THE HISTORY OF THE OIL INDUSTRY IN KAZAKHSTAN: FROM THE ORIGINS TO THE PRESENT DAY

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Abstract: Despite the fact that people have known about oil since ancient times, active oil production began only in the late 19th and the early 20th centuries. Kazakhstan was one of the first countries that started the geographical and hydrogeological area survey in order to find oil fields. Currently, Kazakhstan has large-scale oil deposits and is involved in active oil production and exports. However, the history of the country's oil industry covers only a little more than 100 years. The purpose of this article is to examine the key historical stages, which helped the country become one of the world's oil producers in such a short time. The paper investigates the background of the oil industry, analyzes the main stages of its development and gives a brief assessment of the current state of the oil industry in the Republic of Kazakhstan.

Keywords: Oil production, oil fields, Kazakhstan, oil industry history.

INTRODUCTION

Scientists have long established that oil has been known since the period 6000-4000 BC. Uses of petroleum were mentioned in the Old Testament of the Bible (Crain, 2004). In ancient history, pitch (a heavy, viscous petroleum) was used for ancient Egyptian chariot axle grease. Early Chinese history reports the first use of natural gas that seeped from the ground; a simple pipeline made of hollowed bamboo poles transported the gas a short distance where it fueled a fire used to boil water (Fagan, 1991). Until the second half of the 19th century, oil was used in its natural form. It was only after it became known that oil could be used to make kerosene, which got widespread use by the middle of the 19th century, that the oil production field began to develop.

According to OPEK Annual Statistical Bulletin (2016), in 2015, world crude oil production increased by 1.75 million barrels/day (b/d), or 2.4 per cent, as compared to 2014, marking the second highest increase within the last ten years. Currently, oil remains one of the most important minerals. Moreover, with the development of the chemical industry, the need for oil production is increasing.

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Among the countries that are engaged in active oil production are Saudi Arabia, Russia, the US and China (OPEK Annual Statistical Bulletin (2016). Kazakhstan is also among the countries that produce oil. According to preliminary forecasts, oil production in the Republic of Kazakhstan should reach 77 million tons by the end of 2016 (Forbes, 2016). As compared with the positions of other countries in this field, Kazakhstan lags behind, however, according to preliminary estimates, oil reserves in the country are about 1.8% of world reserves (BP Statistical Review of World Energy, 2016). Undoubtedly, this points to the obvious potential of the country in the field of oil production and the prospects for further development in this industry. The purpose of this work is to study the history of the oil industry in Kazakhstan from the very origins to the present day.

The main objectives of the study include the following:

- to briefly analyze historical, geological and geographical conditions for the development of the oil industry in Kazakhstan;
- to consider the main development stages of the oil industry in Kazakhstan;
- to examine the current main trends in the field of oil production and to give a brief overview of future prospects.

To achieve the objectives of the study, it is expedient to use complementary methods that reflect a comprehensive approach to solving the problem and include historical, systematic and comparative methods. The research also used materials from different areas of knowledge – history, geography, geology, economics and political science.

BACKGROUND AND EARLY DEVELOPMENT OF THE OIL INDUSTRY IN THE REPUBLIC OF KAZAKHSTAN

The second half of the 19th century was marked by the rapid flow of the industrial revolution, which took a global scale. The socio-political model of society underwent fundamental changes. A sharp increase in labor productivity led to an increase in the standard of living, started the process of urbanization and marked the start of production at a new, industrial, level. All these factors have contributed to scientific and technical progress, the development of new trends in the field of mechanical engineering and the massive emergence of modernized means of production. It was mechanical engineers who faced one of the major problems - the search for new types of fuel. It appeared to be gasoline (Cherdabayev, 2011).

This discovery made it possible to take a fresh look at oil. Within a short period of time a real boom started in the exploration and development of oil fields. In 1859 in Pennsylvania (the US), Edwin Drake, who led the world's first oil company "Seneka Oil of Connecticut", developed the first oil gusher. Then, one

after another, in various states new oil fields began to emerge - Kentucky, Ohio, California, Colorado, etc. In 1900, 15 states actively participated in oil production, and the total number of extracted oil was 8.6 million tons.

