

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

ABIQUIU RESERVOIR  
NAME OF RESERVOIR

48- 8  
DATA SHEET NO.

DAM	1. OWNER Dept of Army, C of E		2. STREAM Rio Chama		3. STATE New Mexico			
	4. SEC. 8 TWP. 23N RANGE 5E		5. NEAREST P O. Abiquiu, NM		6. COUNTY Rio Arriba			
	7. LAT. 36° 14' 30" LONG. 106° 25' 00 "		8. TOP OF DAM ELEVATION 6,368.0		9. SPILLWAY CREST ELEV. 6,350.0			
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	6,283.5	7,480	502,000	579,039	5 Feb 63		
	b. MULTIPLE USE							
	c. POWER					16. DATE NORMAL OPFR. BEGAN		
	d. WATER SUPPLY							
	e. IRRIGATION					4 Apr 63		
	f. CONSERVATION <u>1/</u>	-----	---	77,039	77,039			
	g. INACTIVE							
WATERSHED	17. LENGTH OF RESERVOIR 13.8 MILES		AV. WIDTH OF RESERVOIR 1.2 MILES					
	18. TOTAL DRAINAGE AREA 2,146 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 19.0 INCHES					
	19. NET SEDIMENT CONTRIBUTING AREA 2,127 SQ. MI.		23. MEAN ANNUAL RUNOFF 2.81 INCHES					
	20. LENGTH 80 MILES		AV. WIDTH 27 MILES		24. MEAN ANNUAL RUNOFF 321,900 (41) AC.-FT.			
	21. MAX. ELEV. 12,000		MIN. ELEV. 6,048		25. ANNUAL TEMP MEAN 42° RANGE -28° to 99°			
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.
	Apr 1963	----	----	Contour (D) Range & Contour (D) <u>2/</u>	20 feet	7,480 <sup>3/</sup>	579,039 <sup>3/</sup>	1.80
	Oct 1967	4.58	4.58		12 (R) - 5 (CI)	7,478 <sup>3/</sup>	572,695 <sup>3/</sup>	1.78
	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		
	Apr 1963	14.71 <sup>4/</sup>		252,952	453,565	1,159,279	252,952	1,159,279
	Oct 1967							
	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	
	Apr 1963	6,344 <sup>3/</sup>	1,385 <sup>3/</sup>	0.65 <sup>3/</sup>	6,344 <sup>3/</sup>	1,385 <sup>3/</sup>	0.65 <sup>3/</sup>	
	Oct 1967							
	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	
Apr 1963	75.7*		1,072	0.24	1.10	6,637	6,637	
Oct 1967	75.7*		1,072					

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION <sup>3/</sup>											
	223.5	200	180	160	140	120	100	80-60	60-40	40-20	20-0	
	-200	-180	-160	-140	-120	-100	-80					
PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION												
Oct 1967	20	24	14	27	17	-2	-2	1	2	-6	5	

26. DATE OF SURVEY	44. REACH DESIGNATION PERCENT OF TOTAL ORIGINAL LENGTH OF RESERVOIR <sup>3/</sup>														
	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														
Oct 1967	44	16	40	7	6	-2	-7	-4	0	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1963	6,089.72	5/6,060.00	93,025				
1964	6,089.52	6,060.00	151,142				
1965	6,186.61	6,060.00	457,158				
1966	6,186.41	6,060.00	278,988				
1967	6,141.17	6,060.00	175,369				
1968	6,095.10	5/6,094.45	3,597				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
6,283.5	7,478	572,695	6,190.0	2,785	102,228	6,120.0	453	8,163
6,280.0	7,260	546,905	6,180.0	2,313	76,820	6,110.0	321	4,315
6,260.0	6,120	413,205	6,170.0	1,875	55,707	6,100.0	180	1,853
6,240.0	5,135	300,258	6,160.0	1,368	39,597	6,090.0	84	598
6,220.0	4,135	207,506	6,150.0	985	28,028	6,080.0	22	92
6,200.0	3,365	132,963	6,140.0	728	19,564	6,070.0	3	11
			6,130.0	557	13,214	6,060.0	0	0

47. REMARKS AND REFERENCES

- 1/ Sediment reserve.
- 2/ 5-ft. contour map to elev. 6,200.0.
- 3/ Top flood control pool, elevation 6,283.5.
- 4/ El Vado recording gage near center of drainage area.
- 5/ Partial year.

