

SERIAL · VINTAGE

RCC rcc_specimen_0002 · 2026

56.1

56.1

GPU-HOURS CERTIFIED

H100-80GB SXM

ENERGY BASIS

TELEMETRY · board-power

WATER

INDIRECT measured / DIRECT modeled

WORKLOAD

SIMULATED

COMPOSITE CARBON

79.2 gCO₂/kWh

ENERGY BASIS

0.6958 kWh/GPU-hr

WATER (WINDOW)

3.10 gal · GATE PASSED

GPU-HOURS

56.1

PROVENANCE

composite · 2 segments

HOST FACILITY

lakeshore-west (sim)

ENERGY ATTRIBUTE · RETIRED EXACTLY
ONCE

granular_cert_ref:

pending retirement (registry stub)

PROVENANCE · SHA256

72e78a7806e548d65104f56ea0bf6c8d5fb02858ef1fab655c5953652a94cb16

RENEWABLE COMPUTE CREDIT

1 RCC = one GPU-hour of compute executed in a clean window, conditional on the executing facility passing the water gate for that window.

PROVENANCE

Carbon intensity & clean-energy %	MEASURED	MISO Michigan fuel mix
Energy basis (kWh/GPU-hr)	MEASURED	calibrated on H100/A100 SXM hardware
Indirect / grid water	MEASURED	computed from the fuel mix · cooling-typed basis
Direct / cooling water	MODELED	published facility WUE benchmark

WATER FOOTPRINT

Direct / cooling · modeled	3.10 gal
Indirect / grid · measured	9.66 gal

Total footprint12.76 gal

Computed $\Sigma(\text{fuel-share} \times \text{energy} \times \text{consumption factor})$ using cooling-typed regional consumption factors (Macknick 2011/2012 × the EIA-860/923 2024 generation-weighted MISO-Central cooling mix). Wind/solar ~0 gal/MWh; on the regional annual mix the basis is ~313 gal/MWh, higher for fossil-heavy windows.

VERIFY IT YOURSELF

Recompute the certificate hash from its inputs, in any language:

```
node verify_rcc.mjs <cert>.json
```

The recomputed SHA-256 must equal the hash on the front. Indirect water recomputes the same way — $\Sigma(\text{fuel-share} \times \text{energy} \times \text{factor})$ from the certificate's own generation mix and energy. Change any figure and the hash will not match.

PROVENANCE HASH

72e78a7806e548d65104f56ea0bf6c8d5fb02858ef1fab655c5953652a94cb16