

RESERVOIR SEDIMENT

DATA SUMMARY

SCS-34 Rev. 6-66

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Rodey (Hatch Valley Arroyos No. 5)

NAME OF RESERVOIR

57-21

DATA SHEET NO.

DAM	1. OWNER Caballo Soil Cons. Dist			2. STREAM Rodey Arroyo			3. STATE New Mexico						
	4. SEC. 22 TWP. 19S RANGE 3W			5. NEAREST P.O. Hatch			6. COUNTY Sierra						
	7. LAT. 32° 10' " LONG. 107° 08' 25" "			8. TOP OF DAM ELEVATION 4119.6			9. SPILLWAY CREST ELEV. 4113.7						
RESERVOIR	10. STORAGE ALLOCATION		11. ELEVATION TOP OF POOL		12. ORIGINAL 1/ SURFACE AREA, ACRES		13. ORIGINAL 1/ CAPACITY, ACRE-FEET		14. GROSS STORAGE, ACRE-FEET		15. DATE STORAGE BEGAN		
	a. FLOOD CONTROL		4113.7		16.97		103.95		170.91		7/1/58		
	b. MULTIPLE USE												
	c. POWER												
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION												
	f. CONSERVATION										7/1/58		
	g. INACTIVE		4105.4		7.80		66.96		66.96				
WATERSHED	17. LENGTH OF RESERVOIR 0.24 MILES			AV. WIDTH OF RESERVOIR 0.1 MILES									
	18. TOTAL DRAINAGE AREA 2.1 SQ. MI.			22. MEAN ANNUAL PRECIPITATION 8.94 INCHES									
	19. NET SEDIMENT CONTRIBUTING AREA 2.1 SQ. MI.			23. MEAN ANNUAL RUNOFF 0.1 INCHES									
	20. LENGTH 2 MILES			AV. WIDTH 1 MILES			24. MEAN ANNUAL RUNOFF 11.2 AC.-FT.						
	21. MAX. ELEV. 5,435			MIN. ELEV. 4,086.7			25. ANNUAL TEMP: MEAN 59°F RANGE 41°-80°F						
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.		
	7/1/58		--	--	Range Contour D		2' C.I.	16.97	170.91		15.4		
	8/18/67		9.1	9.1	Range Contour D		2' C.I.	16.96	141.25		12.7		
	26. DATE OF SURVEY		34. 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			
	8/18/67		10.13		Dry Pool - no records								
	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					
	8/18/67		29.66	3.26	1.55	29.66	3.26	1.55					
	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						
8/18/67		85 (1)	2869	2869	1.91	17.3	--	---					

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	19.7-		17.7-	19.7	15.7-	17.7	13.7-	15.7	8.3-	13.7	Crest-				
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION															
8/18/67	3	8	1	9	1	8	9	9	9	7					
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															
8/18/67	16	29	24	14	7	3	2	3	1	.03					
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
	Dry Pool														
46. ELEVATION-AREA-CAPACITY DATA															
				Capacity 1967											
ELEVATION	AREA Ac.	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA Ac.	CAPACITY							
Original	Capacity	1958	4098	4.10	24.24	4113.7	16.96	141.25							
4113.7	16.97	170.91	96	3.20	16.96	12	15.18	113.94							
12	15.17	143.60	94	2.51	11.27	10	12.55	86.25							
10	12.98	115.50	92	1.79	6.99	08	10.50	63.23							
08	10.89	91.66	90	1.31	3.91	06	8.58	44.19							
06	8.86	71.95	88	0.71	1.92	04	6.62	29.69							
04	7.12	56.52	86	0.41	0.82	02	5.45	17.64							
02	5.91	43.51	84	0.19	0.24	4100	4.00	8.23							
4100	4.65	32.98	82	0.04	0.02	98	2.20	2.13							
47. REMARKS AND REFERENCES															
<p>1/ Original capacity and surface area reconstructed in 1968 from field survey and sediment probe conducted in 1959. Fill material was excavated in the sediment pool area.</p> <p>Land Use: Range 100%</p> <p>Geology: 0.9 sq. mi. Tertiary pyroclastics; 0.7 sq. mi. Quaternary alluvium and bolson deposits; Quaternary basalt and andesite.</p>															
48. AGENCY MAKING SURVEY				Soil Conservation Service											
49. AGENCY SUPPLYING DATA				Same											
50. DATE						4/1/68									