



MODULE 14

Report Builder

A composition canvas, blocks bound to the live database, and a replayable template that produces the same report with today's data.

- Group: Integration
- PDF and Excel export
- Blocks bound to the live database
- Reusable .gmrpt templates

Image
logo_left.jpg

Text Field
Samples Sheet

Image
logo_right.jpeg

Data Table
Table: DHSamples Columns: 15

Executive summary

Report Builder turns the report into a replayable template: the blocks are bound to the database rather than pasted from a spreadsheet, so next month's report is produced in one click with the day's data.

01 What it replaces

The Word report reworked every month, its tables re-pasted by hand and its figures no longer matching the database by the time it is reviewed.

02 How it works

A composition canvas takes blocks bound to the data, filtered block by block, plus substitution tokens carrying the context — project, period, author. The template is saved and replayed.

03 Who it is for

The project geologist producing the monthly report, and head office wanting the same document, in the same format, across every project.

1

template, N reports

PDF + XLSX

outputs per template

0

copy-paste from a spreadsheet

Lot

multi-scope generation

Contents

01 What the module produces

A sheet, a drillhole report or a project summary, as PDF or Excel.

02 The composition canvas

Blocks dropped, moved and resized with the mouse on the page.

03 Eight block types

Title, table, statistics, chart, log strip, map, text, page break.

04 Data binding

Every block points at a table or a query; the report follows the database.

05 Substitution tokens

{today}, {project}, {user}, {hole}, {page}, {pages}.

06 Batch reporting

One report per hole, generated in series then merged.

07 Output settings

Page size, orientation, PDF quality, filename pattern.

08 Business value

The monthly report is regenerated, not rewritten.



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SECTION I

The module

The problem addressed, the capabilities delivered, the processing chain and the module's place in the platform.

-
- 01 Context
 - 02 Key capabilities
 - 03 Processing chain
 - 04 Place in the platform
-

Context

A sampling sheet, a drillhole report, a campaign summary: they are the same documents, month after month, with different data.

The Report Builder separates layout from content: the template is drawn once, the data is re-read on every generation.

Blocks are bound, not pasted

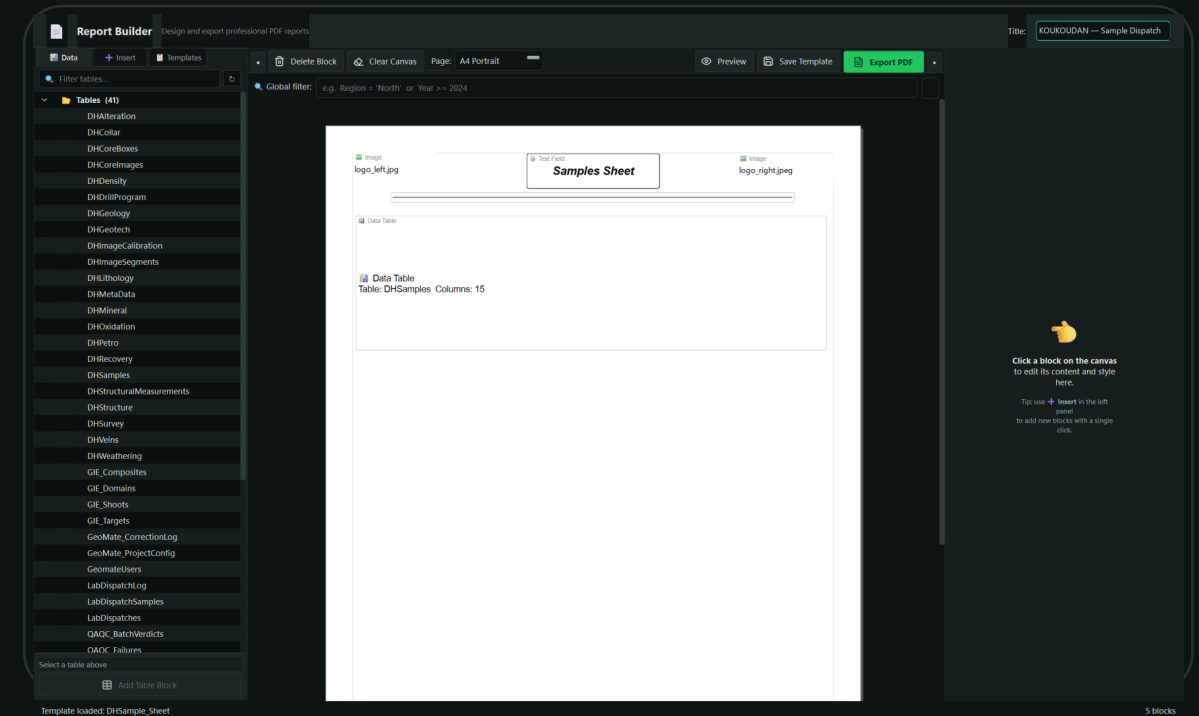
A table block points at a table or a SQL query: it always shows the current state of the database.

