

Dam: Wadi Dayqah

Country Oman

River Wadi Dayqah

23°04'55.96"N 58°50'54.03"E

23.082211 58.848343

Owner/Client Ministry of Regional Municipalities and Water Resources

Designer/Engineer Wadi Dayqah Dam JV (Black & Vetch, Su Yapi and Nespak)

Contractor CJV (Vinci & CCC Oman)

Purpose (code) W

Site start 01.08.2006

RCC start 24.01.2008

RCC completion 11.04.2009

Site completion 30.11.2009

Height (m) 75

Length (m) 410

Volume of RCC ($m^3 \times 10^3$) 590

Total volume ($m^3 \times 10^3$) 650

Reservoir capacity ($m^3 \times 10^6$) 100

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) (3') *

Depth of layers (mm) 300

Depth of lifts (mm) 1200

Cement content (kg/m^3) 126
112

Pozzolan content (kg/m^3) 54
48

Code for pozzolan (M)

RCCDAM Unique Serial No. RCCDAM0439

Under Construction



RCCDAM0439UC

Completed Dam



RCCDAM0439CD

Google Earth



RCCDAM0439GE

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