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Groundwater Transport Modeling of Constituents Originating from the Burial Grounds Complex (U)

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Savannah River Site
Aiken, SC 29808

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Groundwater Transport Modeling of Constituents Originating from the Burial Grounds Complex (U)

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1 INTRODUCTION

The Savannah River Site (SRS), a Department of Energy (DOE) facility, operates a number of sites for the land disposal of various leachable radionuclide, organic, and inorganic wastes. Located within the General Separations Area (GSA) of SRS are the Low Level Radioactive Waste Disposal Facility (LLRWDF) and the Old Burial Ground (OBG). A portion of the LLRWDF has been designated as the Mixed Waste Management Facility (MWMF). Throughout this report, the LLRWDF together with the MWMF will be termed collectively as MWMF/LLRWDF. These facilities are shown in Figure 1.1. The OBG began receiving waste in 1952 and was closed in 1974. Various wastes, including transuranic, intermediate and low level beta-gamma, and solvents, were received during this period of operation. In 1969, prior to the closing of the OBG, a portion of the MWMF/LLRWDF (the MWMF) began receiving waste. This area consists of a series of trenches where mixed wastes were placed. The MWMF was defined as hazardous by the Resource Conservation and Recovery Act (RCRA) and was closed in 1986. A low permeability cap was completed in December of 1990. Currently, Westinghouse Savannah River Company (WSRC), which operates SRS for DOE, is in the process of preparing a Post-Closure Care Part B Permit for the MWMF.

GeoTrans, Inc. was contracted by WSRC to conduct a numerical modeling study to assess groundwater flow and contaminant transport in the vicinity of the MWMF in support of an Alternate Concentration Limits demonstration for the Part B permit. The project was divided into two phases: development of a groundwater flow model of the hydrogeologic system underlying the MWMF which includes the entire GSA, and development of a solute transport model to assess migration of 19 designated constituents of concern (COCs) over a period 30 years into the future. The first phase was completed in May of 1992 and the results documented in GeoTrans (1992). That report serves as the companion volume to the present contaminant transport modeling report. The transport study is intended to develop predictions of concentration and mass flux of the 19 COCs at downgradient exposure points over the 30 year period of interest. These results are to be used in human health and ecological risk assessments which are also being performed in support of the Part B permit.

Figure 1.1. Location of the Burial Grounds Complex, including the Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and Old Burial Grounds.

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Although the Part B permit pertains specifically to the MWMF, a number of other facilities are incorporated into this analysis. The primary additional facility is the OBG. The OBG was included due to its proximity to the MWMF and difficulties in assigning which facility contributed to observed contamination. A secondary reason for inclusion is that the risk assessment incorporates effects that contribute to the overall risk at the Point of Exposure (POE). Thus the modeling provides a quantitative means of assigning a risk that is additive to the MWMF risk.

Results of the modeling are presented in three main formats: 1) concentration distribution maps for each layer for each COC, 2) plots of mass flux entering and exiting the system versus time for each COC, and 3) printout of mass fluxes and maximum concentrations for each surface water feature which could serve as a POE. These results are included in this report either in the main text or as Appendices. The body of the report presents the data upon which the model is based, discusses modeling methodology, development, and assumptions and presents a narrative on the results.

2 GROUNDWATER QUALITY IN MWMF VICINITY

2.1 CONSTITUENTS OF CONCERN

Dames and Moore (1992) identified 19 constituents of concern (COCs) for the MWMF. This determination was based on a statistical comparison between groundwater concentrations in three background wells and groundwater concentrations in the remaining Point of Compliance (POC) wells surrounding the Burial Grounds Complex. Figures 2.1, 2.2, and 2.3 show the location of the POC and other monitor wells in the MWMF vicinity for Unit IIB Zone 2 (Water Table Aquifer), Unit IIB Zone 1 (Barnwell/McBean Aquifer), and Unit IIA (Congaree Aquifer), respectively. The statistical analysis was performed using fifteen consecutive quarters of data beginning in the first quarter of 1988. Dames and Moore (1992) used data from the SRS groundwater quality data base in performing the determination of COCs. The 19 constituents consist of 7 inorganics, 5 radionuclides, and 7 organics as shown in Table 2.1. Also shown in Table 2.1 are groundwater protection standards (if available) and maximum observed concentrations for each constituent. Maximum observed concentrations for some constituents are close to or below groundwater protection standards.

Many contaminants, particularly the organics, are not noted consistently with time in the observation well network. Table 2.2 shows the number of occurrences during the fifteen quarter period of record that each COC was above detection limits. It also indicates the number of wells monitored during each quarter for that constituent. Although a sporadic occurrence of a constituent generally does not affect the determination of a COC, it does complicate the identification of a plume or quantification of extent of contamination.

Other data on the distribution of contamination across the GSA exist. Groundwater quality data near the MWMF include BG series and MG series of wells, "grid wells" formerly located in the interior of the facilities, other nearby facility wells, and seepage data collected adjacent to Upper Three Runs Creek and Fourmile Branch. Complications in using these data in characterizing the extent of contamination include: (1) questionable well construction; (2) inappropriate well casing material; (3) non-contemporaneous nature of measurements; and (4) inability to distinguish contamination from a particular facility.

Figure 2.1. Location of point of compliance wells and other wells in the vicinity of the MWMF/LLRWDF and OBG for Unit IIB, Zone 2 (Water Table Aquifer).

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Figure 2.2. Location of point of compliance wells and other wells in the vicinity of the MWMF/LLRWDF and OBG for Unit IIB, Zone 1 (Barnwell/McBean Aquifer).

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Figure 2.3. Location of point of compliance wells and other wells in the vicinity of the MWMF/LLRWDF and OBG for Unit IIA (Congaree Aquifer).

Table 2.1. Constituents of concern for the transport study.
Concentrations of organics and inorganics are in $\mu\text{g/L}$,
radionuclides in pCi/L.

Constituent	Groundwater Protection Standard	Maximum Observed Concentration
<u>Inorganics</u>		
Aluminum	---	2182
Barium	1000	1000
Iron	---	17000
Lead	15	69.8
Manganese	---	222
Zinc	---	141
Nickel	100	46
<u>Radionuclides</u>		
Carbon-14	2	81
Tritium (pCi/mL)	20	220000
U234	28	110
U235	28	20
U238	28	21
<u>Organics</u>		
Chloroform	100	78
Dichloroethane	7	130
Phenol	---	1000
Trichloroethylene	5	1000
Tetrachloroethylene	5	43
Trans 1-2 Dichloroethane	100	2600
Chloroethane	2	92.7

Table 2.2. Number of readings (non-duplicate) that are above detection limits/number of wells sampled by quarter for each constituent of concern.

Species	1988				1989				1990				1991		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
Aluminum	3/3	0/0	2/3	0/2	0/2	0/2	3/3	28/38	3/3	2/3	20/31	2/3	24/45	21/46	20/50
Barium	2/38	0/40	2/40	29/39	31/38	58/58	32/58	50/58	54/55	42/46	51/51	47/47	50/50	57/59	68/70
Carbon-14	0/0	0/0	0/0	0/0	0/0	0/0	0/0	9/19	10/19	0/13	5/8	0/0	0/0	0/0	0/0
Chloroethene	0/0	0/0	0/0	0/1	0/38	0/58	0/23	0/58	0/56	0/43	0/2	0/2	0/50	2/60	1/70
Chloroform	0/0	0/0	0/0	0/1	1/38	16/58	4/23	7/58	7/56	5/46	6/51	5/47	7/50	5/60	9/70
1,1-Dichloroethane	0/0	0/0	0/0	0/1	0/38	1/58	1/23	1/58	3/56	4/46	2/51	2/47	2/50	4/60	2/70
Iron	3/38	2/43	6/42	16/39	25/38	50/58	54/58	53/58	54/55	34/46	37/51	37/47	44/50	41/59	49/70
Lead	0/38	1/43	0/42	1/39	4/38	18/58	31/57	20/58	11/55	31/46	28/51	17/47	23/50	19/59	15/70
Manganese	0/38	1/43	0/42	18/39	18/38	36/58	43/58	45/58	44/55	37/46	41/51	41/47	44/50	54/59	60/70
Nickel	0/3	0/3	0/3	0/5	0/2	0/5	0/3	3/38	0/3	0/3	10/31	0/3	15/46	12/46	9/51
Phenol	0/38	1/40	11/42	8/39	6/38	10/58	3/58	13/58	4/55	3/46	8/51	7/47	0/50	2/59	2/70
Tetrachloroethylene	0/0	0/0	0/0	1/1	1/38	2/58	4/23	3/58	8/56	6/46	6/51	25/47	10/50	18/60	7/70
trans-1,2-Dichloroethene	0/0	0/0	0/0	0/1	1/38	8/58	7/23	0/22	0/56	1/46	9/51	8/47	0/3	0/0	0/0
Trichloroethylene	0/0	0/0	0/0	1/1	12/38	12/58	10/23	13/58	16/56	15/46	14/51	14/47	15/50	24/60	24/70
Tritium	32/38	31/43	31/42	35/44	32/43	48/58	47/58	46/58	45/55	37/46	42/50	35/45	39/49	49/59	58/70
Uranium-234	0/0	0/0	0/0	0/0	0/0	0/0	0/0	3/5	9/19	7/13	3/10	0/0	8/11	0/0	0/0
Uranium-235	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/19	0/19	1/13	0/10	0/0	7/12	10/19	0/0
Uranium-238	0/0	0/0	0/0	0/0	0/0	0/0	0/0	8/19	5/19	3/13	2/10	0/0	9/12	0/0	0/0
Zinc	0/3	0/3	2/3	2/5	1/2	4/5	3/3	23/38	3/3	0/3	3/3	2/3	0/3	0/0	1/3

Data on the usage, inventory, or burial location of specific constituents is extremely sparse. Of the COCs, information on Tritium, Uranium, and Lead are the most abundant. Data on the organics are almost non-existent except for a reference discussing solvent spills and areas affected by equipment decontamination solvents (Albenesius, 1983). This reference does not distinguish between the various organic compounds.

2.2 DISTRIBUTION OF CONTAMINATION

To aid in the quantification of groundwater contamination resulting from the Burial Grounds Complex, a series of contaminant distribution plots inclusive of the entire GSA was made. Three plots, one for each aquifer layer, were made for each COC. Plots for Tritium and Lead are shown and discussed in this section; the entire series of plots is contained in Appendix A.

Contaminant distribution plots for Tritium in Unit IIB, Zone 2 (Water Table), Unit IIB, Zone I (Barnwell/McBean), and Unit IIA (Congaree) are presented in Figures 2.4, 2.5, and 2.6, respectively. These plots show the relative magnitude of concentrations using a shaded circle to indicate the maximum detected quantity over the fifteen quarter period of record at a given location. Note that overall maximums are plotted regardless of time; all data are therefore not contemporaneous. This methodology was required to prevent bias when presenting contaminants that are not detected consistently with time or are not sampled for regularly. These plots should be viewed as a conservative or worst case illustration of existing contamination indicated by the current monitoring network.

An open circle is used to denote values below detection limit. Because the open circles will only appear when a contaminant has not been detected over the entire fifteen quarters, the minimum detection limit is plotted to show the probable upper limit of concentration. The open circles will generally indicate where a contaminant is not present or is present in very low concentrations.

Figure 2.4. Measured maximum concentrations of Tritium (pCi/mL) in Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detected readings.

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Figure 2.5. Measured maximum concentrations of Tritium (pCi/mL) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum nondetected readings.

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Figure 2.6. Measured maximum concentrations of Tritium (pCi/mL) in Unit IIA, (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detected readings.

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Seepline concentrations from Fall 1991 are shown on all plots regardless of layer. No attempt was made to differentiate which hydrostratigraphic layer these samples were taken from due to inaccuracies in determining formation outcrops. Note that seepline sampling locations are along Upper Three Runs Creek as well as some of its tributaries.

The plot of Tritium in Unit IIB, Zone 2 (Water Table), Figure 2.4, indicates a very large concentration in the southwest corner of the OBG. Another large concentration appears in the southeast corner of the OBG, while moderately high Tritium concentrations are present in the central part of the OBG. Most of the wells north of the MWMF/LLRWDF facility show only limited concentrations of Tritium. The plot of Tritium in Unit IIB, Zone 1 (Barnwell/McBean), Figure 2.5, supports the higher values noted in the OBG for the overlying aquifer. There appears to be some migration to the north of the MWMF/LLRWDF. There are, however, very few wells by which to determine the extent of contamination once it has slipped past the POC wells. This is particularly true for the OBG. Figure 2.6, which shows Tritium distribution in Unit IIA (Congaree), indicates only limited migration to this aquifer has been documented. Tritium appears at the seepline in low concentrations. It is difficult from these plots alone to determine the extent of contamination and whether the MWMF/LLRWDF is contributing to seepline concentrations.

Contaminant distribution plots for Lead are shown for Unit IIB Zone 2 (Water Table), Unit IIB Zone 1 (Barnwell/McBean), and Unit IIA (Congaree) in Figures 2.7, 2.8, and 2.9, respectively. Concentrations in the POC wells in Unit IIB Zone 2 (Water Table) are in the range of 10 to 50 $\mu\text{g/L}$ (see Figure 2.7), however higher concentrations persist in three wells upgradient of the facility near the background wells. Concentrations near the facility are predictably lower in the underlying Unit IIB Zone 1 (Barnwell/McBean), but data are somewhat limited (see Figure 2.8). A series of non-detects are noted beyond the facility to the north, followed by some detected quantities further north in wells and seepline samples. As shown in Figure 2.9, Lead concentrations in Unit IIA (Congaree) are

Figure 2.7. Measured maximum concentrations of Lead ($\mu\text{g/L}$) in Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detected readings.

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Figure 2.8. Measured maximum concentrations of Lead ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detected readings.

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Figure 2.9. Measured maximum concentrations of Lead ($\mu\text{g/L}$) in Unit IIA, (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detected readings.

generally near 10 $\mu\text{g/L}$, with the exception of a point just north of the facility.

These plots highlight some of the problems with quantifying the extent of contamination. It is clear that the plots do not show a trend of decreasing contaminant concentration away from the facility, as one might expect. Distinct plume shapes are not evident, much less the ability to contour concentration distributions. Many of the difficulties may be attributed to the monitoring network, which consists primarily of wells which surround the facility perpendicular to flow directions. These wells (the POC wells) were not intended to characterize the extent of contamination, but rather to provide regulatory assurance that contamination was not leaving the facility boundaries. If contamination has crossed the boundary, there are few monitor wells within reasonable distance to indicate how far the plume has migrated. A second deficiency of the monitoring network is that it was designed primarily to assess horizontal flow across facility boundaries. Simplified contaminant transport modeling which computes particle trajectories and velocities indicates that vertical flow is an important aspect of the hydrogeologic system. The decreased amount of measurements in the lower aquifers therefore prevents accurate characterization of plume migration. This is particularly true for Unit IIA (Congaree) where there are virtually no measurements in areas where contamination is predicted to occur. To compound the dilemma, the contaminants which have been discussed, Tritium and Lead, generally have more data associated with them than do the other COCs. Determination of contaminant extent or concentrations for the remaining COCs is therefore fraught with more uncertainty. A complete set of contaminant distribution plots is given in Appendix A.

A number of simple calculations were made to assess the potential extent of contamination. These were made to determine which wells beyond the POC system or seepage measurements could be affected by Burial Grounds Complex contaminants. Maximum horizontal advective groundwater velocities in the MWMF vicinity given in WSRC (1992) are 75 ft/y for Unit IIB Zone 2, 57 ft/y for Unit IIB Zone 1, and 288 ft/y for Unit IIA. Assuming a 15 yr travel time (1977 to present) for constituents originating at the MWMF/LLRWDF gives potential travel distances of 1125 ft, 855 ft, and 4320

ft, respectively. In order to reach Unit IIA (Congaree) the waste must first traverse 2 aquifers and 2 aquitards vertically. This is estimated to take in excess of 10 years. Hence, very limited transport in the aquifer with the highest transport capability is currently taking place. These distances are well short of Upper Three Runs Creek and eliminate many of the wells north of the facility from being considered to quantify current plume extent. Jaegge, et al. (1986) estimated flow velocities in the water table near the OBG to range from 40 to 80 ft/yr from Tritium tracer tests. Using a 35 year travel time (1957 to present) yields travel distances of 1400 ft to 2800 ft towards Fourmile Branch. Another analysis was performed using particle tracking computations from the groundwater flow model developed during the first phase of this study. For purely advective flow, the 15 year travel time of particles originating from the MWMF/LLRWDF is shown in Figure 2.10.

These calculations and results indicate that it is highly unlikely that the currently observed concentrations near Upper Three Runs Creek and at distances greater than 1200 ft from the facility boundary originated from the MWMF/LLRWDF. It appears reasonable to assume that some contamination has migrated to Fourmile Branch from the OBG. Solute transport modeling of contaminant migration from facility startup to the present supports the premise that observed concentrations north of the facility near Upper Three Runs Creek cannot be solely attributed to the MWMF/LLRWDF.

Figure 2.10. Particle traces for a 15 year travel time from the Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility.

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3 SOLUTE TRANSPORT MODELING

3.1 FTWORK CODE

The code FTWORK was chosen for simulation of groundwater flow and solute transport in the GSA. This code was developed for SRS to provide a validated, well-documented, three-dimensional code to simulate the groundwater system at SRS (Faust, et al., 1990). The program has been submitted to the International Groundwater Modeling Center and National Energy Software Center for release as public domain software. GeoTrans, the developer of the code, provides technical support to users and serves as the code custodian for dissemination of updates and enhancements to the code. FTWORK has been benchmarked against several flow and transport models and analytic solutions (Sims, et al., 1989). The code has been applied to several investigations at SRS, to the Paducah Gaseous Diffusion Plant, and several other waste sites.

FTWORK is a finite-difference model for simulation of flow and solute transport processes in fully-saturated porous media in one, two, or three-dimensions (Faust, et al., 1990). FTWORK provides an alternative to more comprehensive models such as SWIFT II (Reeves, et al., 1986) and HST3D (Kipp, 1987). Unlike these models, the flow equation is posed in terms of hydraulic head. The hydraulic head formulation is more convenient than the pressure formulation for most groundwater and hazardous waste assessments. FTWORK is easier to use in terms of input and operation because many of the complexities of more comprehensive codes (density dependence, heat transport, deformation, etc.) are not considered. FTWORK is consistent with the well known groundwater flow model, MODFLOW (McDonald and Harbaugh, 1988), in terms of equation and finite-difference formulation, allowing transfer of input data between the two codes.

The three-dimensional model is based on a finite-difference scheme using the block-centered grid that allows variable spacing and approximation of irregular geometry. The model also allows approximation of layers that have irregular thickness and/or that are not horizontal.

For unconfined conditions, the transmissivity term is a function of the saturated thickness in adjacent blocks. A simple approach for treating non-linear terms is used that is suitable for applications where the non-

linearity is mild. This model does not include a procedure for resaturation of grid blocks. If a grid block becomes desaturated during any iteration, the grid block is deleted from subsequent solution sets.

This model includes two optional geometrical approximations. The first option permits approximation of aquitards between grid block layers. The second option provides approximation of layers that have variable thickness and variable elevations. The aquitard and variable thickness/elevation options may be specified together or separately.

The equations for flow and solute transport are coupled due to the advective and accumulation terms in the transport equation. These terms are dependent upon head. Because it is assumed that density is independent of concentration, no terms in the flow equation depend on concentration. Thus, the flow equation can be solved independently of solute transport, but the solute transport equation must be solved in conjunction with the flow equation. Many applications involve steady flow but unsteady solute transport. FTWORK also provides options to simulate a completely unsteady flow and transport situation or to simulate a series of steady flow fields with unsteady solute transport. The latter condition is of practical interest for aquifers in which historical pumping has increased in increments. No matter which type of simulation is required, the finite-difference equations are decoupled by first solving the flow equation for heads. The head values required in the transport simulation are then explicitly specified.

For general three-dimensional problems, an iterative method is used to solve the flow and transport equations. This method, Slice Successive Over-Relaxation (SSOR), is a subset of the more general method of block successive over relaxation (Woo and Emanuel, 1976). For a detailed description of SSOR, see Wattenbarger and Thurnau (1976). SSOR is similar to line successive over relaxation in two dimensions, except that instead of solving each row implicitly, each vertical slice of the grid is solved implicitly. For flow, the three-dimensional equations have seven unknowns per equation (grid block). The transport system has 19 unknowns for each grid block. The SSOR method divides the system of equations as follows: five coefficients are treated implicitly for flow and nine coefficients are treated implicitly for transport.

