

Pre-1990 Water quality dataset from Lusatia

Basic information

Time period: 1949-1995

Geographical Locations: All across Lusatia (longitude: ~13.0-15.0, Latitude: ~51.2-52.2)

Coordinate Reference system: WGS 84 (EPSG:4326)

Data Volume: 6056 records and 58 parameter columns

Column Descriptions

The column names explicitly indicate the corresponding parameters and their units. The “geometry” column contains the precise geographic coordinates of each sampling point in WGS 84 coordinate reference system (EPSG:4326). The following is a list of column names:

Outcrop Name
Municipal District
Height [m]
Sample Time [yr]
Temperature [°C]
Conductivity at 20C [S/m]
pH
Evaporation Residue [mg/l]
Ignition Residue [mg/l]
Total Alkalinity (to pH 4.3) [mmol/l]
Total Hardness [°dH]
Carbonate Hardness [°dH]
Non-carbonate hardness [°dH]
Potassium Permanganate Consumption [mg/l]
Oxygen Consumption (in Potassium Permanganate Method)[mg/l]
Free Associated CO2 [mg/l]
Aggressive CO2 [mg/l]
Bound CO2 [mg/l]
Total CO2 [mg/l]
Oxygen [mg/l]

Sodium [mg/l]
Potassium [mg/l]
Calcium [mg/l]
Magnesium [mg/l]
Total Iron [mg/l]
Fe+2 [mg/l]
Fe+3 [mg/l]
Manganese [mg/l]
Ammonium [mg/l]
Nitrit [mg/l]
Nitrat [mg/l]
Bicarbonate [mg/l]
Chlorid [mg/l]
Sulfate [mg/l]
Phosphate [mg/l]
Fluoride [mg/l]
Bromide [mg/l]
Iodine [mg/l]
Siliciumdioxid [mg/l]
Hydrogen sulfide [mg/l]
Copper [mg/l]
Lead [mg/l]
Cadmium [mg/l]
Zinc [mg/l]
Chromium [mg/l]
Nickel [mg/l]
Vanadium [mg/l]
Boron [mg/l]
Mercury [mg/l]
Aluminum [mg/l]
Arsenic [mg/l]
Phenol [mg/l]
Water Germs [number]
Total Dissolved Solids
Ion Balance [%]
Sample Depth [m]
geometry
5 years intervals [yr]

Notes

The accompanying paper named “Groundwater Quality in the Lusatia Mining Region: Historical Records, FAIR Transformation, and Pattern Analysis” will be published in the journal of “Data in Brief”. The DOI link to this database will be included in the paper.

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