Filters are per block

One report can show every collar and only the samples above a threshold.

The template travels

A .gmrpt file applies to any project sharing the same schema — a reporting standard becomes a file.



Reports carrying log-plot inserts are memory-intensive. Beyond twenty holes, use the background batch option.

Key capabilities



01

Composition canvas

A page at the chosen format, on which blocks are dropped, moved and resized freely.



02

Data-bound blocks

Every table, statistics or chart block points at a database table or a custom query.



03

Substitution tokens

{today}, {project}, {user}, {hole}, {page} and {pages} are substituted at generation time.



04

Branding

Company logo, project title block, page headers and footers, custom colour scheme.



05

Batch generation

One report per hole, per dispatch batch or for the whole project, in a single operation.



06

Reusable templates

Saved as .gmrpt, applicable to any project sharing the same database schema.

Processing chain

From a template designed once to a report produced every period.

A Inputs

Database and identity

- Tables and queries of the project database
- Per-block filters: period, prospect, hole
- Context tokens: project, dates, author, version
- Visual identity: logo, colours, title block
- An existing template to replay, where there is one



B Composition

Canvas and bound blocks

- Placement of the title block and page header
- Data blocks: tables, charts, text
- Token substitution at generation time
- Preview against the real data
- Template saved for reuse



C Outputs

Produced documents

- PDF report, orientation and page size as chosen
- Excel workbook of the underlying data
- Batch generation across several scopes
- Automatic naming of the produced files
- Production triggerable from the automation engine

THE DIFFERENCE FROM A PASTED REPORT

A bound block queries the database at generation time. It therefore cannot be stale, nor contradict the table on the next page. That is what makes the report reproducible: two people regenerating it on the same day get the same document.

Place in the platform

FED BY

01 Dashboard

Supplies the progress indicators and the tracking charts.

11 Assay Intercept

Supplies the intercept table, the heart of the results report.

07 Geochemical Analytics

Supplies the figures and statistics of the geochemical chapter.



Report Builder

The platform's editorial output: it presents, for a reader, what the other modules have produced.

FEEDS

16 Automation Builder

Report generation becomes an action triggered by a clock or an event.

Project committee

The produced PDF is the document presented and archived.

15 Audit Report Builder

The periodic report and the audit file answer each other: one presents, the other attests.