The matrix equation for each slice is solved using the Gauss-Doolittle method (Weaver, 1967) for banded coefficient matrices. The coefficient matrix for the flow equation is symmetric, but the coefficient matrix for the transport equation is non-symmetric. FTWORK includes two alternative equation solvers so that extra computational work is not performed for the flow solution. Also, because the coefficient matrix does not change during a time step or nonlinear iteration, the matrix decomposition is performed only on the first SSOR iteration. On subsequent SSOR iterations, forward and back substitutions are performed. This procedure results in a substantial computational savings because matrix decomposition requires many more computations than forward and backward substitutions. Convergence of the SSOR scheme is checked in absolute terms for flow and normalized terms for solute transport.

Processes considered for solute transport include dispersion, a linear equilibrium adsorption isotherm, and first-order decay. Cross-product terms for hydrodynamic dispersion can be included in the transport calculations. Inclusion of cross-product terms can provide a significant improvement in the accuracy of transport calculations. The model has an option to use either central or upstream weighting of the advection term and central or backwards weighting of the time derivative.

A Gauss-Newton technique for non-linear least-squares parameter estimation has been incorporated into solution of the flow equation for automatic history matching. A comprehensive mass balance is included in the code for both flow and transport. A layer-by-layer balance is also included for multi-aquifer simulations.

Flow simulations for this project were made with FTWORK Version 2.7, with slight modification. Modifications were required to address special conditions related to dry nodes in areas along stream valleys where aquifers pinch out.

3.2 GROUNDWATER FLOW MODEL

Solute transport from the MWMF/LLRWDF and OBG is controlled to a large extent by advection, which is the movement of dissolved solutes by the flowing groundwater. Groundwater flow results primarily from hydraulic head differences, which may be described by the groundwater flow equation.

Numerical codes such as MODFLOW (McDonald and Harbaugh, 1988) and FTWORK (Faust, et al., 1990) solve the groundwater flow equation and essentially develop a description of hydraulic head as a function of space and time. A site-specific numerical groundwater flow model of the GSA was developed as phase I of this project. The model and site hydrogeology is described and documented in detail in GeoTrans (1992). A brief summary of the model is presented here; the reader is referred to the phase I document for further details.

The groundwater flow model of the GSA covers the area between Upper Three Runs Creek to the north and Fourmile Branch to the south, McQueen Branch to the east and one mile west of F-area to the west as shown in Figure 3.1. The model is comprised of five layers, which represent three aquifers and two aquitards. The aquifers, from top to bottom, are Aquifer Unit IIB Zone 2 (Water Table), Aquifer Unit IIB Zone I (Barnwell/McBean), and Aquifer Unit IIA (Congaree). Each layer is represented by one model layer. The aquitards, from top to bottom, are Confining Unit IIB1-IIB2 (Tan Clay) and Confining Unit IIA-IIB (Green Clay). Each aquitard is also represented by one model layer. Three-dimensional stratigraphic surfaces were developed from hydrogeologic data, including borings and wells. The layers incorporated in the model therefore exhibit considerable variation in thickness and are compatible with the current understanding of the subsurface geology.

Boundary conditions for the model represent, to the degree possible, actual hydrologic boundaries. River boundaries (head-dependent flux) are used to model all perennial streams, particularly Upper Three Runs Creek, Fourmile Branch, and portions of McQueen Branch. Drain boundaries (head-dependent discharge flux) are used to model wetland areas and intermittent streams. A no-flow boundary is used on the western extent of the model in Unit IIB to represent a groundwater flow line. Finally, specified head boundaries are used along the perimeter of the model in Unit IIA (Congaree) to represent flow in this more regional aquifer system. Assignment of all boundary conditions is based on a rigid set of rules that are tied to a Geographic Information System (GIS).

The finite-difference grid used in the model contains 5 layers, 91 columns, and 75 rows. The minimum grid spacing is 200 ft, which covers

Figure 3.1. Model domain and finite-difference grid used for the groundwater flow and solute transport analysis.

most of the modeled area. The maximum grid spacing is 1246 ft. Grid spacing increases towards the model edges in areas outside the immediate study area.

Hydrologic parameters, such as horizontal and vertical hydraulic conductivities, and recharge rates were derived from field data. These values were adjusted during the model calibration phase. A steady-state model calibration was obtained based on matching modeled water levels to water levels observed in wells during the second quarter of 1991. A total of 396 calibration targets were used. Modeled results after calibration were generally within 2 ft of observed. Residuals (modeled heads minus observed heads) were clustered around a mean of zero, indicating a normal distribution of errors. An attempt was also made to match stream discharge in those nodes representing Upper Three Runs Creek and Fourmile Branch. Although the modeled discharge rate appeared to be reasonable, an accurate quantitative comparison was not possible due to limited number of stream gages and uncertainty regarding percent contribution from each side of the stream.

Sensitivity analysis was also conducted with the model to address effects of parameter uncertainty. It was concluded that recharge rate was the most sensitive parameter, followed by vertical hydraulic conductivity, followed by horizontal hydraulic conductivity, for equivalent changes in each parameter. It was also noted that localized changes in parameter values caused local changes in hydraulic heads. This observation indicates that significant heterogeneity could produce unexpected head distributions.

The calibrated flow model for the GSA is a useful tool for conceptualizing flow processes and predicting potential flowpaths of contaminants. It represents a considerable improvement upon previous models of this area due to a more complete hydrologic data base, advances in modeling technology (linkage with a GIS), and a better representation of stratigraphy and boundary conditions.

3.3 SOLUTE TRANSPORT MODELING METHODOLOGY

The goals of this project dictated a methodology that could either accurately predict or provide a reasonable worst case estimate at the points of exposure of contaminant levels and mass loadings for current and

future conditions. Whatever the procedure used to attain this goal, the required methodology represents one form or another of a solute transport model. The model could be as simplistic as a dilution/advection calculation or as complex as a three-dimensional numerical model that accounted for leaching from the source area, advection, dilution, dispersion, diffusion, and geochemical reactions in both the unsaturated and saturated zones. The procedure should be consistent with the needs of the project, the timeframe allowed to complete the study, as well as the level of understanding of site-specific flow and transport phenomenon.

Difficulties in characterizing the extent of existing contamination and in defining the source term for each of the 19 constituents of concern were discussed in Section 2 of this report. It is clear from that discussion that data are insufficient to uniquely characterize a plume configuration that could be matched through a calibration exercise or initialized as a starting condition. Although the solute transport phenomenon at this site are poorly understood, the flow of groundwater flow is characterized much better. The methodology which was chosen uses the available data and site characterization to a level of certainty that is scientifically defensible, is reasonably conservative, and is consistent with the accuracy of risk projections which are ultimately derived from the model results.

3.3.1 Description of Method

The modeling methodology that was chosen may be referred to as the Superposition Unit Dilution or SPUD method. In using this method, it is recognized that the groundwater flow process is characterized considerably better at this site than is solute transport. Therefore, the groundwater flow model developed as phase I of this study (GeoTrans, 1992) and summarized in section 3.2 of this report forms the basis for transport calculations. It is assumed that the groundwater flow paths and velocities derived from this model are a more complete representation than simple one-dimensional gradient based calculations inherent in some codes used for regulatory assessment (VHS, EPACML). The three-dimensional nature of the flow system demands that flowpaths be derived by the resolution of horizontal and vertical components of the velocity vector. Hence, the

three-dimensional groundwater flow model is most appropriate for this analysis.

The primary answer which is sought from the transport model is how much attenuation can be expected between the source of contamination (or very close to the source, the POC) and the points of exposure (POE). A separate assessment must be performed for each constituent of concern because each contaminant is uniquely distributed. Quantification of these distributions is a significant difficulty in developing a transport model of this site. Rather than attempt to derive plumes from the limited available data, reasonable worst case scenarios were run using maximum observed concentrations at the POC wells. Recognizing that contaminant distributions vary considerably across this large site, maximum observed concentrations were used to assign mass fluxes to discrete areas of the facility. The facility was therefore subdivided into ten parcels, four in the OBG and six in the MWMF/LLRWDF. These parcels are of approximately the same size and take into account areas that are capped to reduce recharge. The mass flux which is assigned to each parcel is derived from the maximum concentration observed in adjacent POC wells. The mass flux of a contaminant is simply the product of the concentration and the prevailing recharge rate. The location of the parcels is shown in Figure 3.2. Wells which are assigned to each parcel are given in Table 3.1.

The principle of superposition was used to simplify the application of the transport modeling. Due to linearity, the contaminant distribution resulting from each parcel is independent of other parcels. Contaminant distributions resulting from individual parcels may therefore be added to form a composite result. Also due to linearity, the mass flux concentration assigned to a parcel can be scaled to either match the maximum observed concentration or to apply a factor of safety. Because of this, only ten unit mass flux or "template" FTWORK simulations are required to perform the entire analysis, one for each parcel. Each template indicates the relative dilution throughout the aquifer system and at the point of exposure resulting from contamination originating from the parcel represented by that template. These templates are chemical independent and may be scaled to match chemical specific maximum concentrations. The scaled concentration distributions and mass fluxes for individual parcels

Figure 3.2. Location of parcels and wells used in the SPUD method.

may then be added to those of other parcels to obtain a composite result for each constituent of concern. This method is very efficient because it requires only ten transport simulations to model 19 constituents. A variety of scale factors can be tested (average concentration, factor of safety, maximum concentration) because scaling and parcel addition are performed after the simulations are made. The process of scaling and addition are orders of magnitude more efficient than actual transport simulation. The process of applying the SPUD method is diagrammed in Figure 3.3. Verification of linearity and parcel scaling/addition is provided in Section 3.3.2.

3.3.2 Verification of Method

Verification of the SPUD method was performed by comparing the results obtained by the method with those computed through an equivalent, direct transport simulation. The COC chosen for use in the verification analysis was Lead because significant Lead contamination is thought to exist at the site and because of its relatively high toxicity. The direct simulation consisted of applying, within a single model run, the Lead mass flux rates directly to each of the respective parcel areas. The comparability of the direct simulation results with those obtained through the scaling and superposition of the separate parcel simulations provides a measure of verification for the SPUD method. The bases for comparison between the SPUD method results to those from direct simulation include the shape and extent of the resulting plumes, the concentrations computed at four selected grid blocks, and the mass flux rates computed to Fourmile Branch and Upper Three Runs Creek. The simulated Lead plumes obtained from the two modeling approaches for Unit IIB Zone 2 (Water Table) are compared in Figure 3.4. The plumes for Unit IIB Zone 1 (Barnwell/McBean) and Unit IIA (Congaree) are presented in Figures 3.5 and 3.6, respectively. The time represented on these plots is the year 2022, the termination time for the risk assessment. The minimum cutoff value for contouring used on these figures was 0.2 times the Lead MCL ($0.15 \mu\text{g/L}$). Inspection of Figures 3.4, 3.5, and 3.6 indicate that the Lead concentrations computed using the SPUD method are identical to those obtained through direct simulation.

Figure 3.3. Flow chart showing utility of the Superposition Unit Dilution (SPUD) method.

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(a)

(b)

Figure 3.4. Lead concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB, Zone 2 (Water Table Aquifer) for year 2022 derived from (a) a single simulation and (b) by scaling and addition of 10 parcels.

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(a)

(b)

Figure 3.5. Lead concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB, Zone 1 (Barnwell/McBean Aquifer) for year 2022 derived from (a) a single simulation and (b) by scaling and addition of 10 parcels.

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(a)

(b)

Figure 3.6. Lead concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022 derived from (a) a single simulation and (b) by scaling and addition of 10 parcels.

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The SPUD method simulation results for Lead were also compared to those from direct simulation with respect to the concentrations computed at four selected grid blocks. All of the blocks are from Unit IIB Zone 1 (Barnwell/McBean) and are located in a north-south alignment in the vicinity of the waste burial facilities. Blocks 1 and 2 are located north of the facilities while 3 and 4 are located to the south. Concentrations at the blocks are compared in Table 3.2 for year 1992 and year 2022 which correspond to the time interval considered by the risk assessment. Results of the comparison indicate that the SPUD method computed concentrations differ at these blocks from those computed by direct simulation by at most 0.3 percent.

The final basis of comparison between the SPUD method Lead simulation results and the results obtained by direct simulation are the mass flux rates to Fourmile Branch and Upper Three Runs Creek, the two principal surface water features in the model area (Figure 1.1). The mass flux rates were compared over the period extending from 1957, corresponding to the start of the transport simulation period, to 2022. This comparison indicates that the two simulation approaches compute identical flux rates to the streams throughout the simulation period (Figure 3.7).

Results from the simulation of Lead transport in the GSA by both the SPUD method and by direct simulation confirm that superimposing template simulations scaled by the respective parcel concentrations is essentially equivalent to simulating the parcel contaminant sources together in a single simulation. Given this conclusion, the SPUD method was used to perform the transport simulations for the 19 COCs considered in the risk assessment.

3.4 MODEL DEVELOPMENT

The SPUD method is applied for this application over a 65 year period. This spans the time when contaminants at the OBG are assumed to enter the water table (1957) to 30 years from the present (2022). A travel time of seven years from waste deposit until entry to the water table is documented by several references (Jaegge et al., 1986). Due to some

COMPARISON OF SPUD METHOD-DERIVED CONCENTRATIONS WITH
CONCENTRATIONS DERIVED FROM DIRECT SIMULATION: RESULTS FOR LEAD

LOCATIONS OF OBSERVATION BLOCKS:

BLOCK	ROW	COLUMN	LAYER
1	27	51	3
2	33	51	3
3	53	51	3
4	61	51	3

YEAR	OBSERVATION BLOCK	SPUD METHOD	DIRECT SIMULATION	PERCENT DIFFERENCE (1)
1992	1	0.042647	0.042750	-0.241
1992	2	0.909199	0.909690	-0.054
1992	3	4.400759	4.394563	0.141
1992	4	0.090834	0.090555	0.307
2022	1	0.478858	0.478800	0.012
2022	2	2.901872	2.901445	0.015
2022	3	6.980443	6.968931	0.165
2022	4	0.364865	0.364227	0.175

(1): PERCENT DIFFERENCE CALCULATED AS FOLLOWS:

$$\frac{((\text{SPUD METHOD RESULT}) - (\text{DIRECT SIMULATION RESULT}))}{(\text{DIRECT SIMULATION RESULT})} \times 100$$

Table 3.2. Comparison of SPUD method derived concentrations with concentrations derived from direct simulation; results for lead.

Figure 3.7. Comparison of mass fluxes ($\mu\text{g}/\text{d}$) to Upper Three Runs Creek and Fourmile Branch derived from a single simulation and by scaling and addition of 10 parcels.

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uncertainty in when the facilities actually began to receive waste, this seven year time was shortened to five and applied to the most often cited opening of the OBG (1952) and the MWMF/LLRWDF (1972). A timeline for the changes to the groundwater system that were incorporated into the modeling is shown in Figure 3.8.

In assigning the mass flux to each parcel, the maximum observed concentration in any adjacent POC well for the fifteen quarters of data was used. This concentration was assigned to a water flux equivalent to the prevailing recharge rate. Parcels 8, 9, and 10 correspond to the MWMF portion of the LLRWDF. The recharge rate for these parcels was reduced by 95 percent to account for emplacement of a low permeability cap. Only currently in-place caps for the MWMF were simulated, and they were assumed to be emplaced in 1990. Using the maximum concentration in the POC wells assumes that these concentrations are representative of the source and not significantly affected by dilution. This is a reasonably conservative assumption because recent data are used to approximate early time leaching into the system: the POC wells are probably at an equilibrium with the leached concentrations. The assumption that a constant concentration based on currently observed data is used throughout the simulation probably overstates the total mass added to the system from inception to present. On the other hand, it is also assumed that future concentrations will get no worse than the present. Given that travel time to Upper Three Runs Creek is greater than 30 years, the importance of understating future concentrations at the source is diminished because they will not reach the POE during the 30 year future analysis period. Longer term projections or assessments involving drinking water wells as exposure points may require assessment of less mobile portions of the constituents in addition to mobile fractions.

Mobile (non-retarded) constituents are modeled in this analysis. Available field data indicates that constituents usually assumed immobile (Aluminum, Lead, Manganese, Zinc, etc.) are present in Unit IIA, while velocity calculations indicate that non-retarded tracers require over 20 years to reach this aquifer. Regardless of the mechanism by which the contaminant has been transported to the extent that it is detected in the wells, this mobile portion is the most critical for a relatively short-term

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Figure 3.8. Timeline showing significant events modeled in the solute transport analysis.

(30 year) analysis. Use of mobile contaminants is appropriate and provides a conservative assessment of contaminant arrival times and concentrations at the POE. It should be noted that velocity calculations indicate that retardation factor of 2 effectively eliminates contaminants from traversing the distance to Upper Three Runs Creek in the period between facility inception and 30 years into the future. Longer term projections or assessments involving drinking water wells as exposure points may require evaluation of less mobile portions of the constituents in addition to mobile fractions.

Conservative (non-decaying) constituents are modeled in all cases, except Tritium. Tritium is modeled as having a half life of 12.3 years in the groundwater system. The source is assumed to be continuously replenished and therefore non-decaying until facility closure in 1990. At that time the source is also assumed to decay. Even though other radionuclides may undergo some decay, their half-lives are so long that decay may be assumed insignificant over the period of analysis. Decay of organics is assumed negligible even though several of the organics in this assessment may have significant decay associated with them (Howard et al., 1991. Neglecting decay of organics and radionuclides overstates predicted concentrations and therefore provides a conservative estimate of mass flux at the POE.

A porosity of 0.25 was assumed in aquifer layers and 0.30 in aquitards in all model layers. This compares well to the site values ranging from 0.1 to 0.3 (Looney, et al. 1987). Longitudinal dispersivities of 300 ft and transverse dispersivities of 30 ft were used in all aquifers. This is based primarily on the scale of the problem and on stability criterion. These dispersivities are consistent with data presented by Gelhar, et al. (1985) and with Looney, et al. (1987) who recommends using a dispersivity of 10 percent of the travel distance. Lower dispersivities (5 ft for α_L , 0.5 ft for α_T) were used in the aquitards, where flow is primarily vertical, in an effort to prevent excessive smearing into the lower aquifer. Initial sensitivity simulations with the unit concentrations in the source area indicated that the model was more sensitive to longitudinal dispersivity in the thin aquitards than to level of vertical grid discretization. A lower dispersivity was therefore used

in the aquitards, but the five layer model was maintained. Geochemical and physical properties used in the model are summarized in Table 3.3.

Concentrations assigned to recharge on the parcels representing the waste facility were based on the highest observed concentration during any of the fifteen quarters of data from any well adjacent to the parcel. A concentration of zero was assigned if a parcel had adjacent wells that all had non-detected quantities over the entire fifteen quarter period of record. Concentrations of adjacent parcels were averaged and assigned to parcels that had adjacent wells with no measurements. This situation occurred most often for parcel 8, which had only one upgradient well adjacent to it. Concentrations of each chemical that were assigned to each parcel are given in Table 3.4.

3.5 MODEL VERIFICATION

Model verification is the process of comparing model results to a data set which is independent of those used to develop or calibrate the model. As is often the case with groundwater models, the current database is so sparse that all data were used to formulate the original model. A true model verification is therefore not attainable for this application. However, because the modeling methodology is intended to give reasonable worst case results, and not necessarily to match field measured values, the verification methodology should be modified accordingly. The verification process in this case is a comparison of modeled results to field measured results and previously derived source term fluxes as a check on the conservativeness of the reasonable worst case scenario. The fact that the same field data are used to develop the modeled source term as are used to check model results does therefore not invalidate this type of reality check.

3.5.1 Comparison to Previously Derived Solute Fluxes

Looney and Cook (1987a and b) estimated mass fluxes of Tritium, Lead, and Cadmium from the MWMF to the groundwater system. They derived fluxes based on concentration data from a series of "grid wells" central to the MWMF. Most of these wells are no longer monitored due to construction of the clay cap overlying the MWMF. Looney and Cook (1987a and b)

Table 3.3. Geochemical/physical properties used in the solute transport simulations.

Longitudinal Dispersivity, α_L	300 ft aquifer, 5 ft aquitards
Transverse Dispersivity, α_T	5 ft aquifers, 0.5 ft aquitards
Porosity	0.20 aquifers, 0.3 aquitards
Retardation	1
Decay (half life)	Not Modeled 12.3 years (Tritium)
Velocity	As generated by flow model
Background Concentration	0
Initial Concentration	0 (1957)
Source	Constant with time, corrections for caps and decay. Derived from POC well data.
Simulation Length	65 years OBG 45 years MWMF/LLRWDF

Table 3.4. Concentrations assigned to each parcel for each constituent of concern.