48. AGENCY MAKING SURVEY Corps of Engineers, Albuquerque District

49. AGENCY SUPPLYING DATA Southwestern Division

50. DATE July 1968

RESERVOIR SEDIMENT  
DATA SUMMARY

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

ABIQUITO DAM

NAME OF RESERVOIR

48-8a

DATA SHEET NO.

DAM	1. OWNER Dept. of Army C of E		2. STREAM Rio Chama		3. STATE New Mexico				
	4. SEC. 8 TWP. 23N RANGE SE		5. NEAREST P.O. Abiquiu, N.M.		6. COUNTY Rio Arriba				
	7. LAT 36° 14' 30" LONG 106° 25' 00"		8. TOP OF DAM ELEVATION 6,368.0		9. SPILLWAY CREST ELEV 6,350.0				
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	6,283.5	7,480	502,000	579,039	5 Feb 63			
	b. MULTIPLE USE								
	c. POWER								
	d. WATER SUPPLY								
	e. IRRIGATION								
	f. CONSERVATION 1/	-	-	77,039	77,039	4 Apr 63			
g. INACTIVE									
WATERSHED	17. LENGTH OF RESERVOIR 13.8 MILES		AV. WIDTH OF RESERVOIR 1.2 MILES						
	18. TOTAL DRAINAGE AREA 2,146 SQ. MI.		22. MEAN ANNUAL PRECIPITATION 10 - 21 INCHES						
	19. NET SEDIMENT CONTRIBUTING AREA 1,254 2/ SQ. MI.		23. MEAN ANNUAL RUNOFF 2.75 INCHES						
	20. LENGTH 80 MILES		AV. WIDTH 27 MILES		24. MEAN ANNUAL RUNOFF 314,672 (47) AC.-FT.				
	21. MAX. ELEV. 12,000		MIN. ELEV. 6,048		25. ANNUAL TEMP. MEAN 42° RANGE -28° to +99°				
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.	
	Apr 63	-	-	Contour (D)	20 ft	7,480 4/	579,039 4/	1.80	
	Oct 67	4.58	4.58	R/C (D) 3/	12 (R)-5 (C1)	7,478 4/	572,695 4/	1.78	
	Sep 72	4.92	9.50	R/C (D)	21 (R)-5 (C1)	7,474 4/	570,700 4/	1.83	
	Aug 73	0.92	10.42	R/C (D)	21 (R)-5 (C1)	7,477 4/	569,500 4/	1.81	
	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		
	Apr 63	-	-	-	-	-	-	-	
	Oct 67	9-21	252,952	453,565	1,159,279	252,952	1,159,279		
	Sep 72	10-21	236,074	343,416	1,161,485	244,291	2,320,764		
	Aug 73	10-21	429,439	395,084	395,084	260,638	2,715,848		
	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		
	Apr 63	-	-	-	-	-	-		
	Oct 67	6,344	1,385	1.10	6,344	1,385	1.10		
Sep 72	1,995	405	0.32	8,339	878	0.70			
Aug 73	1,200	1,304	1.04	9,539	915	0.73			
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		
Apr 63	75.7*	-	-	-	-	-	-		
