

„Kleofas” Mine

HISTORY

The mining plant operating in the city of Katowice (districts Śródmieście, Dąb, Załęże, Koszutka, Osiedle Witosa and part of Tysiąclecia housing estate). In the area of the former "Kleofas" mine, the coal exploitation dates back to 1792. The second of the mines included in the "Katowice-Kleofas" Coal Mine established in 1905, until 1953 was called "Eminencja" and later "Gottwald". From January 1, 1974, the "Kleofas" and "Gottwald" mines was combined in one enterprise called "Gottwald" Hard Coal Mine. From 1990, the mine was called "Kleofas". In 1996 "Kleofas" and "Katowice" mines were combined into one mine "Katowice-Kleofas", separated into two mining plants: Ruch I "Kleofas" and Ruch II "Katowice". In 1999, the former independent "Gottwald" mine was closed. In 2001, Ruch II "Katowice" was liquidated and on March 4, 2004 it was decided to close mining plant Ruch I due to the high risk of rock bursts, as well as for economic reasons. The mining was ended in November 2004.

GEOLOGY

In the geological structure Quaternary, local Tertiary and Carboniferous deposits are involved. Carboniferous strata falls towards NWW-SEE. The layers dip is variable and equals 4-5° in the southern and central parts, growing northwards, where it reaches around 25° in places. The area is cut by many faults dividing them into separate tectonic blocks, with throws from several dozen to 200 meters. The main meridian faults are:

- "Wojciech" fault, with a throw of 65 ÷ 140 m, throwing layers eastwards,
- "Waterloo" fault, with 45 ÷ 50 m throw to NE,
- "Baidonski" fault, with a throw from several to 50 m towards NE,
- "Baidoński Środkowy" fault, in the eastern part of the area, with a throw up to 30 m on NE,
- "Środkowy" fault, running through almost the entire deposit, with a throw up to 60 m to the west,
- Western faults (I, II, III) occurring in the western part of the area, reach throws 10 ÷ 35 m to the east,
- "Kalina" fault with throw of about 70 m in the northern part, in the central part rising to about 100 m and in the "Radoszowy" part decreasing to about 40 m; it throws layers westwards,
- VI and VIII faults occurring in the northern part of the deposit, with a throw up to 65 m (VI fault) and 50 m (VIII fault) in the northeast direction.

The main latitudinal faults are:

- fault VII running in the northern part of the mining area; in the eastern part it is a single dislocation throwing layers to the south, with a throw of 20 ÷ 30 m; in the western part there are several faults with throws of 10 ÷ 40 m,

- fault IX occurring in the northern part of the deposit, throwing layers to the north; the maximum amount of throw is 30 m,
- “Brynowski I” fault occurring in the north-eastern part of the area, with a throw up to 30 m in the north-west direction,
- “Brynowski II” fault, similar in course to the Brynowski I fault, throwing layers in a south-eastern direction,
- “Arkona” fault occurring in the south-eastern part of the area; it throws layers to the southeast; the amount of its throw is 10 ÷ 28 m,
- “Kłodnicki” fault belonging to the most important dislocations shaping tectonics of USCB; it is a Miocene fault or a renewed Miocene that throws layers to the south. In the “Kleofas” mine area it splits into two faults: “Kłodnicki I” and “Kłodnicki III”, with the “Kłodnicki I” fault being of major importance; its throw in the mining area ranges from 100 to 200 m, the “Kłodnicki III” fault throw reaches up to 80 m.

MINING

In the mining area of the “Kleofas” mine, seams 401, 402, 404, 405, 407, 412, 416 (Rudzkie layers), 501, 504 and 510 (Siodłowe layers), 620 (Porębskie layers) were mined in the depth zone up to about 700 m.

SINKHOLE THREAT

Exists on the surface in the areas where the coal was extracted in the depth ranging from 0 to 100 m. Such exploitation was carried out in SE part of the area (Załęże district and Witosa housing estate) in seams: 401, 402, 404, 4,5, 407, 408 and in N part of the area (Dąb and Koszutka districts) in seams 412, 416, 501, 504, 510.