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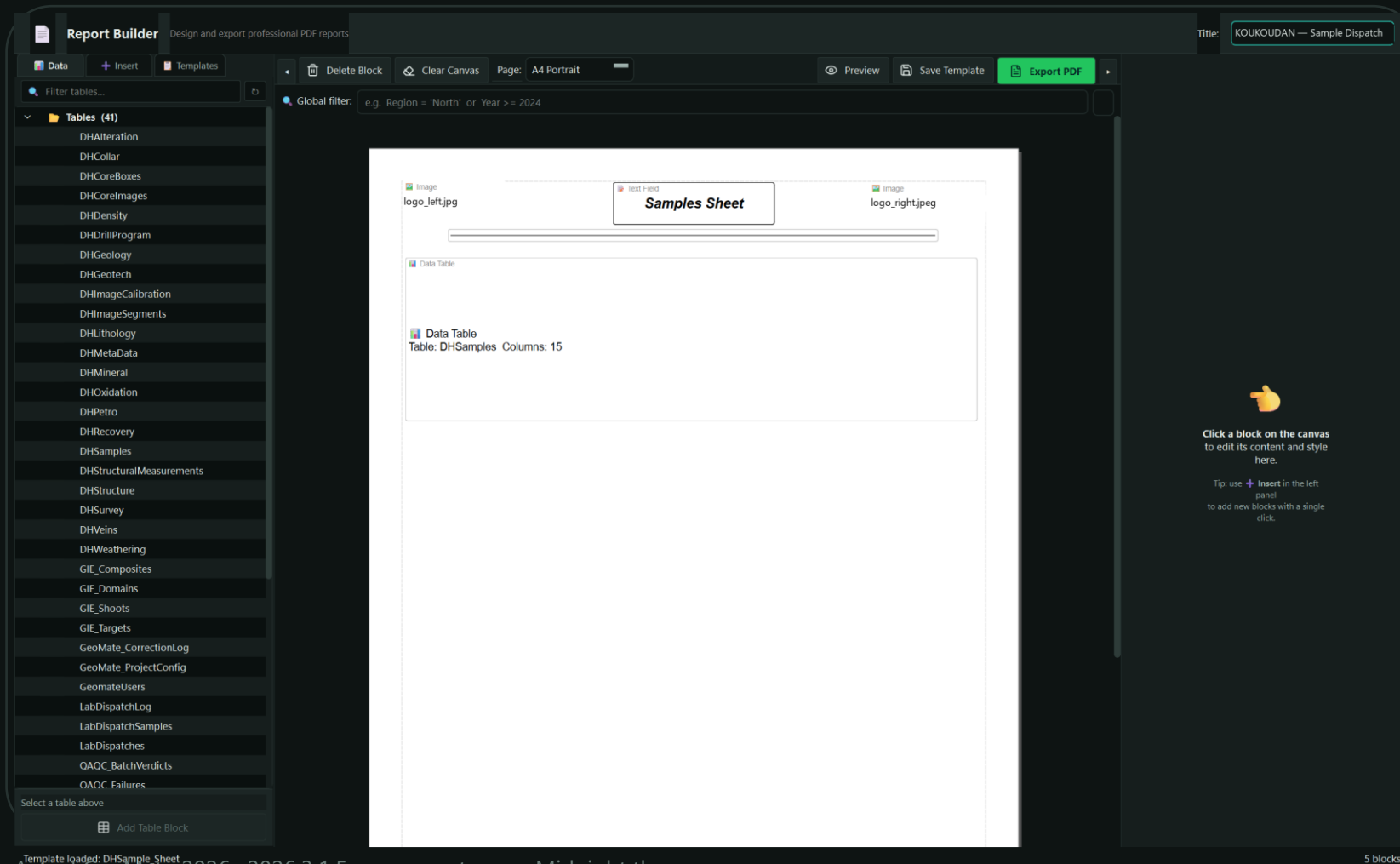
SECTION II

In practice

The real interface, the operating workflow, the reference settings, good practice and the questions that come up.

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- 01 The interface
 - 02 Operating workflow
 - 03 In depth
 - 04 Good practice
 - 05 Frequently asked
-

The interface



1 Data panel

The project's 41 tables, filterable — one click adds a bound table block.

2 Composition bar

Delete a block, clear the canvas, choose the page format.

3 Global filter

One expression applied across every block in the report.

4 Page canvas

The “Samples Sheet” template: two logos, a title, a rule and a table block bound to DHSamples.

5 Preview and export

Preview against real data, save the template, export to PDF.

Template loaded: DHSample_Sheet
Actual GeoMate 2026 v2026.3.1.5 screen capture — Midnight theme.

Operating workflow

Six steps to build a template; two clicks to replay it.

1

Create the template

Name the report and choose the mode: per hole or project summary.

2

Drop the title block

Logo, project name, title and date — the {today} and {project} tokens write themselves.

3

Add the data blocks

Table, statistics or chart, each bound to a table or a query.

4

Filter per block

Restrict each section independently — collars of the current hole, samples above a threshold.

5

Preview

The render is built on real data; section order is corrected by dragging.

6

Save and export

The template is saved as .gmrpt; the export produces the PDF or the Excel workbook.

The eight block types

BLOCK	CONTENT	SOURCE
Title Block	Logo, project name, report title, date, author	Substitution tokens
Table Section	Tabular data, selected columns, its own filter	Table or SQL query
Summary Stats	Count, min, max, mean, total per numeric column	Table or SQL query
Chart Insert	Bar, line or scatter chart from the selected data	Table or SQL query
Log Plot Insert	Multi-track strip log of the current hole	Log Plot module
Map Insert	Collar location map	Dashboard module
Text Block	Interpretive notes, disclaimers, legends	Rich text entry
Page Break	Forces a new page in the PDF output	Layout

Tokens and output settings

ITEM	VALUES	NOTE
Text tokens	{today} · {project} · {user} · {hole} · {page} · {pages}	Substituted at generation time
Page size	A4 · A3 · Letter · Ledger	Portrait or landscape
PDF quality	Screen 72 dpi · Print 150 dpi · High quality 300 dpi	300 dpi for a printed report
Excel format	One sheet per section, or one sheet per hole	.xlsx
Filename pattern	{project}_{hole}_{today}	Configurable pattern, tokens accepted
Report mode	Drillhole report, or project summary	Drillhole mode enables serial generation

Good practice

What to settle before a report template is frozen.

