

Dam: Miel I

Country Colombia

River La Miel

5°33'38.6"N 74°53'12.33"W

5.560722 -74.886757

Owner/Client Isagen S.A. E.S.P. - Hidromiel S.A. E.S.P.

Designer/Engineer Hidroestudios S.A.

Contractor CNO (Odebrecht), GMD (Grupo Mexicano de Desarrollo), ABB and Kvaener, J.V. (Consorcio Miel)

Purpose (code) H

Site start 24.12.1997

RCC start 08.04.2000

RCC completion 09.07.2002

Site completion 09.10.2002

Height (m) 188

Length (m) 345

Volume of RCC ( $m^3 \times 10^3$ ) 1669

Total volume ( $m^3 \times 10^3$ ) 1730

Reservoir capacity ( $m^3 \times 10^6$ ) 565

Upstream slope V

Forming of upstream face (code) (4')

Downstream slope  
0.75  
1.00

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

Spillway slope  
0.75  
1.00

Forming of spillway face (code) (12)

Depth of layers (mm) 300

Depth of lifts (mm) 300

Cement content ( $kg/m^3$ ) 85 to 160

Pozzolan content ( $kg/m^3$ ) 0

Code for pozzolan (-)

RCCDAM Unique Serial No. RCCDAM0278

## Under Construction



RCCDAM0278UC

## Completed Dam



RCCDAM0278CD

## Google Earth



RCCDAM0278GE

# 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