Such success in the field of oil production in the United States marked the beginning of the struggle for world oil domination (Cherdabayev, 2011) and the development of Caspian oil fields. Kazakhstan was also within the field of view of those who wanted to get rich and famous for the discovery of new oil deposits.

The fact that the Kazakh lands have oil resources has been known for a long time. This is evidenced by the historical names of Kazakh rivers, tracts, sources and other irrigation and hydrographic objects: Maytobe (an oil hill), Karaarna (a black track), Karachungul (a black depression), Karamay (black oil) and others (Oil Encyclopedia of Kazakhstan, 2005). Kazakh doctor Matenkozha treated skin diseases of humans and animals with the help of black oil emerging from beneath the sands in the lower reaches of the River Oyyl (Oil Encyclopedia of Kazakhstan, 2005).

It was also repeatedly stated by Russian military men, scientists and travelers. The reference to the oil-bearing capacity of the Kazakh lands can be seen in the notes of A. Bekovich-Cherkasskiy, who in the course of the Khivan campaign of 1717 crossed the territory of Atyrau region. Such researchers as I. Lepikhin, P. Rychkov, P. Pallas, S. Gmelin and N. Severtsev also mentioned about the oil fields of Kazakhstan in their notes (Oil Encyclopedia of Kazakhstan, 2005).

By the second half of the 19th century, the foundation of geological research in Kazakhstan was laid. There began to appear the first information about potential oil fields and to form the natural-climatic picture of the region. In 1832, there was a major expedition led by G. Karelin on studying the northeastern part of the Caspian Sea. In 1846, the expedition by M. Ivanin discovered the first signs of oil shows on the island of Mangystau. Of great importance was the expedition in 1982 in Western Kazakhstan headed by S. Nikitin. This expedition first used drilling rigs for the research of oil seeps in Karachungul, Dossor and Iskene. These findings attracted the public's attention to the oil potential of the region and urged entrepreneurs to submit the first applications for the exploration of individual sections.

As a result of expeditions, it became clear that oil production will not be an easy thing for two main reasons:

First, back then Kazakhstan was rather a backward country, experiencing the political and economic crisis. In fact, the Kazakh steppes were the province of the Russian Empire. Most of the population fell into the category of "foreigners", which greatly limited their civil and political rights. The economy was in decline and increasingly dependent on such

- primitive activities as cattle breeding, fishing, hunting, haying and salt mining (Kuzembayuly & Abil, 2006). There could be no question of the developed settlements and means of communication.
- Second, people were faced with harsh climatic conditions and the lack of fresh water (see Figure 2). Despite being located in the temperate climatic zone, Kazakhstan is characterized by a large amplitude between winter and summer temperatures (from +40°C to -50°C). Different regions of the country are characterized by such phenomena as wildfires, dust storms, drought, and blizzards. In summer, Kazakhstan is experiencing an acute shortage of water resources.

Yurt was the only sign of civilization among the steppe, desert and mountain ranges of the country.

The combination of these two factors greatly complicated the activity of pioneering explorers in the field of oil production.

THE MAIN DEVELOPMENT STAGES OF THE OIL INDUSTRY IN KAZAKHSTAN

By the beginning of the 19th century, Kazakhstan was under the control of the Russian Empire. This was the period of active industrialization and creation of the first oil fields under the leadership of Russian entrepreneurs, who bought mineral deposits for a mere song. For example, Kazakh bais in the 50's sold the Karaganda coal deposit for 255 rubles to merchant Ushakov, the Saransk deposit – for 114, and the Dzhezkazgan copper deposit – for 100 rubles (Kuzembayuly & Abil, 2006). Copper and coal mines were developed, silver-lead and copper-smelting plants were built, and gold mining was developing rapidly.

