

Dam: Ayvali

Country Turkey

River Oltu

40°46'4.24"N 41°55'47.17"E

40.768333 41.930279

Owner/Client Ozdogan Enerji

Designer/Engineer Su Yapi Engineering and Consulting Inc.

Contractor Özkar Construction and Trade

Purpose (code) H

Site start 01.04.2011

RCC start 01.02.2013

RCC completion 28.02.2015

Site completion 31.10.2015

Height (m) 177

Length (m) 405

Volume of RCC (m<sup>3</sup>x10<sup>3</sup>) 1650

Total volume (m<sup>3</sup>x10<sup>3</sup>) 1900

Reservoir capacity (m<sup>3</sup>x10<sup>6</sup>) 308

Upstream slope V

Forming of upstream face (code) (3')

Downstream slope 0.75

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

Spillway slope 0.75

Forming of spillway face (code) (12)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content (kg/m<sup>3</sup>) 50  
100

Pozzolan content (kg/m<sup>3</sup>) 110  
120

Code for pozzolan (F)

RCCDAM Unique Serial No. RCCDAM0630

## Under Construction



RCCDAM0630UC

## Completed Dam



RCCDAM0630CD

## Google Earth



RCCDAM0630GE

# 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