Constituents	Parcel									
	1	2	3	4	5	6	7	8	9	10
<u>Inorganics and Organics in $\mu\text{g/L}$</u>										
Aluminum	377	431	580	158	1947	43.2	76.6	171	92.6	2182
Barium	177	64.5	137	37.5	60	60	48.7	7.21	90	1000
Iron	1719	317	553	2449	260	2840	291	17000	150	1000
Lead	52.2	52.8	36.7	50.1	19.6	30	10.8	9.60	10.9	69.8
Manganese	221.8	83.2	48	102.9	80	160	55.1	24.40	67.5	76.8
Nickel	20.8	7.3	0	9.6	4.3	13.2	4.9	7.50	0	46
Zinc	77.1	77.1	77.1	77.1	140.8	41.6	50.6	77.70	87.1	64.3
Chloroethene	92.7	0	0	0	0	0	0	0	0	0
Chloroform	28.7	20	0	78	5	5	7	5.70	33	27
1,1-Dichloroethane	130	0	0	5	0	0	0	0	2	0
Phenol	44.3	11	28.3	11.7	58	0	9.4	22.50	101	1000
Tetrachloroethylene	29.2	43	7	20	10	4	5.5	6.50	30	11
Trans 1,2-Dichloroethane	2600	190	0	470	13	0	0	4.30	36	49
Trichloroethylene	300	54	34	1000	122	47	10	59.70	230	120
<u>Radionuclides in pCi/L</u>										
Carbon-14	7.8	0	15.50	31	22	11	12	15	81	15
Tritium (pCi/mL)	220000	21000	1050	20800	170	55.2	11800	35	685	2360
Uranium 234	3.2	1.6	5.80	9.9	6.30	0	4.20	3.50	12	110
Uranium 235	15	20	12	10	0	0	0	0	2.70	6.1
Uranium 238	0.12	0.24	0.92	1.6	0.27	0	0.90	0.39	2.20	21

characterized their analysis as a "worst case" estimation of flux to the groundwater. They pointed out that although some of the well construction materials and the sampling and analysis methods used to obtain the concentration data do not meet SRS or regulatory protocols, the errors introduced would tend to overestimate the projected flux to the groundwater system.

Looney and Cook (1987a) estimated Lead flux to the groundwater system in the MWMF as ranging from 4.8 to 176 mg/m² yr, spatially averaging approximately 29 mg/m² yr. A similar area in the present analysis (parcel 10) was assigned a mass flux of 21.3 mg/m² yr. It should be noted that the area impacted by Lead in the MWMF/LLRWDF in the present analysis is larger than the area shown by Looney and Cook (1987a). Consequently, although the peak mass flux is lower in the present analysis, the total mass input to the system is greater than that estimated by Looney and Cook (1987a).

Looney and Cook (1987b) estimated Tritium flux to the groundwater system in the MWMF as ranging from 0.04 to 350 mCi/m² yr, spatially averaging 66.5 mCi/m² yr. Tritium fluxes in the present analysis range from 10.7 to 3597 mCi/m² yr, spatially averaging 767 mCi/m² yr. It should be noted that the impacted area of the MWMF/LLRWDF in the present analysis is larger than the impacted area shown by Looney and Cook (1987b). Consequently, the present model estimates a greater total mass input to the system in addition to higher peak mass flux than do Looney and Cook (1987b).

The present analysis shows a remarkable similarity to the analyses by Looney and Cook (1987a and b). Except for peak mass flux for Lead, the present analysis is more conservative than the "worst case" analysis performed by Looney and Cook (1987a and b). Unfortunately, similar analysis for other constituents were not made with the grid wells such that additional comparisons could be made. However, the favorable comparisons between currently derived and prior estimates of Lead and Tritium fluxes provides confidence that the method would give favorably conservative results for other constituents.

Another comparison was made between total quantities of Tritium in the OBG and MWMF/LLRWDF plumes as estimated by Jaegge, et al. (1987). They estimate a range in Tritium in the OBG plume from 13,300 to 38,600 Ci

between 1974 and 1984, averaging 27,750 Ci. Modeled results are 27,000 Ci (42,000 Ci, not corrected for decay) for 1974 and 32,500 Ci (67,000 Ci, not corrected for decay) for 1984. Thus, the modeled quantity of Tritium in the OBG plume is consistent with estimated quantities. Jaegge, et al. (1987) also estimate a range of Tritium in the MWMF/LLRWDF plume from 200 Ci to 5,600 Ci between 1981 and 1984, averaging 2375 Ci. Modeled results are 1450 Ci (1600 Ci, not corrected for decay) for 1981 and 2300 Ci (2800 Ci not corrected for decay) for 1984. Modeled quantities in the MWMF/LLRWDF are also consistent with estimated quantities, although the period of record is not long enough to be as conclusive as with the OBG.

3.5.2 Comparison to Current Conditions

The modeled contaminant distributions were compared to observed current conditions as a further means of assessing the conservativeness of the transport model. Modeled concentrations were compared to maximum and average measured concentrations in the POC wells for the period from first quarter 1988 through third quarter 1991. Additionally, the modeled contaminant plumes for Tritium and Lead for 1992 were compared to the plots of the measured maximum concentrations of these constituents over the above-mentioned period.

The modeled concentrations of each of the 19 COCs were compared to maximum and average concentrations as measured in the 61 POC wells. Specifically, the maximum and average concentrations for a given well were compared to the modeled concentration for the model grid block containing that well. A limitation of this approach is that the modeled concentration value represents an average value for the entire area of a 200 ft by 200 ft grid block. The measured concentration in a given well may therefore not be representative of the modeled concentration typical of the area represented by the corresponding grid block.

Model results were compared to current conditions by computing the ratio of modeled concentration to measured concentration. Use of the ratio of modeled to measured concentrations among all of the wells for each COC provides a means to assess both the goodness of the fit of model results to the measured data and to determine conservativeness of the model results.

Ratios greater than one indicate over-estimation of the model while ratios less than one indicate under-estimation.

Two methods of computing ratios were used. The first method dealt with computing the ratio of modeled concentrations to observed maximum concentrations for individual COCs. The denominator of the ratio represents the summation of maximum measured concentrations in POC wells with data for an individual COC; the numerator represents the summation of modeled concentrations at grid blocks corresponding to the POC wells considered in the denominator. This computation is summarized by the following equation:

$$\text{Ratio 1} = \frac{\sum_{i=1}^n C_{\text{modeled}}}{\sum_{i=1}^n \text{MAX} (C_{\text{measured}})}$$

where:

n = number of wells with measured concentrations.

The second method dealt with computing the ratio of modeled concentrations to observed time-averaged concentrations for individual COCs. The denominator of the ratio represents the summation of the time-averaged measured concentration in POC wells with data for an individual COC; the numerator represents the summation of modeled concentrations at grid blocks corresponding to the POC wells considered in the denominator. This computation is summarized by the following equation:

$$\text{Ratio 2} = \frac{\sum_{i=1}^n C_{\text{modeled}}}{\sum_{i=1}^n \frac{\sum_{j=1}^m C_{\text{measured}}}{m}}$$

where:

n = number of wells with measured concentrations, and

m = number of measurements over time.

Modeled and measured concentrations were compared with and without consideration given to wells with non-detected values. If detection limits were not considered, wells with non-detects were removed prior to the computation of the ratios. In the case where detection limits were included in the analysis, the reported detection limit for the analysis was multiplied by a factor and then included in the analysis. The value of the factor used for a given non-detect well depended on whether the parcel containing the well included any other wells with above-detection limit data for the COC under consideration. If above-detection limit data existed for other wells in the parcel, the value of the factor was 0.5. If only below-detection limit data existed in the parcel, a value of 0.1 was used.

Table 3.5 presents the results of the comparison of the modeled concentrations to maximum measured concentrations. Comparison was made to maximum concentrations so as to evaluate the transport model results against the worst-case estimation of current conditions. If wells with non-detects are neglected, the ratio of computed to measured concentrations ranges from 1.24 for Phenol to 0.26 for Uranium-238 and Zinc. The ratio averages 0.58 among all 19 COCs. With the consideration of non-detect wells in the analysis, ratios range from a high of 1.44 for Trichloroethene to 0.22 for Uranium-238 and averages 0.76. These results indicate that the transport model generally under-estimates actual maximum concentrations by approximately 25%.

Results of the comparison of modeled concentrations to the time-averaged measured concentrations for the 19 COCs are presented in Table 3.6. Comparison of the model results to time-averaged data was performed as the averaged data may better represent typical conditions at the site than the maximum concentrations used previously. Without consideration given to non-detects, the ratio of the modeled to measured concentration

Table 3.5. Ratio of modeled concentrations to maximum concentrations in the point-of-compliance wells.

Constituents	Non-Detects Not Considered	Non-Detects Considered
Aluminum	0.54	0.67
Barium	0.88	0.88
Carbon-14	0.28	0.31
Chloroform	0.41	1.33
Chloroethene (Vinyl chloride)	0.56	0.95
1,1-Dichloroethane	0.58	0.89
Iron	0.56	0.56
Lead	0.75	0.83
Manganese	0.52	0.53
Nickel	0.38	0.60
Phenol	1.24	1.36
Tetrachloroethylene	0.83	0.82
trans-1,2-Dichloroethene	0.63	0.95
Trichloroethene	0.69	1.44
Tritium	0.71	0.71
Uranium-234	0.34	0.36
Uranium-235	0.57	0.60
Uranium-238	0.26	0.22
Zinc	0.26	0.36
Average	0.58	0.76

Table 3.6. Ratio of modeled concentrations to average concentrations in the point-of-compliance wells.

Constituents	Non-Detects Not Considered	Non-Detects Considered
Aluminum	0.91	1.12
Barium	1.99	1.99
Carbon-14	0.46	0.50
Chloroethene (Vinyl Chloride)	2.90	1.00
Chloroform	0.81	1.94
1-1-Dichloroethane	1.04	1.21
Iron	3.24	3.24
Lead	2.39	2.52
Manganese	1.19	1.21
Nickel	0.60	0.76
Phenol	6.62	6.39
Tetrachloroethylene	1.65	1.63
trans-1,2-Dichloroethene	2.01	2.92
Trichloroethene	1.33	2.71
Tritium	1.23	1.24
Uranium-234	1.20	1.25
Uranium-235	0.70	0.63
Uranium-238	0.16	0.15
Zinc	0.33	0.46
Average	1.62	1.73

ranges from 6.62 for Phenol to 0.16 for Uranium-238 and averages 1.62 for all COCs. If non-detects are included in the analysis, the ratio ranges in value from 6.39 for Phenol to 0.15 for Uranium-238 and averages 1.73 for all COCs. Based on these results, concentrations computed by the transport model exceed the actual time-averaged measured values by nearly 75 percent.

Based on the calculations described above and presented in Tables 3.5 and 3.6, it is clear that the model is generally a conservative predictor of current contaminant concentrations in the POC well network. Because the modeled concentrations are lower than the all-time maximums in all wells, the model cannot be viewed as worst case. Similarly, because the modeled concentration are greater than time-averaged concentrations, the model cannot be viewed as calibrated to current conditions. Instead, the model should be viewed a reasonably conservative predictor of current conditions.

The modeled plumes for Tritium and Lead in 1992 were compared to measured data as a means for assessing the conservativeness of the transport model. The modeled Tritium concentrations for the three aquifer units in the study area are presented in Figures 3.9 through 3.11. Comparison of these figures with those showing the measured concentrations (Figures 2.4 through 2.6) indicate that the modeled distribution is generally in good agreement with the measured data. The plot (Figure 3.9) for Unit IIB Zone 2 (Water Table) shows two peak concentration areas which correspond to the southeast and southwest corners of the OBG. Concentrations throughout most of the MWMF/LLRWDF and OBG are above 1000 pCi/mL in this unit. Figure 3.10 shows the modeled Tritium concentrations in Unit IIB Zone 1 (Barnwell/McBean). This plot indicates that concentrations in excess of 5000 pCi/mL exist in this unit in the vicinity of the southwest corner of the OBG. Well data in this vicinity do not exist to verify these results. The modeled concentrations (Figure 3.11) in the Unit IIA (Congaree) are difficult to compare to actual measurements because there are no wells in the area predicted to be most impacted. The single measured value which is near 100 pCi/mL is in agreement with the model. The model does appear to over predict concentrations in some wells in this aquifer.

Figure 3.9. Tritium concentrations (pCi/mL) in layer 1, Unit IIB, Zone 2 (Water Table Aquifer) for year 1992.

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Figure 3.10. Tritium concentrations (pCi/mL) in layer 3, Unit IIB, Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure 3.11. Tritium concentrations (pCi/mL) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

The modeled Lead contaminant plumes are presented in Figures 3.12, 3.13, and 3.14 for Unit IIB Zone 2 (Water Table), Unit IIB Zone 1 (Barnwell/McBean), and Unit IIA (Congaree Aquifer), respectively. Comparison of these figures with Figures 2.7, 2.8, and 2.9 indicate that the transport model results are in good agreement with the observed Lead concentrations. The areas of maximum observed concentration at the southwest corner of the OBG and the northwest boundary of the MWMF/LLRWDF in Unit IIB Zone 2 (Water Table) are represented in the modeled plume for this unit. Similarly, the extent and magnitude of the modeled contamination in Unit IIB Zone 1 (Barnwell/McBean) is in agreement with the observed concentrations. Lead concentrations in Unit IIA (Congaree Aquifer) in the western portion of the OBG and in the southwestern portion of the LLRWDF/MWMF ranges from less than $10\mu\text{g/L}$ to greater than the contouring cutoff value of $3\mu\text{g/L}$. Under actual conditions, Lead concentrations in this unit range from 10 to $50\mu\text{g/L}$. Comparison of modeled to actual conditions is generally fairly good. However an adequate well network does not exist to provide assurance that modeled results do in fact occur.

3.6 MODEL RESULTS

Results obtained from the transport modeling include contaminant distribution plots and detailed mass balance information regarding the mass fluxes to creeks, wetlands, and tributary streams. At the direction of WSRC, results were obtained at five year increments from the year 1957 to 2022 for all constituents except Tritium. Results were obtained annually for Tritium. The final time corresponds to 30 years from the present. Due to numerical considerations, results were calculated by the FTWORK code at smaller time increments, but (except for Tritium) only printed each five years.

Contaminant distribution plots for each of the 19 constituents of concern, in each of the three aquifers, for years 1992 and 2022 are included in Appendix B. Results for the year 1992 were discussed earlier and are included as a means of comparing available data to modeled present day conditions. Results for the year 2022 are shown because they represent the end of the 30 year period of interest and have the highest mass fluxes

Figure 3.12. Lead concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB, Zone 2 (Water Table Aquifer) for year 1992.

Figure 3.13. Lead concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB, Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure 3.14. Lead concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

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and POE concentrations for the simulation period. To maintain a consistent perspective on the meaning of these plots, the minimum contour level was generally chosen to be one-fifth of any existing groundwater protection standard.

Modeled Tritium concentrations for the year 2022 are presented in Figures 3.15, 3.16, and 3.17 for Unit IIB Zone 2 (Water Table), Unit IIB Zone 1 (Barnwell/McBean), and Unit IIA (Congaree), respectively. As shown in Figure 3.15, Tritium concentrations are generally very similar in Unit IIB Zone 2 (Water Table) as 1992 conditions (see Figure 3.9). Peak concentrations are lower due to decay of the source term. There is some advancement of the 100 pCi/ml contour near Fourmile Branch, but this is accompanied by a retreat of the 500 pCi/ml contour in the F-area effluent stream. Inspection of modeled nodal concentrations indicates that the Tritium concentration in groundwater exiting at the F-area effluent stream attains a maximum of 518 pCi/ml in 1990 and declines to 285 pCi/ml by 2022. Concentration contours end abruptly to the north as this aquifer becomes desaturated. Modeled Tritium concentrations in Unit IIB Zone 1 (Barnwell/McBean) for the year 2022 (Figure 3.16) show a similar comparison to 1992 results as did the overlying aquifer (Figure 3.10). Peak concentrations are significantly lower due to source term decay. There is some advancement of the 100 pCi/mL contour north of the MWMF/LLRWDF facility, but not as far as the POE (Crouch Branch, Upper Three Runs Creek wetlands). As shown in Figure 3.17, Tritium concentrations for 2022 in Aquifer IIA (Congaree) show the greatest change from 1992 conditions (Figure 3.11). Again, peak concentrations have declined west of the OBG, but the 100 pCi/mL contour has advanced to Upper Three Runs Creek. Inspection of modeled nodal concentrations indicates that the Tritium concentration in groundwater exiting at Upper Three Runs Creek attains a peak value of 94 pCi/mL in the year 2019.

Modeled Lead concentrations for the year 2022 are presented in Figures 3.18, 3.19, and 3.20, Unit IIB Zone 2 (Water Table), Unit IIB Zone 1 (Barnwell/McBean) and Unit IIA (Congaree), respectively. A very slight increase in peak Lead concentration and advancement of the 10 µg/L contour line in the OBG may be noted in Unit IIB Zone 2 (Water Table) when

Figure 3.15. Tritium concentrations (pCi/mL) in layer 1, Unit IIB, Zone 2 (Water Table Aquifer) for year 2022.

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Figure 3.16. Tritium concentrations (pCi/mL) in layer 3, Unit IIB, Zone 1 (Barnwell/McBean Aquifer) for year 2022.

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Figure 3.17. Tritium concentrations (pCi/mL) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure 3.18. Lead concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB, Zone 2 (Water Table Aquifer) for year 2022.

Figure 3.19. Lead concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB, Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure 3.20. Lead concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

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comparing 2022 conditions (Figure 3.18) to present conditions (Figure 3.12). The most significant change in this aquifer, however, is a decline in peak concentration in the western corner of the MWMF/LLRWDF. This is attributed to the low-permeability cap which reduces recharge and hence mass flux to the groundwater system. The effect of the cap may also be seen in the underlying aquifer, Unit IIB Zone 1 (Barnwell/McBean), shown in Figure 3.19. When compared to current conditions (Figure 3.13), the peak concentration in the MWMF/LLRWDF is reduced, but the extent of the 10 $\mu\text{g/L}$ contour has expanded to cover nearly the entire facility. There is some minor expansion of the Lead plume within the OBG, but for exposure purposes is minimal. Peak Lead concentrations in groundwater exiting to the F-Area effluent stream are 2.7 $\mu\text{g/L}$ for year 2022, which may be compared to 2.0 $\mu\text{g/L}$ for 1992. For Upper Three Runs Creek, these values are 1.7 $\mu\text{g/L}$ for 2022 and 0.2 $\mu\text{g/L}$ for 1992. Lead concentrations in Unit IIA (Congaree) for 2022 are everywhere less than 10 $\mu\text{g/L}$ (Figure 3.20). In comparison to current conditions (Figure 3.14), the area enclosed by the 3 $\mu\text{g/L}$ contour has expanded significantly toward Upper Three Runs Creek.

A detailed mass balance consisting of total mass flux to each POE feature and maximum nodal mass flux to each POE feature was obtained. POE features consist of Fourmile Branch wetlands, Fourmile Branch, F-area effluent stream, H-area effluent stream, Upper Three Runs Creek wetlands, Upper Three Runs Creek, Crouch Branch, an unnamed tributary to Upper Three Runs Creek, McQueen Branch, and the Unit IIA (Congaree) specified head boundaries. A summary mass balance of all features tributary to either Fourmile Branch or Upper Three Runs Creek was also obtained. For the summary mass balance, mass fluxes arriving at a tributary feature were assumed to instantaneously mix with mass fluxes from other tributary features having a similar arrival time, regardless of location. A comprehensive listing of the detailed mass balance for each constituent of concern is provided in Appendix C. The results presented in Appendix C were used in the risk assessment calculations by Rogers and Associates (1992).