The news about huge oil reserves in the Kazakh lands stirred the minds of hunters for profit. There began to appear dozens of associations, partnerships and companies for oil search and exploration: "Emba", "Ural oil", "Nobel Brothers", the Ural-Caspian Oil Corporation (UCOC) and others.

In 1894, the St. Petersburg group of entrepreneurs began to actively explore oil in Dossor, Karaton, Karachungul and Iskene. The S. Leman Company, which had the concession of the company "Emba-Caspian" at its disposal, drilled 21 wells with the depth ranging from 38 to 275 m in Karachungul (Oil Encyclopedia of Kazakhstan, 2005). In November 1899 from 40 meter depths of Karachungul oil field the first oil in the territory of Kazakhstan was produced by fountain. Day to day on Karachungul oilfield started to produce 12-25 tons (Muktar, 2011). This moment is considered the starting point for the history of the oil industry in Kazakhstan.

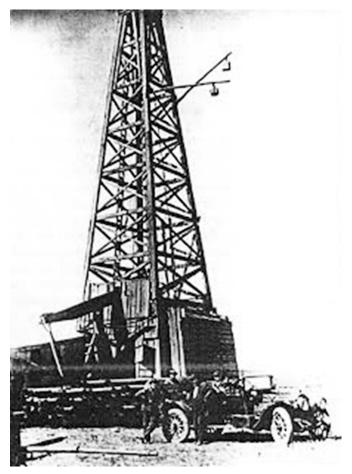


Figure 1: The drilling rig of the company "Standard Oil" in 1898 (Bakhgazin, Vereshchagin & Furman, 2003)

The opening of the first oil deposit caused a rapid stir among Russian industrialists. However, they faced a number of difficulties that inhibited the development of oil production. Firstly, exploration work was insufficient; secondly, all the activities were carried out haphazardly, which brought more losses than profits. In addition, the barbaric drilling and development of discovered fields was conducted without compliance with any occupational health and safety rules. In connection with this, for a long time oil production was carried out at a fairly slow pace, and there was a need to attract foreign companies with the aim of investing in Kazakhstan's oil industry.

It should also be mentioned about terrible working conditions prevailing in the oil fields. L.E. Fayn, S.T. Kozhabayev, K.E. Temirgaliyev described the situation

as follows: "The labor of oil producers in pre-revolutionary Emba was unbearably exhausting. All the hard work on drilling and oil production was done by hand; the working day lasted 10-12 hours, and there was no labor protection. This explains the high percentage of accidents in the oil industry. For example, in 1915, accidents in local oil companies were 5 times more than in other oil regions" (Fain, Temirgaliyev & Kozhabayev, 1957). Given the fact that the indigenous population were allowed to do only low-skilled work, their condition was deplorable. The absence of any medical assistance and minimum acceptable sanitary and living conditions made the mortality rate of workers incredibly high.



Figure 2: Excavations around the flowing well (Bakhgazin, Vereshchagin & Furman, 2003)

Foreign funding, as expected, contributed to the improvement of the situation: in the period from 1906 to 1909, four oil flows were discovered in different wells in

Karaton. The Leman Company, with the financial support of British businessmen, organized a deep drilling in Dossor. In April 1911, a powerful oil gusher was obtained from the well No. 3. As of 1913, the Ural-Caspian Oil Corporation owned five sites in Dossor, 1 site in Makat area and 1 - in Iskin. In the same year, the area of the Black River, Bleuli, Zhingildy started to be explored. By the beginning of 1914, 29 areas in Guryev district of Ural region were allocated for oil production. This number was increased by Akatkol, Satybaldy, Tegen. In 1915, the trial exploitation of Makat was launched, and the territories of Matenkozha, Mortuk and Itassay were developed, in 1916 - Keykebas and Zhusan, and in 1917 - Imankara, Dongeleksor, Zhaltyr.

By 1917, oil exploration also spread to the interstream area of the Ural-Volga (Novobogatinsk, Black River), Western Predmugodzharye (Mortyk, Itassay), the central part of the Caspian (Matenkozha) and Aktobe Cisurals (Zhusa) (Oil Encyclopedia of Kazakhstan, 2005). The total number of exploration and exploitation wells reached 166 and 117, respectively.

