



# 2013 Minerals Yearbook

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## TAJIKISTAN

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# THE MINERAL INDUSTRY OF TAJIKISTAN

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Tajikistan has more than 400 mineral deposits, including deposits of antimony, bismuth, fluorite, gold, lead, mercury, molybdenum, silver, tungsten, and zinc, as well as natural gas and crude petroleum. Some deposits were explored and developed; however, many remained undeveloped owing to their location and depth. In 2013, Tajikistan was the world's fifth-ranked producer of antimony and the sixth-ranked producer of mercury, accounting for 3% and 2%, respectively, compared with 1% and 2%, respectively, in 2012. In addition, in 2013, aluminum, cement, coal, crude petroleum, gold, gypsum, natural gas, salt, sand and gravel, silver, and zinc were produced in Tajikistan (Embassy of the Republic of Tajikistan in Swiss Confederation—Permanent Mission of the Republic of Tajikistan to the United Nations Office at Geneva, 2009; Guberman, 2014, 2015; Virta, 2014; George, 2015).

Historically, Tajikistan has imported natural gas from Uzbekistan, but it did not do so in 2013. Production of some commodities decreased owing to the lack of natural gas. Tajik Aluminium Company (TALCO) decreased production of aluminum, and JSC Tajikcement Ltd.'s plant completely stopped operations in 2013 (Ministry of Economic Development of the Russian Federation, 2013b, p. 2; Agency on Statistics Under the President of the Republic of Tajikistan, 2014, p. 130).

## Minerals in the National Economy

In 2013, the gross domestic product (GDP) was reported to be \$8.5 billion, and real GDP growth was 7.4%, which was slightly lower than the growth rate of 7.5% in 2012. Industrial production accounted for 13% of the GDP in 2013 compared with 14% (revised) in 2012; in nominal terms, industrial production increased by 3.9% in 2013 compared with 10.8% (revised) in 2012. Mining made up 8.9% of the value of industrial production in 2013 compared with 12.2% (revised) in 2012. In 2013, mining sector revenue increased by 43% to \$230.4 million<sup>1</sup> (TJS1.1 billion) compared with \$164 million (TJS782.9 million) in 2012, which accounted for 11.2% of total industrial sector revenue. In 2013, mining and quarrying employment increased by 7% to 12,000 employees compared with 11,200 employees in 2012 (Agency on Statistics Under the President of the Republic of Tajikistan, 2014, p. 80, 81, 85).

For infrastructure projects, Tajikistan relied heavily on foreign investments and loans from China, Iran, Russia, and international institutions; it also initiated some reforms to attract investors from abroad. In its ease of doing business rankings, the World Bank ranked Tajikistan 141 (out of 185 countries) in 2013 compared with 147 (out of 183 countries) in 2012. The improvement in ranking was attributed to implementation of such reforms as a “single-window” business registration system

<sup>1</sup>Where necessary, values have been converted from Tajikistani Somoni to U.S. dollars (US\$) at an average rate of TJS5.23=US\$1.00 for 2014 and TJS4.78=US\$1.00 for 2013.

for domestic and foreign applicants, improvements in protecting investor interests, and a simplified process for registering property (World Bank, The, 2012, p. 6; 2013, p. 3; Ministry of Economic Development of the Russian Federation, 2013a, p. 2; U.S. Department of State, 2013, p. 1).

According to the Agency on Statistics Under the President of the Republic of Tajikistan (2014), foreign direct investment (FDI) in Tajikistan totaled \$209 million in the third quarter of 2013. The leading foreign investors in the same period were China, \$93 million; Russia, \$44 million; the United States, \$25 million; Qatar, \$18 million; the United Kingdom, \$17.6 million; Turkey, \$7 million; and Iran, \$4 million (U.S. Department of State, 2013, p. 2).

