

TABLE 5

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

COCHITI LAKE  
NAME OF RESERVOIR

57-27

DATA SHEET NO.

DAM	1. OWNER Dept. of Army C. of E.		2. STREAM Rio Grande		3. STATE New Mexico			
	4. SEC. 16 TWP. 16N RANGE 6E		5. NEAREST P O Pena Blanca		6. COUNTY Sandoval			
	7. LAT 35° 37' 01" LONG 106° 18' 58"		8. TOP OF DAM ELEVATION 5479.0		9. SPILLWAY CREST ELEV. 5460.5			
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL	12. ORIGINAL SURFACE AREA, ACRES	13. ORIGINAL CAPACITY, ACRE-FEET	14. GROSS STORAGE, ACRE-FEET	15. DATE STORAGE BEGAN	
	a. FLOOD CONTROL		5460.5	9361	483,100	588,100	12 Nov 73	
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY						16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION							
	f. CONSERVATION <u>1/</u>		5321.3	1200	47,490	47,490	9 Apr 75	
g. INACTIVE <u>2/</u>		5357.5	2061	105,000	105,000			
17. LENGTH OF RESERVOIR		21.0	MILES		AV. WIDTH OF RESERVOIR		0.88	
							MILES	
WATERSHED	18. TOTAL DRAINAGE AREA		11,695	SQ. MI.	22. MEAN ANNUAL PRECIPITATION		10-40	
							INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA		11,680	SQ. MI.	23. MEAN ANNUAL RUNOFF		1.75	
							INCHES	
20. LENGTH		305	MILES	AV. WIDTH	38	MILES	24. MEAN ANNUAL RUNOFF	
							1,093,160 <u>3/</u>	
							AC.-FT.	
21. MAX. ELEV.		13,830	MIN. ELEV.	5191	25. ANNUAL TEMP MEAN			50.3 RANGE -23 to 106
SURVEY DATA	26. DATE OF SURVEY	27. PERIOD YEARS	28. ACCL. YEARS	29. TYPE OF SURVEY	30. NO. OF RANGES OR CONTOUR INT.	31. SURFACE AREA, ACRES	32. CAPACITY, ACRE-FEET	33. C/I. RATIO, AC.-FT. PER AC.-FT.
	April 1972	0	0	Contour (D)	5 Feet	9361	588,100	0.538
	April 1976	4	4	Range	16 Ranges	<u>4/</u>	<u>4/</u>	<u>4/</u>
	April 1978	2.08	6.08	Range (D)	16 Ranges	9375	586,477	0.536
	26. DATE OF SURVEY	24. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET			36. WATER INFL. TO DATE, AC.-FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
	April 1972	-	-	-	-	-	-	-
	April 1976	-	-	.935,134	1,210,519	3,740,535	935,134	3,740,535
	April 1978	10 - 30	-	569,441	396,828	1,184,437	810,028	4,924,972
	26. DATE OF SURVEY	37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET			
	a. PERIOD TOTAL	b. AV. ANNUAL	c. PER SQ. MI.-YEAR	a. TOTAL TO DATE	b. AV. ANNUAL	c. PER SQ. MI.-YEAR		
April 1972	-	-	-	-	-	-	-	
April 1976	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	
April 1978	1623	780	0.067	1623	780	0.067		
26. DATE OF SURVEY	39. AV. DRY WGT., LBS PER CU. FT.	40. SED. DEP., TONS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM		
		a. PERIOD	b. TOTAL TO DATE	a. AV. ANN.	b. TOT. TO DATE	a. PERIOD	b. TOT. TO DATE	
April 1972	-	-	-	-	-	-	-	
April 1976	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	<u>4/</u>	
April 1978	75.7*	110	110	0.133	0.276	1660	1660	

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION										
	270-240	240-210	210-180	180-150	150-120	120-90	90-60	60-30	30-0		
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
April 1978	4	34	37	3	13	4	2	3	0		

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR														
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	-105	-110	-115	-120	-125
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION														
April 1978	45	14	12	10	8	4	3	2	1	1					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1974	5266.15	5258.53	560,390				
1975	5328.15	5265.35	1,210,519				
1976	5331.60	5320.91	758,087				
1977	5322.65	5320.89	396,828				
1978 <sup>5/</sup>	5330.78	5320.79	146,207 <sup>5/</sup>				

46. November 1978 Capacities 6/ ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
5460	9255	581,400	5380	2928	159,700	5300	825	24,520
5450	7954	496,600	5370	2540	132,400	5290	700	16,990
5440	6288	425,600	5360	2140	109,000	5280	550	10,760
5430	5880	364,800	5350	1852	89,050	5270	406	6,016
5420	4780	312,300	5340	1594	71,900	5260	258	2,708
5410	4274	267,000	5330	1362	57,160	5250	170	514
5400	3798	226,600	5320	1174	44,490	5240	0	0
5390	3330	191,000	5310	994	33,620			

47. REMARKS AND REFERENCES

1/ Recreation pool, 1200 acre surface area pool authorized

2/ Sediment reserve

3/ Rio Grande at Otowi, 66 year period of record

4/ Monuments established and ranges surveyed but changes in storage capacities and surface areas not calculated

5/ 4 months

6/ November 1978 was the approval date of the revised elevation/area/capacity data which were based on the April 1978 resurvey.

48. AGENCY MAKING SURVEY Corps of Engineers, Albuquerque  
 49. AGENCY SUPPLYING DATA District, Southwestern Division  
 50. DATE 30 July 1979