FORMATION OF THE KAZAKH SSR AND DEVELOPMENT OF THE OIL INDUSTRY IN THE EARLY YEARS OF SOVIET POWER

The 20s of the 20th century brought significant changes in the socio-political life of the Kazakh people. The overthrow of tsarism in Russia and the further formation of the Bolshevik regime led to the formation of the Soviet republics. On August 26, 1920 the Kyrgyz Soviet Socialist Republic was formed with the capital in Orenburg. In 1925, following some territorial changes, the Kirghiz SSR was renamed the Kazak ASSR (see Figure 3). Only in 1936 it was finally renamed the Kazakh ASSR and received the status of a union republic.

Undoubtedly, all of these processes could not but affect the industry of Kazakhstan. Whereas until the 1920s there was an active development of many spheres, as a result of social and political disturbances, most industries went into decline. Such large mining enterprises as Ridder, Spassky plant, Karaganda and Ekibastuz mines were inactive. The exception was only the light and food industries, which slightly lowered the rate of development.

Despite the deplorable economic situation, the oil industry could keep the leading position. As envisioned by Moscow authorities, who directly dictated the internal politics of the country, Kazakhstan should have become one of the main areas of rapid industrialization (Kuzembayuly & Abil, 2006).

In 1920, Vladimir Lenin initiated the issue of wide industrial development of the Ural-Emba district and started the construction of the Alexandrov Gay-Emba railway with the aim to connect the remote Emba region with the center of the country. The construction of the railway is a prerequisite for creating a wide industrial turn of the powerful oil industry (Sagingaliev, 2002).

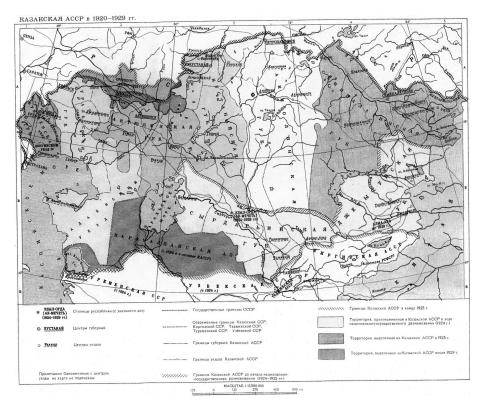


Figure 3: The territory of the Kazakh SSR in 1920-1929. Source: Geodesy and Cartography Management at the Council of People's Commissars of the Kazakh SSR

In 1925, F. Goloshchekin, first secretary of the Kazakh Regional Committee of the AUCP(b), lobbied for Stalin's idea to establish the mining industry and rail transport for the export of raw materials in the Republic.

At a meeting of the Supreme Council of National Economy in 1924, the report "The Ural-Emba district and perspectives of its development" stated: "... the two fields - Dossor and Makat - are a threshold of the entire oil industry of the region". The targeted exploration of oil deposits was carried out in 1924-1927. As a result, six promising zones were identified: Dossor, South, Novobogatinsk, Iman-Kar, Tersakan and Temir (Oil Encyclopedia of Kazakhstan, 2005).

With the advent of Soviet power, all small domestic and foreign companies and enterprises, involved in the development of oil fields and oil production, were eliminated in Kazakhstan. They were replaced by the trusts, endowed with the right to conduct exploration and production activities (Oil Encyclopedia of Kazakhstan, 2005). In 1922, the "Embaneft" trust was formed, which became the monopolist of exploitation and exploration drilling. It carried out the development of Dossor

and Makat (see Figure 4) as well as the search for oil in Bayshonase in 1930, in Sagyz and Iskene – in 1931 and 1932, respectively. By 1927, "Embaneft" began using deep drifts and compressors for oil production. In addition, for the first time in the USSR, rotary drilling was used in Emba, which increased the average depth of wells from 196.7 m to 637.7 m (Oil Encyclopedia of Kazakhstan, 2005). In 1932, the ultradeep drilling equipment was used in Dossor and Makat, which was a unique event for both the Soviet Union and Europe. At the same time, the depth of wells reached 2,800 m.



