

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

OILWELL (3-A)

NAME OF RESERVOIR

63-10

DATA SHEET NO.

DAM	1. OWNER USDI BLM		2. STREAMTRIB.OF BADGER WASH		3. STATE COLO.			
	4. SEC. 25 TWP. 8S. RANGE 104 W.		5. NEAREST P.O. MACK, COLO.		6. COUNTY MESA			
	7. LAT 39° 20' " LONG. 108° 56' "		8. TOP OF DAM ELEVATION 5,034		9. SPILLWAY CREST ELEV. 5,029.5			
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					Dec. 1953		
	b. MULTIPLE USE							
	c. POWER							
	d. WATER SUPPLY	5,029.5	2.46	12.92	12.92	16. DATE NORMAL OPER. BEGAN		
	e. IRRIGATION					Dec. 1953		
	f. CONSERVATION							
	g. INACTIVE							
WATERSHED	17. LENGTH OF RESERVOIR .093		MILES		AV. WIDTH OF RESERVOIR .041			
	18. TOTAL DRAINAGE AREA .059		SQ. MI.		22. MEAN ANNUAL PRECIPITATION 8.75 (38 yr) INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA .059		SQ. MI.		23. MEAN ANNUAL RUNOFF .72 (17 yr) INCHES			
	20. LENGTH .38		MILES		AV. WIDTH .16			
	21. MAX. ELEV. 5,135		MIN. ELEV. 5,020		25. ANNUAL TEMP.: MEAN 51°F RANGE			
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.
	12-6-53	--	--	Range D	5	2.46	12.92	5.71
	7-28-55	1.6	1.6	"	5	"	12.18	5.39
	11-4-56	1.3	2.9	"	5	"	12.18	5.39
	10-25-57	1.0	3.9	"	4	"	11.90	5.26
	11-20-58	1.1	5.0	"	4	"	11.90	5.26
	11-12-59	1.0	6.0	"	4	"	11.64	5.15
	11-2-61	2.0	8.0	"	4	"	11.31	5.00
	26. DATE OF SURVEY	34. PERIOD ANNUAL PRECIPITATION	35. PERIOD WATER INFLOW, ACRE-FEET <u>2/</u>			36. WATER INFL. TO DATE, AC.-FT.		
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE	
	12-6-53	--	--	--	--	--	--	--
	7-28-55	11.3	3.63	4.31	5.81	3.63	5.81	
	11-4-56	7.7	.30	.20	.39	2.12	6.20	
	10-25-57	13.0	7.40	7.40	7.40	2.72	13.60	
	11-20-58	9.3	0	0	0	2.26	13.60	
11-12-59	6.1	2.26	2.26	2.26	1.98	15.86		
11-2-61	17.8	2.77	5.23	5.54	2.68	21.40		
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		
12-6-53	--	--	--	--	--	--		
7-28-55	.74	.46	7.80	.74	.46	7.80		
11-4-56	0	0	0	.74	.26	4.40		
10-25-57	.28	.28	4.75	1.02	.26	4.40		
11-20-58	0	0	0	1.02	.20	3.39		
11-12-59	.26	.26	4.40	1.28	.21	3.56		
11-2-61	.33	.16	2.71	1.61	.20	3.39		
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	
12-6-53	--	--	--	--	--	--	--	
7-28-55	90*	15,289	15,289	3.56	5.73	182,791	183,702	
11-4-56	"	--	8,625	2.01	5.73	--	172,146	
10-25-57	"	9,302	8,625	2.01	7.89	54,573	108,173	
11-20-58	"	--	6,645	1.55	7.89	--	108,173	
11-12-59	"	8,638	6,978	1.62	9.91	165,934	116,403	
11-2-61	"	5,482	6,645	1.55	12.46	85,920	108,510	

*Assumed

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION													
	12-10	10-8	8-6	6-4	4-2	2-0								
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION													
10-25-57	0	73	20	7	0	0								
11-10-63	0	46	38	12	4	0								
10-25-67	0	27	54	12	7	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														
11-4-56	14	26	28	22	5	5	0	0	0	0					
11-10-63	15	22	23	18	9	8	2	2	1	0					
10-25-67	14	22	22	18	9	10	2	2	1	0					

45. RANGE IN RESERVOIR OPERATION							
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.
1955	21.88	18.8	1.70	1966	23.40	20.7	1.58
1956	--	--	0	1967	22.93	20.8	3.04
1957	23.6	19.0	7.40	1968	26.68	21.4	7.05
1958	--	--	0	1969	22.05	21.6	.10
1959	--	19.6	2.26	1970	22.77	21.7	1.06
1960	20.19	19.7	.32				
1961	24.95	19.8	5.23				
1962	23.14	19.9	1.59				
1963	21.45	20.1	.68				
1964	22.02	20.2	1.03				
1965	22.88	20.4	2.72				

