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Figure 1. Iron ore open pit Erzberg

Leopoldstein Lake and a small pool of water called “Black Puddle” are situated near the road leading from Eisenerz to Hieflau in Austria. For centuries, the people there had seen Aquarius who lived in his cave below the pool. Sometimes, during nice weather he would come ashore and bathe in the sun. It was believed that he possessed a great treasure, so the people wanted to catch him. He was shy and so he didn’t go out if someone was nearby. Besides, he was as slippery as a fish, so it was impossible to catch him. Therefore, people had to resort to trickery.

One nice, warm and sunny morning, they set out a roast, wine and clothing covered with tar from the in-

side, and they hid and waited. After a while, Aquarius came out of his cave and curiously looked at the placed items. He grabbed the roast, drank the wine, dressed up, danced, and in the end, he laid down to rest. The roast, wine and weariness had taken their toll and soon he was quickly fast asleep. The people carefully crept up and succeeded in tying him up despite the fact that he woke up and fought with all his strength to break free. He failed, so he took the people to the valley at the foot of the ore mountain now known as Erzberg (see **Figure 1**) and promised them a great treasure if they released him. Since this is what they were hoping for, the people asked him: “What will you give us?” Aquarius answered: “Listen to me very carefully and choose wisely: A golden foot will soon disappear, silver heat will be spent with time and an iron hat will remain forever, or in transla-



Figure 2. Aquarius in the underground mine

tion: gold for 10 years, silver for 100 years or iron ore forever. Choose wisely and never be humbled!”. “We want the hat of iron ore!”, they cried. Aquarius (see **Figure 2**) pointed to the mountain and said: “There is a hill. It will give you an iron ore forever and more! Now take me back to my cave.”

People believed his promise, took him back and released him. He immediately disappeared into the depths. The earth shook, the water began to foam and turned into blood and from the depths came a somber voice: “You forgot to ask me the best of all – the precious stones and the meaning of the cross in the walnut.” The people were scared, quickly fled and since then, Aquarius was never seen again. To the present day, no one has interpreted the last words of Aquarius.

His promise would be realised if people still used hammers to obtain raw materials as in the time of this legend. However, he didn’t predict the significant progress in mining which is available today. Currently, the annual production in this mine is 8.4 million tons of raw material from which it gets about 2.1 million tons of iron ore and the remaining 6.3 million tons is disposed of as gangue and Aquarius’ promise remains questionable.

However, it can also be viewed differently, because the share of useful minerals in the raw material will decrease over time since the “richer” deposits were already opened and numerous other deposits are in areas where exploitation already ended, so for exploitation, the remaining deposits are in areas with lower content of useful minerals. Therefore, as of today, gangue may contain a higher share of useful minerals than “newly opened”



Figure 3. “Hauly” – the largest taxi in the world



Figure 4. Presentation of the legend in the subsurface of the mine

deposits because older mineral processing technology couldn’t “extract” all the useful minerals. Thus, it is not uncommon that gangue becomes a source of “new deposits”, potentially interesting for processing again. Gangue of this mine contains up to 20% of iron, so the legend of Aquarius and its promise still lives on ... While still working, this open pit mine can be visited and a ride can be taken in the biggest taxi in the world called “Hauly” (see **Figure 3**).

It is 11.5 m long, 4.5 m wide, can carry 62 passengers, has an engine power of 641 kW (860HP) and a top speed of 60 km/h. Also, the train called “Katl” can take you into the underground to hear first-hand all about this deposit and mine, see numerous mining machines and still enjoy the legend of Aquarius through a presentation (see **Figure 4**).

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Slika 1. Površinski kop željezne rude Erzberg

U blizini ceste koja vodi od Eisenerza do Hieflaua u Austriji nalazi se jezero Leopoldstein i mali bazen vode nazvan Crna lokva. Stoljećima su ljudi ondje vidali vodenjaka koji je prebivao u svojoj špilji ispod bazena, no ponekad, za lijepoga vremena izišao bi na obalu i okupao se na suncu. Vjerovalo se da posjeduje veliko blago, pa su ga ljudi htjeli uhvatiti. Budući da je bio sramežljiv, nije izlazio kada bi nekoga bilo u blizini, a osim toga bio je i klizav kao riba, pa je bilo nemoguće uhvatiti ga. Zato su ljudi morali pribjeći lukavstvu.

