

THE LAND OF THE NAPHTHA FOUNTAIN

by
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Before pipelines were developed in this century, oil reached the cities of the Levant, Persia and Central Asia from the western shore of the Caspian Sea by camel caravan, horse-drawn *arba* and ship. By 1903, the Baku region supplied half the world's oil, and it was here that the Nobel Brothers Petroleum company modernized refining principles that had been developed earlier in the Arab world.

Since the collapse of the Soviet Union in 1991, the undeveloped or underdeveloped oil resources of the new nations that were formerly Soviet republics have been much in the news. But that news is in fact very old. The existence of rich oil resources in the region from the western slopes of the Caspian Sea basin to the mountains of Afghanistan has been known for millennia.

The ancient Greeks and Romans could not help but notice on their travels the spectacular "**eternal fires**" that dotted the landscape all the way from Baku, in present-day Azerbaijan, to Persia and Turkmenia. Legend has it that one of the servants of Alexander the Great accidentally struck oil while trying to pitch a tent for his master in Turkmenia. According to the Roman historian **Pliny** the Elder, Alexander the Great observed burning natural oil wells in Bactria, which comprised today's northern Afghanistan and parts of Uzbekistan and Tajikistan.

The land from northwestern Iran to Azerbaijan was known in ancient times as Media, where the most numerous "eternal fires," or burning oil seeps, probably inspired Zoroastrianism, the religion of the Persians that dates from roughly 600 BC. "The Pillars of Fire" near Baku became a center of worship and pilgrimage. The title of Zoroastrian priests was *athravan*, or "keeper of the fire." Even the word Azerbaijan itself is rooted in the ancient Persian *aderbadagan*, "garden of fire."

Neither Romans nor Persians, however, left us records of the trade in oil that must have existed in the region in ancient times. Such records were only written centuries later by **the Arabs**, who conquered the Caucasus within only 26 years of the death of the Prophet Muhammad in 632 and who, **by 751**, had become Masters of Bukhara, Samarkand, Tashkent and Kashgar. The newly Muslim lands then included all the world's known, major oil-producing regions outside China. Sargis Tmogveli, a Georgian scholar, quotes on that high point of caliphal power:

Thou art master of Eran and T'hran;
From China to Qirwan,
All is thine and under thy command.

In the Caucasus, the city of Tiflis - now Tblisi, the capital of Georgia - grew into a center of trade between the Muslim state and northern Europe. Gold and silver coins have been found in the city that date to the ninth century and were minted in Baghdad, Muhammadiyyah (in Armenia), Kufa, Basra, Aran and Balkh, as well as in Africa and India. In addition, according to the Arab geographer al-Maqdisi, Georgia had become an important exporter of naphtha and bitumen to Baghdad. Beyond that, the region was also strategically important to the caliphate: It was a buffer province facing northern Byzantium.

As the Abbasid Caliphate weakened after the destruction of Baghdad in 813 by troops armed with

incendiary grenades, a secessionist movement coalesced on the empire's northwestern fringes.

In 843, the Arab amir of Georgia, Ishaq ibn Isma'il, withheld his annual payment of tribute to Baghdad, and declared his independence from the caliph. To quell the rebellion, Caliph al-Mutawakkil dispatched a punitive expedition led by a Turk named Bugha al-Kabir al-Sharabi. From northern Iraq, Bugha crossed Armenia and marched directly on Tiflis, which by then had a population of approximately 50,000. On his arrival on a hill overlooking the city, Bugha was apparently surprised to find that the houses were built of wood - unlike most cities of the Middle East. Taking a soldier's advantage of his observation, he warned Tiflis to surrender or risk a fire the like of which "exists only in hell." When the rebels refused, Bugha ordered his *naffatun*, or naphtha troops, to burn the city.

So complete was the resulting destruction that it had political effects, ending the city's chances of becoming the capital of an Islamic state in the Caucasus. At such a distance from Baghdad, the Abbasids chose not to rebuild the city extensively, and as a result their influence in the region waned.

