

Dam: Gibe III

Country Ethiopia

River Omo

06°50'55.17"N 37°18'10.37"E

6.848658 37.302879

Owner/Client Ethiopian Electric Power (EEP)

Designer/Engineer Unknown

Contractor Salini - Impregilo SpA

Purpose (code) H

Site start 22.04.2008

RCC start 18.12.2011

RCC completion 31.10.2015

Site completion 31.12.2016

Height (m) 246

Length (m) 630

Volume of RCC ($m^3 \times 10^3$) 6200

Total volume ($m^3 \times 10^3$) 6400

Reservoir capacity ($m^3 \times 10^6$) 14690

Upstream slope 0.25

Forming of upstream face (code) (3')

Downstream slope 1.00

Forming of downstream face (code) (3') *

Spillway slope 1.00

Forming of spillway face (code) (3') *

Depth of layers (mm) 400

Depth of lifts (mm) 400

Cement content (kg/m^3) 70 to 120

Pozzolan content (kg/m^3) 45 to 60

Code for pozzolan (S)

RCCDAM Unique Serial No. RCCDAM0641

Under Construction



RCCDAM0641UC

Completed Dam



RCCDAM0641CD

Google Earth



RCCDAM0641GE

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