Package: boreholelabdata (via r-universe)

November 13, 2026

Title Borehole Water Quality Laboratory Results, Malawi 2017 to 2019

Version 1.0.1

Description This dataset contains comprehensive records of water quality test results collected from various water points across Malawi between 2017 and 2019.

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Encoding UTF-8

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`boreholelabdata` *Water Quality Laboratory Analysis and Reporting Dataset – Malawi (2017–2019)*

Description

This dataset contains comprehensive records of water quality test results collected from various water points across Malawi between 2017 and 2019

Usage

```
boreholelabdata
```

Format

A tibble with 32 rows and 53 variables

waterpoint_name Name of the water point site

waterpoint_type category of the water point (e.g., borehole, well, spring)

latitude Geographic latitude coordinate of the water point

longitude Geographic longitude coordinate of the water point

date_sample_collected Date when the water sample was physically collected from the site

date_sample_analyzed Date when the collected sample was analyzed in the laboratory

date_results_received Date when the lab results were received or recorded

lab_sample_no Unique laboratory identification number assigned to the sample

ph_value pH value of the water sample

ph_within_mw_standards pH value falls within Malawis water quality standards (Yes/No)

conductivity Measures electrical conductivity of water, indicating ion concentration (?S/cm at 25C)

conductivity_within_mw_standards conductivity is within Malawis acceptable standards (Yes/No)

tds_mg_l Concentration of total dissolved solids in mg per liter

tds_within_standards total dissolved solids fall within Malawis standards (Yes/No)

carbonate_mg_l Concentration of carbonate ions in mg per liter

carbonate_within_standards carbonate levels meet Malawis water standards (Yes/No)

bicarbonate_mg_l Concentration of bicarbonate ions in mg per liter

bicarbonate_within_standards bicarbonate levels meet Malawis water standards (Yes/No)

chloride_mg_l Concentration of chloride ions in mg per liter

chloride_within_standards chloride levels are within Malawis acceptable limits (Yes/No)

sulphate_mg_l Concentration of sulphate ions in mg per liter

sulphate_within_standards sulphate levels are within Malawis standards (Yes/No)

nitrate_mg_l Concentration of nitrate ions in mg per liter

nitrate_within_standards nitrate levels comply with Malawis standards (Yes/No)

fluoride_mg_l Concentration of fluoride ions in mg per liter

fluoride_within_standards fluoride levels meet Malawis water quality standards (Yes/No)

sodium_mg_l Concentration of sodium ions in mg per liter

sodium_within_standards sodium concentration is within Malawis standards (Yes/No)

potassium_mg_l Concentration of potassium ions in mg per liter

potassium_within_standards potassium levels comply with Malawis water standards (Yes/No)

calcium_mg_l Concentration of calcium ions in mg per liter

calcium_within_standards calcium levels fall within Malawis acceptable standards (Yes/No)

magnesium_mg_l Concentration of magnesium ions in mg per liter

magnesium_within_standards magnesium levels comply with Malawis standards (Yes/No)

iron_mg_l Concentration of iron in mg per liter

iron_within_standards iron concentration is within Malawis water quality limits (Yes/No)

manganese_mg_l Concentration of manganese in mg per liter

manganese_within_standards manganese levels meet Malawis water standards (Yes/No)

hardness_mg_l Total hardness of water measured as mg/l of calcium carbonate

hardness_within_standards total hardness is within Malawis acceptable limits (Yes/No)

alkalinity_mg_l Total alkalinity of water measured as mg/l of calcium carbonate

alkalinity_within_standards alkalinity levels are within Malawis standards (Yes/No)

arsenic Concentration of arsenic in water

arsenic_within_standards arsenic levels comply with Malawis water quality standards (Yes/No)

turbidity_ntu Measure of water turbidity in Nephelometric Turbidity Units (NTU)

turbidity_within_standards turbidity is within Malawis acceptable water quality limits (Yes/No)

suspended_solids Concentration of suspended solids in water (mg/l)

suspended_within_standards suspended solids levels meet Malawis standards (Yes/No)

faecal_coli_count Count of fecal coliform bacteria per 100 ml of water

faecal_coli_within_standards fecal coliform counts meet Malawis water quality standards (Yes/No)

faecal_strep_count Count of fecal streptococci bacteria per 100 ml of water

faecal_strep_within_standards fecal streptococci counts meet Malawis water standards (Yes/No)

comments Additional remarks or observations related to the sample or site

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