✓ Bind rather than paste

A bound block updates; a pasted image ages. Everything that can be bound should be.

✓ Filter block by block

The block's own filter, rather than a global one, guarantees each table carries the scope its title announces.

✓ Use tokens for the context

Project, period, author and version as tokens: they cannot be left on last month's values.

✓ Preview against the real data

A layout that holds on three demonstration rows can overflow on thirty real ones.

✓ Export the data as well

The Excel workbook alongside the PDF lets the reader check a figure without asking for another extract.

✓ Name and archive systematically

Automatic naming avoids the "report_final_v3_really.pdf" file and keeps the history legible.

Frequently asked

The questions asked when designing a template.

Q Does the report update itself?

The template is replayed: at every generation the bound blocks query the database and return the day's value.

Q Can several reports be produced at once?

Yes: batch generation applies the same template to several scopes — one report per prospect, for instance.

Q How do we apply our visual identity?

Logo, colours and title block are set in the template and apply to every report derived from it.

Q What if a table overflows?

Previewing against the real data is when to see it. Adjust the block height or the filter feeding it.

Q Is the template shareable?

Yes: that is the point of a template — the same document, in the same format, across all the company's projects.

Q Can it generate without opening the application?

Generation is an action available to the automation engine: a clock or a database event can trigger it.



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SECTION III

The data

What the module produces on a real dataset, and the vocabulary needed to read those results.

01 Anonymised data

02 Key concepts

Anonymised data

The reporting volume a project the size of KOUKOUDAN represents.

805

PER-HOLE REPORTS

generated serially from a single template

8

BLOCK TYPES

title, table, statistics, chart, log, map, text,
break

6

SUBSTITUTION TOKENS

{today} · {project} · {user} · {hole} · {page} ·
{pages}

300 dpi

PRINT QUALITY

A4, A3, Letter or Ledger, portrait or
landscape

One .gmrpt template drawn once produces the campaign's 805 drillhole sheets, each filled with its own hole's real data, then merged into a single document if required.

Source: KOUKOUDAN project database (Senegal) — figures computed from the real data exported from GeoMate.

Key concepts

The vocabulary of report composition.

Template

The saved composition: blocks, filters, layout and identity. It is replayed as often as needed.

Substitution token

A marker replaced at generation time by a context value — project name, period, author, version number.

Batch generation

Applying the same template to a series of scopes, producing a series of automatically named files.

Bound block

A report element that queries the database at generation time, instead of carrying a frozen value.

Title block

The document's identification block: project, title, date, author, revision. What the archivist reads first.

Reproducibility

The property of a report that, regenerated under the same conditions, yields the same document. It is what makes it verifiable.



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SECTION IV

Value & specifications

What the module changes for the project, and its technical integration profile.

01 Business value

02 Technical profile

Business value

The monthly report stops being rewritten

The template is drawn once; each month only the generation is re-run.

.gmrpt template

A report per hole becomes realistic

Serial generation produces hundreds of documents and merges them — which no team does by hand.

Serial generation

The report's figures are the database's figures

No copy-paste between software and document: binding removes the whole class of transcription errors.

Direct binding

The document carries the company identity

Logo, title block, headers and palette: the deliverable is presentable as-is to a shareholder.

Ready to circulate

The reporting standard becomes a file

A .gmrpt approved by head office applies across every group project sharing the same schema.

Group standard

Technical profile

Composition

Blocks

8 types, freely positioned

Binding

Database table or custom SQL query

Filters

Report-wide, and per block

Templates

.gmrpt file, reusable across projects

PDF output

Sizes

A4 · A3 · Letter · Ledger

Orientation

Portrait or landscape

Quality

72, 150 or 300 dpi

Naming

Token pattern {project}_{hole}_{today}

Excel & batch output

Excel

One sheet per section or per hole

Batch

One document per hole, optional merge

Background

Recommended beyond 20 holes

Automation

Triggerable from the Automation Builder



One platform, from field to report

The “Report Builder” module is one of the 19 modules of GeoMate 2026 — a single, fully offline platform covering the whole chain: database design, data entry, validation, QA/QC, dispatch, analysis and reporting.