## Government Policies and Programs

In 2013, presidential elections were held in Tajikistan, and the new president made some major changes in the structure of Government agencies. The Ministry of Energy and Industry was renamed the Ministry of Energy and Water Resources. In November 2013, the Ministry of Industry and New Technologies was formed and was assigned responsibility for monitoring industries, such as coal mining, construction materials, food processing, machine manufacturing, mining and metallurgy, and textiles (Ministry of Economic Development of the Russian Federation, 2013b, p. 1; Ministry of Industry and New Technologies of the Republic of Tajikistan, 2013a, c).

## Production

In 2013, cement production increased by 53%; coal and gold, 25% each; salt, 14%; silver, 13%; antimony, 10%; and mercury, 6%. Production of natural gas decreased by 64%; primary aluminum, 21%; gypsum, 14%; and crude petroleum (in terms of volume), 8%. Data on mineral production are in table 1 (CRU Group, 2013, p. 54; Ergasheva, 2013a, c; World Bulletin, 2013; Agency on Statistics Under the President of the Republic of Tajikistan, 2014, p. 90–91; Mangazeya, 2014).

## Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

## Mineral Trade

The total value of trade in 2013 was \$5.31 billion; exports totaled \$1.16 billion compared with \$1.36 billion in 2012, and imports totaled \$4.15 billion compared with \$3.78 billion in 2012. In 2013, the value of aluminum exports was about \$388.9 million, which accounted for 33% of total exports. During the first 9 months of 2013, the value of precious and semiprecious stones and metals exports decreased by 29%.

The country's main export partners were Turkey (which received 41% of Tajikistan's exports); Russia and Iran (10% each); and China, Kazakhstan, and Switzerland (7% each) (Agency on Statistics Under the President of the Republic of Tajikistan, 2014, p. 124, 126; Interfax, 2014a, p. 17).

In 2013, imports of fertilizer increased by about 50% to \$27.6 million from \$18.4 million in 2012. Imports of clays decreased by 19% to \$202.5 million from \$249.5 million, and petroleum products, by 7% to \$393.3 million from \$424.5 million. Imports of natural gas, which were valued at \$38.7 million in 2012, were halted in 2013. The main import partners were Russia (which supplied 22% of Tajikistan's imports), Kazakhstan (15%), China (15%), and the United States (5%) (Agency on Statistics Under the President of the Republic of Tajikistan, 2014, p. 130–131).

## Commodity Review

### Metals

**Aluminum.**—In 2013, Tajik Aluminium Company (TALCO) decreased aluminum production by 21% to 216,369 metric tons (t) from 272,500 t in 2012. The decrease was attributed to TALCO's need to modernize in response to intermittent supplies of raw materials, interruptions in the energy supply, and the low global prices for aluminum since 2009 (in June 2013, the price was \$1,760 per metric ton). Because of an interruption in the energy supply that was caused by the disruption of natural gas imports from Uzbekistan in 2012, the company installed gas-production plants to produce synthetic gas from coal, which the company began to use in place of natural gas. TALCO transported coal from the Fon Yagnob Mine located in Ayni District, Sughd Province, to the aluminum plant. The Government of Tajikistan awarded TALCO two additional coal deposits, the Dzhidzhikrut and the Konte deposits, for development. The Government held talks with Glencore Xstrata plc of Switzerland about modernizing TALCO's facilities and increasing its production capacity (Interfax, 2014a, p. 10; 2014b; Metal Bulletin, 2014, p. 12; Tajik Aluminium Co., 2014).

**Antimony.**—Antimony production increased by 10% to 4,675 t from 4,248 t at the Anzob mining-beneficiation complex in 2013. The complex used only 50% of its designed annual capacity of 700,000 metric tons per year (t/yr). According to the Ministry of Energy and Water Resources, Consap Commodities Inc. of the United States, which owned the Anzob complex, invested \$4.5 million for the construction of a metallurgical plant that would increase antimony metal production to 5,000 t/yr. The plant was expected to start operating in 2012; however, the startup of operations was postponed for unknown reasons (Ergasheva, 2013c).