Oct 67	75.7*	1,814	1,814	0.24	1.10	6,613	6,613		
Sep 72	65.8	242	1,003	0.15	1.44	946	3,789		
Aug 73	65.8	1,490	1,046	0.16	1.65	3,202	3,704		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION: 4/														
	223.5 - 200	200 - 180	180 - 160	160 - 140	140 - 120	120 - 100	100 - 80	80 - 60	60 - 40	40 - 20	20 - 0				
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
Oct 67	20	24	14	27	17	-2	-2	1	2	-6	5				
Sep 72	17	33	17	20	13	-1	-1	2	1	-3	2				
Aug 73	15	30	22	18	14	0	-1	1	2	-3	2				
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														
Oct 67	44	16	40	7	6	-2	-7	-4	0	0					
Sep 72	40	33	13	6	3	3	1	1	0	0					
Aug 73	17	21	18	12	13	18	1	0	0	0					
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
1963 5/	6,089.72	6,060.00	93,025												
1964	6,089.52	6,060.00	151,142												
1965	6,186.61	6,060.00	457,158												
1966	6,186.41	6,060.00	278,988												
1967	6,141.17	6,060.00	175,369												
1968	6,167.30	6,060.00	268,153												
1969	6,172.20	6,100.28	343,416												
1970	6,167.00	6,092.02	237,674												
1971	6,116.38	6,104.30	170,452												
1972	6,114.98	6,107.00	145,387												
1973 5/	6,219.93	6,107.97	395,084												
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
6,283.5	7,477	569,500	6,190.0	2,785	99,110	6,120.0	440	5,410							
6,280.0	7,260	543,700	6,180.0	2,313	73,710	6,110.0	226	2,070							
6,260.0	6,120	410,100	6,170.0	1,875	52,610	6,100.0	84	775							
6,240.0	5,135	297,100	6,160.0	1,354	36,680	6,090.0	33	195							
6,220.0	4,135	204,400	6,150.0	978	25,250	6,080.0	3	22							
6,200.0	3,365	129,800	6,140.0	730	16,820	6,070.0	1	3							
			6,130.0	556	10,470	6,060.0	0	0							
47. REMARKS AND REFERENCES															
1/ Sediment Reserve															
2/ Adjusted for 873 Square Miles El Vado Reservoir Drainage area															
3/ 5-Ft. contour map to elevation 6,200.0															
4/ Top of flood control pool, elevation 6,283.5															
5/ Partial Year.															
48. AGENCY MAKING SURVEY				Corps of Engineers, Albuquerque				50. DATE	19 December 1973						
49. AGENCY SUPPLYING DATA				District Southwestern Division											