46. ELEVATION-AREA-CAPACITY DATA								
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY
ORIGINAL CAPACITY 1953			CAPACITY 1969					
18	0	0	21.6	0	0			
20	.43	.40	22.0	.42	.11			
22	.76	1.60	23.0	.77	.70			
24	1.12	3.48	24.0	1.01	1.60			
26	1.53	6.13	26.0	1.42	4.25			
28	2.02	9.65	28.0	1.91	7.77			
30	2.57	14.24	30.0	2.46	12.36			

47. REMARKS AND REFERENCES

- 1/ From National Weather Service Record at Fruita, Colo.
- 2/ Inflow amounts recorded during April 1 to Nov. 1 season. This generally includes most of the inflow for the year.
- 3/ Capacity increase.

Lusby, G. C., Turner, G. T., Thompson, J. R., and Reid, V. H., 1963, Hydrologic and biotic characteristics of grazed and ungrazed watersheds of Badger Wash basin in western Colorado, 1953-58: U.S. Geol. Survey Water-Supply Paper 1532-B.

Lusby, G. C., Reid, V. H., and Knipe, O. D., Effects of grazing on the hydrology and biology of the Badger Wash basin in western Colorado, 1953-66: U.S. Geol. Survey open-file report.

48. AGENCY MAKING SURVEY U.S. Geological Survey

49. AGENCY SUPPLYING DATA U.S. Geological Survey

50. DATE 11/71

RESERVOIR SEDIMENT
DATA SUMMARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

OILWELL(3-A)--Cont.

SCS-34 Rev. 6-66

NAME OF RESERVOIR

63-10

DATA SHEET NO.

DAM	1. OWNER			2. STREAM			3. STATE									
	4. SEC.	TWP.	RANGE	5. NEAREST P.O.			6. COUNTY									
	7. LAT.	" LONG.		8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.									
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															
	b. MULTIPLE USE															
	c. POWER															
	d. WATER SUPPLY										16. DATE NORMAL OPER. BEGAN					
	e. IRRIGATION															
	f. CONSERVATION															
	g. INACTIVE															
WATERSHED	17. LENGTH OF RESERVOIR				MILES				AV. WIDTH OF RESERVOIR				MILES			
	18. TOTAL DRAINAGE AREA				SQ. MI.				22. MEAN ANNUAL PRECIPITATION				INCHES			
	19. NET SEDIMENT CONTRIBUTING AREA				SQ. MI.				23. MEAN ANNUAL RUNOFF				INCHES			
	20. LENGTH				MILES				AV. WIDTH				MILES			
	21. MAX. ELEV.				MIN. ELEV.				25. ANNUAL TEMP.: MEAN				RANGE			
	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.	
11-10-63	2.0	10.0	Range D	5	2.46	11.25	4.98									
11-5-64	1.0	11.0	"	4	"	11.21	4.96									
11-4-65	1.0	12.0	"	4	"	10.73	4.75									
11-3-66	1.0	13.0	"	6	"	10.82	4.79									
10-25-67	1.0	14.0	"	5	"	10.62	4.70									
11-9-68	1.0	15.0	"	7	"	10.15	4.49									
11-4-69	1.0	16.0	"	6	"	10.13	4.48									
10-29-70	1.0	17.0	"	5	"	9.99	4.42									
SURVEY DATA	26. DATE OF SURVEY		34. PERIOD ANNUAL PRECIPITATION		35. PERIOD WATER INFLOW, ACRE-FEET ^{2/}			36. WATER INFL. TO DATE, AC.-FT.								
			a. MEAN ANNUAL	b. MAX. ANNUAL	c. PERIOD TOTAL	a. MEAN ANNUAL	b. TOTAL TO DATE									
	11-10-63	17.8	1.13	1.59	2.27	2.37	23.67									
	11-5-64	5.2	1.03	1.03	1.03	2.24	24.70									
	11-4-65	10.9	2.71	2.71	2.71	2.28	27.41									
	11-3-66	6.2	0	0	0	2.11	27.41									
	10-25-67	18.0	3.05	3.05	3.05	2.18	30.46									
	11-9-68	20.7	7.03	7.03	7.03	2.50	37.49									
	11-4-69	16.7	1.11	1.11	1.11	2.35	37.60									
	10-29-70	13.7	1.06	1.06	1.06	2.27	38.66									
	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								
11-10-63	.06	.03	.51	1.67	.17	2.88										
11-5-64	.04	.04	.68	1.71	.16	2.72										
11-4-65	.48	.48	8.14	2.19	.18	3.05										
11-3-66	-.09 ^{3/}	-.09 ^{3/}	--	2.19	.17	2.88										
10-25-67	.20	.20	3.39	2.39	.17	2.88										
11-9-68	.47	.47	7.96	2.86	.19	3.22										
11-4-69	.02	.02	.34	2.88	.18	3.05										
10-29-70	.14	.14	2.38	3.02	.18	3.05										
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									
11-10-63	90 ^{2/}	997	5,645	1.32	12.92	38,135	101,760									
11-5-64	"	1,329	5,332	1.24	13.24	56,017	99,852									
11-4-65	"	15,947	5,979	1.39	16.95	255,471	115,237									
11-3-66	"	--	5,645	1.32	16.95 ^{4/}	--	115,237									
10-25-67	"	6,645	5,645	1.32	18.50	94,586	113,168									
11-9-68	"	15,615	6,312	1.47	22.14	96,431	110,029									
11-4-69	"	664	5,979	1.39	22.29	262,064	110,479									
10-29-70	"	4,651	5,979	1.39	23.37	190,490	112,669									