The traveling merchant from the Venetian Republic, **Marco Polo**, was the only writer of that early era to leave us a description of where the oil fields of Georgia might have been. On his way back from China around **1291** he traveled north from Mosul, in Iraq, into Armenia, to a port city on the Black Sea. Speaking of one of the wonders he encountered there he wrote,

To the north (of Armenia) lies Georgia, near the confines of which there is a fountain of oil which discharges so great quantity as to furnish loads for many camels. The use made of it is not for the purpose of food, but as an unguent for the cure of cutaneous distempers in men and Cattle, as well as other complaints, and it is also good for burning. In the surrounding country no other (oil) is used in their lamps, and people come from distant parts to procure it.

Bugha, centuries earlier, may have been one of those who stopped by this gusher to supply himself with naphtha for his incendiary campaign against Tiflis. Even today, Georgia has an important oil field that fits Marco's description perfectly: The Patara-Mirzaani field, almost across the border from Azerbaijan and not very far from the present border with Armenia. Its wells were in fact drilled near ancient oil "fountains," which leads us to think that one of them may well be the one that Marco Polo - and al-Maqdisi - were referring to.

Nevertheless, scholars in the past have often misinterpreted Marco Polo's words as a reference to the **gusher of Baku**, whose volume and notoriety outstripped any other in ancient times. In fact, if there was as an oil-boom town in the Middle Ages, Baku, today the capital of the Republic of Azerbaijan, was it. Built on the Apsheron Peninsula on the Caspian Sea, and set against the fertile slopes of the Caucasus Mountains to the west, Baku, with its forests and lush, flowering gardens, should have been a haven for poets and romantics. But since the time of Alexander the Great, the city has been known for its fiery wells and coveted for its abundant oil.

As early as 642, the Arabs made an attempt on Azerbaijan under the command of al-Mughira ibn Shu'ba, who served Caliph 'Umar as governor of Kufa. The region remained under loose Arab rule until the end of the ninth century, with allegiance first to the central government of the Umayyad Dynasty in Damascus and then to the Abbasids in Baghdad. To help him fund the construction of Baghdad, the new capital of the Muslim world, Caliph al-Mansur imposed a special "**naphtha tax**" on Baku; the middle of the eighth century thus marked the first appearance of a state tax on petroleum - a levy with which we are all still familiar today.

Baku's oil and the extraordinary sight of its "eternal fires" caught the eyes of many Arab geographers, chief among them [al-Mas'udi](#), born in Baghdad in the 10th century. No one in his time or before had written more about oil than he did. He invented the word **atam** to describe a burning well, and he observed oil wells in Sicily, Oman, the Hadramawt in today's Yemen, Iraq, Persia, Turkmenistan, Tashkent, India and on the island of Sumatra. In Baku, however, al-Mas'udi was so astonished by the amount of oil produced that he called the region *bilad al-nafta*, "the land of the naphtha fountain." He spent much time exploring and measuring the Caspian Sea as well as studying the people who lived on its shores. Baku, he wrote,

is a naphtha fountain in the Kingdom of Shirwan, beyond the Golden Hordes, from which white naphtha is obtained. There are also burning wells whereby fire emerges from the ground. Across from the naphtha fountain of Baku are islands which contain such firewells. These are visible at night from considerable distances.

In the Middle Ages, Baku probably counted only 10,000 to 15,000 inhabitants, most of whom, in one way or another, made their living from the extraction of oil or oil shale and the transport of oil by ship, cart or barrel-laden camel. Because of its excellent harbor, Baku served as the principal export center for both oil and oil shale from Central Asia to the markets of Persia, the Middle East and perhaps, via the Volga River, even parts of Europe. Al-Mas'udi gives a hint of this tanker traffic:

On the shores of the Caspian Sea are [towns]...busy with shipping to and from the city of Amol and the mouth of the Volga River. All of [them] trade heavily with Baku, which is especially famous for the shipping of the mineral white naphtha.