RESERVOIR SEDIMENT  
DATA SUMMARY

ABIQUIU LAKE

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

NAME OF RESERVOIR

48-8a

DATA SHEET NO.

DAM		1. OWNER Dept. of Army C of E		2. STREAM Rio Chama		3. STATE New Mexico															
DAM		4. SEC. 8 TWP. 23 N RANGE 5E		5. NEAREST P.O. Abiquiu, NM		6. COUNTY Rio Arriba															
DAM		7. LAT. 36° 14' 30" LONG. 106° 25' 00"		8. TOP OF DAM ELEVATION 6,368.0'		9. SPILLWAY CREST ELEV. 6,350.0'															
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		6,283.5		7,480		502,000		579,039		5 Feb 63										
	b. MULTIPLE USE																				
	c. POWER																				
	d. WATER SUPPLY																				
	e. IRRIGATION																				
	f. CONSERVATION		1				77,039		77,039		4 Apr 63										
g. INACTIVE																					
WATERHEEL		17. LENGTH OF RESERVOIR		13.8 MILLS		AV. WIDTH OF RESERVOIR		1.2 MILE													
WATERHEEL		18. TOTAL DRAINAGE AREA		2,146 SQ. MI.		22. MEAN ANNUAL PRECIPITATION		10-19 INCHES													
WATERHEEL		19. NET SEDIMENT CONTRIBUTING AREA		1,254 2/SQ. MI.		23. MEAN ANNUAL RUNOFF		2.91 INCHES													
WATERHEEL		20. LENGTH		80 MILES		AV. WIDTH		27 MILES		24. MEAN ANNUAL RUNOFF											
WATERHEEL		21. MAX. ELEV.		12,000		MIN. ELEV.		6,048		25. ANNUAL TEMP MEAN											
WATERHEEL								42 RANGE -28		LOW 33°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. CR. RATIO, AC.-FT. PER ACRES						
	Apr 63		-		-		Contour (C)		20 ft		7,480 5/		579,030 5/		1.80						
	Oct 67		4.58		4.58		R&C (D) 3/		12 (R) -5 (C I)		7,478 5/		572,695 5/		1.78						
	Sep 72		4.92		9.50		R&C (D)		21 (R)-5 (CI)		7,474 5/		570,700 5/		1.83						
	Aug 73		0.92		10.42		R&C (D)		21 (R)-5 (CI)		7,477 5/		569,500 5/		1.81						
	Mar 76		2.50		12.92		Contour (D) 2/		2 (CI)		7,473 5/		568,400 5/		1.98						
	May 78		2.16		15.08		Range (D) 1/		19 Ranges		7,469 5/		565,000 5/		1.97						
	SURVEY DATA		26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET		36. WATER INFL. TO DATE, AC.-FT.												
	SURVEY DATA				a. MEAN ANNUAL		b. MAX. ANNUAL		c. PERIOD TOTAL		d. MEAN ANNUAL		e. TOTAL TO DATE								
	Apr 63		-		-		-		-		-		-		-						
Oct 67		9-21		252,952		453,565		1,159,279		252,952		1,159,279									
Sep 72		10-21		236,074		343,416		1,161,485		244,291		2,320,764									
Aug 73		10-21		429,439		426,525		395,084		260,638		2,718,840									
Mar 76		9-18		322,135		364,814		805,338		272,538		3,521,188									
May 78		9-18		300,712		407,040		649,532		276,573		4,170,725									
SURVEY DATA		29. DATE OF SURVEY		37. PERIOD CAPACITY LOSS, ACRE-FEET			38. TOTAL SED. DEPOSITS TO DATE, ACRE-FEET														
SURVEY DATA				a. PERIOD TOTAL			b. AV. ANNUAL			c. PER SQ. MI. YEAR			d. TOTAL TO DATE			e. AV. ANNUAL			f. PER SQ. MI. YEAR		
Apr 63		-		-			-			-			-			-			-		
Oct 67		6,344		1,385			1.10			6,344			1,385			1.10					
Sep 72		1,995		405			0.32			8,339			878			0.70					
Aug 73		1,200		1,304			1.04			9,539			915			0.73					
Mar 76		1,100		440			0.35			10,639			823			0.66					
May 78		3,400		1,574			1.26			14,039			931			0.74					
SURVEY DATA		29. DATE OF SURVEY		39. AV. DRY WGT. LBS. PER CU. FT.		40. SED. DEPT. LOSS PER SQ. MI.-YR.		41. STORAGE LOSS, PCT.		42. SED. INFLOW, PPM.											
SURVEY DATA				a. PERIOD		b. TOTAL TO DATE		c. AV. ANN.		d. TOT. TO DATE		e. FLOOD		f. TOT. TO DATE							
Apr 63		75.7%		-		-		-		-		-		-		-					
Oct 67		75.7%		1,814		1,814		0.24		1.10		6,613		6,613							
Sep 72		65.8		242		1,003		0.15		1.44		946		3,789							
Aug 73		65.8		1,490		1,046		0.16		1.65		3,202		3,704							
Mar 76		65.8		503		946		0.142		1.84		1,441		3,155							
May 78		65.8		1,780		1,060		0.161		2.42		5,460		3,550							

23. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION = 7											
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	100-110	110-120
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION											
Oct 67	20	24	14	27	17	-2	-2	1	2	-6	5	
Sep 72	17	33	17	20	13	-1	-1	2	1	-3	2	
Aug 73	15	30	22	18	14	0	-1	1	2	-3	2	
Mar 76	6/	6/	6/	6/	6/	6/	6/	6/	6/			
May 78	3	15	45	15	11	6	2	0				

