Example, invented data. No real firm, facility or test.

Sample report check

What a check looks like when it comes back: each mismatch with the page it is on, what the other documents say and what to look at. Your reviewer decides what to change.

Job	Example Station, Engine 2 outlet (invented)
Unit	Natural gas engine, 1,380 hp
Methods	EPA Methods 3A, 7E and 10; 3 runs
Checked	Final report (96 pages), field data workbook, ERT project file
Result	**3 mismatches, 1 question, 1 wording note.** Everything else agrees.

Mismatches

Mismatch **Run 2 NO_x at 15% O_2: the ERT file differs from the report**

Source	Where	Value, ppmvd
Report, results table	p. 14	7.96
Field data workbook, DAS export	row 418	7.96
ERT file, run data	**Run 2, NO_x**	**9.76**

The report and the field data agree. The ERT entry looks like the same digits in another order. The test average in the ERT file changes with it.

Mismatch **Average CO does not follow from the three runs**

Run	Where	CO, ppmvd at 15% O_2
Run 1	p. 22	41.2
Run 2	p. 22	42.9
Run 3	p. 22	42.8
Average of the runs, recomputed		42.3
Average as printed	**p. 22**	**41.8**

The printed average is 0.5 ppm lower than the average of the printed runs. The ERT file carries the runs, so ERT will show 42.3.

Mismatch **NO_x mid-level gas: the certificate and the calibration sheet disagree**

Source	Where	Certified value, ppm
Cylinder certificate, cylinder EX-0412 (invented)	p. 61	45.2
Calibration sheet	p. 58	54.2
ERT file, gas cylinder list	EX-0412	54.2

The certified value enters the calibration error, the system bias and every bias-corrected run result. With the certificate's 45.2 ppm, the pre-test calibration error for this gas is outside the Method 7E limit of 2.0 percent of span.

Question

Question **Was the engine tested at the load the rule asks for?**

The report gives the engine load as 82 percent during all three runs (p. 9). 40 CFR 63.6620(b) asks for a test within plus or minus 10 percent of 100 percent load for this engine class. The report does not say why the load was lower. There may be an approval we can't see.

Wording

Wording **"Turbine" in an engine report**

The introduction on p. 3 says "the turbine was operated at normal load". Every other page describes a reciprocating engine. This reads like text carried over from another job.

Checked, nothing to report

- Runs 1 and 3: report, field data and ERT file agree for NO_x, CO and O_2
- Calibration error, system bias and drift for O_2 and CO, against the Method 7E limits
- Gas cylinders certified before the test and not expired
- Every calibration in the ERT file uses a cylinder on the cylinder list
- Run start and end times in order on the test day
- Units fit each gas: O_2 in percent, NO_x and CO in ppm
- O_2-corrected values follow from the measured ones
- Every field ERT requires is filled in

Stackbook never declares compliance and never signs or submits. Your reviewer decides on each item and your firm authorizes the report.