

TIME OF RUN  
 DATE OF RUN 07/29/92  
 INPUT FILE NAME: tan-pu1.par  
 OUTPUT FILE NAME: tan-pu1.gut

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*****
*
*   is output was produced by the model:
*
*   GWScreen
*   Version Control Copy, Version 1.3
*   A semi-analytical model for the assessment
*   of the groundwater pathway from the leaching
*   of surficial and buried contamination.
*
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*   EG&G Idaho Inc.
*   Subsurface and Environmental Modeling Unit
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*   Idaho Falls, Idaho 83415
*****
    
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>>> TITLE OF PROJECT:  
 'TAN percolation pond problem; case 1 4.9 m/y infiltration for Pu-239 ' TITL

>>> INPUT DATA

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*****
INTEGRATION TIME (years)                1
LENGTH OF SOURCE PARALLEL TO GW FLOW (m) 1.42E+02
WIDTH OF SOURCE PERPENDICULAR TO GW FLOW (m) 1.42E+02
THICKNESS OF SOURCE (m)                 1.00E+00
PERCOLATION RATE (darcy vel m/y)        4.90E+00
VOLUMETRIC WATER CONTENT IN SOURCE      4.60E-01
VOLUMETRIC WATER CONTENT IN UNSATURATED ZONE 4.60E-01
BULK DENSITY AT SOURCE (g/cm**3)        1.50E+00
SORPTION COEFFICIENT AT SOURCE (ml/g)    2.20E+01
BULK DENSITY IN UNSAT ZONE (g/cm**3)     1.90E+00
SORPTION COEFFICIENT IN UNSAT ZONE (ml/g) 2.20E+01
HALF LIFE OF CONTAMINANT (y)             2.41E+04
INITIAL MASS OR ACTIVITY (mg or Ci)       1.00E+00
MOLE WEIGHT (g/mole)                     2.39E+02
SOIL ACTIVITY LIMIT (mg/L)               1.00E+06
BULK DENSITY OF AQUIFER (g/cm**3)        1.90E+00
POROSITY OF AQUIFER                      1.00E-01
SORPTION COEFFICIENT IN AQUIFER (ml/g)    2.20E+01

DISPERSIVITY X DIRECTION (m)             9.10E+00
DISPERSIVITY Y DIRECTION (m)            4.00E+00
PORE VELOCITY (m/y)                     7.30E+01
WELL SCREEN THICKNESS (m)                1.50E+01
DISTANCE TO AQUIFER BELOW CONTAMINATION (m) 1.50E+01
DISTANCE TO RECEPTOR ALONG X AXIS (m)   7.10E+01
DISTANCE TO RECEPTOR ALONG Y AXIS (m)   0.00E+00
LIMITING RADIONUCLIDE GW CONCENTRATION (Ci/L) 1.50E-11
UNITS OF CONTAMINANT                     Ci
    
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INPUT DATA FILE CREATED BY: A.S. Rood DATE 7/29/92

INPUT DATA CHECKED BY: \_\_\_\_\_ DATE / /

LIMITING SOIL CONCENTRATION CALCULATION

INITIAL SOURCE RESET TO 1.0 Ci  
 >>> INITIAL ACTIVITY CONVERTED TO MASS (mg) 1.61E+04  
 >>> VALUES CALCULATED IN SOURCE SUBROUTINE

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LEACH RATE CONSTANT (1/y)                1.4644E-01
UNSATURATED PORE VELOCITY (m/y)          1.0652E+01
DECAY CONSTANT (1/y)                     2.8749E-05
RETARDATION FACTOR (SATURATED)           4.1900E+02
RETARDATION FACTOR (UNSATURATED)         9.1870E+01
SOLUBILITY LIMITED MASS (mg)              6.7469E+14
SOLUBILITY LIMITED ACTIVITY (Ci)         4.1893E+10
TRANSIT TIME IN UNSAT ZONE (years)        1.2937E+02
FRACTION DECAYED DURING UNSAT TRANSPORT   3.7123E-03
    
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EXPOSURE DATA FOR LIMITING SOIL CONCENTRATION

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*****
BULK WEIGHT (kg)                          7.000E+01
AVERAGING TIME (days)                    2.555E+04
WATER INTAKE RATE (L/d)                   2.000E+00
EXPOSURE FREQUENCY (days/year)           3.500E+02
EXPOSURE DURATION (years)                 3.000E+01
    
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