25. 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	100-110	110-120	120-130	130-140
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN REACH DESIGNATION													
Oct 67	44	16	40	7	6	-2	-7	-4	0	0				
Sep 72	40	33	13	6	3	3	1	1	0	0				
Aug 73	17	21	18	12	13	13	1	0	0	0				
Mar 76	6/	6/	6/	6/	6/	6/	6/	6/	6/	6/				
May 78	21	35	15	2	15	12	0							

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1963 7/	6,089.72	6,060.00	93,025	1974	6184.33	6116.06	258,129
1964	6,089.52	6,060.00	151,142	1975	6193.86	6115.97	364,814
1965	6,186.61	6,060.00	457,158	1976	6161.29	6062.908/	407,040
1966	6,186.41	6,060.00	278,988	1977	6152.79	6148.60	209,338
1967	6,141.17	6,060.00	175,369	1978 9/	6148.72	6143.62	61,762
1968	6,167.30	6,060.00	268,153				
1969	6,172.20	6,100.28	343,416				
1970	6,167.00	6,092.02	237,674				
1971	6,116.38	6,104.30	170,452				
1972	6,114.98	6,107.00	145,387				
1973	6,219.93	6,107.97	426,525				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
6070	0	0	6150	809	22,090	6230	4,640	243,700
6080	10	33	6160	1,477	33,350	6240	5,135	292,600
6090	15	157	6170	1,841	49,900	6250	5,670	346,600
6100	122	759	6180	2,307	70,600	6260	6,120	405,500
6110	125	1,994	6190	2,659	95,360	6270	6,680	469,500
6120	340	4,230	6200	3,365	125,400	6280	7,260	539,200
6130	549	8,636	6210	3,705	160,700	6283.5	7,469	565,000
6140	668	14,710	6220	4,135	199,900	6350	12,430	1,212,000

47. REMARKS AND REFERENCES

- 1/ Sediment Reserve
- 2/ Adjusted for 873 square mile drainage area above El Vado Reservoir
- 3/ 5-ft. Contour map to elevation 6200.0
- 4/ 2-ft. Contour map to elevation 6150.00
- 5/ Top of flood control pool, elevation 6283.5
- 6/ Not calculated
- 7/ 6 months
- 8/ Reservoir emptied for control gate repairs
- 9/ 7 months

RESERVOIR SEDIMENT  
DATA SUMMARY

Table 1  
Abiquiu Lake  
NAME OF RESERVOIR

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS

48-8a  
DATA SHEET NO.

