Moisture and Dry Tonnage Log

How-to guide: what the workbook does, how to use it and what every number means. mfgcalcs.com



Moisture and Dry Tonnage Log

Turn every wet delivery of a bulk mineral into dry tons from its moisture test, with the water in it, its dry-basis value and any water above the contract limit.

For: Quality managers, purchasing and stores staff receiving clays, sands, minerals and other bulk materials bought on a dry basis.

Version 1.0.0 · updated 11 November 2026

Quick start

1. On Setup, type your site, currency and mass unit, your testing cost per wet ton and fixed lab cost per month, and list your materials with their price per dry ton and moisture limit.
2. On Lots, give each delivery a row: date, ticket, material, supplier, wet weight and the tested moisture.
3. Fix anything the Check column names.
4. Open the Dashboard: pick a material for its moisture trend, and see moisture against the limit by material and dry tons by month.

What is in the workbook

Start Here	Read this first: what the workbook does and how to use it.
Setup	Site, currency, mass unit, the testing costs, and the materials with their price per dry ton and moisture limit.
Lots	One row per delivery: wet weight and tested moisture in; dry weight, water and dry-basis value out.
Dashboard	Dry tons and water by material and by month, and the moisture trend of the material you pick against its limit.
Method	How every number is calculated, with assumptions, limits and sources.
Verify	Self-check: the workbook's formulas recomputed on fixed inputs against an independent reference.

What each number means

Quantity	How it is calculated	Units
Dry weight	Wet weight x (1 - moisture).	{MassUnit}
Water	Wet weight - dry weight.	{MassUnit}
Water above limit	Wet weight - dry weight / (1 - moisture limit), when the moisture is over the limit.	{MassUnit}

Quantity	How it is calculated	Units
Status	Out of limits when the moisture is over the material's limit; otherwise Within limits.	-
Dry value and water at dry price	Dry weight x price per dry ton; water x price per dry ton.	currency
Testing cost	Wet weight x testing cost per wet ton; by month, plus the fixed lab cost.	currency
Monthly moisture	Water / wet weight over the month's deliveries.	%

Assumptions, limitations, sources and the self-check (the Verify sheet, which recomputes the workbook's formulas on fixed test inputs) are in the workbook. The last page shows the Dashboard with the example data for Brackenridge Ceramics, a fictional business.

Free from MFG Calcs - keep this credit when you share it.

Engineering estimates for planning and improvement work. Verify the results against your own process, data and standards before you rely on them.

Moisture and Dry Tonnage Log

Dry tons and water by material and by month, and the moisture trend of the material you pick against its limit.

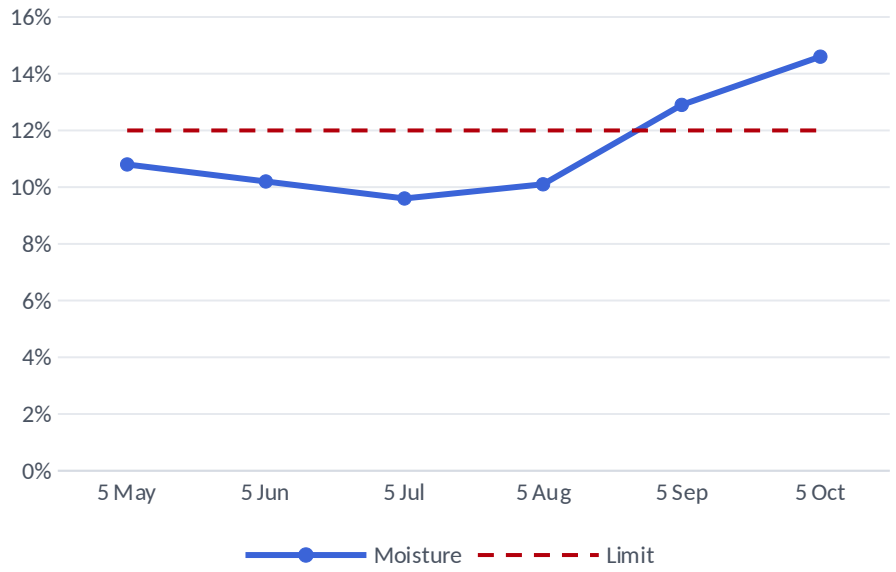
mfgcalcs.com

Material shown in the trend: Ball clay

Brackenridge Ceramics, raw materials (example): 24 lots, 650 wet tons of 4 materials. Amounts in USD.

LOTS	DRY WEIGHT (TONS)	WATER (TONS)	LOTS OVER MOISTURE LIMIT
24	607.7	42.2	3
Rows with a dry weight	Wet weight x (1 - moisture)	Hauled and handled, not bought	Moisture above the material's limit

Moisture against limit, material shown



Moisture against limit by material

