

Dam: Ambarau

Country DR Congo

River Kibali

3°05'4.98"N 29°34'57.00"E

3.084717 29.5825

Owner/Client RandGold

Designer/Engineer ARQ

Contractor M&T via DRA Mining

Purpose (code) H

Site start 01.11.2014

RCC start 09.05.2015

RCC completion 31.12.2016

Site completion 31.12.2017

Height (m) 21

Length (m) 255

Volume of RCC (m³x10³) 33

Total volume (m³x10³) 40

Reservoir capacity (m³x10⁶) 6

Upstream slope 0.75

Forming of upstream face (code) (4') *

Downstream slope 0.75

Forming of downstream face (code) (1) *

Spillway slope 0.75

Forming of spillway face (code) (1)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content (kg/m³) 100

Pozzolan content (kg/m³) 0

Code for pozzolan (-)

RCCDAM Unique Serial No. RCCDAM0685

Guide to Abbreviations

Purpose

- E Environmental
- F Flood control
- G Groundwater recharge
- H Flood control
- I Irrigation
- N Navigation
- P Pollution control
- R Recreation
- W Water supply

Facing method

- (1) Traditional concrete against formwork
- (2) Traditional concrete against formwork with external geomembrane
- (3) RCC against formwork
- (4) RCC against formwork with external geomembrane
- (5) Traditional concrete against precast concrete panels
- (6) Traditional concrete against precast concrete panels with geomembrane
- (7) RCC against precast concrete panels
- (8) RCC against precast concrete panels with geomembrane
- (9) RCC against precast concrete panels with hot poured membrane
- (10) RCC against precast concrete blocks
- (11) Reinforced conventional concrete cast before RCC placement
- (12) Reinforced conventional concrete cast after RCC placement
- (13) Reinforced concrete cast against precast units or slip-formed facing elements
- (14) Slip-formed/extruded facing elements
- (15) RCC supported by fill shoulders
- (16) Mechanically compacted unformed face of RCC
- (17) Unformed face of RCC
 - ' GEVR/GE-RCC
 - * Stepped face

Pozzolans

- (-) No Pozzolan Used
- (C) High-lime flyash (ASTM Class C)
- (F) Low-lime flyash (ASTM Class F)
- (M) Milled sand
- (N) Natural pozzolan (ASTM Class N)
- (R) ROLAC (mixture of flyash and slag with or without limestone fines)
- (S) Ground-granulated blast-furnace slag
- (L) Mixture of GGBFS and limestone fines