**Gold.**—In 2013, Tajikistan's production of gold increased by 25% to 3,000 kilograms (kg) in 2013 from 2,401 kg in 2012. The increase in gold production was attributed to increased gold output by such companies as the Tajik-China Mining Co. Ltd. joint venture JV Zarafshon Gold Company LLC (ZGC) (which produced 1,700 kg in 2013), Government-owned Tilloi Tochik [Tajik Gold] (395 kg), the private company Odina (168 kg), and

the Tajik-Canada joint venture Aprelevka (517 kg) (Ergasheva, 2013a; Soyuz Zolotopromyshlennikov, 2014).

In 2013, ZGC (the country's leading gold producer) modernized the infrastructure at the Jilao and the Taror Mines and the processing system at its plant. The modernized mines and processing system were expected to be operational by July 2014. In 2013, the Chairman of Zijin Mining Group and the President of Tajikistan announced that owing to the modernization of operations, the output of gold would increase by 3.5 t/yr and the removal of copper at the mine would begin in 2014 (Zijin Mining Group Co., Ltd., 2011; 2013a; 2013b, p. 25; Sedova, 2014, p. 14).

The Aprelevka deposit consists of two mines located about 50 kilometers (km) northeast of the city of Khujand and about 70 km east of the city of Kansai. The western pit was mined, but the eastern pit remained undeveloped. The highest grade of ore was contained in quartz-carbonate veins that occur in shear zones. The lower grade ore occurs in a stockwork vein envelope that surrounds the higher grade ore. Aprelevka contracted BJ Drilling of Kyrgyzstan to begin drilling the Aprelevka East area in the fourth quarter of 2012. The drilling program was expected to continue through the second quarter of 2013; the objective of the program was to expand known gold resources (Central Asian Minerals and Resources Plc., 2011; Ministry of Industry and New Technologies of the Republic of Tajikistan, 2013b).

State-owned Tilloi Tochik conducted a geologic survey of the Sebi Kopa gold placer deposit located in the Khovaling District, Khatlon Province. The estimated reserves of the deposit contain 2,000 kg of gold. The company purchased \$400,000 worth of equipment for washing gold-bearing sands from the Magadan mechanical plant for use at the site (Ergasheva, 2013b, f; 2014c).

China Nonferrous Gold Ltd. (CNG) (formerly Kryso Resources Corp. Ltd.) held an exploration permit and a mining license for the Pakrut gold project, which consists of eight mineralized zones. Pakrut's Joint Ore Reserves Committee (JORC) code-compliant measured resources were estimated to be 18.57 million metric tons (Mt) at a grade of 3.16 g/t gold; the indicated resources were estimated to be 10.02 Mt at a grade of 2.05 g/t gold, and the inferred resources were estimated to be 41.19 Mt at a grade of 1.64 g/t gold using a cutoff grade of 0.5 g/t gold. The feasibility study on developing resources of ore-bearing zones 1 and 3 (located at the southern and northwestern areas of the project) was carried out by Beijing General Research Institute of Mining and Metallurgy, and construction of the underground mine and ore-processing plant was in progress. The production capacity of the Pakrut Mine was estimated to be 1.32 million metric tons per year (Mt/yr) of ore. The phase 1 production of 730,000 t/yr was expected to start in June 2015 (China Nonferrous Gold Ltd., 2013, p. 4; SRK Consulting China Ltd., 2013, p. ii–iii).

**Lead and Zinc.**—At the end of 2013, the Zarnisor project (formerly the Altyn-Topkan project), which was controlled by Tajik-China Co. Ltd. and sponsored by Xinjiang Tacheng International Resources Co. Ltd. of China and the Government, was suspended. The Minister of Energy and Industry and company officials discussed increasing the production capacity at the Zarnisor ore-processing plant and construction of a metallurgical plant in Sughd Province.

China Global New Technology Import and Export Co., Ltd., which was the main investor in Tajik-China Mining Co. Ltd., would invest \$500 million in the construction of the metallurgical plant. The production capacity was estimated to be 50,000 t/yr each for lead and for zinc. The processing of lead was expected to start in 2016, and the processing of zinc, in 2017. The plant was expected to employ 1,300 people (Chorshanbiyev, 2013; Kazakhstan Today, 2014; Larsson and Ericsson, 2014, p. 10).

