DATAMINE

geovariances

kartotrak

CASE STUDY

RSK

RSK Environnement has selected Kartotrak, the leading expert tool for characterizing soil and structural contamination. The objective: to integrate a probabilistic approach and significantly enhance the robustness of its assessments.

Client
RSK ENVIRONNEMENT

Environmental Consulting
GEOSCIENCES

Location
FRANCE

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CONTEXT

A demanding environment for environmental engineering firms

Managing contaminated sites and soils is a major challenge for protecting both the environment and public health. Specialist consulting firms must not only deliver accurate assessments but also provide clients with strong methodological assurances based on reliable, industry-recognized tools.

RSK Environnement, the French subsidiary of the international RSK Group, has been supporting industrial and institutional actors for more than ten years in their remediation and environmental management projects. In this context, the firm set out to reinforce its analysis and modelling capabilities by adopting a software solution specifically designed for the contaminated sites and soils (CSS) field: **Kartotrak**, developed by Geovariances.

THE NEED

Pushing beyond the limits of traditional tools

Until recently, RSK Environnement mainly relied on general-purpose GIS and mapping software.



> These software programs are fine for drawing surfaces or piezometric maps, but I was looking for additional features, especially computational capabilities to account for uncertainty. They don't offer that.

Julien Breton
Technical Director
Head of the Aix-en-Provence Office

These limitations primarily prevented the team from:

Quantifying and representing uncertainties related to estimation and inherent to to limited, uneven, or variable-quality data.

Producing probability maps showing the likelihood of threshold exceedance.

Establishing accurate mass balances and excavation plans that integrate sample depth information.

> In contaminated sites and soils, we have an obligation of means and a duty of advice to our clients. It is essential to be able to evaluate uncertainties, not only qualitatively but also quantitatively.







THE SOLUTION

Kartotrak, a benchmark tool

Following an internal audit and a comparative testing phase, RSK Environnement selected **Kartotrak**.

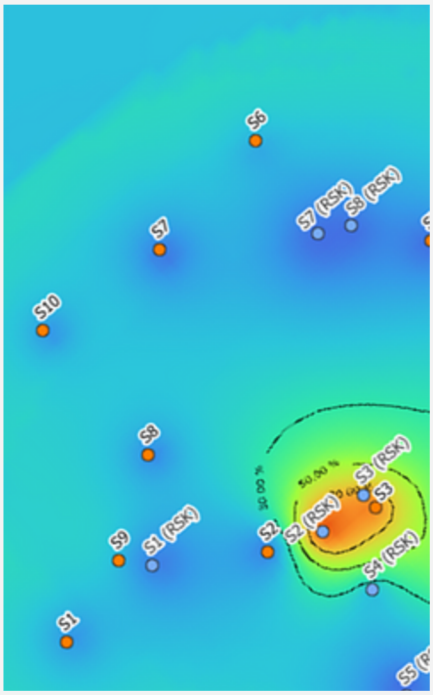
The reasons behind this choice include:

A robust and proven solution

Specifically designed to apply geostatistics to contaminated sites and soils, Kartotrak is considered a reference in the industry.

Advanced functionalities

2D/3D modeling and visualization, accurate mass balances, and optimized sampling plans.



Quantitative uncertainty management

Through variograms and geostatistical simulations that generate probability maps of threshold exceedance, Kartotrak delivers rigorous uncertainty quantification and greater transparency in reporting.



Data control

Data is stored on an internal server, ensuring enhanced security and confidentiality.

Comprehensive support

Geovariances provides training and technical assistance to help teams progress step by step.

BENEFITS

Secure services

A recognized tool endorsed by methodological guidelines for managing contaminated sites and soils, and referenced in certain official specifications.

Deliverables that stand out

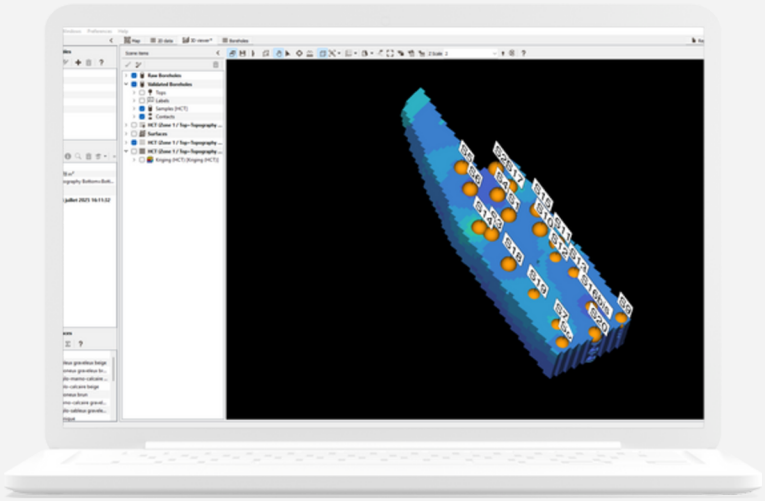
Refined representations and robust quantitative analyses that support strong decision-making.

Greater technicality and credibility

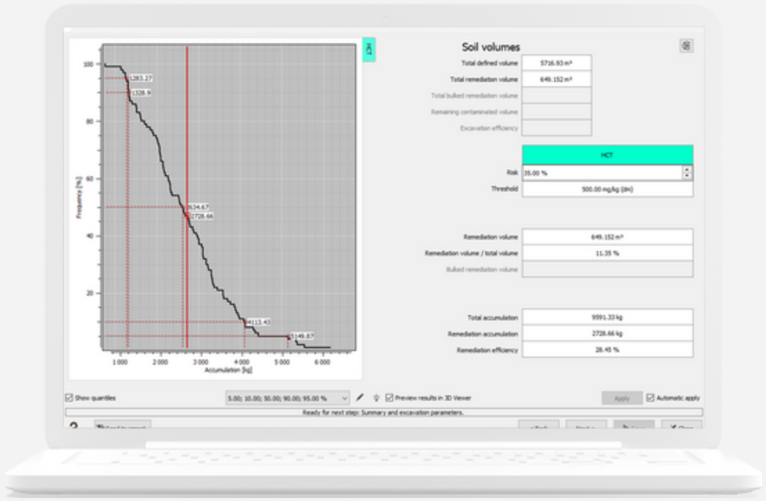
Advanced capabilities that meet – and often exceed – client expectations.

Strengthened internal expertise

Teams trained in probabilistic approaches gain new skills and confidence.



3D visualization of a contamination



Module for calculating impacted soil masses and volumes

> We are still in the learning phase today, but tomorrow, I would like us to offer 3D deliverables for our management plans.

Looking ahead

RSK Environnement continues to expand its expertise with Kartotrak, aiming to deploy it across a wider range of projects and integrate it with other GIS tools.



By choosing Kartotrak, RSK Environnement demonstrates its commitment to investing in specialized, proven solutions that deliver the best possible outcomes for clients. This approach reflects a culture of continuous improvement, where scientific precision becomes a driver of trust and performance.