

EXHIBIT B

**PERTINENT DATA SHEETS FOR SAN ANTONIO DAM,
CARBON CANYON DAM, AND
VILLA PARK DAM**

**PRADO DAM
SANTA ANA RIVER
RIVERSIDE COUNTY, CALIFORNIA**

**Los Angeles District Office
U.S. Army Corps of Engineers
September 1991**

Exhibit B

SAN ANTONIO DAM AND RESERVOIR LOS ANGELES AND SAN BERNARDINO COUNTIES, CALIFORNIA

PERTINENT DATA (REVISED MAY 1983)

Stream System		San Antonio Creek
Drainage Area	sq. ml	26.7
Reservoir:		
Elevation		
Streambed at upstream toe of dam	ft, m.s.l	2,125
Debris pool	ft, m.s.l	2,164
Flood control pool (spillway crest)	ft, m.s.l	2,238
Streambed design surcharge level	ft, m.s.l	2,254.9
Top of dam	ft, m.s.l	2,260
Area		
Debris pool	acres	44.4
Spillway crest	acres	145
Spillway design surcharge level	acres	163.5
Top of dam	acres	168.1
Capacity, gross		
Debris pool	acre-ft	466.9 (0.33*)
Spillway crest	acre-ft	7,703.2 (5.41*)
Spillway design surcharge level	acre-ft	10,298.6 (7.23*)
Top of dam	acre-ft	11,144.2 (7.83*)
Allowance for sediment (50-year)	acre-ft	2,000 (1.40*)
Dam: - Type		
	Earth	
Height above original streambed	ft	160
Top length	ft	30
Top width	ft	3,960
Freeboard	ft	5.1
Spillway: - Type		
	Ungated ogee	
Crest length	ft	200
Design surcharge	ft	16.9
Design discharge	c.f.s	53,700
Outlets:		
Gates - Type		
Number and size		Vertical lift
Gate sill elevation	ft., m.s.l	3-5'-8"W x 10'H
Conduits		2,125
Number and size - diameter	ft	1-14.5
Length	ft	508
Maximum capacity at spillway crest	c.f.s	11,800
Regulated capacity at spillway crest	c.f.s	8,000
Reservoir design flood:		
Duration (inflow)	Days	2
Total volume	acre-ft	22,500 (15.68*)
Inflow peak	c.f.s	19,000
Spillway design flood:		
Duration (inflow)	Days	1
Total volume	acre-ft	18,200 (12.69*)
Inflow peak	c.f.s	60,000
Historic maximums:		
Maximum release	c.f.s	8,420
Date		1-25-69
Maximum water surface elevation	ft., m.s.l	2225.6
Date		2-19-80

*Inches in runoff

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CARBON CANYON DAM AND RESERVOIR ORANGE COUNTY, CALIFORNIA

PERTINENT DATA (REVISED MAY 1983)

Stream System		Carbon Creek
Drainage Area	sq. miles	19.3
Reservoir:		
Elevation		
Streambed at dam	ft. m.s.l.	403
Flood control pool (spillway crest)	ft. m.s.l.	475
Spillway design surcharge level	ft. m.s.l.	493.7
Top of dam	ft. m.s.l.	499
Area		
Spillway crest	acres	224.6
Spillway design surcharge level	acres	287.2
Top of dam	acres	305.6
Capacity, gross		
Spillway crest	acre-ft	6,614.1 (6.43*)
Spillway design surcharge level	acre-ft	11,322.8 (11.0*)
Top of dam	acre-ft	12,898.7 (12.53*)
Allowance for sediment (50-year)	acre-ft	1,500 (1.46*)
Dam: - Type	Earthfill	
Height above original streambed	ft	99
Top length	ft	2,610
Top width	ft	20
Freeboard	ft	5.3
Spillway: - Type	Ungated, broad-crested	
Crest width	ft	125
Design surcharge	ft	18.7
Design discharge	c.f.s	36,800
Outlets:		
Gates - Type	Hydraulic slide	
Number and size	2-5'W x 6.5'H	
Sill elevation	ft., m.s.l.	403
Conduits - Type	Rectangular	
Number and size	1-4.75'W x 7'H	
Length (including transition section)	ft	549
Invert elevation at intake	ft., m.s.l.	403
Discharge at spillway crest elevation	c.f.s	1,270
Discharge at top of dam elevation	c.f.s	1,480
Reservoir design flood:		
Duration (inflow)	Days	2
Total volume	acre-ft	8,030 (7.80*)
Inflow peak	c.f.s	9,300
Spillway design flood:		
Duration (inflow)	Days	1
Total volume	acre-ft	11,800 (11.46*)
Inflow peak	c.f.s	52,000
Historic maximums:		
Maximum release	c.f.s	446
Date		2-25-69
Maximum water surface elevation	ft., m.s.l.	430.9
Date		3-1-83

*Inches in runoff

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VILLA PARK DAM AND RESERVOIR
ORANGE COUNTY, CALIFORNIA
PROJECT OWNER AND OPERATOR: OCEMA

PERTINENT DATA
(FROM "VILLA PARK OPERATION MANUAL" DATED NOVEMBER 1984)

Construction Completed		1963
Stream System		Santiago Creek
Drainage Area	sq. miles	83.4
Reservoir:		
Elevation		
Streambed at dam	ft, m.s.l	480
Debris pool	ft, m.s.l	510
Spillway crest	ft, m.s.l	566
Spillway design surcharge level	ft, m.s.l	577
Top of dam	ft, m.s.l	584
Area		
Debris pool	acres	65
Spillway crest	acres	480
Spillway design surcharge level	acres	540
Top of dam	acres	570
Capacity, gross (January 1971 Survey)		
Debris pool	acre-ft(in.)	700 (0.16*)
Spillway crest	acre-ft	16,000 (3.60*)
Spillway design surcharge level	acre-ft	21,800 (4.91*)
Top of dam	acre-ft	25,000 (5.63*)
Dam: - Type		
		Earthfill
Height above original streambed	ft	104
Top length	ft	1,460
Top width	ft	20
Freeboard	ft	7
Spillway: - Type		
		Detached, broad-crested
Crest width	ft	200
Crest elevation	ft	566
Design surcharge	ft	11
Design discharge	c.f.s	29,000
Outlets:		
Gates - Type		
		Hydraulic slide
Number and size		3 - 6'W x 12'H
Sill elevation	ft, m.s.l	484
Conduits		
Number and Size		1 - 13'W x 13'H
Length	ft	440
Discharge at spillway crest elevation	c.f.s	6,000
Regulated capacity at spillway	c.f.s	6,000
Reservoir Project Design Flood (OCEMA routing - 6,000 cfs max outflow):		
Duration (inflow)	Days	1
Total volume	acre-ft	33,500 (7.54*)
Maximum Water Surface Elevation	ft	571.5
Inflow peak	c.f.s	24,500
Outflow peak	c.f.s	9,200

*Inches in runoff