**Silver.**—In June 2013, the Adrasman mining-beneficiation complex stopped operating owing to the decrease in the world price of silver (which had decreased to \$29 per troy ounce) and termination of investment by Konimansur LC Co., which was owned by Kazzinc Co. of Kazakhstan. The State Committee for Investment and Property Management was looking for a new investor to develop the largest silver deposit in the country, Konimansuri Kalon (Big Konimansur). The historical reserves were estimated to be 1 billion metric tons (Gt) of ore at grades of 49 g/t silver, 0.38% zinc, and 0.49% lead. The Adrasman mining-beneficiation complex planned to increase its production of silver and zinc ore at Eastern Konimansur by 15% (Ergasheva, 2013e; 2014a).

### *Industrial Minerals*

**Cement.**—In 2013, some cement plants halted operations to convert from natural gas to coal. Despite the closures, cement production increased by 53% owing to large-scale construction projects, such as the Rogum hydropower plant. The country's largest cement plant, JSC Tajikcement Ltd., which was located in Dushanbe, halted operations in January 2013. Owing to the shortage of natural gas, JSC Tajikcement was idle until October 2. On September 11, the Ministry for Energy and Industry and Beijing Uni-Construction Group of China discussed the transition of JSC Tajikcement from natural gas to coal. The plant resumed operations after the first coal-fired rotary kiln, which had a capacity of 600 metric tons per day of cement, was installed (Global Cement, 2013a; Ergasheva, 2014b; Khovar, 2014).

In addition to the shortage of the natural gas, JSC Tajikcement faced a lawsuit with the Export Guarantee and Insurance Corp. (EGAP), which was a Czech insurance company. The EGAP had loaned about \$5 million to JSC Tajikcement Ltd. for renovation of its cement plant. JSC Tajikcement had paid off one-half of the loan but still owed \$2.5 million. In April, the Supreme Court of Arbitration of Russia ordered JSC Tajikcement to pay the outstanding amount of the loan. The EAGP agreed to negotiate with the Inekon Group about supplying the equipment needed to complete the renovation of JSC Tajikcement's cement plant if the company paid the outstanding balance of the loan (Ergasheva, 2013d; Global Cement, 2013c; Ministry of Economic Development of the Russian Federation, 2013b, p. 2).

In 2013, the Tajik-Chinese joint venture Huaxin Gayur Cement Co. Ltd., which was a subsidiary of Huaxin Cement Co. Ltd. of China and LLC Gayur, constructed a cement plant in the Yovon District of Khatlon Province; the production capacity of the plant was 1 Mt/yr. The Yovon cement plant became operational in late September and produced 230,000 t in the

first 2 months of operations. The estimated cost of construction of the coal-powered plant was \$110 million. Coal was obtained from the Fon-Yaghnob and the Ziddi coalfields. The plant employed 534 workers, of which 80% were residents of Tajikistan (Global Cement, 2013b, d; Zangli, 2013).

In 2014, Huaxin Central Asia Investment (Wuhan) Co. Ltd. of China and LLC Gayur started construction of two new cement plants in northern Tajikistan. The Ghayur-Sughd cement plant was expected to be built in Ghafurov District with a production capacity of 1.2 Mt/yr. The cost of the construction was estimated to be \$100 million. The first unit of the plant was expected to be commissioned in 2015, and the second unit, in 2016. The second plant, the Chjuntsay-Taboshar cement plant, was expected to have a production capacity of 0.6 Mt/yr and to be completed in 2015 (Global Cement, 2014).

**Sand and Gravel.**—In 2013, 65 quarries produced sand and gravel, but only 56 of them were operational for the entire year. Among the new sand and gravel quarries that began operations in 2013, the Anvar LLC enterprise had a production capacity of 40,000 cubic meters per year (Vremya Vostoka, 2013).

### *Mineral Fuels and Related Materials*

**Coal.**—In 2013, coal production increased by 25% to 515,600 t in 2013 from 412,000 t in 2012 owing to demand from factories that were converting from natural gas to coal. The conversion from natural gas to coal was caused by the cessation of gas imports from Uzbekistan (Mangazeya, 2014; Sedova, 2014, p. 15).