Figure 4: A general view of the oil field Dossor (30s of the 20th century) (English Russia, 2011)

One of the positive aspects was the improvement of working conditions of the local population. Since the beginning of the revolutionary movement, the workers of oil fields had been on strike and demanded that the new government establish an 8-hour working day. According to the recollections of one of the workers, "having found out about the overthrow of tsarism, we, the workers of Dossor, the following day, as soon as our hateful master Spirin appeared on the site, piled him into a wheelbarrow, rolled over to the administration and overturned along with a wheelbarrow under the common workers' cries "the end has come to your mockery of us!" (Fain, Temirgaliyev & Kozhabayev, 1957).

The new development stage of the industry refers to 1925-1926, when the oil field workers of the "Embaneft" trust were given a task to carry out exploration activities in the northern areas of Aktobe region for 5-7 years. To accomplish this task, the "Aktobenefterazvedka" trust was created, later renamed "Kaznefterazvedka".

Another important step in the oil field development was the resolution of the Council of People's Commissars of the Kazakh SSR No.86 "On measures to develop Embaneft" of January 29, 1934. According to the resolution, "Embaneft" undertook to commission the oil field of Kosshagyl and Iskene as well as to build electric power plants, oil storage facilities and water pipelines near them. Particular emphasis was put on the construction of the railway Makat-Kosshagyl and a branch to Iskene (Oil Encyclopedia of Kazakhstan, 2005).

Before the Second World War in 1930, another oil well was opened in the salt dome of Shubarkuduk, and in addition to "Embaneft", one more trust was created - "Aktobneft", later called "Aktobnefterazvedka".

OIL PRODUCTION IN KAZAKHSTAN DURING THE YEARS OF WORLD WAR II

The war years were particularly severe for Kazakhstan. According to historians, 25% of the population was mobilized, and more than 70% of the male population aged 15 to 50 were off at the front (National Digital History of Kazakhstan, 2013). In addition, most of the soldiers of the Kazakh SSR were at the heart of the war: in the Battle of Moscow and Stalingrad, the Battle of Kursk.

From the first days of the war, the development of the economy in Kazakhstan was dictated by the military mobilization needs. At the Plenum of the CC CP(b) of Kazakhstan on 25-26 June 1941, the basic plans were adopted for the transfer of the country's domestic industry to the war economy (Pavlenko, 2003). The main objectives were the release of weapons, ammunition and subsistence supplies to the front.

Undoubtedly, the war also affected the country's oil industry sector. In 1942, such important cities-oil suppliers as Maykop and Grozny were occupied by German troops. Soviet rulers reached a decision to force oil production in Kazakhstan.

Working shifts again increased to 12-13 hours a week. Most of the work fell on the shoulders of women. According to the figures cited in the work by V. Pavlenko (2003), the Emba oil fields in Kazakhstan involved about 4.7 thousand working women, or 42.5% of the total number of workers. Oil production and drilling activities involved 1,407 Kazakhs, 201 of them were senior operators, assistant operators, assistant drillers (Pavlenko, 2003). One of the most famous women-oil workers was operator of the Baychunas oil field Balginym Dospayeva. The youth also took an active part in oil production: young oil workers organized 66 teams in the Emba oil fields (1943), and by 1945 their number reached 261.

In order to increase performance, new oil production technology was applied, namely: forced drainage, additional hole perforation, low-bit horizon torpedoing, joint exploitation of multiple horizons, introduction of exploitation secondary methods, etc. In the period of 1941-1945, oil production amounted to about 800 thousand tons per year (Oil Encyclopedia of Kazakhstan, 2005).