The mass balance data described above and included in Appendix C are summarized for each chemical in Figures 3.21 through 3.39. These figures show mass flux entering the groundwater system for each facility (either

Figure 3.21. Mass flux of Aluminum originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.22. Mass flux of Barium originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.23. Mass flux of Carbon-14 originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.24. Mass flux of Chloroethylene (vinyl chloride) originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.25. Mass flux of Chloroform originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.26. Mass flux of 1,1-Dichloroethane originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.27. Mass flux of Iron originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.28. Mass flux of Lead originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.29. Mass flux of Manganese originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.30. Mass flux of Nickel originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.31. Mass Flux of Phenol originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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- - - - FLUX FROM MWMF/LLRWDF
 - - - - FLUX FROM OBG
 * * * * FLUX TO FOURMILE BRANCH
 + + + + FLUX TO UPPER THREE RUNS CREEK

Figure 3.32. Mass flux of Tetrachloroethylene originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.33. Mass flux of Trans-1,2-Dichloroethene originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.34. Mass flux of Trichloroethylene originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.35. Mass flux of Tritium originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.36. Mass flux of Uranium-234 originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.37. Mass flux of Uranium-235 originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.38. Mass flux of Uranium-238 originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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Figure 3.39. Mass flux of Zinc originating from the Old Burial Ground and Mixed Waste Management Facility/Low Level Radioactive Waste Disposal Facility and exiting at Upper Three Runs Creek and Fourmile Branch.

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OBG or MWMF/LLRWDF) versus time superimposed on mass flux exiting the groundwater system at the two primary creeks (Fourmile Branch or Upper Three Runs Creek) versus time. With the exception of Tritium, the figures generally show a constant flux into the OBG starting in 1957. For the MWMF/LLRWDF, the figures generally show a step increase in flux as this facility becomes operational and contaminants begin to enter the groundwater system in 1977. This is followed by a constant flux until 1990 at which time portions of the facility are capped. Capping results in a step decrease in mass flux into the system. From 1990 flux remains constant until the simulation period ends in the year 2022. Flux to Fourmile Branch is generally significantly less than flux to Upper Three Runs Creek. Although nearly imperceptible on the figures, mass flux to Fourmile Branch is presently close to a steady state condition. Mass flux to Upper Three Runs Creek rises significantly from the present time to the end of the simulation period in 2022.

With the exception of Tritium, the entire system would eventually reach a steady-state where mass flux into the system equalled mass flux out of the system. In this case the sum of the inflow lines on the plot would equal the sum of the outflow lines. Although approximately 40 additional years would be required to reach a steady state, it is not apparent how realistic this would be considering possible inventory or mobile fraction depletion or changes to the source or capped areas.

The plot for Tritium (Figure 3.35) is interesting due to the decay phenomenon. The short half-life of Tritium prevents the mass flux out to ever equilibrate to the input mass flux rate. Influx follows the same pattern as described for the other chemicals until 1990 when the Tritium source is no longer replenished and begins to decay. Influx therefore declines consistent with the 12.3 year half-life of Tritium. Efflux from the system peaks in 1990 for Fourmile Branch and in 2021 for Upper Three Runs Creek.

4 CONCLUSIONS AND RECOMMENDATIONS

The data base for developing a predictive model of contaminant migration from the Burial Grounds Complex is very limited. The data that were analyzed as a part of this study were insufficient to uniquely quantify a plume configuration from which to calibrate a model or initialize concentrations for predictive simulations. Geochemical factors which may tend to decrease mobility of some dissolved constituents are poorly characterized and not well understood. Because of these uncertainties, a standard application of solute transport modeling was not possible and an alternative methodology was undertaken.

The available groundwater concentration data are insufficient due to the configuration and intent of the monitoring network. The monitoring network consists of wells which surround the exterior boundary of the facility. These wells (referred to as point of compliance or POC wells) were not intended to characterize the extent of contamination, but rather to provide regulatory assurance that contamination was not leaving the facility boundaries. There are few wells within reasonable distance to characterize plumes that may have left facility boundaries. The additional data that were analyzed show contamination at distances that are inconsistent with simple advective travel time calculations and current and prior model results. Elevated concentrations north of the Burial Grounds Complex do not appear to be the result of MWMF operations.

The modeling approach which was chosen uses the available data and site characterization to a level of certainty that is scientifically defensible, is reasonably conservative, and is consistent with the accuracy of the risk projections which are ultimately derived from the model results. The modeling approach is essentially a reasonable worst case estimate of concentration reduction resulting from dilution/attenuation of maximum currently observed concentrations. An efficient method of computing concentrations and mass fluxes based on the principle of superposition was developed. The mechanics of the method were verified with a more direct simulation of contaminant migration. The model results were subjected to tests of reasonableness: 1) comparison to source concentrations derived using other data and by other researchers, 2)

comparison to estimates of contaminant volumes in plumes, and 3) comparison of modeled POC concentrations to observed data. In all cases, the intent of the comparisons was not to match modeled data with another form of data, but to ensure that the model results were conservative. The checks that were made support that the model would tend to over-predict exposure levels and hence risk at the POE.

The model results were presented as contaminant distribution maps, mass flux versus time plots, and detailed mass balance data. Significant travel times to the POE at Upper Three Runs Creek and Fourmile Branch are indicated by the model. Travel time to the POE is decreased by a strong downward gradient which forces contamination into Unit IIA (Congaree) and directs it northwest toward Upper Three Runs Creek. Dilution is fairly important, resulting in a one to two order of magnitude reduction from the POC to the POE 30 years from the present. The results presented in this study can be expressed in terms of risk to human health and the environment to further quantify the effect of contaminant migration from the MWMF/LLRWDF and OBG.

Several recommendations are offered to characterize the site better and to narrow the level of uncertainty with these types of assessments. More data should be gathered in existing wells to narrow the band of uncertainty that exists in quantifying source area contamination. This would involve sampling all wells (BG, BGO, BGX, MG, available grid wells, etc.) for all 19 constituents of concern. The effect of steel well casings and other concerns that exist with some of the existing monitor wells should be studied. It is likely that the steel well casings may be inaccurate for some constituents, but they may be useful for others. A more long term recommendation is to adequately characterize the plumes emanating from the MWMF/LLRWDF and OBG. This will involve more wells; but they should be strategically placed to assess specifically vertical migration, extent of contamination in Unit IIA (Congaree), and horizontal versus vertical migration. Modeling results should be used to guide the drilling program. Further research needs to be conducted on the geochemical controls on mobility of constituents. Field tests designed specifically to assess sorption should be conducted. Core samples collected within the source and sampled for the COCs would be invaluable.

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APPENDIX A

**DISTRIBUTION OF MAXIMUM MEASURED QUANTITIES OF
CONTAMINATION IN THE MWMF VICINITY**

Figure A-1. Measured maximum concentrations of Aluminum ($\mu\text{g/L}$) in Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/184

Figure A-2. Measured maximum concentrations of Aluminum ($\mu\text{g/L}$) Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-3. Measured maximum concentrations of Aluminum ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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S/3017-003/OA/186

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S/3017-003/OA/188

Figure A-6. Measured maximum concentrations of Barium ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-8. Measured maximum concentrations of Carbon-14 (pCi/L) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/191

Figure A-10. Measured maximum concentrations of Chloroethylene (vinyl chloride) ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/193

Figure A-13. Measured maximum concentrations of Chloroform ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/196

Figure A-15. Measured maximum concentrations of Chloroform ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-17. Measured maximum concentrations of 1,1-Dichloroethane ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-18. Measured maximum concentrations of 1,1-Dichloroethane ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/201

Figure A-19. Measured maximum concentrations of Iron ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-21. Measured maximum concentrations of Iron ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-22. Measured maximum concentrations of Lead ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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SAVANNAH RIVER SITE

S/3017-003/OA/205

Figure A-23. Measured maximum concentrations of Lead ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/206

Figure A-24. Measured maximum concentrations of Lead ($\mu\text{g/L}$) in Unit 1 (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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SAVANNAH RIVER SITE

S/3017-003/OA/207

Figure A-27. Measured maximum concentrations of Manganese ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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SAVANNAH RIVER SITE

S/3017-003/OA/210

Figure A-28. Measured maximum concentrations of Nickel ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-30. Measured maximum concentrations of Nickel ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-31. Measured maximum concentrations of Phenol ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/211

Figure A-32. Measured maximum concentrations of Phenol ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/212

Figure A-33. Measured maximum concentrations of Phenol ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-34. Measured maximum concentrations of Tetrachloroethylene (pCi/L) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/217

Figure A-35. Measured maximum concentrations of Tetrachloroethylene (pCi/L) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/218

Figure A-37. Measured maximum concentrations of Trans-1,2-Dichloroethene ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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SAVANNAH RIVER SITE

S/3017-003/OA/220

Figure A-38. Measured maximum concentrations of Trans-1,2-Dichloroethene ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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S/3017-003/OA/221

Figure A-39. Measured maximum concentrations of Trans-1,2-Dichloroethene ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/222

Figure A-42. Measured maximum concentrations of Trichloroethylene ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 through 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-43. Measured maximum concentrations of Tritium (pCi/L) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/226

Figure A-44. Measured maximum concentrations of Tritium (pCi/ml) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SPS

SAVANNAH RIVER SITE

S/3017-003/OA/227

Figure A-46. Measured maximum concentrations of Uranium-234 (pCi/L) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-47. Measured maximum concentrations of Uranium-234 (pCi/L) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-48. Measured maximum concentrations of Uranium-234 (pCi/L) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SPS

SAVANNAH RIVER SITE

S/3017-003/OA/231

Figure A-49. Measured maximum concentrations of Uranium-235 (pCi/L) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-50. Measured maximum concentrations of Uranium-235 (pCi/L) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3C17-003/OA/232

Figure A-51. Measured maximum concentrations of Uranium-235 (pCi/L) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/233

Figure A-52. Measured maximum concentrations of Uranium-238 (pCi/L) Unit I13, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/234

Figure A-54. Measured maximum concentrations of Uranium-238 (pCi/L) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

Figure A-55. Measured maximum concentrations of Zinc ($\mu\text{g/L}$) Unit IIB, Zone 2 (Water Table Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

SAVANNAH RIVER SITE

S/3017-003/OA/237

Figure A-56. Measured maximum concentrations of Zinc ($\mu\text{g/L}$) in Unit IIB, Zone 1 (Barnwell/McBean Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

SRS

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S/3017-003/OA/238

Figure A-57. Measured maximum concentrations of Zinc ($\mu\text{g/L}$) in Unit IIA (Congaree Aquifer) between 1st quarter 1988 and 3rd quarter 1991. Open circles denote minimum non-detect readings.

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S/3017-003/OA/239

APPENDIX B

**MODELED CONCENTRATION PLUMES FOR
CURRENT AND FUTURE CONDITIONS**

Figure B-1. Aluminum concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-2. Aluminum concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-3. Aluminum concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-4. Aluminum concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-5. Aluminum concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-6. Aluminum concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-7. Barium concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) year 1992.

Figure B-8. Barium concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-9. Barium concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-10. Barium concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

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SAVANNAH RIVER SITE

S/3017-003/OA/73

Figure B-11. Barium concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-12. Barium concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-13. Carbon-14 concentrations (pCi/L) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-14. Carbon-14 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-15. Carbon-14 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-16. Carbon-14 concentrations (pCi/L) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

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SAVANNAH RIVER SITE

S/3017-003/OA/79

Figure B-17. Carbon-14 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-18. Carbon-14 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-19. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-20. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in Layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-21. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in Layer 5, Unit IIA (Congaree Aquifer) for year 1992.

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SAVANNAH RIVER SITE

S/3017-003/OA/84

Figure B-22. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-23. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-24. Chloroethylene (vinyl chloride) concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-25. Chloroform concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

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SAVANNAH RIVER SITE

S/3017-003/OA/88

Figure B-26. Chloroform concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-27. Chloroform concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-28. Chloroform concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-29. Chloroform concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-30. Chloroform concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-31. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-32. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-33. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-34. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-35. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone
1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-36. 1,1-Dichloroethane concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-37. Iron concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-38. Iron concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-39. Iron concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-40. Iron concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-41. Iron concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-42. Iron concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-43. Lead concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-44. Lead concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-45. Lead concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-46. Lead concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-47. Lead concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-48. Lead concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

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SAVANNAH RIVER SITE

S/3017-003/OA/111

Figure B-49. Manganese concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-50. Manganese concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-51. Manganese concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-52. Manganese concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-53. Manganese concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-54. Manganese concentrations ($\mu\text{g/L}$) in Layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-55. Nickel concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-56. Nickel concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-57. Nickel concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-58. Nickel concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-59. Nickel concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-60. Nickel concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-61. Phenol concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

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SAVANNAH RIVER SITE

S/3017-003/OA/124

Figure B-62. Phenol concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zor~ (Barnwell/McBean Aquifer) for year 1992.

Figure B-63. Phenol concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-64. Phenol concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-65. Phenol concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-66. Phenol concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-67. Tetrachloroethylene concentrations (pCi/L) in layer 1, Unit IIB
Zone 2 (Water Table Aquifer) for year 1992.

Figure B-68. Tetrachloroethylene concentrations (pCi/L) in layer 3, Unit IIB
Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-69. Tetrachloroethylene concentrations (pCi/L) in layer 5, Unit IIA
(Congaree Aquifer) for year 1992.

Figure B-70. Tetrachloroethylene concentrations (pCi/L) in layer 1, Unit IIB
Zone 2 (Water Table Aquifer) for year 2022.

Figure B-71. Tetrachloroethylene concentrations (pCi/L) in layer 3, Unit IIB
Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-72. Tetrachloroethylene concentrations (pCi/L) in layer 5, Unit IIA
(Congaree Aquifer) for year 2022.

Figure B-73. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB
Zone 2 (Water Table Aquifer) for year 1992.

Figure B-74. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB
Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-75. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-76. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-77. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB
Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-78. Trans-1,2-Dichloroethene concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

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S/3017-003/OA/147

Figure B-79. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

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S/3017-003/OA/148

Figure B-80. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-81. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-82. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-83. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-84. Trichloroethylene concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-85. Tritium concentrations (pCi/mL) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-86. Tritium concentrations (pCi/mL) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

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S/3017-003/OA/155

Figure B-87. Tritium concentrations (pCi/mL) in layer IIA (Congaree Aquifer) for year 1992.

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S/3017-003/OA/156

Figure B-88. Tritium concentrations (pCi/mL) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

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S/3017-003/OA/157

Figure B-89. Tritium concentrations (pCi/mL) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-90. Tritium concentrations (pCi/mL) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-91. Uranium-234 concentrations in (pCi/L) layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

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Figure B-92. Uranium-234 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-93. Uranium-234 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-94. Uranium-234 concentrations (pCi/L) in layer 1, Unit IIB Zone 2
(Water Table Aquifer) for year 2022.

Figure B-95. Uranium-234 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-96. Uranium-234 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-97. Uranium-235, concentrations (pCi/L) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-98. Uranium-235, concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-99. Uranium-235, concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-100. Uranium-235, concentrations (pCi/L) in layer 1, Unit IIB Zone 2
(Water Table Aquifer) for year 2022.

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S/3017-003/OA/169

Figure B-101. Uranium-235, concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

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S/3017-003/OA/170

Figure B-102. Uranium-235, concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

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Figure B-103. Uranium-238 concentrations (pCi/L) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

Figure B-104. Uranium-238 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

Figure B-105. Uranium-238 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-106. Uranium-238 concentrations (pCi/L) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-107. Uranium-238 concentrations (pCi/L) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

Figure B-108. Uranium-238 concentrations (pCi/L) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

Figure B-109. Zinc concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 1992.

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S/3017-003/OA/178

Figure B-110. Zinc concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 1992.

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S/3017-003/OA/179

Figure B-111. Zinc concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 1992.

Figure B-112. Zinc concentrations ($\mu\text{g/L}$) in layer 1, Unit IIB Zone 2 (Water Table Aquifer) for year 2022.

Figure B-113. Zinc concentrations ($\mu\text{g/L}$) in layer 3, Unit IIB Zone 1 (Barnwell/McBean Aquifer) for year 2022.

SRS

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S/3017-003/OA/182

Figure B-114. Zinc concentrations ($\mu\text{g/L}$) in layer 5, Unit IIA (Congaree Aquifer) for year 2022.

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SAVANNAH RIVER SITE

S/3017-003/OA/183

APPENDIX C

**MODELED MASS FLUX AND CONCENTRATION
VERSUS TIME FOR VARIOUS POINTS OF EXPOSURE**

ALUMINUM

ALUMINUM

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	377.00
2	431.00
3	580.00
4	158.00
5	1947.00
6	43.20
7	76.60
8	171.00
9	92.60
10	2182.00

BEGINNING OF MULTI-FEATURE SUMMARIES
-----FOURMILE CREEK TOTAL
(CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.85327E+02	-4.07952E+02	39	54	1	2.03530E-02	39	54	1
1967.0	-1.60353E+04	-1.16491E+04	39	54	1	5.81183E-01	39	54	1
1972.0	-8.83061E+04	-5.41240E+04	39	54	1	2.70029E+00	39	54	1
1977.0	-2.54102E+05	-1.27993E+05	39	54	1	6.38566E+00	39	54	1
1982.0	-5.35266E+05	-2.17946E+05	39	54	1	1.08735E+01	39	54	1
1987.0	-9.38936E+05	-3.09267E+05	39	54	1	1.54296E+01	39	54	1
1990.0	-2.23560E+06	-3.60810E+05	39	54	1	1.80012E+01	39	54	1
1992.0	-1.31215E+06	-3.38869E+05	39	54	1	1.89300E+01	39	54	1
1997.0	-1.78355E+06	-3.79178E+05	39	54	1	2.12055E+01	39	54	1
2002.0	-2.27035E+06	-4.08566E+05	39	54	1	2.28634E+01	39	54	1
2007.0	-2.73706E+06	-4.30665E+05	39	54	1	2.41007E+01	39	54	1
2012.0	-3.16258E+06	-4.48635E+05	39	54	1	2.51065E+01	39	54	1
2017.0	-3.53793E+06	-4.64067E+05	39	54	1	2.59703E+01	39	54	1
2022.0	-3.86280E+06	-4.82276E+05	38	55	1	2.67232E+01	39	54	1