Fon-Yaghnob was the leading coal producer in Tajikistan with estimated resources of 1 Gt. In October 2012, Kaisun Energy Group Ltd. of China was awarded a mining license for the eastern zone of the Fon-Yaghnob deposit. Production started in January 2013, and 33,460 t was extracted during the year. The company owned mining rights for three other mines—the Kaftar-Hona anthracite deposit, the Zeddi coal deposit, and the Mienadu coal deposit. In 2013, total production from the four coal deposits amounted to 111,000 t (Kaisun Energy Group Ltd., 2012, p. 5; 2013, p. 5; Ministry of Industry and New Technologies of the Republic of Tajikistan, 2013a).

**Natural Gas and Petroleum.**—In 2013, China National Petroleum Corp. (CNPC), Edgo Energy of Jordan, Gazprom of Russia, and Tethys Petroleum Ltd. of Canada were engaged in developing oil and gas reserves in Tajikistan. Edgo Energy signed a production-sharing agreement with the Ministry of Energy and Industry. Under the agreement, Edgo Energy was given two licenses for prospecting and extraction of hydrocarbons in the promising Surkhsimo and Qarordon oil and gasfields located in the Khalton region (Natural Gas Asia, 2013; Sedova, 2014, p. 13).

In 2013, Tethys Petroleum signed a memorandum of understanding, through its subsidiary Kulob Petroleum Ltd., with CNPC, Total S.A. of France, and the Government of the Republic of Tajikistan [each acquired a one-third interest in the Bokhtar production-sharing contract (PSC)]. The Bokhtar PSC covers 35,000 square kilometers in Cretaceous and Jurassic reservoirs in the Afghan-Tajik portion of Amu-Darya basin west of the Pamir Mountains. Resources available through the Bokhtar PSC were estimated to be 27.5 billion barrels (GbbL)

of oil equivalent, 3.2 trillion cubic meters of natural gas, and 8.5 Gbbl of oil (Natural Gas Asia, 2012; Tethys Petroleum Ltd., 2013; Total S.A., 2013; Sedova, 2014, p. 13).

Gazprom's exploration licenses for hydrocarbons in the Western Shaamary and Sarykamysch areas were extended for 5 years. In 2013, Gazprom completed the drilling of a test gas well (Shakhrinav-1P) to a depth of 6,300 meters at the Sarykamysch site. The provisional reserves were estimated to be 18 billion cubic meters. Gazprom was also expected to receive licenses for new prospects (Collins and White, 2013, p. 1; Gazprom, 2013).

The only oil refinery in Tajikistan was located in Tursnoda, which is a town in Shahrinav District. The refinery had a production capacity of 456,000 barrels per year (bbl/yr) of refined petroleum. A new oil refinery was being constructed by the open joint stock company Naftrason in Kanibadam City, Sughd Province. The new refinery was expected to be operational in September 2014 and to have a production capacity of 513,000 bbl/yr of refined petroleum. The refined petroleum was expected to be exported to Kazakhstan and Russia (Ministry of Economic Development of the Russian Federation, 2013a, p. 2).

## Outlook

Tajikistan relies heavily on foreign investments and loans for development of infrastructure projects and mineral industries. At present, foreign companies are engaged in the development of coal, gold, and silver deposits and petroleum and natural gas reserves, and in the renovation of cement plants. Given these efforts, it is likely that Tajikistan will be able to increase its output of gold and continue to expand production of cement, coal, and oil and gas. Development of oil and gas reserves could help the country address energy shortages and prevent long-term environmental problems associated with the use of coal.