Despite the war, geological studies were conducted on salt domes - Narmondanak, Kuzbak, Kyzylzhar, Munaily, Koshkar, Dyuseke. A number of industrial oil deposits were found in Munaily, Zholdybay, Narmondanak and Kulsary. During the war, the oil fields of Koshkar-Sagiz were brought into production (Ayzenshtadt & Antonov, 1963); the steam turbine power plant was built in Kamyskula near Kulsary and the Guryev oil refinery was put into operation, which became the first-born of a new branch of the Caspian region's economy.

FROM THE POST-WAR DEVASTATION TO THE PRESENT DAY: THE KAZAKH OIL FIELD FROM 1945 TO 2016

In the postwar period, Kazakhstan's oil industry was on the rise. These years were marked by the discovery of new oil fields: Munaily and South Toles (1947), Karaton (1948), Toles (1950), Karsak (1951). Their exploitation contributed to a sharp increase in oil production – up to 1.5 million tons of oil per year were produced (Oil Encyclopedia of Kazakhstan, 2005). An important role was played by the discovery of powerful oil fields in Kulsary (Kazakhstan's industry for 40 years, 1957).

The Soviet government was interested in improving the rate of drilling and construction works. In order to realize these objectives, special trusts were established: "Kazakhstanneftestroy", "Kazakhstannefterazvedka", "Aktyubnefterazvedka" and the Kazakh branch of the National Geographic trust.

In 1959-1960, large oil deposits were identified in Kenkiyak (Aktobe region) and Prorva. In 1962, new Martyshi and Southwest Kamyshitoviy fields were discovered; in 1964 - Zhanatalap; in 1969 - Gran and Oktyabrskoye. In 1968, oil production in Emba reached 2 million tons, and by 1972 – 3 million tons.

In the 60s of the 20th century, oil producers started to introduce turbine drilling, significantly expanded the fleet of drilling rigs and improved their technical characteristics, which allowed them to complete wells at the depth of up to 4 thousand m.

Exploration work was conducted with the aim of discovering new oil- and gas-bearing regions in the country. The Mangystau peninsula turned out to be under scrutiny. To carry out intelligence work in this area, a new trust called "Mangyshlakneftegazrazvedka" (1957) was created. As a result of exploration, a major oil- and gas-bearing basin was opened here - South Mangystau (Oil Encyclopedia of Kazakhstan, 2005). In January 1961, the first gas gusher was received in the Uzen field, and in July, an oil gusher appeared in Zhetybai,

which had produced over a million liters of fluid per day (Nursultan, 2007). The Production Association "Mangyshlakneft" was founded in 1964 for the commercial development of the territory of South Mangystau.

In the following ten years, such oil fields as East Zhetybay, Karanmandybas, Tasbolat and Tenge were discovered and put into operation (Oil Encyclopedia of Kazakhstan, 2005). Exploration was conducted in more than 20 locations: East Zhetybay, Kurganbay, Kokunbay, Karasyaz-Taspas, Dung, Cape Peschaniy, Tarly, Zhag, Karagiy (Nursultan, 2007).

By 1970, 688 oil wells and 57 pressure wells were drilled and put into operation, 23 million tons of oil were produced, and 57 group settings were built and put into operation. Commercial development involved such oil fields as Kalamkas, Zhetybay, Asar, South Zhetybay, East Zhetybay, Oymasha, North Karagiye, Alatobe and Burmasha; trial exploitation – Ayrantakyr, North Akkar and Pridorozhnoye (Nursultan, 2007). In the '70s, the oil exploration activity took place on the Buzachi Peninsula and ended with the discovery of such large-scale deposits as Karazhambas, North Buzachi and Kalamkas (Oil Encyclopedia of Kazakhstan, 2005).

An important event was the drilling of ultra-deep Aralsor and Biikzhal wells about 7,000 meters deep. In 1972, the pre-salt fields of Zhanazhol as well as the oil and gas condensate deposits of Karashyganak were discovered. In 1974, the field of Karazhanbas, noted for shallow oil field, was discovered. By the '80s, drilling operations of the giant field Tengiz, which was included in the world's five largest oil fields, were completed.