Some two centuries later, another geographer, [Yaqut al-Hamawi](#), recorded the financial value of Baku's resource. In *The Book of All Lands*, he noted that **Baku** had two great oil fields; one produced oil "the color of mercury" and the other a darker grade. He recorded the value of the output from the two fields as 2000 silver dirhams a day - equivalent to roughly 800 grams (28 ounces) of gold, or four million dollars a year at today's prices. Such an enormous sum was enough to qualify Baku as one of the wealthiest cities in the Muslim realm.

To the east, across the Caspian from Baku, lay the vast expanse of Central Asia to Tashkent, known as Shash to the Muslims of the Middle Ages. **Conquered by the Arab Ziyad ibn Salih in 751**, **Tashkent** became the largest and most important city on Islam's eastern flank, a distinction that it retains even today as the capital of the Uzbek Republic, with a population of more than 1.5 million. To the Arabs, Tashkent was famed for its fruits and gardens, watered by the Chirchik River, a tributary of the great Syr Darya. South of the city, however, lay a mountain called Asbara - now Isfara - that was renowned for its many oil fountains and vast reserves of shale. "In this area," wrote the scholar **al-Qazwini** in the 13th century,

there is a mountain whose rocks are black and burn like charcoal. They are sold by the load at a price of one or two loads per dirham. When this rock burns, it produces an intensely white ash useful in whitening clothes.

To the early Muslims, Central Asia - and especially the eastern mountains of today's Tajikistan - was also the source of an extraordinary soft rock that could be torn apart into fibers, much like certain kinds of cheese. For centuries before the arrival of the Arabs, the Central Asians had woven these fibers into blankets and scarves that they called "salamander skins," after a widespread legend, originally perhaps from northern China, about a snow-white dragon, called a salamander, that lived high in the mountains and could endure fire without the slightest harm. The Persian king Yezdgerid I

is said to have had a handkerchief cut from the skin of this mythical animal; he dazzled friends and foes alike by throwing it into the fire until it glowed red, and then retrieving it not only unburned but clean and without stains.

In the days of Harun al-Rashid, at the height of Abbasid power, the Arabs fashioned this coveted asbestos into fireproof uniforms and padding for the naphtha troops and their horses. They called the substance *hajar al-fatila* or "wick-stone" because, as one writer from Damascus put it, "it is made into indestructible wicks for lanterns, for although the oil burns off the wicks themselves remain intact."

Central Asia, and soon Baku and most of the Middle East, fell to the **Mongol invasions** of the 12th century. Although in 1509, following a period of renaissance in Persia, Baku became a Persian possession called the Baku Khanate, the influence of **Russia** began to grow in the region after the Mongol devastations.

This too was not entirely new. **Al-Mas'udi** had written of the frequent wars between the Muslims of the Caspian and the tribes of the Volga, whom he called "the Rus." In one early 10th-century account, these Rus - who were very likely the **Scandinavian Vikings** who founded Moscow - sailed down the Volga and, striking a deal with the **Khazar tribes** at the mouth of the river, entered the Caspian Sea for the first time. At once their 500-ship navy commenced devastating raids on the Muslim coastal towns.

The Muslims, wrote al-Mas'udi, were taken by surprise: They had never been attacked from the sea before. The governor of **Azerbaijan**, Ali ibn Haitham, gathered an army to pursue the enemy to the uninhabited islands that faced Baku - the ones with the "pillars of fire." After a protracted war at sea and on land, the Rus were forced to retreat to the mouth of the Volga, where the remnants of their forces were destroyed. "The Rus," wrote al-Mas'udi, "never ventured onto the Caspian again."

