

Minimum viable dataset: mining and resources

What we need to install your mine operations Control Room: one page, exported from the reporting you already have.

You do not need perfect data. These core fields, pulled from shift reports, the fleet management system and the assay lab, are enough to build a working mine operations performance view and cost per tonne in 14 days. Missing a field? We build around it.

1 • Production (per shift or per day)

Field / column	Format	Example	Required	Notes
Date	DD/MM/YYYY	03/02/2026	Yes	—
Shift	Text	Day / Night	Yes	—
Area / pit / stope	Text	Stage 4 Cutback	Yes	Consistent names
Tonnes mined (t)	Decimal	4,820	Yes	BCM or tonnes
Tonnes processed (t)	Decimal	4,510	No	If milled
Head grade (g/t or %)	Decimal	1.42	Yes	From assay / ROM
Recovery (%)	Decimal 0–1	0.91	No	Processing recovery

2 • Equipment hours and availability

Field / column	Format	Example	Required	Notes
Date	DD/MM/YYYY	03/02/2026	Yes	—
Equipment ID	Text	EX-04 / HT-12	Yes	Match the fleet system
Operating hours	Decimal	18.5	Yes	Per day
Available hours	Decimal	22.0	Yes	Scheduled
Downtime hours	Decimal	3.5	Yes	Unplanned + planned
Downtime category	Text	Mechanical / Tyres	No	Drives the Pareto

3 • Cost inputs (per period, weekly or monthly)

Field / column	Format	Example	Required	Notes
Period	MMM-YYYY	Feb-2026	Yes	—
Diesel / fuel (\$)	Currency	182,000	Yes	AU\$
Consumables (\$)	Currency	94,500	Yes	Explosives, GET, etc.
Labour (\$)	Currency	210,000	Yes	AU\$
Maintenance (\$)	Currency	76,000	No	AU\$
Total tonnes for period (t)	Decimal	118,400	Yes	For cost per tonne

Acceptable sources

Shift reports or daily production sheets; a fleet management (dispatch) export; assay lab grade data; the cost ledger or month-end cost report. CSV or Excel, one row per record.

Frequency

Production and equipment: per shift or daily (or an 8–12 week batch for the build). Grade: per assay batch. Cost: weekly or monthly.

“We don’t have clean data”? Mining data is rarely tidy: it is split across dispatch, the lab and finance. We stitch those three sources together and build the reconciliation in. A partial dataset still produces a working cost-per-tonne view.