The deposit is located at 8 km distance Southeastwards from the town of Hust, Transcarpathian region, within 2.5 km from railway and motorway in highland area (elevation amounting to 120 meters). The area incorporates a thicket of half-grown trees (68%), shrubs, pasture and low fertility arable land (13%0.

Zeolitized plagioliparite Neogene tuffs are represented by gently sloping (a-12") thick bed among argillutes and aleurolites. The tuffs are detrital with medium size and fine particles, weakly cleated.

Two rhythms are thoroughly distinguished with thicknesses respectively 85 m and 1 10 m. Within each rhvthm the size of particles gradually diminishes from foot (1 - 3 mm) to roof (less than 0.001 mm).

The tuff structure determines zeolite (clinoptilolite) tontent: maximum 70-90% content technological grades are confined to aleuro-psammite (0.01-0.1 mm) tuffs embedded in the medium portion of the rhythm, whereas 50-55% content grades are confined to the foot and roof strata.

Two occurrences of the deposit are divided by a packet of low quality zeolite tuffs with 10.9 M average thickness. Overlying Quarternary clays, loams and shingle have an average thickness of 7 meters.

The upper occurrence is characterized by measured reserves amounting to 126.1 million tons and 58.2 m thickness. In the medium portion of the occurance there is a packet of high quality (A grade) rock making up 39.5 million tons with clinoptilolite content ranging from 70.9 to 74.6% (average content making up 72%) whereas in bottom and roof portions, clinoptilolite content accounts for 59 and 53% respectively.

Hazardous elements content is low, to wit: fluorine — less than 6x10-2%, arsenic — less than 3X10-3% ~. mercury- less than 5X1@%, cadmium — less than - lead-l .5x IO-"%. Maximum lead content values in A grade samples amount to 3.3x10-"%; in other grader respectively 6.5XlU"%. Cathionic exchange capacity averages 111 mg-equiv./lOO g (ranging from 76 to 196).

The lower occurrence accounts for 154.9 million tons nominal reserves and 83.2 m thichness. The clinoptilolite rocks (A grade) are high quality raw material 'for dessication of gases and liquids. They may also be used as feeding stuff admixtures for cattle and poultry. They are also well suited for soil desactivation and land improvement purposes. The same rocks with lower zeolite content (no lower than 60%) may be used for manufacturing water softeners and active mineral admixtures for cement production.

Overburden clays and loams are vwvL suited for manufacturing bricks. Low quality coarse psammite tuffs embedded in the bottom of the upper occurrence may be used for producing construction rock debris from porous rocks.

All the rocks have low level of natural radioactivity.

Geologic conditions are favourable for surface mining. About 70% of measured reserves ate embedded above the level of ground water table.

The deposit is located in an area with established infrastructure and available labour, including highly skilled professionals.

At present the deposit is exploited with annual production amounting to 200 thousand tons, whereas potential annual production may be increased to 1 million tons.

Large reserves, fovourable geographic and economic location, and widening scope of application guarantee cost effective joint venture exploitation of the deposit.

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