

Christian S. Calvo

Phoenix, AZ

christianscalvo@gmail.com | 520-660-7884

Professional Summary

Data-driven laboratory professional with experience in **KPI analytics, business intelligence, and operational reporting**. Proven ability to transform raw data into **actionable insights** using Snowflake, Power BI, and Python. Experienced in building **end-to-end data workflows** and delivering **executive-level reports** that drive operational decision-making and performance improvement.

Technical Skills

Languages & Tools: Python, SQL, LaTeX

Data Platforms: Snowflake (Data Modeling, Querying, Views)

Visualization: Power BI (KPIs, Dashboards, Data Modeling, DAX)

Concepts: Data Analysis, ETL Pipelines, KPI Design, Data Transformation

Other: Microsoft 365 Copilot (Enterprise), Reporting Automation

Professional Experience

Laboratory Technician III

Freeport-McMoRan, Miami, AZ

April 2023 – Present

- Perform analytical testing and laboratory operations supporting metallurgical processes, ensuring accuracy and compliance with operational standards.
- Developed and enhanced **KPI tracking systems** to monitor laboratory performance, including turnaround time (TAT), SLA/on-time performance, and lateness severity.
- Designed and implemented **Snowflake data models and reporting views** to transform StarLIMS data into structured, analysis-ready datasets aligned with business logic.
- Built **interactive Power BI dashboards** providing visibility into sample flow, lab performance, and operational bottlenecks across multiple functions.
- Transitioned from dashboard reporting to **insight-driven analysis**, identifying key drivers of performance such as high-impact sample types, lab-level disparities, and backlog indicators.
- Created **executive-level KPI reports** using LaTeX, integrating trend analysis, root cause identification, and actionable recommendations for management.
- Leveraged **Snowflake AI (Cortex)** and enterprise Copilot tools to support exploratory analysis and insight generation within a secure environment.

- Identified critical operational risks, including:
 - Sample-type bottlenecks (e.g., Regular samples driving majority of delays)
 - Lab-level performance gaps
 - Increasing lateness severity and backlog patterns
- Translated analytical findings into **business-focused recommendations**, improving decision-making and operational visibility for supervisors and leadership.

Projects

Laboratory KPI Reporting System

- Designed an end-to-end reporting pipeline integrating Snowflake, Python, Power BI, and LaTeX.
- Built structured KPI reporting templates used for monthly and quarterly performance reviews.
- Automated generation of reports including performance trends, root cause analysis, and management recommendations.

Monthly Composite Analyte Forecasting Tool

- Developed a forecasting tool to model expected analyte ranges and identify deviations.
- Reduced manual review effort and improved anomaly detection in composite samples.

LIMS Operations & Data Enablement

- Performed daily StarLIMS operations including sample login, data entry, approvals, and exception handling.
- Supported data integrity and consistency through accurate record management aligned with SOPs.
- Designed workflow tools and prototypes (inventory tracking, barcode flows) to improve efficiency and reduce manual effort.
- Documented lab workflows using structured guides and process diagrams, improving clarity and standardization.

Education

High School Diploma

Leopoldo Queipo IES - Melilla, Spain

Electrical Engineering (3 years out of 4 completed)

Universidad de Malaga - Malaga, Spain