fully prospected. Significant reserves of the Russian sector's recoverable oil and gas are still waiting to be discovered. For instance, according to some forecasts, formations around the Yuri Korchagin field alone may contain almost 1.9 billion barrels of oil equivalent. Therefore, it is just a matter of time before Russia significantly boosts its oil and gas production at the Northern Caspian.

Politics, Foreign Affairs and Security

- The Deputy Prime Minister of Turkey, Numan Kurtulmus, announced that Ankara suspended high-level diplomatic contacts with the Netherlands in response to a ban on the Turkish ministers speaking at political rallies in the Dutch cities. The Government of the Netherlands barred the Turkish Foreign Minister, Mevlut Cavusoglu, from flying to Rotterdam and later did not permit the Family Minister, Fatma Betul Sayan Kaya, to enter the Turkish Consulate in Rotterdam.
- During his official visit to Paris, the President of Azerbaijan, Ilham Aliyev, and the President of France, Francois Hollande, discussed prospects for strengthening the economic bilateral relations focusing on agriculture, infrastructure, space industry and tourism. As a result, the parties signed five documents including Memorandums of Understanding (MoUs) on renewable energy, environmental and transportation cooperation.
- During his official visit to Doha, the President of Turkmenistan, Gurbanguly Berdimuhamedov, and the Emir of Qatar, Sheikh Tamim Bin Hamad Al-Thani, discussed prospects for development of trade and economic cooperation and diversification of mutual trade turnover. As a result, the MoUs on the development of energy cooperation and on cooperation in standardization, meteorology, certification and accreditation were adopted at intergovernmental level.
- On the sidelines of the 5th Global Baku Forum, the President of the Azerbaijan, Ilham Aliyev, and the President of Georgia, Giorgi Margvelashvili, discussed opportunities for deepening bilateral cooperation between the two countries, especially in international energy and infrastructural projects.
- The Parliament of Kazakhstan adopted the law, which ratifies the Protocol on returning of the Emba range to Kazakhstan by Russia. According to a Protocol, the process of the transfer and acceptance of the Emba range will be carried out by a Joint Commission consisting of the parties' authorized representatives. It is planned that the returned lands will be further used for the interests of the entrepreneurs involved in agriculture and the companies specializing in exploration and extraction of minerals.
- During his two-day official visit to Minsk, the Chairman of the Majilis of Kazakhstan, Nurlan Nigmatulin, met with the Belarusian Prime Minister, Andrei Kobyakov, the Chairman of the House of Representatives, Vladimir Andreichenko, and the Chairman of the Council, Mikhail Myasnikovich. During the meetings, the parties discussed a wide range of issues, including interparliamentary cooperation, trade and economic interaction and improvement of the legislative framework.

- The Southern Military District of Russia reported that over 6,000 troops took part in the unplanned military drills, which were held in military units deployed to the Krasnodar and Stavropol regions, the Astrakhan and Volgograd regions, Karachay-Cherkessia and Adygea, and also units of the Russian military bases in Armenia and Abkhazia.

Economy, Finance and Energy

- The Shah Deniz Consortium, which is led by the British Petroleum, announced that the second jacket for the Shah Deniz Stage 2 platforms was sailed to the Caspian Sea offshore of Azerbaijan after commissioning at the Heydar Aliyev Baku Deepwater Jackets Factory. It was noted that the transportation, launch, positioning, pile installation and final completion activities of the jacket are expected to take around 75 days.
- According to the Russian state-owned nuclear company Rosatom, the construction and installation works were started on the site of Bushehr-2 Nuclear Power Plant in Iran. It was noted that the implementation of Bushehr-2 project would take 10 years.
- Azerbaijan's state oil company SOCAR stated that purchasing of seven tankers from Turkey-based Palmali Shipping Company, which would expand the transport capacity of the company's fleet in the Mediterranean and Caspian seas was completed. The deal gives the company access to two Suezmax-class tankers with deadweight of 140,000 tons each and five Aframax-class tankers with 80,000 tons capacity each.
- Kazakhstan's Lokomotiv Kurastyru Zauyty reported that next consignment of diesel locomotives was delivered to Azerbaijan. Currently, 10 locomotives produced in Kazakhstan are running along the railways of Azerbaijan. Moreover, Kazakhstan's diesel locomotives are already successfully operated on the railways of Kyrgyzstan, Tajikistan, Ukraine and Turkmenistan. Azerbaijan Railways and the Kazakh Lokomotiv Kurastyru Zauyty signed an agreement on the supply of locomotives to Azerbaijan in August 2015.
- The President of Ukraine, Pyotr Poroshenko, imposed sanctions against five banks with the Russian state capital operating in the Ukrainian financial sector. Restrictions are introduced for a year against Sberbank, VS Bank, Prominvestbank, VTB Bank and BM Bank.
- The Foreign Minister of Russia, Sergey Lavrov, stated that the country channeled \$6.7 billion in financial aid to the Central Asian countries over the past decade. Financial aid provided through the UN comes to more than \$570 million, while financial aid through the World Bank and other organizations exceeds \$1.3 billion. Moreover, financial aid through the Eurasian Economic Union comes to more than

\$592.3 million. It was also noted that bilateral financial aid that does not have to be reimbursed comes to more than \$4 billion.

- On the sidelines of the Islamic Finance News Forum (IFN) held in Astana, the Islamic Corporation for the Development of the Private Sector (ICD) and the Tajikistani private bank SOHIBCORBANK signed the MoU aimed to sets the stage for jointly introducing Islamic banking products in Tajikistan. The parties agreed to strengthen cooperation at the strategic and technical levels on the basis of complementarity, comparative advantages and mutual benefit.
- The Ministry of National Economy of Kazakhstan reported that the average nominal income per capita in Kazakhstan amounted to 72,999 tenge (\$229.65) in January 2017, which is 4.1% higher than in January 2016. It was also noted that the average monthly nominal wage in February 2017 was 137,331 tenge.

Society and Culture

- Turkmenistan announced its plans to apply to the United Nations Educational, Scientific and Cultural Organization (UNESCO) to include Akhal-Teke horses in the World Heritage List. The President of Turkmenistan, Gurbanguly Berdimuhamedov, gave instructions to prepare a catalog of the Akhal-Teke horses with the prospect of their international registration.
- During the First Baku International Water Week organized by the Government of Azerbaijan with the participation of the World Water Council, the participants explored practical solutions to various global water issues addressing major issues such as clean and sustainable water resources, access to sanitation services, environmental and ecological conditions, as well as climate change.
- The Ministry of Labor and Social Protection of Kazakhstan reported that more than 2,000 work permits for foreign citizens were issued in February 2017, while only 480 work permits were issued in January 2017. It was also noted that the number of permits issued by the local executive authorities to employers for attracting foreign labor force increased from 210 in January 2017 to 476 in February 2017.
- The Chief Ecological Inspector for the Atyrau region of Kazakhstan, Kanat Kalmukhan, reported that an oil producing company Tengizchevroil was fined in amount of 4.8 billion tenge (\$15.35 million) for the accidental discharge of 33.393 million cubic meters of gas in atmosphere. It was noted that the gas-flaring incident carried out without a special permission was registered in January-February 2016.