It was **Peter the Great** who, in the 18th century, appears to have been the first European monarch to interest himself in oil, and to foresee the enormous economic potential of petroleum. **In 1723**, he gave orders to Matushkin, one of his generals, to take Baku. Peter wrote, "Of white naphtha send one thousand poods [16,000 kilos or 36,000 pounds], or as much as possible, and find there a refining master."

What is interesting about this request is not so much the size of the shipment but that, first, the czar used the Arabic term "white naphtha," and second that he needed a refining master to accompany the petroleum - an indication that Russia had no refining masters of its own, and needed the technology of Muslim Caucasia. That this interest on the part of the czar is documented more than 135 years before the first oil well in the Western world was drilled is further evidence of the critical importance of Baku in the transfer of oil technology from East to West.

In 1735, the year Empress Anna of Russia restored Baku to Persian rule, an obscure British scientist named **Lerche** visited the oil fields and recorded his observations. Much of what he described coincided with what the Arabs had reported more than eight centuries earlier. The Englishman toured two large oil fields. The first, about 14 kilometers (nine miles) north of town, was known as the "Balakhani-Sabunchi-Romany" field, named after the three partners who operated it. About five kilometers (three miles) south of town was a slightly smaller field called Bibi-Eybat. About the former, Lerche wrote that it yielded a crude oil that, when distilled, turned into a bright yellow oil "resembling a spirit," which "readily ignited." He counted 52 productive wells in this field alone, which, he said were a great source of wealth for the ruling khan, who owned the wells but leased them to private contractors for a high fee.

Such lease-back arrangements were not new. [Cleopatra VII](#) had leased the Dead Sea oil fisheries back to the Nabataeans in 36 BC, and in Baku itself, in an exhausted petroleum pit, a stone bearing an Arabic inscription has been found that states that the pit had been worked in the year 1597, and gives the name of the operator who leased it.

Lerche described how the collected oil was first stored in deep, stone-lined ponds and then carted to Baku in large leather bags. "The oil", he said, "is used in all houses as fuel, which is why all houses are blackened by the dense smoke." Most residents purchased crude oil for lighting, he wrote, while others made use of it in their trades: Leather workers especially prized it in the oiling of horse saddles and trappings; cart makers could not do without it as a lubricant, since their alternative was the far more costly whale oil; herbalists used it in the treatment of rheumatism, skin diseases and kidney stones; and veterinarians made it into a dip to combat parasites and skin diseases in cattle and other farm animals.

Lerche estimated the combined **output** of the two fields he visited to be in the neighborhood of 3500 tons annually - on the order of 80 or 90 barrels a day. This is modest production by today's standards, but more than half of it was surplus to Baku's own needs, and thus exportable. It was **shipped** southward by sea or by camel caravan to Persia, or on special Volga River barges to the northern side of the Caucasus Mountains.

By 1813, however, Persia's hold on Baku had begun to weaken again. After a period of antagonism with Russia, Persia consented to the so-called **Gulistan Treaty**, under which the Baku Khanate was officially ceded back to the czar, and only Russia was permitted a navy on the Caspian. Inside the khanate, however, Muslim opposition to Russia continued unabated; it came to a head in 1834 when **Shaykh Shamil**, a local spiritual leader, took to the mountains with his supporters and fought the Russians fiercely for 25 years.

But Russia could not contemplate losing Baku: The **first oil well in North America** was drilled in 1858, and it became clear to the Czar that Baku was Russia's best hope for countering a potential North American monopoly on oil. Shamil was captured and killed, and by 1864 the last local rebellions were crushed.

This freed Russia's military forces to further consolidate the czar's power in the oil-rich regions east and south of the Caspian - where Peter the Great had made his presence felt a century and a half before - all the way to Tajikistan. **By 1873** the Uzbek Khanate of Kokand, including the Turkmen nomads and the cities of Kiva and Bukhara, were subdued. **By 1884** all of Tajikistan was taken. That completed Russia's conquest of the Central Asian portion of what was to become the Soviet Union, whose purposes the oil of the Caucasus and Central Asia would serve until the present decade.

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