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TABLE 1  
TAJIKISTAN: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2009	2010	2011	2012	2013
METALS					
Aluminum, primary	359,385	348,850	278,000	272,500	216,369
Antimony, Sb content of ore	2,000 <sup>e</sup>	2,000 <sup>e</sup>	4,500 <sup>e</sup>	4,248 <sup>r</sup>	4,675
Gold, Au content of ore kilograms	1,361	2,049	2,240	2,401	3,000
Lead, Pb content of ore <sup>e</sup>	800	800	800	840	840
Mercury, Hg content of ore <sup>e</sup>	30	30	30	32	34
Silver, Ag content of ore kilograms	1,267	2,651 <sup>r</sup>	1,764	1,767	2,000
Zinc, Zn content of ore <sup>e</sup>	--	--	10,000	20,000	20,000
INDUSTRIAL MINERALS					
Cement, hydraulic	195,000	288,200	299,400	251,400 <sup>r</sup>	384,000
Gypsum <sup>e</sup>	26,400	15,000 <sup>r</sup>	11,000 <sup>r</sup>	14,000 <sup>r</sup>	12,000
Salt	52,000 <sup>e</sup>	52,000 <sup>e</sup>	27,000 <sup>e</sup>	27,954	32,000
Sand and gravel cubic meters	NA	NA	8,800	2,000	264,000
MINERAL FUELS AND RELATED MATERIALS					
Coal, bituminous and lignite	178,000	199,700	236,000 <sup>r</sup>	412,000 <sup>r</sup>	515,600
Gas, natural thousand cubic meters	19,900	22,800	18,800	11,170	4,000
Petroleum, crude:					
In gravimetric units	26,200	27,000	28,300 <sup>r</sup>	29,800 <sup>r</sup>	27,300
In volumetric units 42-gallon barrels	80,000	78,500	82,069 <sup>r</sup>	86,419 <sup>r</sup>	79,169

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. NA Not available. -- Zero.

<sup>1</sup>Table includes data available through June 27, 2014.

<sup>2</sup>In addition to the commodities listed, Tajikistan produced a number of other mineral commodities in the past, but available information is inadequate to determine if production was still taking place.

TABLE 2  
TAJKISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2013<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Aluminum	Tajik Aluminium Co. (TALCO) (Government, 100%)	Tursunzade smelter	517,000
Antimony, ore	Anzob mining-beneficiation complex (Consum Commodities Inc., 100%)	Dzhzhikrutskoye antimony- mercury deposit	700,000
Antimony, metal	Isfara hydrometallurgical plant (Government, 100%)	Isfara	500
Arsenic	Mosrif deposit	NA	NA
Bismuth	Isfara hydrometallurgical plant (Government, 100%)	Isfara	500
Do.	Leninabad mining-beneficiation complex (Government, 100%)	Yuzhno-Yangikanskiy deposit	25
Bismuth, copper, fluorspar, gold, silver, zinc (ore processing)	Adrasman mining-beneficiation complex (Government, 100%)	Kanimansurskoye deposit	650,000
Boron	Yakarkharskoye deposit	Badakhshan region	NA
Cement	JSC Tajikcement Ltd.	Dushanbe	1,200,000 <sup>2</sup>
Do.	Yovon Cement (Huaxin Gayur Cement Co. Ltd. and Tajik Ghayur Co.)	Yovon District, Khatlon Province	1,000,000
Do.	Ghau-i-Sughd Cement (Tajik Ghayur Co. and Hauksin Central Asia Investment)	Ghafurov District, Sughd Province	1,200,000
Do.	Chjuntsay-Taboshar Cement	NA	60,000
Do.	LLC Tojikiston	Kharangon village, Varzob District, Districts Under Republic Administration	70,000
Do.	Isfarinsky Cement	Isfarinsky region	1,000,000
Do.	Sarabansky Cement	NA	70,000
Coal	UP Fon-Yaghnob	Pyandzh region	50,000
Do.	Isfara hydrometallurgical plant (Government, 100%)	Isfara	300,000
Do.	OAo Anguisht	Shurab region	32,000
Do.	Shurab brown coal deposit	do.	NA
Do.	SP Anzob	do.	NA
Copper-lead-zinc	Leninabad mining-beneficiation complex (Government, 100%)	Yuzhno-Yangikanskiy deposit	2,500
Dolomite	Yavan electrochemical complex	Pashkharvoskoye deposit	NA
Fluorspar, concentrate	Takob mining-beneficiation complex	Takob and Krasnye Kholmy deposits	60,000 <sup>3</sup>
Gold, in ore	kilograms Aprelevka joint venture	Aprelevka deposit	200
Do.	do. Odina	NA	NA
Do.	do. Darvaz joint venture	Yak-Suyskoye deposit, Khatlon Province	2,000
Do.	do. OOO Takom Gold	NA	NA
Do.	do. Tilloi Tochik	NA	NA
Do.	do. JV Zarafshon Gold Company LLC (Zijin Mining Northwest Co. Ltd., 75%, and Government of Tajikistan, 25%)	Jilau, Khirskhona, Olympiyskoye, and Tarror deposits, Sughd Province	2,500
Do.	do. China Nonferrous Gold Ltd. (100%)	Parkut Gold Project, southern portion of the Tien Shan Fold Belt	728
Gold, ore processing	do. Kansayskaya factory	Aprelevka, Burgunda, Kyzyl-Chek, and Shkol'noye deposits	165,000 <sup>3</sup>
Do.	do. Vostokredmet refinery	Qizfaquz	NA
Lead	Zarnisor Shimoli (Tajik-China Mining Co. Ltd.)	Northern Altin-Topkan and Pay Buloq	50,000
Lead-zinc	Adrasman mining-beneficiation complex (Government, 100%)	Adrasman, Sughd Province	NA
Do.	Kansayskoye mining complex	Karamazor region	NA
Do.	Takaeliyskiy metallurgical complex	NA	NA
Do.	Tibet Summit Industry Co.	Altyn-Topkan	NA