Jednoga lijepog, toplog i sunčanog jutra postavili su pečenja, vina i odjeće s unutarnje strane prekrivene katranom te se sakrili i čekali. Nakon nekoga vremena

vodenjak je izišao iz svoje pećine i znatizjeljno se zagledao u postavljene stvari. Zgrabio je pečenje, popio vino, odjenuo se i zaplesao te na kraju legao odmoriti se. Pečenje, vino i umor učinili su svoje te je ubrzo zaspao tvrdim snom. Ljudi su se oprezno prišuljali i uspjeli ga svezati usprkos tome što se probudio i borio svom snagom kako bi se oslobodio. Nije uspio pa je odveo ljude u dolinu gdje se danas nalazi Erzberg (**slika 1**) i obećao im veliko blago ako ga oslobode. Budući da su to i željeli, upitali su ga: „Što ćeš nam dati?” Vodenjak je odgovorio: „Slušajte me pažljivo i odaberite mudro. Zlatno stopalo uskoro će nestati, srebrno srce s vremenom će se potrošiti, a željezni šešir ostat će zauvijek, ili u prijevodu: zlata za 10 godina, srebra za 100 godina ili željezne rude zauvijek. Izaberite mudro i ne oskudijevajte nikada!”



Slika 2. Vodnjak u podzemnome dijelu rudnika

„Želimo šesir željezne rude!” povikaše ljudi. Vodnjak je pokazao na planinu i rekao: „Tu je brdo. Ono će vam dati željezne rude zauvijek i više! Vratite me sada u moju pećinu.”

Ljudi su povjerovali obećanju, odveli ga natrag i oslobodili. Odmah je nestao u dubinu. Zemlja se zatresla, voda zapjenila i pretvorila u krv, a iz dubina se začuo mračan glas: „Zaboravili ste me pitati najbolje od svega – o dragome kamenu i značenju križa u orahu.” Ljudi su se uplašili, brzo pobjegli i od tada ga više nisu vidjeli, a do današnjih dana nitko nije protumačio posljednje vodnjakove riječi. Vodnjakovo obećanje bilo bi se i ostvarilo da su ljudi, kao nekada, u vrijeme nastanka ove legende, nastavili ručno uz upotrebu čekića dobivati sirovinu. Ipak, on nije predvidio znatan napredak rudarstva, tako da se danas ovdje godišnje izvadi više od 8,4 milijuna tona sirovine od čega se dobije oko 2,1 milijuna tona željezne rude, a ostatak od 6,3 milijuna tona odlaze se kao jalovina i vodnjakovo obećanje (p)ostaje upitno. Pa ipak, može se na sve gledati i drugačije, jer udio korisnih minerala u sirovini s vremenom će biti sve manji s obzirom na to da su „bogatija” ležišta već otvorena, a brojna su i ona u kojima je eksploatacija već završila, pa za eksploataciju preostaju ona s manjim sadržajem korisnih minerala. Zato već i danas jalovišta mogu sadržavati veći udio korisnih minerala nego „nova” ležišta u otvaranju jer starija tehnologija oplemenjivanja nije us-



Slika 3. Hauly – najveći taksi na svijetu



Slika 4. Presentacija legende u podzemnome dijelu rudnika

piovala izvući sve korisne minerale. Stoga, nerijetko danas jalovišta postaju „nova ležišta”, potencijalno ponovo interesantna za preradu. Jalovina ovoga rudnika sadržava i do 20 % željeza, tako da legenda o vodnjaku i njegovo obećanje ipak žive i dalje... Iako još uvijek radi, ovaj površinski kop može se posjetiti i pritom se provozati u najvećemu taksiju na svijetu, nazvanom Hauly (slika 3). On je dugačak 11,5 m, širok 4,5 m, može prevesti 62 putnika, ima motor snage 641 kW (860 KS) i najveću brzinu od 60 km/h. Također se vlakom po imenu Katl može odvesti u podzemlje i osobno čuti sve o ovome ležištu i rudniku, vidjeti brojne rudarske strojeve te i dalje uživati u legendi o vodnjaku kroz prezentaciju (slika 4).