^{4/} Capacity increase was not considered in computations of storage loss.

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
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														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
48. AGENCY MAKING SURVEY															
49. AGENCY SUPPLYING DATA USGS															
50. DATE 11/71															

RESERVOIR SEDIMENT
DATA SUMMARY

Oilwell (3-A)

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCS-34 Rev. 6-66

NAME OF RESERVOIR

63-10 a

DATA SHEET NO.

DAM	1. OWNER			2. STREAM			3. STATE					
	4. SEC.		TWP.		RANGE		5. NEAREST P. O.			6. COUNTY		
	7. LAT. ° ' "		" LONG ° ' "		8. TOP OF DAM ELEVATION			9. SPILLWAY CREST ELEV.				
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											
	b. MULTIPLE USE											
	c. POWER											
	d. WATER SUPPLY								12.92		16. DATE NORMAL OPER. BEGAN	
	e. IRRIGATION											
	f. CONSERVATION											
g. INACTIVE												
WATERSHED	17. LENGTH OF RESERVOIR				MILES		AV. WIDTH OF RESERVOIR				MILES	
	18. TOTAL DRAINAGE AREA				SQ. MI.		22. MEAN ANNUAL PRECIPITATION				INCHES	
	19. NET SEDIMENT CONTRIBUTING AREA				059 SQ. MI.		23. MEAN ANNUAL RUNOFF				INCHES	
	20. LENGTH		MILES		AV. WIDTH		MILES		24. MEAN ANNUAL RUNOFF		2.26 AC.-F.T.	
	21. MAX. ELEV.		MIN. ELEV.		25. ANNUAL TEMP.: MEAN				RANGE			
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.				
	11-18-71	1	18	Range D	6	2.46	9.95	4.40				
	11-09-72	1	19	"	6	"	9.91	4.38				
	10-17-73	1	20	"	7	"	9.84	4.35				
	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						
	11-18-71	7.98	1.12	1.12	1.12	2.21	39.78					
	11-09-72	6.65	.51	.51	.51	2.12	40.29					
	10-17-73	9.49	.69	.69	.69	2.04	40.90					
	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						
11-18-71	.04	.04	.68	3.06	.17	2.88						
11-09-72	.04	.04	.68	3.10	.16	2.71						
10-17-73	.07	.07	1.19	3.17	.16	2.71						
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					
11-18-71	90*	1,329	5,645	1.31	23.68	--	--					
11-09-72	"	1,329	5,312	1.23	23.99	--	--					
10-17-73	"	2,333	5,312	1.23	24.54	--	--					

26. DATE OF SURVEY	43. DEPTH DESIGNATION RANGE IN FEET BELOW, AND ABOVE, CREST ELEVATION														
	PERCENT OF TOTAL SEDIMENT LOCATED WITHIN DEPTH DESIGNATION														
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														
45. RANGE IN RESERVOIR OPERATION															
WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.	WATER YEAR	MAX. ELEV.	MIN. ELEV.	INFLOW, AC.-FT.								
46. ELEVATION-AREA-CAPACITY DATA															
ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY	ELEVATION	AREA	CAPACITY							
47. REMARKS AND REFERENCES															
48. AGENCY MAKING SURVEY 49. AGENCY SUPPLYING DATA U. S. Geological Survey 50. DATE <u>January 1977</u>															