DAM	1. OWNER Dep of Army C of E			2. STREAM Rio Chama			3. STATE New Mexico									
	4. SEC. TWP. RANGE			5. NEAREST P O Abiquiu, NM			6. COUNTY Rio Arriba									
	7. LAT 36° 14' 30" LONG 106° 25' 00"			8. TOP OF DAM ELEVATION 6,368.0			9. SPILLWAY CREST ELEV 6,350.0									
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		6,283.5		7,480		502,000		579,039		5 Feb 63					
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER BEGAN					
	e. IRRIGATION										4 Apr 63					
	f. CONSERVATION 1/						77,039		77,039							
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR 13.8 MILES			AV. WIDTH OF RESERVOIR 1.2 MILES												
	18. TOTAL DRAINAGE AREA 2,146 SQ MI			22. MEAN ANNUAL PRECIPITATION 10-19 INCHES												
	19. NET SEDIMENT CONTRIBUTING AREA 1,254 2/ SQ MI			23. MEAN ANNUAL RUNOFF 2.97 INCHES												
	20. LENGTH 80 MILES AV. WIDTH 27 MILES			24. MEAN ANNUAL RUNOFF 340,110 6/ (65) AC-FT.												
	21. MAX. ELEV. 12,000 MIN. ELEV. 6,048			25. ANNUAL TEMP MEAN 42 RANGE -28 to +99												
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:1 RATIO, AC-FT PER AC-FT.	
	May 78		2.16		15.08		Range (D)		19 Ranges		7,469 3/		565,000 3/		1.97	
	Jul & Dec 84		6.58		21.66		Range (D)		24 Ranges		7,441 3/		554,579 3/		1.76 7/	
	Mar & Aug 90		6.08		27.74		Range (D)		25 Ranges		7,463 3/		551,471 3/		1.62	
	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-Feet 4/				36. WATER INFL. TO DATE, AC-FT.							
					a. MEAN ANNUAL		b. MAX ANNUAL		c. PERIOD TOTAL		d. MEAN ANNUAL		e. TOTAL TO DATE			
	May 78		9-18		300,712		407,040		649,539		276,573		4,170,725			
	Jul & Dec 84		9-18		470,589 4/		635,280		3,096,474		335,512		7,267,199			
	Mar & Aug 90		7-14		421,151		626,460		2,562,813		354,362		9,830,012			
	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		d. TOTAL TO DATE		e. AV. ANNUAL		f. PER SQ MI YEAR				
May 78		3,400		1,574		1.26		14,039		931		0.74				
Jul & Dec 84		10,421		1,584		1.26		24,460		1,129		0.90				
Mar & Aug 90		3,108		511		0.41		27,568		994		0.79				
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		c. AV ANN		d. TOT. TO DATE		e. PERIOD		f. TOT. TO DATE		
May 78		65.8 5/		1,780		1,060		0.161		2.42		5,460		3,550		
Jul & Dec 84		65.8 5/		1,810		1,290		0.198		4.22		3,549		3,5497/		
Mar & Aug 90		65.85/		584		1,132		0.172		4.76		1,278		2,957		

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION 3/										
	225-200	200-180	180-160	160-140	140-120	120-100	100-80	80-60	60-40	40-20	20-0
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION										
May 78	3	18	45	15	11	6	2	0			
Jul & Dec 84	38	31	13	8	3	3	2	2			
Mar & Aug 90	0.23	0.97	0.61	-1.67	6.69	26.61	18.85	18.76	34.11	8.20	13.35

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														
May 78	21	35	15	2	15	12	0								
Jul & Dec 84	8	12	24	9	11	14	13	6	1	0					
Mar & Aug 90	8	13	21	10	22	15	7	3.60	0.40	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1984	6228.09	6191.09	599,632				
1985	6256.22	6206.36	626,459				
1986	6246.74	6218.86	543,970				
1987	6261.06	6227.95	597,180				
1988	6235.74	6214.28	290,550				
1989	6221.69	6210.55	303,323				
1990	6216.24	6211.22	201,331				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
6075	0	0	6160	1225	27,445	6240	5,089	280,468
6080	4	5	6170	1565	41,426	6250	5,603	333,842
6090	15	101	6180	2239	60,324	6260	6,096	392,282
6100	76	476	6190	2767	85,481	6270	6,680	456,113
6110	129	1544	6200	3274	115,362	6280	7,280	525,647
6120	229	3399	6210	3701	150,328	6283.5	7,463	551,471
6130	385	6394	6220	4105	189,307	6350	12,430	1,198,524
6140	558	11,018	6230	4548	232,160	6381	16,480	1,636,524
6150	769	17,569						

47. REMARKS AND REFERENCES

- 1/ Sediment Reserve
- 2/ Adjusted for 873 square mile drainage area above El Vado Reservoir
- 3/ Top of flood control pool, elevation 6283.5
- 4/ From 1971 to present-Values include San Juan Chama Transmountain Diversion water.
- 5/ Based on samples taken during the 1972 survey
- 6/ Values include San Juan Chama Transmountain Diversion water.
- 7/ Correction to previous Eng Form 1787.

48. AGENCY MAKING SURVEY Corps of Engineers, Albuquerque  
 49. AGENCY SUPPLYING DATA District, Southwestern Division  
 50. DATE 17 January 1991