UPPER THREE RUNS CREEK TOTAL
(CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.74591E-03	-3.39926E-04	48	9	5	1.34098E-08	43	23	3
1967.0	-5.06597E+01	-3.40261E+00	48	9	5	3.38885E-05	48	9	5
1972.0	-5.33319E+03	-2.89071E+02	48	9	5	2.87902E-03	48	9	5
1977.0	-9.18205E+04	-3.71725E+03	48	9	5	3.81200E-02	47	9	5
1982.0	-6.04151E+05	-2.52363E+04	9	24	5	1.92791E-01	47	9	5
1987.0	-2.24626E+06	-9.25751E+04	9	24	5	5.98430E-01	34	8	5
1990.0	-4.14827E+06	-1.66309E+05	9	24	5	1.08233E+00	33	8	5
1992.0	-5.91430E+06	-2.30884E+05	9	24	5	1.51355E+00	33	8	5
1997.0	-1.28220E+07	-4.47172E+05	9	24	5	3.05063E+00	33	8	5
2002.0	-2.43425E+07	-7.30048E+05	9	24	5	5.36802E+00	45	8	5
2007.0	-4.08319E+07	-1.07085E+06	36	7	5	1.02375E+01	45	8	5
2012.0	-6.08558E+07	-1.62544E+06	36	7	5	1.50548E+01	45	8	5
2017.0	-8.20281E+07	-2.16344E+06	36	7	5	1.94449E+01	45	8	5
2022.0	-1.02242E+08	-2.60214E+06	36	7	5	2.30221E+01	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.56662E+00	-1.05781E+00	52	62	1	2.49333E-04	52	61	1
1967.0	-3.80831E+02	-7.15014E+01	52	62	1	1.21646E-02	52	61	1
1972.0	-3.96176E+03	-6.62123E+02	40	59	1	7.27311E-02	52	61	1
1977.0	-1.86944E+04	-3.56224E+03	40	59	1	3.04139E-01	40	59	1
1982.0	-5.60512E+04	-1.02675E+04	40	59	1	8.76624E-01	40	59	1
1987.0	-1.24519E+05	-2.06707E+04	40	59	1	1.76483E+00	40	59	1
1990.0	-1.81323E+05	-2.89037E+04	40	60	1	2.40154E+00	40	59	1
1992.0	-2.05290E+05	-3.24233E+04	40	60	1	2.85540E+00	37	60	1
1997.0	-3.11687E+05	-4.60863E+04	37	60	1	4.60541E+00	37	60	1
2002.0	-4.30122E+05	-6.48660E+04	37	60	1	6.48323E+00	37	60	1
2007.0	-5.49311E+05	-8.26128E+04	37	60	1	8.25706E+00	37	60	1
2012.0	-6.61971E+05	-9.79620E+04	37	60	1	9.79122E+00	37	60	1
2017.0	-7.64681E+05	-1.10491E+05	37	60	1	1.10436E+01	37	60	1
2022.0	-8.56577E+05	-1.20444E+05	37	60	1	1.20383E+01	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.67496E-02	-5.41636E-02	55	66	1	4.48109E-06	55	66	1
1967.0	-2.23086E+01	-7.53160E+00	55	66	1	6.23108E-04	55	66	1
1972.0	-6.42235E+02	-1.25867E+02	38	61	1	1.08133E-02	38	61	1
1977.0	-6.35585E+03	-1.29091E+03	38	61	1	1.10903E-01	38	61	1
1982.0	-3.05227E+04	-5.83160E+03	38	61	1	5.00996E-01	38	61	1
1987.0	-9.18754E+04	-1.62106E+04	38	61	1	1.43934E+00	36	60	1
1990.0	-1.52446E+05	-2.56251E+04	38	61	1	2.32678E+00	36	60	1
1992.0	-1.95618E+05	-3.17757E+04	38	61	1	2.99225E+00	36	60	1
1997.0	-3.41533E+05	-5.24070E+04	36	60	1	5.00301E+00	36	60	1
2002.0	-5.16898E+05	-7.57151E+04	36	60	1	7.22896E+00	36	60	1
2007.0	-7.03324E+05	-9.83550E+04	36	60	1	9.39057E+00	36	60	1
2012.0	-8.84443E+05	-1.18424E+05	36	60	1	1.13067E+01	36	60	1
2017.0	-1.04961E+06	-1.35155E+05	36	60	1	1.29041E+01	36	60	1
2022.0	-1.19438E+06	-1.48650E+05	36	60	1	1.41926E+01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.80664E+02	-4.07952E+02	39	54	1	2.03530E-02	39	54	1
1967.0	-1.56322E+04	-1.16491E+04	39	54	1	5.81183E-01	39	54	1
1972.0	-8.37021E+04	-5.41240E+04	39	54	1	2.70029E+00	39	54	1
1977.0	-2.29052E+05	-1.27993E+05	39	54	1	6.38566E+00	39	54	1
1982.0	-4.48692E+05	-2.17946E+05	39	54	1	1.08735E+01	39	54	1
1987.0	-7.22540E+05	-3.09267E+05	39	54	1	1.54296E+01	39	54	1
1990.0	-9.01830E+05	-3.60810E+05	39	54	1	1.80012E+01	39	54	1
1992.0	-9.11244E+05	-3.38869E+05	39	54	1	1.89300E+01	39	54	1
1997.0	-1.13033E+06	-3.79178E+05	39	54	1	2.12055E+01	39	54	1
2002.0	-1.32332E+06	-4.08566E+05	39	54	1	2.28634E+01	39	54	1
2007.0	-1.48441E+06	-4.30665E+05	39	54	1	2.41007E+01	39	54	1
2012.0	-1.61614E+06	-4.48635E+05	39	54	1	2.51065E+01	39	54	1
2017.0	-1.72360E+06	-4.64067E+05	39	54	1	2.59703E+01	39	54	1
2022.0	-1.81179E+06	-4.82276E+05	38	55	1	2.67232E+01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	2.35805E-06	-7.51062E-07	61	63	1	5.61313E-11	61	63	1
1967.0	3.35653E-04	-3.54274E-04	60	65	1	2.33037E-08	61	63	1
1972.0	-4.20423E-03	-8.31488E-03	60	65	1	4.68675E-07	61	63	1
1977.0	-8.22334E-02	-5.66555E-02	60	65	1	2.91612E-06	61	63	1
1982.0	-4.31262E-01	-2.09183E-01	60	65	1	1.03188E-05	60	65	1
1987.0	-1.34745E+00	-5.43957E-01	60	65	1	2.68329E-05	60	65	1
1990.0	-2.32015E+00	-8.60922E-01	60	65	1	4.24684E-05	60	65	1
1992.0	-2.21773E+00	-8.73276E-01	60	65	1	4.49296E-05	60	65	1
1997.0	-3.79666E+00	-1.20262E+00	60	65	1	1.01185E-04	59	66	1
2002.0	-7.64136E+00	-2.56182E+00	59	66	1	3.56464E-04	59	66	1
2007.0	-1.41460E+01	-6.22417E+00	59	66	1	8.66066E-04	59	66	1
2012.0	-2.41744E+01	-1.25867E+01	59	66	1	1.75138E-03	59	66	1
2017.0	-3.85027E+01	-2.25310E+01	59	66	1	3.13509E-03	59	66	1
2022.0	-5.74749E+01	-3.68443E+01	59	66	1	5.12674E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.61652E-04	-2.44312E-04	55	22	3	9.72856E-09	55	22	3
1967.0	-2.95212E+00	-7.27807E-01	55	19	3	2.07642E-05	57	15	5
1972.0	-1.59382E+02	-3.43563E+01	55	19	3	1.05116E-03	57	15	5
1977.0	-1.85150E+03	-3.17052E+02	55	19	3	9.52721E-03	57	15	5
1982.0	-9.92343E+03	-1.37037E+03	4	30	5	3.67320E-02	57	15	5
1987.0	-3.77377E+04	-5.43974E+03	4	30	5	1.55964E-01	24	7	5
1990.0	-8.46443E+04	-1.01726E+04	4	30	5	3.40530E-01	24	7	5
1992.0	-1.35504E+05	-1.44739E+04	4	30	5	5.29320E-01	24	7	5
1997.0	-4.02882E+05	-4.23670E+04	70	36	3	1.29054E+00	24	7	5
2002.0	-9.29874E+05	-1.08491E+05	70	36	3	2.52546E+00	24	7	5
2007.0	-1.74761E+06	-2.08405E+05	70	36	3	4.29859E+00	24	7	5
2012.0	-2.82744E+06	-3.32633E+05	70	36	3	6.65910E+00	24	7	5
2017.0	-4.10641E+06	-4.69644E+05	70	36	3	9.50740E+00	24	7	5
2022.0	-5.50957E+06	-6.09904E+05	70	36	3	1.25335E+01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.22810E-03	-3.39926E-04	48	9	5	3.61755E-09	53	11	5
1967.0	-4.61382E+01	-3.40261E+00	48	9	5	3.38885E-05	48	9	5
1972.0	-5.08422E+03	-2.89071E+02	48	9	5	2.87902E-03	48	9	5
1977.0	-8.89387E+04	-3.71725E+03	48	9	5	3.81200E-02	47	9	5
1982.0	-5.89131E+05	-2.52363E+04	9	24	5	1.92791E-01	47	9	5
1987.0	-2.19254E+06	-9.25751E+04	9	24	5	5.98430E-01	34	8	5
1990.0	-4.03288E+06	-1.66309E+05	9	24	5	1.08233E+00	33	8	5
1992.0	-5.73287E+06	-2.30884E+05	9	24	5	1.51355E+00	33	8	5
1997.0	-1.22843E+07	-4.47172E+05	9	24	5	3.05063E+00	33	8	5
2002.0	-2.30909E+07	-7.30048E+05	9	24	5	5.86802E+00	45	8	5
2007.0	-3.84744E+07	-1.07085E+06	36	7	5	1.02375E+01	45	8	5
2012.0	-5.70606E+07	-1.62544E+06	36	7	5	1.50548E+01	45	8	5
2017.0	-7.65655E+07	-2.16344E+06	36	7	5	1.94449E+01	45	8	5
2022.0	-9.49873E+07	-2.60244E+06	36	7	5	2.30221E+01	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.80966E-06	-3.69446E-07	64	19	5	2.18832E-10	64	20	5
1967.0	-8.98991E-03	-1.40858E-03	64	19	5	6.96090E-07	64	20	5

1972.0	-5.33358E-01	-6.86543E-02	64	17	5	3.01473E-05	64	20	5
1977.0	-5.70769E+00	-6.89533E-01	64	15	5	2.47800E-04	64	20	5
1982.0	-2.68313E+01	-2.93041E+00	64	15	5	8.96624E-04	64	20	5
1987.0	-2.95232E+02	-6.58695E+01	70	29	3	2.83267E-03	70	30	3
1990.0	-1.87445E+03	-4.63800E+02	70	29	3	1.91403E-02	70	30	3
1992.0	-4.73874E+03	-1.14898E+03	70	29	3	4.69098E-02	70	30	3
1997.0	-2.51624E+04	-5.78660E+03	70	29	3	2.27789E-01	70	30	3
2002.0	-7.30471E+04	-1.62628E+04	70	29	3	6.30286E-01	70	30	3
2007.0	-1.54263E+05	-3.39897E+04	70	29	3	1.31012E+00	70	30	3
2012.0	-2.72863E+05	-6.01546E+04	70	29	3	2.31206E+00	70	30	3
2017.0	-4.31948E+05	-9.53880E+04	70	29	3	3.65296E+00	70	30	3
2022.0	-6.30543E+05	-1.39024E+05	70	29	3	5.29785E+00	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.54349E-04	-1.51539E-04	43	22	3	1.34098E-08	43	23	3
1967.0	-1.56039E+00	-2.71484E-01	43	22	3	2.07632E-05	43	23	3
1972.0	-8.90568E+01	-1.09731E+01	43	22	3	1.14488E-03	40	7	5
1977.0	-1.02463E+03	-1.14850E+02	42	18	3	2.18114E-02	40	7	5
1982.0	-5.06991E+03	-5.57895E+02	41	16	3	1.43206E-01	40	7	5
1987.0	-1.56875E+04	-1.74821E+03	41	16	3	5.02297E-01	40	7	5
1990.0	-2.88745E+04	-2.99646E+03	41	16	3	8.81530E-01	40	7	5
1992.0	-4.11879E+04	-4.12278E+03	41	16	3	1.22056E+00	40	7	5
1997.0	-1.09647E+05	-1.33533E+04	43	22	3	2.56295E+00	40	7	5
2002.0	-2.48681E+05	-3.12526E+04	43	22	3	5.10338E+00	40	7	5
2007.0	-4.55632E+05	-5.50331E+04	43	22	3	9.05592E+00	40	7	5
2012.0	-6.94914E+05	-7.93354E+04	43	22	3	1.37253E+01	40	7	5
2017.0	-9.24210E+05	-1.03760E+05	42	18	3	1.81144E+01	40	7	5
2022.0	-1.11509E+06	-1.26892E+05	42	18	3	2.16355E+01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.78097E-23	-3.24451E-24	90	35	3	3.84769E-29	90	36	3
1967.0	-1.31670E-17	-2.76330E-18	90	35	3	3.04092E-23	90	36	3
1972.0	-2.78806E-14	-6.09642E-15	90	35	3	6.50734E-20	90	36	3
1977.0	-4.23964E-12	-9.35376E-13	90	35	3	9.84045E-18	90	36	3
1982.0	-1.46343E-10	-3.21157E-11	90	35	3	3.35550E-16	90	36	3
1987.0	-1.99130E-09	-4.31734E-10	90	35	3	4.49672E-15	90	36	3
1990.0	-6.96876E-09	-1.49745E-09	90	35	3	1.55819E-14	90	36	3
1992.0	-1.44989E-08	-3.09719E-09	90	35	3	3.22253E-14	90	36	3
1997.0	-7.01073E-08	-1.47899E-08	90	35	3	1.53693E-13	90	36	3
2002.0	-2.96479E-07	-6.28349E-08	90	35	3	6.50945E-13	90	36	3
2007.0	-1.43095E-06	-3.08887E-07	90	35	3	3.18718E-12	90	36	3
2012.0	-7.00427E-06	-1.51369E-06	90	35	3	1.56043E-11	90	36	3
2017.0	-2.83511E-05	-6.03985E-06	90	35	3	6.23310E-11	90	36	3
2022.0	-9.11507E-05	-1.90330E-05	90	35	3	1.96708E-10	90	36	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.57243E-09	-3.24307E-09	1	42	5	2.90374E-14	1	42	5
1967.0	-6.53867E-04	-2.32873E-04	1	42	5	2.08508E-09	1	42	5
1972.0	-2.27002E-01	-7.63164E-02	1	42	5	6.83314E-07	1	42	5
1977.0	-8.01049E+00	-2.55769E+00	1	42	5	2.29008E-05	1	42	5
1982.0	-8.49113E+01	-2.59154E+01	1	42	5	2.32039E-04	1	42	5
1987.0	-4.44667E+02	-1.30461E+02	1	42	5	1.16811E-03	1	42	5
1990.0	-9.58759E+02	-2.75347E+02	1	42	5	2.46537E-03	1	42	5
1992.0	-1.48756E+03	-4.21627E+02	1	42	5	3.77753E-03	1	42	5
1997.0	-3.68471E+03	-1.01291E+03	1	42	5	9.07587E-03	1	42	5

2002.0	-7.39430E+03	-1.97840E+03	1	42	5	1.77281E-02	1	42	5
2007.0	-1.27189E+04	-3.32301E+03	1	42	5	2.97771E-02	1	42	5
2012.0	-1.94451E+04	-4.97560E+03	1	42	5	4.45857E-02	1	42	5
2017.0	-2.71141E+04	-6.81361E+03	1	42	5	6.10560E-02	1	42	5
2022.0	-3.51861E+04	-8.70657E+03	1	42	5	7.80188E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.66904E-03	-1.36293E-03	36	60	5	1.17781E-07	36	60	5
1967.0	-3.90306E+00	-1.24222E+00	36	60	5	1.07350E-04	36	60	5
1972.0	-1.35339E+02	-4.21849E+01	38	61	5	3.41060E-03	36	60	5
1977.0	-1.19500E+03	-3.83015E+02	38	61	5	2.82139E-02	36	60	5
1982.0	-5.15044E+03	-1.67665E+03	38	61	5	1.15663E-01	36	60	5
1987.0	-1.43933E+04	-4.71813E+03	38	61	5	3.11405E-01	36	60	5
1990.0	-2.31176E+04	-7.58869E+03	38	61	5	4.91568E-01	36	60	5
1992.0	-2.88956E+04	-9.57706E+03	38	61	5	6.40454E-01	36	60	5
1997.0	-4.92917E+04	-1.62970E+04	38	61	5	1.07201E+00	36	60	5
2002.0	-7.23677E+04	-2.38364E+04	38	61	5	1.55378E+00	36	60	5
2007.0	-9.59111E+04	-3.14325E+04	38	61	5	2.03412E+00	36	60	5
2012.0	-1.17926E+05	-3.84215E+04	38	61	5	2.47465E+00	36	60	5
2017.0	-1.37316E+05	-4.44529E+04	38	61	5	2.85528E+00	36	60	5
2022.0	-1.53806E+05	-4.94613E+04	38	61	5	3.17249E+00	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.20053E-27	-1.20053E-27	91	26	5	2.04919E-31	91	26	5
1967.0	-3.26262E-21	-3.26235E-21	91	26	5	5.56854E-25	91	26	5
1972.0	-1.48520E-17	-1.48410E-17	91	26	5	2.53323E-21	91	26	5
1977.0	-3.75750E-15	-3.74561E-15	91	26	5	6.39346E-19	91	26	5
1982.0	-1.84550E-13	-1.82913E-13	91	26	5	3.12218E-17	91	26	5
1987.0	-3.22476E-12	-3.16338E-12	91	26	5	5.39966E-16	91	26	5
1990.0	-1.26547E-11	-1.23096E-11	91	26	5	2.10117E-15	91	26	5
1992.0	-2.78969E-11	-2.69575E-11	91	26	5	4.63207E-15	91	26	5
1997.0	-1.50843E-10	-1.43373E-10	91	26	5	2.46830E-14	91	26	5
2002.0	-6.41465E-10	-6.04896E-10	91	26	5	1.04318E-13	91	26	5
2007.0	-2.94067E-09	-2.79910E-09	91	26	5	4.82775E-13	91	26	5
2012.0	-1.47486E-08	-1.41037E-08	91	26	5	2.43260E-12	91	26	5
2017.0	-6.39336E-08	-6.06160E-08	91	26	5	1.04553E-11	91	26	5
2022.0	-2.18273E-07	-2.04543E-07	91	26	5	3.52815E-11	91	26	5