The 1970-90s were very productive for the oil industry of Kazakhstan. The search for oil and gas moved to the area of the Caspian Depression, to Ustyurt, Buzachi and the Aryskum basin of the South Turgay Depression. In the area of the Northern Caspian a series of small fields were discovered: Teplovskoye, Tokarevskoye, Chinarevskoye, Kamenskoye, Daryinskoye (Oil Encyclopedia of Kazakhstan, 2005). Southern Kazakhstan was also not neglected – a gas-bearing basin Shu-Sarysu was identified there. During this period, sedimentary basins of the southern regions of Kazakhstan were also studied - Aral, Syrdaria, South Turgay. In 1984, in the south of the Turgay basin it was possible to discover a large oil and gas field Kumkol, and a number of smaller fields - Maybulak, South Kumkol, Aryskum, Konys, South and Northwest Konys, Kyzylkiya, Nuraly, Ashysay, Akshabulak, Bektas and others (Oil Encyclopedia of Kazakhstan, 2005).

The beginning of the 1980s was also marked by a major event in the oil industry sector: a huge oil field was found on the southern edge of the Caspian Depression - Tengiz.

The 1990s are characterized by the beginning of the development of oil deposits in the Caspian Sea. In Soviet times, research work was conducted in its territory, which helped to identify large structures corresponding to the current fields of Kashagan, Tsentralnoye, Kurmangazy, South Zhambay. In 1993, the Kazakh government signed a number of international agreements with the representatives of Shell (the Netherlands), Statoil (Norway), Mobil (the US), BP (the UK), and others. Their purpose was to organize the international consortium, which should have included "Kazakhstancaspishelf" (Oil Encyclopedia of Kazakhstan, 2005). From 1994 to 1999, active seismic, environmental and infrastructure studies were carried out, and the exploratory drilling was initiated. In 2000, a new oil field was discovered in Eastern Kashagan. This was followed by the identification of others - West Kashagan, Kalamkas-sea, Kayran, Aktoty and Southwest Kashagan (Oil Encyclopedia of Kazakhstan, 2005).

The production rate of crude oil and gas condensate was 26.6 million tons in 1991. In 2014, this figure amounted to 80.8 million tons (RFCA Ratings, 2015). Currently, their share in the export structure of the Republic of Kazakhstan is about 70%. In recent years, the number of produced oil remains high (see Figure 5).

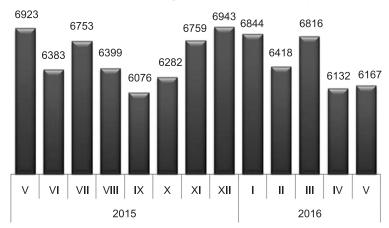


Figure 5: A comparative diagram of oil production in the Republic of Kazakhstan by months for 2015-2016 (Information-analytical center of oil and gas, 2016)

In 2017-2019, Kazakhstan's government plans to increase oil production due to the start of oil extraction in the Kashagan field as well as through the development of Tengiz and Karachaganak fields in the future.

Thus, one can conclude that for 117 years of active development of the oil industry, Kazakhstan has taken a strong position among the leading countries for the production and export of such valuable natural resource as oil, and in the short term, this industry will experience sustainable development.

CONCLUSIONS

The history of the oil industry of Kazakhstan covers 117 years and during this period, it has passed through many stages. Its beginning was difficult and unhurried: harsh

climatic and difficult socio-economic conditions hampered the development of the oil industry. However, year after year, the oil industry has developed, despite a number of socio-political changes both in Kazakhstan and abroad. Moreover, even during the Second World War, Kazakhstan has managed to retain a high rate of oil production and to achieve an increase of these indicators. From the 50s of the last century to the present day, the oil industry has remained one of the priority sectors of Kazakhstan's economy. All these years intelligence work has been regularly carried out on finding and developing oil- and gas-bearing areas. By now, more than 200 oil, gas, and oil-gas fields have been discovered. Three of them – Kashagan, Tengiz, Karashyganak – are the largest fields not only in Kazakhstan but also in the world and, of course, are a world treasure.

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