See footnotes at the end of table



TABLE 2—Continued  
TAJKISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2013<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Limestone		Dushanbe cement complex	Kharangonskoye deposit	NA
Loam		do.	Varzobskoye Ushchel'ye deposit	NA
Marble		Dal'yan Bolo deposit	Ganchinskiy region	NA
Do.		Dashtak deposit	Darvaz region	NA
Do.		Jilikul deposit	Sughd Province	NA
Mercury		Anzob mining-beneficiation complex (Consum Commodities Inc., 100%)	Dzhzhikrutskoye deposit	150
Petroleum	42-gallon barrels	Beshtentyakskoye, Kichik-Belskoye, Shaambary, and Uzunkhorskoye deposits	Southern Tajik depression	200,000
Petroleum, refined	do.	NA	Turshzoda town, Shahrinav District, Districts Under Republic Administration	456,000
Do.	do.	OJSC Nafrason	Kanibadam city, Sughd Province	513,000
Salt		Ashtskiy plant	Kamyshkurganskoye deposit	NA
Do.		Khoja-Sartez, Samanchi, and Tanabchi deposits	NA	NA
Do.		Voseyskiy plant	Khodzha-Muminskoye deposit	NA
Do.		Yavan electrochemical complex	Tut-Bulakskoye deposit	NA
Sand and gravel	thousand cubic meters	Anvar LLC	NA	40
Silver	kilograms	JV Zarafshon Gold Company LLC (Zijin Mining Northwest Co. Ltd., 75%, and Government of Tajikistan, 25%)	Jilau, Sughd Province	3,637
Do.	do.	do.	Taror deposits, Sughd Province	727
Do.		Aprelevka joint venture	Aprelevka deposit	NA
Do.		Kanjol ore field (Nukrafom Co.) (Silverhill Resources Ltd.)	Gafurov District, Sughd Province	NA
Do.		Kytco BV	Akjilga	NA
Strontium, ore		Chaltash, Chilkutan, and Davgir deposits	Khatlon Province	180,000
Zinc		Zarnisor Shimoli (Tajik-China Mining Co. Ltd.)	Northern Altin-Topkan and Pay Buloq	50,000

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.

<sup>1</sup>Many location names have changed since the breakup of the Soviet Union. Many enterprises, however, are still named or commonly referred to based on the former location name, which accounts for discrepancies in the names of enterprises and locations.

<sup>2</sup>Capacity estimates are totals for all enterprises that produce the commodity.

<sup>3</sup>Operation stopped in 2013.