BARIUM

BARIUM

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:	
PARCEL NUMBER	START CONC
1	177.00
2	64.50
3	137.00
4	37.50
5	60.00
6	60.00
7	48.70
8	7.20
9	190.00
10	1000.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.42719E+02	-1.18266E+02	39	54	1	5.90037E-03	39	54	1
1967.0	-3.96180E+03	-2.78316E+03	39	54	1	1.38854E-01	39	54	1
1972.0	-2.00936E+04	-1.17193E+04	39	54	1	5.84687E-01	39	54	1
1977.0	-5.56305E+04	-2.64272E+04	39	54	1	1.31848E+00	39	54	1
1982.0	-1.15062E+05	-4.40755E+04	39	54	1	2.19896E+00	39	54	1
1987.0	-2.00103E+05	-6.21030E+04	39	54	1	3.09837E+00	39	54	1
1990.0	-2.62634E+05	-7.23987E+04	39	54	1	3.61204E+00	39	54	1
1992.0	-2.78932E+05	-6.81155E+04	39	54	1	3.80510E+00	39	54	1
1997.0	-3.78863E+05	-7.64117E+04	39	54	1	4.27332E+00	39	54	1
2002.0	-4.82682E+05	-8.26521E+04	39	54	1	4.62521E+00	39	54	1
2007.0	-5.82741E+05	-8.74816E+04	39	54	1	4.89561E+00	39	54	1
2012.0	-6.74330E+05	-9.23935E+04	38	55	1	5.11583E+00	39	54	1
2017.0	-7.55324E+05	-9.71281E+04	38	55	1	5.30218E+00	39	54	1
2022.0	-8.25499E+05	-1.01067E+05	38	55	1	5.46238E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.36847E-03	-7.92718E-05	48	9	5	2.77101E-09	43	23	3
1967.0	-1.29358E+01	-7.92973E-01	48	9	5	7.89766E-06	48	9	5
1972.0	-1.41605E+03	-6.73908E+01	48	9	5	6.71183E-04	48	9	5
1977.0	-2.42405E+04	-1.17410E+03	9	24	5	8.84451E-03	47	9	5
1982.0	-1.54858E+05	-7.24164E+03	9	24	5	4.47438E-02	47	9	5
1987.0	-5.58862E+05	-2.44849E+04	9	24	5	1.40721E-01	9	24	5
1990.0	-1.02868E+06	-4.22745E+04	9	24	5	2.42962E-01	9	24	5
1992.0	-1.47723E+06	-5.73789E+04	9	24	5	3.40059E-01	33	8	5
1997.0	-3.36622E+06	-1.06405E+05	9	24	5	9.32202E-01	47	9	5
2002.0	-6.79810E+06	-2.04548E+05	48	9	5	2.21629E+00	47	9	5
2007.0	-1.18950E+07	-3.63854E+05	48	9	5	4.10115E+00	45	8	5
2012.0	-1.80296E+07	-5.74425E+05	36	7	5	6.15332E+00	45	8	5
2017.0	-2.42104E+07	-7.87289E+05	36	7	5	7.83762E+00	45	8	5
2022.0	-2.96088E+07	-9.47716E+05	36	7	5	8.96950E+00	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.07666E+00	-2.51052E-01	52	62	1	5.91743E-05	52	61	1
1967.0	-8.71182E+01	-1.69692E+01	52	62	1	2.88692E-03	52	61	1
1972.0	-8.68268E+02	-1.20968E+02	40	59	1	1.72603E-02	52	61	1
1977.0	-3.98897E+03	-6.58788E+02	40	59	1	5.62463E-02	40	59	1
1982.0	-1.18745E+04	-1.93150E+03	40	59	1	1.64909E-01	40	59	1
1987.0	-2.64800E+04	-3.95721E+03	40	59	1	3.37860E-01	40	59	1
1990.0	-3.87349E+04	-5.55756E+03	40	60	1	4.74997E-01	37	60	1
1992.0	-4.38646E+04	-6.27117E+03	40	60	1	5.95233E-01	37	60	1
1997.0	-6.71550E+04	-9.50789E+03	37	60	1	9.50123E-01	37	60	1
2002.0	-9.33861E+04	-1.33163E+04	37	60	1	1.33094E+00	37	60	1
2007.0	-1.19952E+05	-1.69312E+04	37	60	1	1.69225E+00	37	60	1
2012.0	-1.45117E+05	-2.00833E+04	37	60	1	2.00731E+00	37	60	1
2017.0	-1.68020E+05	-2.26856E+04	37	60	1	2.26741E+00	37	60	1
2022.0	-1.88412E+05	-2.47776E+04	37	60	1	2.47651E+00	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.31771E-02	-1.28553E-02	55	66	1	1.06355E-06	55	66	1
1967.0	-5.45880E+00	-1.78756E+00	55	66	1	1.47890E-04	55	66	1
1972.0	-1.53337E+02	-2.79141E+01	38	61	1	2.55410E-03	36	60	1
1977.0	-1.46230E+03	-2.77805E+02	36	60	1	2.60304E-02	36	60	1
1982.0	-6.83650E+03	-1.24765E+03	36	60	1	1.16906E-01	36	60	1
1987.0	-2.02260E+04	-3.46517E+03	36	60	1	3.24688E-01	36	60	1
1990.0	-3.33245E+04	-5.48836E+03	36	60	1	5.14261E-01	36	60	1
1992.0	-4.26293E+04	-6.85418E+03	36	60	1	6.54193E-01	36	60	1
1997.0	-7.39724E+04	-1.12293E+04	36	60	1	1.07200E+00	36	60	1
2002.0	-1.11564E+05	-1.60220E+04	36	60	1	1.52971E+00	36	60	1
2007.0	-1.51503E+05	-2.06601E+04	36	60	1	1.97256E+00	36	60	1
2012.0	-1.90325E+05	-2.47791E+04	36	60	1	2.36582E+00	36	60	1
2017.0	-2.25774E+05	-2.82374E+04	36	60	1	2.69601E+00	36	60	1
2022.0	-2.56893E+05	-3.10560E+04	36	60	1	2.96512E+00	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.41619E+02	-1.18266E+02	39	54	1	5.90037E-03	39	54	1
1967.0	-3.86922E+03	-2.78316E+03	39	54	1	1.38854E-01	39	54	1
1972.0	-1.90720E+04	-1.17193E+04	39	54	1	5.84687E-01	39	54	1
1977.0	-5.01792E+04	-2.64272E+04	39	54	1	1.31848E+00	39	54	1
1982.0	-9.63513E+04	-4.40755E+04	39	54	1	2.19896E+00	39	54	1
1987.0	-1.53397E+05	-6.21030E+04	39	54	1	3.09837E+00	39	54	1
1990.0	-1.90574E+05	-7.23987E+04	39	54	1	3.61204E+00	39	54	1
1992.0	-1.92438E+05	-6.81155E+04	39	54	1	3.80510E+00	39	54	1
1997.0	-2.37735E+05	-7.64117E+04	39	54	1	4.27332E+00	39	54	1
2002.0	-2.77730E+05	-8.26521E+04	39	54	1	4.62521E+00	39	54	1
2007.0	-3.11283E+05	-8.74816E+04	39	54	1	4.89561E+00	39	54	1
2012.0	-3.38883E+05	-9.23935E+04	38	55	1	5.11583E+00	39	54	1
2017.0	-3.61522E+05	-9.71281E+04	38	55	1	5.30218E+00	39	54	1
2022.0	-3.80183E+05	-1.01067E+05	38	55	1	5.46238E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	5.59663E-07	-1.78258E-07	61	63	1	1.33223E-11	61	63	1
1967.0	7.96646E-05	-8.40841E-05	60	65	1	5.53093E-09	61	63	1
1972.0	-9.97825E-04	-1.97347E-03	60	65	1	1.11236E-07	61	63	1
1977.0	-1.95172E-02	-1.34467E-02	60	65	1	6.92113E-07	61	63	1
1982.0	-1.02355E-01	-4.96476E-02	60	65	1	2.44907E-06	60	65	1
1987.0	-3.19726E-01	-1.29094E-01	60	65	1	6.36807E-06	60	65	1
1990.0	-5.49866E-01	-2.04228E-01	60	65	1	1.00743E-05	60	65	1
1992.0	-5.24471E-01	-2.06991E-01	60	65	1	1.06496E-05	60	65	1
1997.0	-8.83785E-01	-2.82740E-01	60	65	1	2.39049E-05	59	66	1
2002.0	-1.73778E+00	-6.03917E-01	59	66	1	8.40320E-05	59	66	1
2007.0	-3.12136E+00	-1.46447E+00	59	66	1	2.03774E-04	59	66	1
2012.0	-5.10965E+00	-2.95307E+00	59	66	1	4.10907E-04	59	66	1
2017.0	-7.70469E+00	-5.26223E+00	59	66	1	7.32217E-04	59	66	1
2022.0	-1.08361E+01	-8.55668E+00	59	66	1	1.19063E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.27938E-04	-5.78187E-05	55	22	3	2.30236E-09	55	22	3
1967.0	-7.10590E-01	-1.72094E-01	55	19	3	4.91891E-06	57	15	5
1972.0	-3.97993E+01	-8.11916E+00	55	19	3	2.48937E-04	57	15	5
1977.0	-4.76491E+02	-7.48819E+01	55	19	3	2.25549E-03	57	15	5
1982.0	-2.56876E+03	-4.09724E+02	4	30	5	8.69678E-03	57	15	5
1987.0	-1.07031E+04	-1.49484E+03	4	30	5	3.87627E-02	24	7	5
1990.0	-2.67588E+04	-2.67855E+03	4	30	5	8.21025E-02	24	7	5
1992.0	-4.44079E+04	-4.14277E+03	61	24	3	1.25509E-01	24	7	5
1997.0	-1.33369E+05	-1.42636E+04	61	24	3	3.21464E-01	60	25	3
2002.0	-2.88780E+05	-3.10707E+04	61	24	3	6.72330E-01	60	25	3
2007.0	-4.96954E+05	-5.19978E+04	61	24	3	1.09566E+00	60	25	3
2012.0	-7.32318E+05	-7.37819E+04	61	24	3	1.68453E+00	24	7	5
2017.0	-9.69413E+05	-9.38517E+04	61	24	3	2.57228E+00	24	7	5
2022.0	-1.18892E+06	-1.10846E+05	61	24	3	3.56755E+00	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.02528E-03	-7.92718E-05	48	9	5	8.54610E-10	53	11	5
1967.0	-1.18797E+01	-7.92973E-01	48	9	5	7.89766E-06	48	9	5
1972.0	-1.35617E+03	-6.73908E+01	48	9	5	6.71183E-04	48	9	5
1977.0	-2.35317E+04	-1.17410E+03	9	24	5	8.84451E-03	47	9	5
1982.0	-1.51138E+05	-7.24164E+03	9	24	5	4.47438E-02	47	9	5
1987.0	-5.44355E+05	-2.44849E+04	9	24	5	1.40721E-01	9	24	5
1990.0	-9.93447E+05	-4.22745E+04	9	24	5	2.42962E-01	9	24	5
1992.0	-1.41869E+06	-5.73789E+04	9	24	5	3.40059E-01	33	8	5
1997.0	-3.18229E+06	-1.06405E+05	9	24	5	9.32202E-01	47	9	5
2002.0	-6.38025E+06	-2.04548E+05	48	9	5	2.21629E+00	47	9	5
2007.0	-1.11525E+07	-3.63854E+05	48	9	5	4.10115E+00	45	8	5
2012.0	-1.69185E+07	-5.74425E+05	36	7	5	6.15332E+00	45	8	5
2017.0	-2.27352E+07	-7.87289E+05	36	7	5	7.83762E+00	45	8	5
2022.0	-2.78085E+07	-9.47716E+05	36	7	5	8.96950E+00	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.29452E-07	-8.76726E-08	64	19	5	5.19309E-11	64	20	5
1967.0	-2.13311E-03	-3.34221E-04	64	19	5	1.65165E-07	64	20	5

1972.0	-1.26536E-01	-1.62876E-02	64	17	5	7.15220E-06	64	20	5
1977.0	-1.35391E+00	-1.63562E-01	64	15	5	5.87805E-05	64	20	5
1982.0	-6.48778E+00	-6.95101E-01	64	15	5	2.12740E-04	64	20	5
1987.0	-1.47805E+02	-3.71793E+01	70	29	3	1.59168E-03	70	30	3
1990.0	-1.03438E+03	-2.59401E+02	70	29	3	1.05103E-02	70	30	3
1992.0	-2.59554E+03	-6.23208E+02	70	29	3	2.48420E-02	70	30	3
1997.0	-1.27726E+04	-2.80419E+03	70	29	3	1.06085E-01	70	30	3
2002.0	-3.29594E+04	-6.74454E+03	70	29	3	2.47069E-01	70	30	3
2007.0	-5.99547E+04	-1.16627E+04	70	29	3	4.19003E-01	70	30	3
2012.0	-8.96090E+04	-1.68613E+04	70	29	3	5.99150E-01	70	30	3
2017.0	-1.19333E+05	-2.20173E+04	70	29	3	7.77822E-01	70	30	3
2022.0	-1.47652E+05	-2.69579E+04	70	29	3	9.49561E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.14825E-04	-3.14259E-05	43	22	3	2.77101E-09	43	23	3
1967.0	-3.43341E-01	-5.97816E-02	43	22	3	4.56153E-06	43	23	3
1972.0	-1.99580E+01	-2.45965E+00	43	22	3	2.54515E-04	40	7	5
1977.0	-2.30924E+02	-2.58494E+01	42	18	3	4.88779E-03	40	7	5
1982.0	-1.14457E+03	-1.25572E+02	41	16	3	3.22001E-02	40	7	5
1987.0	-3.65570E+03	-3.95555E+02	41	16	3	1.13291E-01	40	7	5
1990.0	-7.43665E+03	-8.69878E+02	43	22	3	2.01162E-01	40	7	5
1992.0	-1.15352E+04	-1.43455E+03	43	22	3	2.84965E-01	40	7	5
1997.0	-3.77866E+04	-5.48549E+03	43	22	3	6.86494E-01	40	7	5
2002.0	-9.61155E+04	-1.34636E+04	43	22	3	1.63158E+00	40	7	5
2007.0	-1.85613E+05	-2.41261E+04	43	22	3	3.25483E+00	40	7	5
2012.0	-2.89215E+05	-3.49681E+04	43	22	3	5.21058E+00	40	7	5
2017.0	-3.86446E+05	-4.44934E+04	43	20	3	6.97767E+00	40	7	5
2022.0	-4.63716E+05	-5.34744E+04	42	18	3	8.24726E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.22698E-24	-7.70055E-25	90	35	3	9.13213E-30	90	36	3
1967.0	-3.12505E-18	-6.55837E-19	90	35	3	7.21728E-24	90	36	3
1972.0	-6.61707E-15	-1.44690E-15	90	35	3	1.54442E-20	90	36	3
1977.0	-1.00620E-12	-2.21993E-13	90	35	3	2.33544E-18	90	36	3
1982.0	-3.47312E-11	-7.62186E-12	90	35	3	7.96346E-17	90	36	3
1987.0	-4.72573E-10	-1.02458E-10	90	35	3	1.06715E-15	90	36	3
1990.0	-1.65346E-09	-3.55291E-10	90	35	3	3.69699E-15	90	36	3
1992.0	-3.43689E-09	-7.34112E-10	90	35	3	7.63808E-15	90	36	3
1997.0	-1.62224E-08	-3.41577E-09	90	35	3	3.54897E-14	90	36	3
2002.0	-5.83892E-08	-1.22380E-08	90	35	3	1.26635E-13	90	36	3
2007.0	-1.89565E-07	-4.04088E-08	90	35	3	4.16393E-13	90	35	3
2012.0	-6.10493E-07	-1.33222E-07	90	35	3	1.37278E-12	90	35	3
2017.0	-1.86995E-06	-4.10969E-07	90	35	3	4.23484E-12	90	35	3
2022.0	-5.09161E-06	-1.10822E-06	90	35	3	1.14197E-11	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.74996E-09	-1.41703E-09	1	42	5	1.26877E-14	1	42	5
1967.0	-2.67092E-04	-9.49391E-05	1	42	5	8.50056E-10	1	42	5
1972.0	-8.55563E-02	-2.86836E-02	1	42	5	2.56824E-07	1	42	5
1977.0	-2.75701E+00	-8.77238E-01	1	42	5	7.85452E-06	1	42	5
1982.0	-2.66207E+01	-8.09383E+00	1	42	5	7.24697E-05	1	42	5
1987.0	-1.27809E+02	-3.73589E+01	1	42	5	3.34500E-04	1	42	5
1990.0	-2.63164E+02	-7.53159E+01	1	42	5	6.74356E-04	1	42	5
1992.0	-3.97186E+02	-1.12209E+02	1	42	5	1.00533E-03	1	42	5
1997.0	-9.28491E+02	-2.54556E+02	1	42	5	2.28087E-03	1	42	5

2002.0	-1.78503E+03	-4.76634E+02	1	42	5	4.27104E-03	1	42	5
2007.0	-2.97955E+03	-7.77462E+02	1	42	5	6.96674E-03	1	42	5
2012.0	-4.46672E+03	-1.14250E+03	1	42	5	1.02378E-02	1	42	5
2017.0	-6.15531E+03	-1.54771E+03	1	42	5	1.38689E-02	1	42	5
2022.0	-7.93435E+03	-1.96616E+03	1	42	5	1.76186E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.39245E-04	-3.28073E-04	36	60	5	2.83514E-08	36	60	5
1967.0	-8.45441E-01	-2.75751E-01	36	60	5	2.38299E-05	36	60	5
1972.0	-2.84866E+01	-8.65220E+00	38	61	5	7.35700E-04	36	60	5
1977.0	-2.46958E+02	-7.73774E+01	38	61	5	5.98974E-03	36	60	5
1982.0	-1.05339E+03	-3.36013E+02	38	61	5	2.42868E-02	36	60	5
1987.0	-2.93105E+03	-9.43281E+02	38	61	5	6.48909E-02	36	60	5
1990.0	-4.70546E+03	-1.51800E+03	38	61	5	1.02108E-01	36	60	5
1992.0	-5.88272E+03	-1.91820E+03	38	61	5	1.32849E-01	36	60	5
1997.0	-1.00653E+04	-3.27787E+03	38	61	5	2.21898E-01	36	60	5
2002.0	-1.48372E+04	-4.81840E+03	38	61	5	3.21495E-01	36	60	5
2007.0	-1.97463E+04	-6.38572E+03	38	61	5	4.21128E-01	36	60	5
2012.0	-2.43768E+04	-7.84230E+03	38	61	5	5.12940E-01	36	60	5
2017.0	-2.84925E+04	-9.11199E+03	38	61	5	5.92746E-01	36	60	5
2022.0	-3.20227E+04	-1.01760E+04	38	61	5	6.59686E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.84934E-28	-2.84934E-28	91	26	5	4.86355E-32	91	26	5
1967.0	-7.74346E-22	-7.74283E-22	91	26	5	1.32163E-25	91	26	5
1972.0	-3.52492E-18	-3.52230E-18	91	26	5	6.01226E-22	91	26	5
1977.0	-8.91775E-16	-8.88953E-16	91	26	5	1.51737E-19	91	26	5
1982.0	-4.37988E-14	-4.34102E-14	91	26	5	7.40978E-18	91	26	5
1987.0	-7.65303E-13	-7.50736E-13	91	26	5	1.28145E-16	91	26	5
1990.0	-3.00301E-12	-2.92113E-12	91	26	5	4.98617E-16	91	26	5
1992.0	-6.61795E-12	-6.39501E-12	91	26	5	1.09884E-15	91	26	5
1997.0	-3.53899E-11	-3.36190E-11	91	26	5	5.78781E-15	91	26	5
2002.0	-1.36296E-10	-1.27785E-10	91	26	5	2.20373E-14	91	26	5
2007.0	-4.48658E-10	-4.20280E-10	91	26	5	7.24879E-14	91	26	5
2012.0	-1.44361E-09	-1.36297E-09	91	26	5	2.35085E-13	91	26	5
2017.0	-4.50163E-09	-4.25940E-09	91	26	5	7.34683E-13	91	26	5
2022.0	-1.25619E-08	-1.18351E-08	91	26	5	2.04143E-12	91	26	5

CARBON-14

CARBON-14

MASS FLUX UNITS: pc/day
 CONCENTRATION UNITS: pc/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	7.80
3	15.50
4	31.00
5	22.00
6	11.00
7	12.00
8	15.00
9	81.00
10	15.00

BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
(CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.43714E+00	-3.81339E+00	39	54	1	1.90253E-04	39	54	1
1967.0	-1.72328E+02	-7.90808E+01	39	54	1	3.94540E-03	39	54	1
1972.0	-1.02419E+03	-3.43526E+02	39	54	1	1.71388E-02	39	54	1
1977.0	-3.14359E+03	-8.72359E+02	39	54	1	4.35227E-02	39	54	1
1982.0	-6.88441E+03	-1.67083E+03	39	54	1	8.33591E-02	39	54	1
1987.0	-1.24003E+04	-2.66941E+03	39	54	1	1.33179E-01	39	54	1
1990.0	-1.65586E+04	-3.32117E+03	39	54	1	1.65696E-01	39	54	1
1992.0	-1.69545E+04	-3.21200E+03	39	54	1	1.79430E-01	39	54	1
1997.0	-2.34150E+04	-3.87826E+03	39	54	1	2.16892E-01	39	54	1
2002.0	-3.07259E+04	-4.44306E+03	39	54	1	2.48634E-01	39	54	1
2007.0	-3.81315E+04	-4.89985E+03	39	54	1	2.74203E-01	39	54	1
2012.0	-4.52222E+04	-5.26787E+03	39	54	1	2.94801E-01	39	54	1
2017.0	-5.17914E+04	-5.57343E+03	39	54	1	3.11902E-01	39	54	1
2022.0	-5.77555E+04	-5.83702E+03	39	54	1	3.26656E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
(CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.45165E-04	-3.36242E-05	57	13	5	1.01511E-09	55	22	3
1967.0	-3.06009E+00	-2.06515E-01	57	13	5	2.87020E-06	57	15	5
1972.0	-2.50882E+02	-1.56342E+01	54	11	5	1.65980E-04	53	11	5
1977.0	-3.55154E+03	-1.99921E+02	48	9	5	2.02671E-03	53	11	5
1982.0	-2.04314E+04	-1.10078E+03	48	9	5	1.09633E-02	48	9	5
1987.0	-7.10829E+04	-3.43297E+03	48	9	5	3.41909E-02	48	9	5
1990.0	-1.32864E+05	-5.92176E+03	48	9	5	5.89782E-02	48	9	5
1992.0	-1.94455E+05	-8.34625E+03	48	9	5	8.34147E-02	48	9	5
1997.0	-4.67673E+05	-1.94929E+04	48	9	5	1.94890E-01	48	9	5
2002.0	-9.57020E+05	-4.01299E+04	48	9	5	4.01328E-01	48	9	5
2007.0	-1.64017E+06	-6.69801E+04	48	9	5	6.69861E-01	48	9	5
2012.0	-2.41872E+06	-9.29814E+04	48	9	5	9.29901E-01	48	9	5
2017.0	-3.18616E+06	-1.13619E+05	48	9	5	1.13631E+00	48	9	5
2022.0	-3.86973E+06	-1.28059E+05	48	9	5	1.28072E+00	48	9	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.80804E-01	-2.06102E-01	52	62	1	4.84754E-05	52	61	1
1967.0	-5.55908E+01	-1.38615E+01	52	62	1	2.34995E-03	52	61	1
1972.0	-4.16648E+02	-9.80158E+01	52	62	1	1.39970E-02	52	61	1
1977.0	-1.34861E+03	-2.94269E+02	52	62	1	3.80677E-02	52	61	1
1982.0	-2.93911E+03	-5.83138E+02	52	62	1	7.10137E-02	52	61	1
1987.0	-5.17813E+03	-9.21869E+02	52	62	1	1.07977E-01	52	61	1
1990.0	-6.81166E+03	-1.13415E+03	52	62	1	1.30603E-01	52	61	1
1992.0	-6.47459E+03	-1.00170E+03	52	62	1	1.32506E-01	52	61	1
1997.0	-8.72822E+03	-1.18753E+03	52	62	1	1.59322E-01	52	61	1
2002.0	-1.14317E+04	-1.41693E+03	52	62	1	1.87993E-01	52	61	1
2007.0	-1.41670E+04	-1.61942E+03	52	62	1	2.12133E-01	52	61	1
2012.0	-1.67764E+04	-1.79084E+03	52	62	1	2.32327E-01	52	61	1
2017.0	-1.92045E+04	-1.93686E+03	52	62	1	2.49459E-01	52	61	1
2022.0	-2.14342E+04	-2.06101E+03	52	62	1	2.63978E-01	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.80959E-02	-1.06270E-02	55	66	1	8.79201E-07	55	66	1
1967.0	-2.59984E+00	-1.47772E+00	55	66	1	1.22256E-04	55	66	1
1972.0	-2.92949E+01	-1.46747E+01	55	66	1	1.21407E-03	55	66	1
1977.0	-1.37960E+02	-5.24596E+01	55	66	1	4.34011E-03	55	66	1
1982.0	-4.44753E+02	-1.14094E+02	55	66	1	9.43928E-03	55	66	1
1987.0	-1.12988E+03	-1.89838E+02	55	66	1	1.57058E-02	55	66	1
1990.0	-1.79996E+03	-2.38075E+02	55	66	1	1.96966E-02	55	66	1
1992.0	-2.27826E+03	-2.70505E+02	38	61	1	2.37489E-02	38	61	1
1997.0	-3.92578E+03	-4.86568E+02	38	61	1	4.27275E-02	38	61	1
2002.0	-6.05130E+03	-7.50491E+02	38	61	1	6.59117E-02	38	61	1
2007.0	-8.46391E+03	-1.03101E+03	38	61	1	9.05484E-02	38	61	1
2012.0	-1.09608E+04	-1.29965E+03	38	61	1	1.14442E-01	36	60	1
2017.0	-1.33853E+04	-1.53846E+03	38	61	1	1.37117E-01	36	60	1
2022.0	-1.56415E+04	-1.74107E+03	38	61	1	1.57084E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.63824E+00	-3.81339E+00	39	54	1	1.90253E-04	39	54	1
1967.0	-1.14137E+02	-7.90808E+01	39	54	1	3.94540E-03	39	54	1
1972.0	-5.78245E+02	-3.43526E+02	39	54	1	1.71388E-02	39	54	1
1977.0	-1.65700E+03	-8.72359E+02	39	54	1	4.35227E-02	39	54	1
1982.0	-3.50046E+03	-1.67083E+03	39	54	1	8.33591E-02	39	54	1
1987.0	-6.09201E+03	-2.66941E+03	39	54	1	1.33179E-01	39	54	1
1990.0	-7.94650E+03	-3.32117E+03	39	54	1	1.65696E-01	39	54	1
1992.0	-8.20122E+03	-3.21200E+03	39	54	1	1.79430E-01	39	54	1
1997.0	-1.07603E+04	-3.87226E+03	39	54	1	2.16892E-01	39	54	1
2002.0	-1.32415E+04	-4.44306E+03	39	54	1	2.48634E-01	39	54	1
2007.0	-1.54980E+04	-4.89985E+03	39	54	1	2.74203E-01	39	54	1
2012.0	-1.74808E+04	-5.26787E+03	39	54	1	2.94801E-01	39	54	1
2017.0	-1.91954E+04	-5.57343E+03	39	54	1	3.11902E-01	39	54	1
2022.0	-2.06711E+04	-5.83702E+03	39	54	1	3.26656E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	4.62660E-07	-1.47360E-07	61	63	1	1.10131E-11	61	63	1
1967.0	6.58826E-05	-6.95076E-05	60	65	1	4.57197E-09	61	63	1
1972.0	-8.22650E-04	-1.63120E-03	60	65	1	9.19319E-08	61	63	1
1977.0	-1.61003E-02	-1.11125E-02	60	65	1	5.71785E-07	61	63	1
1982.0	-8.44002E-02	-4.10188E-02	60	65	1	2.02341E-06	60	65	1
1987.0	-2.63508E-01	-1.06625E-01	60	65	1	5.25968E-06	60	65	1
1990.0	-4.53024E-01	-1.68644E-01	60	65	1	8.31902E-06	60	65	1
1992.0	-4.31708E-01	-1.70875E-01	60	65	1	8.79144E-06	60	65	1
1997.0	-7.25975E-01	-2.33092E-01	60	65	1	1.97307E-05	59	66	1
2002.0	-1.42516E+00	-4.98493E-01	59	66	1	6.93629E-05	59	66	1
2007.0	-2.55398E+00	-1.20855E+00	59	66	1	1.68164E-04	59	66	1
2012.0	-4.16534E+00	-2.43594E+00	59	66	1	3.38951E-04	59	66	1
2017.0	-6.24786E+00	-4.33763E+00	59	66	1	6.03563E-04	59	66	1
2022.0	-8.73195E+00	-7.04647E+00	59	66	1	9.80488E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.04049E-04	-2.54922E-05	55	22	3	1.01511E-09	55	22	3
1967.0	-3.14625E-01	-7.26702E-02	55	19	3	2.87020E-06	57	15	5
1972.0	-1.55486E+01	-3.54382E+00	55	19	3	1.43435E-04	57	15	5
1977.0	-1.54617E+02	-3.35282E+01	55	19	3	1.29373E-03	57	15	5
1982.0	-6.91101E+02	-1.38780E+02	55	19	3	4.98386E-03	57	15	5
1987.0	-2.58833E+03	-3.80529E+02	55	19	3	1.24922E-02	57	15	5
1990.0	-6.70110E+03	-7.02377E+02	55	19	3	2.10545E-02	57	15	5
1992.0	-1.13853E+04	-1.16103E+03	61	24	3	3.03608E-02	57	15	5
1997.0	-3.66867E+04	-4.11716E+03	61	24	3	9.40368E-02	60	25	3
2002.0	-8.24691E+04	-9.35662E+03	61	24	3	2.05450E-01	60	25	3
2007.0	-1.43717E+05	-1.62148E+04	61	24	3	3.46100E-01	60	25	3
2012.0	-2.10976E+05	-2.35214E+04	61	24	3	4.91051E-01	60	25	3
2017.0	-2.75507E+05	-3.02024E+04	61	24	3	6.19355E-01	60	25	3
2022.0	-3.31708E+05	-3.56339E+04	61	24	3	7.20290E-01	60	25	3

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.32368E-04	-3.36242E-05	57	13	5	3.91106E-10	56	13	5
1967.0	-2.71060E+00	-2.06515E-01	57	13	5	2.40192E-06	56	13	5
1972.0	-2.32910E+02	-1.56342E+01	54	11	5	1.65980E-04	53	11	5
1977.0	-3.36455E+03	-1.99921E+02	48	9	5	2.02671E-03	53	11	5
1982.0	-1.95595E+04	-1.10078E+03	48	9	5	1.09633E-02	48	9	5
1987.0	-6.78588E+04	-3.43297E+03	48	9	5	3.41909E-02	48	9	5
1990.0	-1.24828E+05	-5.92176E+03	48	9	5	5.89782E-02	48	9	5
1992.0	-1.80938E+05	-8.34625E+03	48	9	5	8.34147E-02	48	9	5
1997.0	-4.24269E+05	-1.94929E+04	48	9	5	1.94890E-01	48	9	5
2002.0	-8.58697E+05	-4.01299E+04	48	9	5	4.01328E-01	48	9	5
2007.0	-1.46746E+06	-6.69801E+04	48	9	5	6.69861E-01	48	9	5
2012.0	-2.16354E+06	-9.29814E+04	48	9	5	9.29901E-01	48	9	5
2017.0	-2.85116E+06	-1.13519E+05	48	9	5	1.13631E+00	48	9	5
2022.0	-3.46461E+06	-1.28059E+05	48	9	5	1.28072E+00	48	9	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.46799E-07	-7.06701E-08	64	19	5	4.18727E-11	64	20	5
1967.0	-1.68143E-03	-2.62768E-04	64	19	5	1.29886E-07	64	20	5

1972.0	-9.74248E-02	-1.25097E-02	64	17	5	5.49855E-06	64	20	5
1977.0	-1.01985E+00	-1.23229E-01	64	15	5	4.43854E-05	64	20	5
1982.0	-4.68768E+00	-5.16565E-01	64	15	5	1.58394E-04	64	20	5
1987.0	-4.62675E+01	-1.00708E+01	70	29	3	4.29721E-04	70	30	3
1990.0	-2.81988E+02	-6.90575E+01	70	29	3	2.81805E-03	70	30	3
1992.0	-7.00217E+02	-1.67805E+02	70	29	3	6.75326E-03	70	30	3
1997.0	-3.53272E+03	-7.89801E+02	70	29	3	3.02837E-02	70	30	3
2002.0	-9.50877E+03	-1.99847E+03	70	29	3	7.43447E-02	70	30	3
2007.0	-1.80374E+04	-3.61723E+03	70	29	3	1.31985E-01	70	30	3
2012.0	-2.78498E+04	-5.39951E+03	70	29	3	1.94572E-01	70	30	3
2017.0	-3.78051E+04	-7.16202E+03	70	29	3	2.56018E-01	70	30	3
2022.0	-4.70958E+04	-8.78951E+03	70	29	3	3.12591E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.40144E-06	-2.43270E-06	43	22	3	2.10312E-10	43	23	3
1967.0	-3.31836E-02	-6.24847E-03	43	22	3	4.69928E-07	43	23	3
1972.0	-2.32594E+00	-3.13031E-01	43	22	3	2.44988E-05	40	7	5
1977.0	-3.13500E+01	-3.58083E+00	42	18	3	5.80427E-04	40	7	5
1982.0	-1.76110E+02	-1.98063E+01	42	18	3	4.51288E-03	40	7	5
1987.0	-5.89486E+02	-6.44160E+01	42	18	3	1.81135E-02	40	7	5
1990.0	-1.05297E+03	-1.14400E+02	41	16	3	3.38490E-02	40	7	5
1992.0	-1.43163E+03	-1.59033E+02	41	16	3	4.83081E-02	40	7	5
1997.0	-3.18435E+03	-3.41921E+02	41	16	3	1.03876E-01	40	7	5
2002.0	-6.34523E+03	-6.74230E+02	42	18	3	2.01944E-01	40	7	5
2007.0	-1.09521E+04	-1.16646E+03	42	18	3	3.52237E-01	40	7	5
2012.0	-1.63553E+04	-1.75872E+03	41	16	3	5.34570E-01	40	7	5
2017.0	-2.16844E+04	-2.36166E+03	41	16	3	7.11934E-01	40	7	5
2022.0	-2.63183E+04	-2.89891E+03	41	16	3	8.58028E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.49206E-24	-6.36068E-25	90	35	3	7.54365E-30	90	36	3
1967.0	-2.57809E-18	-5.40863E-19	90	35	3	5.95285E-24	90	36	3
1972.0	-5.44628E-15	-1.19022E-15	90	35	3	1.27071E-20	90	36	3
1977.0	-8.25575E-13	-1.81997E-13	90	35	3	1.91523E-18	90	36	3
1982.0	-2.83907E-11	-6.22406E-12	90	35	3	6.50531E-17	90	36	3
1987.0	-3.84742E-10	-8.33138E-11	90	35	3	8.68104E-16	90	36	3
1990.0	-1.34278E-09	-2.88149E-10	90	35	3	2.99963E-15	90	36	3
1992.0	-2.78612E-09	-5.94260E-10	90	35	3	6.18578E-15	90	36	3
1997.0	-1.30496E-08	-2.74071E-09	90	35	3	2.84982E-14	90	36	3
2002.0	-4.55514E-08	-9.46179E-09	90	35	3	9.81697E-14	90	36	3
2007.0	-1.35116E-07	-2.81406E-08	90	35	3	2.90344E-13	90	36	3
2012.0	-3.77295E-07	-7.97566E-08	90	35	3	8.21853E-13	90	35	3
2017.0	-1.01162E-06	-2.16286E-07	90	35	3	2.22872E-12	90	35	3
2022.0	-2.51256E-06	-5.36553E-07	90	35	3	5.52892E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.59642E-10	-6.02891E-11	1	42	5	5.39810E-16	1	42	5
1967.0	-1.09808E-05	-3.89881E-06	1	42	5	3.49087E-11	1	42	5
1972.0	-3.38575E-03	-1.13319E-03	1	42	5	1.01462E-08	1	42	5
1977.0	-1.05741E-01	-3.35777E-02	1	42	5	3.00644E-07	1	42	5
1982.0	-1.01432E+00	-3.07907E-01	1	42	5	2.75691E-06	1	42	5
1987.0	-5.03055E+00	-1.47002E+00	1	42	5	1.31621E-05	1	42	5
1990.0	-1.07659E+01	-3.08355E+00	1	42	5	2.76092E-05	1	42	5
1992.0	-1.67784E+01	-4.74746E+00	1	42	5	4.25344E-05	1	42	5
1997.0	-4.30788E+01	-1.18510E+01	1	42	5	1.06187E-04	1	42	5

2002.0	-9.14287E+01	-2.45350E+01	1	42	5	2.19854E-04	1	42	5
2007.0	-1.67284E+02	-4.39212E+01	1	42	5	3.93572E-04	1	42	5
2012.0	-2.71593E+02	-6.99646E+01	1	42	5	6.26945E-04	1	42	5
2017.0	-4.00093E+02	-1.01384E+02	1	42	5	9.08487E-04	1	42	5
2022.0	-5.44604E+02	-1.36060E+02	1	42	5	1.21922E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.15361E-04	-2.68076E-05	40	62	5	1.59291E-09	36	60	5
1967.0	-1.34363E-01	-3.06763E-02	40	62	5	1.64579E-06	36	60	5
1972.0	-4.33066E+00	-9.83258E-01	38	61	5	5.38017E-05	36	60	5
1977.0	-3.44674E+01	-8.12259E+00	38	61	5	4.40902E-04	36	60	5
1982.0	-1.36678E+02	-3.32107E+01	38	61	5	1.78757E-03	36	60	5
1987.0	-3.63286E+02	-9.04260E+01	38	61	5	4.81387E-03	36	60	5
1990.0	-5.74605E+02	-1.44665E+02	38	61	5	7.64822E-03	36	60	5
1992.0	-7.21967E+02	-1.82721E+02	38	61	5	1.00272E-02	36	60	5
1997.0	-1.24113E+03	-3.17054E+02	38	61	5	1.72281E-02	36	60	5
2002.0	-1.85772E+03	-4.77346E+02	38	61	5	2.57698E-02	36	60	5
2007.0	-2.52046E+03	-6.49098E+02	38	61	5	3.48267E-02	36	60	5
2012.0	-3.18424E+03	-8.18677E+02	38	61	5	4.37129E-02	36	60	5
2017.0	-3.81825E+03	-9.76971E+02	38	61	5	5.19703E-02	36	60	5
2022.0	-4.40543E+03	-1.11938E+03	38	61	5	5.93704E-02	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.35349E-28	-2.35348E-28	91	26	5	4.01717E-32	91	26	5
1967.0	-6.38676E-22	-6.38624E-22	91	26	5	1.09007E-25	91	26	5
1972.0	-2.90086E-18	-2.89869E-18	91	26	5	4.94782E-22	91	26	5
1977.0	-7.31712E-16	-7.29393E-16	91	26	5	1.24501E-19	91	26	5
1982.0	-3.58105E-14	-3.54920E-14	91	26	5	6.05822E-18	91	26	5
1987.0	-6.23300E-13	-6.11403E-13	91	26	5	1.04362E-16	91	26	5
1990.0	-2.43990E-12	-2.37318E-12	91	26	5	4.05086E-16	91	26	5
1992.0	-5.36803E-12	-5.18666E-12	91	26	5	8.91214E-16	91	26	5
1997.0	-2.85335E-11	-2.70990E-11	91	26	5	4.66534E-15	91	26	5
2002.0	-1.07476E-10	-1.00637E-10	91	26	5	1.73555E-14	91	26	5
2007.0	-3.27889E-10	-3.05879E-10	91	26	5	5.27566E-14	91	26	5
2012.0	-9.14839E-10	-8.60142E-10	91	26	5	1.48357E-13	91	26	5
2017.0	-2.45752E-09	-2.33061E-09	91	26	5	4.01995E-13	91	26	5
2022.0	-6.16621E-09	-5.86384E-09	91	26	5	1.01145E-12	91	26	5

