

Dam: Chucas

Country Costa Rica

River Tárcoles

9°55'58.99"N 84°23'1.39"W

9.933052 -84.38372

Owner/Client ICE (Instituto Costarricense de Electricidad - Costa Rican Institute of Electricity)

Designer/Engineer ENEL, Italy

Contractor SinoHydro Corporation (11th Construction Bureau)

Purpose (code) H

Site start 01.03.2011

RCC start 05.10.2014

RCC completion 31.12.2016

Site completion 31.12.2017

Height (m) 48

Length (m) 130

Volume of RCC (m³x10³) 180

Total volume (m³x10³) 200

Reservoir capacity (m³x10⁶) 450

Upstream slope 0.20

Forming of upstream face (code) *Unknown*

Downstream slope 0.75

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

Spillway slope 0.75

Forming of spillway face (code) *Unknown*

Depth of layers (mm) 300

Depth of lifts (mm) 2500

Cement content (kg/m³) 95

Pozzolan content (kg/m³) 96

Code for pozzolan (N)

RCCDAM Unique Serial No. RCCDAM0970

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