

One well file. A clear data diagnostic.

Fictional well DEMO-WELL-01 | 1,000-1,002 m | Five samples | Four log curves

This entirely invented dataset demonstrates data preparation and a documented handoff. It contains no customer measurements, field names or private project identifiers.

1. Source and checks

One LAS 2.0 file, depth in metres, 0.5 m spacing and a declared null value of -999.25. The source bytes are preserved. Coverage was checked with PetroGeo's LAS diagnostic software; the numbers below refer only to this small synthetic example.

Curve	Declared unit	Valid / total	Missing
GR	API	4 / 5	1
RHOB	G/C3	5 / 5	0
NPHI	V/V	5 / 5	0
RT	OHMM	5 / 5	0

2. Finding and recorded handling

Gamma ray is missing at 1,001 m. Its four valid measurements form two separate coverage segments. The other three curves are complete across the five sampled depths.

Retain the GR null and exclude it from numeric summaries. Carry the location of the gap into the handoff. No interpolation, substitution, depth shift, splice or unit conversion is applied.

The diagnostic handoff

3. Measurements carried forward

The blank GR entry displays the declared source null. All other values are copied unchanged. Readable unit notation below does not change the measurement scale.

Depth m	GR API	RHOB g/cm3	NPHI V/V	RT ohm.m
1000.0	42.0	2.41	0.18	12.5
1000.5	45.0	2.38	0.2	10.2
1001.0	Missing	2.35	0.22	8.4
1001.5	88.0	2.29	0.27	3.1
1002.0	96.0	2.26	0.29	2.4

4. What the reviewer receives

Source: the unchanged, explicitly synthetic LAS.

Data table: the five source rows, with the GR null left blank in the CSV.

Inventory: curve mnemonics, declared units, valid/null counts and coverage.

Diagnostic: the located gap and documented handling above.

Where this example ends

The data diagnostic is complete for the stated inventory and null-handling scope. A qualified petrophysicist decides whether additional acquisition evidence is needed before interpretation. This example does not calculate lithology, saturation, net pay or reserves and is not expert-approved customer work.

Explore the source and matching tables at xzhenergy.com/petrogeo/example.