

POND ANALYSIS SHEET
MARY COMBS, CLAIM NO. 94-9300
T47N R2W SECTION 7 SW1/4NE1/4

SOURCE: UNNAMED STREAM TRIBUTARY TO BLACK CREEK

DIMENSIONS OF POND: 9 YD (108') X 30 YD (360') X 3 FT DEEP (AS MEASURED BY CLAIMANT)

SURFACE AREA: 108 FT X 360 FT = 38,880 SQ FT

38,880 SQ FT / 43,560 CU FT = 0.89 ACRES

TOTAL POND SIZE: 0.89 ACRES X 3 FT = 2.68 ACRES

EVAPORATION = 2424 GPD X 245 DAYS / 325,850 GAL/AF = 1.82 AF

SEEPAGE = 0

STOCKWATER USAGE = 20 HEAD HORSES X 12 GPD X 365 DAYS/YR / 325,850 GAL/AF = 0.27 AF

STOCKWATER STORAGE:	A. POND SIZE	2.7 AF
	B. EVAPORATION	1.8 AF
	C. SEEPAGE	0
	D. STOCK	<u>0.3 AF</u>
	TOTAL	4.8 AF

INPUTS

CLAIM 94-9300 MARY COMBS

NOTES/SUGGESTED VALUES

POND

SURFACE AREA (SQFT)

AVERAGE DEPTH (FT)

FILL OR REFILL RATE (CFS)

USE 0 IF FILLED NATURALLY FROM GW

CONVERT TO GPD GPD

REFERENCE EXAMPLE:
ESTIMATED NUMBER OF DAYS
TO FILL BASED ON PROVIDED
INPUTS

NA DAYS
NA HR

EVAPORATION (IN/DAY)

IF UNKNOWN, USE REFERENCE ETpk80 FROM ABOVE

CONVERT TO GPD GPD

EVAPORATION (GPYper year)

2.714876033 AFY

1.82231405 AFY AT 245 DAY IN THE YEAR (FROZEN)

SUGGESTED VALUES FOR DIFFERENT SOIL TYPES:

(FT/DAY) 0 = NATURALLY FILLED FROM GW, OR LINED

(FT/DAY) 0.001 = CLAY SOILS

(FT/DAY) 0.01 = Ponds with vegetation, aquatic life.

(FT/DAY) 0.1 = SANDS/GRAVELS MIX (APPROX 30% OF VOLUME LOSS IN SEEPAGE)

SEEPAGE RATE (FT/DAY)

SEEPAGE RATE (GPY per year)

SEEPAGE RATE (AF PER YEAR)

0 AF

CONVERT TO GPD

0

GPD

RESULTS

TOTAL AF FOR THIS WATER RIGHT AF

IRRIGATION AF

SEEPAGE AF AF

EVAPORATION (GPYper year) AFY

POND SIZE AF

CAPACITY CUFT
 G