CHLOROFORM

CHLOROFORM

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	28.70
2	20.00
4	78.00
5	5.00
6	5.00
7	7.00
8	5.70
9	33.00
10	27.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.04285E+01	-2.39586E+01	39	54	1	1.19531E-03	39	54	1
1967.0	-9.75389E+02	-6.06938E+02	39	54	1	3.02806E-02	39	54	1
1972.0	-5.26386E+03	-2.56958E+03	39	54	1	1.28198E-01	39	54	1
1977.0	-1.46244E+04	-5.59910E+03	39	54	1	2.79343E-01	39	54	1
1982.0	-2.93674E+04	-8.84367E+03	39	54	1	4.41218E-01	39	54	1
1987.0	-4.89188E+04	-1.17173E+04	39	54	1	5.84585E-01	39	54	1
1990.0	-6.24805E+04	-1.31671E+04	39	54	1	6.56920E-01	39	54	1
1992.0	-6.36211E+04	-1.21783E+04	39	54	1	6.80312E-01	39	54	1
1997.0	-8.27383E+04	-1.30238E+04	39	54	1	7.28357E-01	39	54	1
2002.0	-1.02414E+05	-1.38614E+04	38	55	1	7.57652E-01	39	54	1
2007.0	-1.20948E+05	-1.47146E+04	38	55	1	7.79735E-01	39	54	1
2012.0	-1.37726E+05	-1.53662E+04	38	55	1	8.00963E-01	39	54	1
2017.0	-1.52643E+05	-1.59150E+04	38	55	1	8.22264E-01	39	54	1
2022.0	-1.65806E+05	-1.64021E+04	38	55	1	8.42681E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.33490E-04	-7.89852E-05	57	13	5	2.20053E-09	55	22	3
1967.0	-6.35950E+00	-4.81910E-01	57	13	5	6.74601E-06	57	15	5
1972.0	-5.43752E+02	-3.29388E+01	54	11	5	3.36171E-04	57	15	5
1977.0	-8.07402E+03	-3.99802E+02	54	11	5	4.17468E-03	53	11	5
1982.0	-4.78896E+04	-1.88833E+03	48	9	5	2.02154E-02	53	11	5
1987.0	-1.65903E+05	-6.19245E+03	48	9	5	6.16742E-02	48	9	5
1990.0	-2.96749E+05	-1.05557E+04	48	9	5	1.05130E-01	48	9	5
1992.0	-4.14248E+05	-1.42993E+04	48	9	5	1.42912E-01	48	9	5
1997.0	-8.46099E+05	-2.76703E+04	48	9	5	2.76647E-01	48	9	5
2002.0	-1.48804E+06	-4.70083E+04	48	9	5	4.70118E-01	48	9	5
2007.0	-2.30411E+06	-6.95956E+04	48	9	5	7.01268E-01	47	9	5
2012.0	-3.20414E+06	-9.10005E+04	48	9	5	9.27964E-01	47	9	5
2017.0	-4.09260E+06	-1.08599E+05	48	9	5	1.11729E+00	47	9	5
2022.0	-4.90246E+06	-1.22001E+05	48	9	5	1.26260E+00	47	9	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.93762E+00	-5.18008E-01	52	62	1	1.21794E-04	52	61	1
1967.0	-1.39812E+02	-3.48109E+01	52	62	1	5.89819E-03	52	61	1
1972.0	-1.07465E+03	-2.46034E+02	52	62	1	3.51100E-02	52	61	1
1977.0	-3.58197E+03	-7.38472E+02	52	62	1	9.54564E-02	52	61	1
1982.0	-7.97186E+03	-1.46325E+03	52	62	1	1.78041E-01	52	61	1
1987.0	-1.41367E+04	-2.31324E+03	52	62	1	2.70705E-01	52	61	1
1990.0	-1.85522E+04	-2.84607E+03	52	62	1	3.27437E-01	52	61	1
1992.0	-1.78805E+04	-2.51337E+03	52	62	1	3.32123E-01	52	61	1
1997.0	-2.38806E+04	-2.97908E+03	52	62	1	3.99229E-01	52	61	1
2002.0	-3.08234E+04	-3.55433E+03	52	62	1	4.71011E-01	52	61	1
2007.0	-3.77161E+04	-4.06281E+03	52	62	1	5.31532E-01	52	61	1
2012.0	-4.42294E+04	-4.49408E+03	52	62	1	5.82258E-01	52	61	1
2017.0	-5.02665E+04	-4.86212E+03	52	62	1	6.25373E-01	52	61	1
2022.0	-5.57950E+04	-5.17557E+03	52	62	1	6.61966E-01	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.56901E-02	-2.67390E-02	55	66	1	2.21218E-06	55	66	1
1967.0	-6.86577E+00	-3.71814E+00	55	66	1	3.07611E-04	55	66	1
1972.0	-9.04655E+01	-3.69234E+01	55	66	1	3.05477E-03	55	66	1
1977.0	-5.23233E+02	-1.31996E+02	55	66	1	1.09203E-02	55	66	1
1982.0	-1.90489E+03	-2.87077E+02	55	66	1	2.46000E-02	36	60	1
1987.0	-4.93457E+03	-7.18991E+02	36	60	1	6.73698E-02	36	60	1
1990.0	-7.70700E+03	-1.12188E+03	36	60	1	1.05121E-01	36	60	1
1992.0	-9.57521E+03	-1.38474E+03	36	60	1	1.32166E-01	36	60	1
1997.0	-1.55915E+04	-2.19336E+03	36	60	1	2.09388E-01	36	60	1
2002.0	-2.25031E+04	-3.01653E+03	36	60	1	2.88006E-01	36	60	1
2007.0	-2.95656E+04	-3.75045E+03	36	60	1	3.58079E-01	36	60	1
2012.0	-3.62274E+04	-4.34785E+03	36	60	1	4.15118E-01	36	60	1
2017.0	-4.22073E+04	-4.80882E+03	36	60	1	4.59130E-01	36	60	1
2022.0	-4.74416E+04	-5.16059E+03	36	60	1	4.92716E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.84452E+01	-2.39586E+01	39	54	1	1.19531E-03	39	54	1
1967.0	-8.28711E+02	-6.06938E+02	39	54	1	3.02806E-02	39	54	1
1972.0	-4.09874E+03	-2.56958E+03	39	54	1	1.28198E-01	39	54	1
1977.0	-1.05192E+04	-5.59910E+03	39	54	1	2.79343E-01	39	54	1
1982.0	-1.94904E+04	-8.84367E+03	39	54	1	4.41218E-01	39	54	1
1987.0	-2.98469E+04	-1.17173E+04	39	54	1	5.84585E-01	39	54	1
1990.0	-3.62202E+04	-1.31671E+04	39	54	1	6.56920E-01	39	54	1
1992.0	-3.61643E+04	-1.21783E+04	39	54	1	6.80312E-01	39	54	1
1997.0	-4.32644E+04	-1.30238E+04	39	54	1	7.28357E-01	39	54	1
2002.0	-4.90840E+04	-1.38614E+04	38	55	1	7.57652E-01	39	54	1
2007.0	-5.36596E+04	-1.47146E+04	38	55	1	7.79735E-01	39	54	1
2012.0	-5.72588E+04	-1.53662E+04	38	55	1	8.00963E-01	39	54	1
2017.0	-6.01536E+04	-1.59150E+04	38	55	1	8.22264E-01	39	54	1
2022.0	-6.25479E+04	-1.64021E+04	38	55	1	8.42681E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.16411E-06	-3.70776E-07	61	63	1	2.77102E-11	61	63	1
1967.0	1.65780E-04	-1.74889E-04	60	65	1	1.15036E-08	61	63	1
1972.0	-2.06901E-03	-4.10424E-03	60	65	1	2.31303E-07	61	63	1
1977.0	-4.04970E-02	-2.79592E-02	60	65	1	1.43854E-06	61	63	1
1982.0	-2.12277E-01	-1.03199E-01	60	65	1	5.09071E-06	60	65	1
1987.0	-6.62695E-01	-2.68243E-01	60	65	1	1.32322E-05	60	65	1
1990.0	-1.13918E+00	-4.24246E-01	60	65	1	2.09276E-05	60	65	1
1992.0	-1.08531E+00	-4.29823E-01	60	65	1	2.21142E-05	60	65	1
1997.0	-1.82310E+00	-5.85972E-01	60	65	1	4.96219E-05	59	66	1
2002.0	-3.57381E+00	-1.25357E+00	59	66	1	1.74429E-04	59	66	1
2007.0	-6.39210E+00	-3.03878E+00	59	66	1	4.22833E-04	59	66	1
2012.0	-1.03945E+01	-6.12367E+00	59	66	1	8.52083E-04	59	66	1
2017.0	-1.55290E+01	-1.09006E+01	59	66	1	1.51678E-03	59	66	1
2022.0	-2.16011E+01	-1.77005E+01	59	66	1	2.46295E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.28571E-04	-5.52616E-05	55	22	3	2.20053E-09	55	22	3
1967.0	-6.96416E-01	-1.55285E-01	55	19	3	6.74601E-06	57	15	5
1972.0	-3.48642E+01	-7.66895E+00	55	19	3	3.36171E-04	57	15	5
1977.0	-3.54833E+02	-7.32547E+01	55	19	3	3.02965E-03	57	15	5
1982.0	-1.62527E+03	-3.05377E+02	55	19	3	1.16703E-02	57	15	5
1987.0	-5.03742E+03	-8.02368E+02	55	19	3	2.82055E-02	57	15	5
1990.0	-9.53053E+03	-1.27996E+03	55	19	3	4.25242E-02	57	15	5
1992.0	-1.36733E+04	-1.69275E+03	55	19	3	5.43375E-02	57	15	5
1997.0	-3.23163E+04	-3.31340E+03	55	19	3	9.45241E-02	57	15	5
2002.0	-6.19389E+04	-5.84022E+03	55	19	3	1.49063E-01	57	15	5
2007.0	-9.92609E+04	-9.00422E+03	55	19	3	2.10059E-01	57	15	5
2012.0	-1.39312E+05	-1.23199E+04	61	24	3	3.11999E-01	24	7	5
2017.0	-1.77777E+05	-1.56399E+04	61	24	3	4.40697E-01	24	7	5
2022.0	-2.11906E+05	-1.83807E+04	61	24	3	5.76725E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.89722E-04	-7.89852E-05	57	13	5	8.80919E-10	56	13	5
1967.0	-5.61947E+00	-4.81910E-01	57	13	5	5.41929E-06	56	13	5
1972.0	-5.05851E+02	-3.29388E+01	54	11	5	3.35106E-04	56	13	5
1977.0	-7.67540E+03	-3.99802E+02	54	11	5	4.17468E-03	53	11	5
1982.0	-4.59998E+04	-1.88833E+03	48	9	5	2.02154E-02	53	11	5
1987.0	-1.59906E+05	-6.19245E+03	48	9	5	6.16742E-02	48	9	5
1990.0	-2.85350E+05	-1.05557E+04	48	9	5	1.05130E-01	48	9	5
1992.0	-3.97839E+05	-1.42993E+04	48	9	5	1.42912E-01	48	9	5
1997.0	-8.06733E+05	-2.76703E+04	48	9	5	2.76647E-01	48	9	5
2002.0	-1.41136E+06	-4.70083E+04	48	9	5	4.70118E-01	48	9	5
2007.0	-2.17965E+06	-6.95956E+04	48	9	5	7.01268E-01	47	9	5
2012.0	-3.02794E+06	-9.10005E+04	48	9	5	9.27964E-01	47	9	5
2017.0	-3.86652E+06	-1.08599E+05	48	9	5	1.11729E+00	47	9	5
2022.0	-4.63211E+06	-1.22001E+05	48	9	5	1.26260E+00	47	9	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.69313E-07	-1.77095E-07	64	19	5	1.04936E-10	64	20	5
1967.0	-4.19804E-03	-6.55767E-04	64	19	5	3.24160E-07	64	20	5

1972.0	-2.42274E-01	-3.10957E-02	64	17	5	1.36702E-05	64	20	5
1977.0	-2.52653E+00	-3.05294E-01	64	15	5	1.10006E-04	64	20	5
1982.0	-1.14757E+01	-1.27664E+00	64	15	5	3.91534E-04	64	20	5
1987.0	-5.18468E+01	-7.37181E+00	70	29	3	9.01819E-04	64	20	5
1990.0	-2.02490E+02	-4.23407E+01	70	29	3	1.70416E-03	70	30	3
1992.0	-4.51042E+02	-9.89687E+01	70	29	3	3.94716E-03	70	30	3
1997.0	-2.05972E+03	-4.44681E+02	70	29	3	1.69331E-02	70	30	3
2002.0	-5.31524E+03	-1.09080E+03	70	29	3	4.02855E-02	70	30	3
2007.0	-9.78100E+03	-1.92069E+03	70	29	3	6.95326E-02	70	30	3
2012.0	-1.47342E+04	-2.79832E+03	70	29	3	9.99884E-02	70	30	3
2017.0	-1.96073E+04	-3.63618E+03	70	29	3	1.28212E-01	70	30	3
2022.0	-2.40406E+04	-4.38630E+03	70	29	3	1.54503E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.43280E-05	-3.63254E-06	43	22	3	3.28862E-10	43	23	3
1967.0	-3.94144E-02	-6.38067E-03	43	22	3	4.90660E-07	43	23	3
1972.0	-2.79470E+00	-3.47339E-01	43	22	3	3.36620E-05	40	7	5
1977.0	-4.12572E+01	-4.61003E+00	42	18	3	7.57098E-04	40	7	5
1982.0	-2.53038E+02	-2.81402E+01	42	18	3	6.21546E-03	40	7	5
1987.0	-9.07391E+02	-9.86660E+01	42	18	3	2.67650E-02	40	7	5
1990.0	-1.66604E+03	-1.80957E+02	41	16	3	5.18710E-02	40	7	5
1992.0	-2.28455E+03	-2.54133E+02	41	16	3	7.53817E-02	40	7	5
1997.0	-4.99031E+03	-5.37507E+02	41	16	3	1.63148E-01	40	7	5
2002.0	-9.42476E+03	-9.90749E+02	41	16	3	3.00309E-01	40	7	5
2007.0	-1.54185E+04	-1.61813E+03	42	18	3	4.84744E-01	40	7	5
2012.0	-2.21542E+04	-2.33681E+03	42	18	3	6.91045E-01	40	7	5
2017.0	-2.86925E+04	-3.05337E+03	41	16	3	8.85773E-01	40	7	5
2022.0	-3.44053E+04	-3.70843E+03	41	16	3	1.04843E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.78558E-24	-1.60023E-24	90	35	3	1.89786E-29	90	36	3
1967.0	-6.48471E-18	-1.36037E-18	90	35	3	1.49728E-23	90	36	3
1972.0	-1.36940E-14	-2.99239E-15	90	35	3	3.19489E-20	90	36	3
1977.0	-2.07477E-12	-4.57323E-13	90	35	3	4.81282E-18	90	36	3
1982.0	-7.13069E-11	-1.56300E-11	90	35	3	1.63372E-16	90	36	3
1987.0	-9.65700E-10	-2.09076E-10	90	35	3	2.17865E-15	90	36	3
1990.0	-3.36894E-09	-7.22789E-10	90	35	3	7.52476E-15	90	36	3
1992.0	-6.98763E-09	-1.49003E-09	90	35	3	1.55113E-14	90	36	3
1997.0	-3.26133E-08	-6.84285E-09	90	35	3	7.11724E-14	90	36	3
2002.0	-1.11218E-07	-2.29605E-08	90	35	3	2.38620E-13	90	36	3
2007.0	-3.02502E-07	-6.16114E-08	90	35	3	6.39259E-13	90	36	3
2012.0	-7.01329E-07	-1.41595E-07	90	35	3	1.46483E-12	90	36	3
2017.0	-1.45239E-06	-2.91883E-07	90	35	3	3.00795E-12	90	36	3
2022.0	-2.76173E-06	-5.53202E-07	90	35	3	5.70048E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.26924E-10	-2.37023E-10	1	42	5	2.12223E-15	1	42	5
1967.0	-4.59877E-05	-1.63612E-05	1	42	5	1.46493E-10	1	42	5
1972.0	-1.52155E-02	-5.10768E-03	1	42	5	4.57326E-08	1	42	5
1977.0	-5.06350E-01	-1.61358E-01	1	42	5	1.44475E-06	1	42	5
1982.0	-5.02886E+00	-1.53129E+00	1	42	5	1.37107E-05	1	42	5
1987.0	-2.47048E+01	-7.23047E+00	1	42	5	6.47394E-05	1	42	5
1990.0	-5.14644E+01	-1.47449E+01	1	42	5	1.32021E-04	1	42	5
1992.0	-7.82261E+01	-2.21213E+01	1	42	5	1.98194E-04	1	42	5
1997.0	-1.85793E+02	-5.09756E+01	1	42	5	4.56752E-04	1	42	5

2002.0	-3.61959E+02	-9.67058E+01	1	42	5	8.66565E-04	1	42	5
2007.0	-6.10079E+02	-1.59238E+02	1	42	5	1.42691E-03	1	42	5
2012.0	-9.19633E+02	-2.35187E+02	1	42	5	2.10748E-03	1	42	5
2017.0	-1.27003E+03	-3.19136E+02	1	42	5	2.85974E-03	1	42	5
2022.0	-1.63810E+03	-4.05561E+02	1	42	5	3.63419E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.88422E-04	-6.82710E-05	36	60	5	5.89984E-09	36	60	5
1967.0	-3.51393E-01	-8.05810E-02	38	61	5	5.76708E-06	36	60	5
1972.0	-1.19446E+01	-2.92828E+00	38	61	5	1.89636E-04	36	60	5
1977.0	-9.80982E+01	-2.51156E+01	38	61	5	1.55368E-03	36	60	5
1982.0	-3.90209E+02	-1.02413E+02	38	61	5	6.17234E-03	36	60	5
1987.0	-1.01473E+03	-2.69280E+02	38	61	5	1.59727E-02	36	60	5
1990.0	-1.57022E+03	-4.17422E+02	38	61	5	2.45982E-02	36	60	5
1992.0	-1.93300E+03	-5.14460E+02	38	61	5	3.15036E-02	36	60	5
1997.0	-3.16730E+03	-8.36296E+02	38	61	5	5.08457E-02	36	60	5
2002.0	-4.52516E+03	-1.18279E+03	38	61	5	7.15691E-02	36	60	5
2007.0	-5.88807E+03	-1.52112E+03	38	61	5	9.14988E-02	36	60	5
2012.0	-7.17633E+03	-1.82925E+03	38	61	5	1.09339E-01	36	60	5
2017.0	-8.35640E+03	-2.09964E+03	38	61	5	1.24651E-01	36	60	5
2022.0	-9.42430E+03	-2.33404E+03	38	61	5	1.37587E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.92089E-28	-5.92088E-28	91	26	5	1.01064E-31	91	26	5
1967.0	-1.60641E-21	-1.60628E-21	91	26	5	2.74178E-25	91	26	5
1972.0	-7.29372E-18	-7.28827E-18	91	26	5	1.24405E-21	91	26	5
1977.0	-1.83889E-15	-1.83306E-15	91	26	5	3.12889E-19	91	26	5
1982.0	-8.99458E-14	-8.91455E-14	91	26	5	1.52165E-17	91	26	5
1987.0	-1.56458E-12	-1.53470E-12	91	26	5	2.61962E-16	91	26	5
1990.0	-6.12210E-12	-5.95461E-12	91	26	5	1.01641E-15	91	26	5
1992.0	-1.34652E-11	-1.30100E-11	91	26	5	2.23549E-15	91	26	5
1997.0	-7.14193E-11	-6.78219E-11	91	26	5	1.16762E-14	91	26	5
2002.0	-2.64887E-10	-2.47797E-10	91	26	5	4.27340E-14	91	26	5
2007.0	-7.54833E-10	-7.01219E-10	91	26	5	1.20943E-13	91	26	5
2012.0	-1.77242E-09	-1.65564E-09	91	26	5	2.85565E-13	91	26	5
2017.0	-3.62183E-09	-3.44700E-09	91	26	5	5.94556E-13	91	26	5
2022.0	-6.67822E-09	-6.54017E-09	91	26	5	1.12811E-12	91	26	5

DICHLOROETHANE

DCE

MASS FLUX UNITS: ug/day
CONCENTRATION UNITS: ug/liter
MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
PARCEL NUMBER START CONC

1 130.00
4 5.00
9 2.00

BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
(CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.46897E+01	-6.11886E+01	39	54	1	3.05274E-03	39	54	1
1967.0	-1.59512E+03	-1.06903E+03	39	54	1	5.33347E-02	39	54	1
1972.0	-6.54799E+03	-3.42211E+03	39	54	1	1.72123E-01	38	53	1
1977.0	-1.54507E+04	-6.08219E+03	39	54	1	3.56897E-01	38	53	1
1982.0	-2.83151E+04	-8.29948E+03	39	54	1	5.34101E-01	38	53	1
1987.0	-4.47771E+04	-1.10908E+04	38	55	1	6.72934E-01	38	53	1
1990.0	-5.60001E+04	-1.25890E+04	38	55	1	7.35928E-01	38	53	1
1992.0	-5.86377E+04	-1.24032E+04	38	55	1	5.43292E-01	39	54	1
1997.0	-7.54214E+04	-1.33767E+04	38	55	1	5.56860E-01	39	54	1
2002.0	-9.19639E+04	-1.39941E+04	38	55	1	5.64206E-01	39	54	1
2007.0	-1.07253E+05	-1.44210E+04	38	55	1	5.74472E-01	39	54	1
2012.0	-1.20733E+05	-1.47907E+04	38	55	1	5.86358E-01	39	54	1
2017.0	-1.32233E+05	-1.51290E+04	38	55	1	5.97151E-01	39	54	1
2022.0	-1.41837E+05	-1.54207E+04	38	55	1	6.05706E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
(CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.35483E-04	-9.98555E-06	9	24	5	1.55306E-10	43	23	3
1967.0	-2.58031E+00	-2.80200E-01	9	24	5	1.61037E-06	9	24	5
1972.0	-3.89595E+02	-3.98595E+01	9	24	5	2.29082E-04	9	24	5
1977.0	-7.20465E+03	-6.50263E+02	9	24	5	3.73722E-03	9	24	5
1982.0	-4.43362E+04	-3.52208E+03	9	24	5	2.02422E-02	9	24	5
1987.0	-1.44642E+05	-1.02387E+04	9	24	5	5.88442E-02	9	24	5
1990.0	-2.41384E+05	-1.60649E+04	9	24	5	9.23289E-02	9	24	5
1992.0	-3.18989E+05	-2.04516E+04	9	24	5	1.17715E-01	9	24	5
1997.0	-5.49136E+05	-3.23904E+04	9	24	5	1.86474E-01	9	24	5
2002.0	-8.03097E+05	-4.42050E+04	9	24	5	2.54534E-01	9	24	5
2007.0	-1.05000E+06	-5.45928E+04	9	24	5	3.17549E-01	9	23	5
2012.0	-1.26770E+06	-6.29658E+04	9	24	5	3.69622E-01	9	23	5
2017.0	-1.44940E+06	-6.95702E+04	9	24	5	4.10607E-01	9	23	5
2022.0	-1.59898E+06	-7.49122E+04	9	24	5	4.43518E-01	9	23	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.31316E-01	-3.32056E-02	52	62	1	7.80732E-06	52	61	1
1967.0	-1.11811E+01	-2.23147E+00	52	62	1	3.78089E-04	52	61	1
1972.0	-1.20046E+02	-1.57714E+01	52	62	1	2.25064E-03	52	61	1
1977.0	-5.91045E+02	-9.73804E+01	37	60	1	1.38960E-02	35	58	1
1982.0	-1.85231E+03	-3.46260E+02	37	60	1	4.89546E-02	35	58	1
1987.0	-4.29188E+03	-7.83307E+02	37	60	1	1.11592E-01	35	58	1
1990.0	-6.39474E+03	-1.10937E+03	37	60	1	1.59230E-01	35	58	1
1992.0	-7.43189E+03	-1.27343E+03	37	60	1	1.89301E-01	35	58	1
1997.0	-1.16767E+04	-1.77879E+03	37	60	1	2.66660E-01	35	58	1
2002.0	-1.65323E+04	-2.21867E+03	37	60	1	3.35370E-01	35	58	1
2007.0	-2.14989E+04	-2.55596E+03	37	60	1	3.88872E-01	35	58	1
2012.0	-2.62002E+04	-2.96797E+03	33	58	1	4.27115E-01	35	58	1
2017.0	-3.04104E+04	-3.31430E+03	33	58	1	4.53732E-01	35	58	1
2022.0	-3.40382E+04	-3.56676E+03	33	58	1	4.72949E-01	35	58	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.57587E-03	-1.71404E-03	55	66	1	1.41807E-07	55	66	1
1967.0	-1.43757E+00	-3.07361E-01	36	60	1	2.87998E-05	36	60	1
1972.0	-5.01994E+01	-1.30946E+01	36	60	1	1.22697E-03	36	60	1
1977.0	-4.65400E+02	-1.15825E+02	36	60	1	1.08528E-02	36	60	1
1982.0	-2.00505E+03	-4.49563E+02	36	60	1	4.21242E-02	36	60	1
1987.0	-5.43426E+03	-1.07998E+03	36	60	1	1.01195E-01	36	60	1
1990.0	-8.51294E+03	-1.57136E+03	36	60	1	1.47237E-01	36	60	1
1992.0	-1.05796E+04	-1.90300E+03	35	60	1	1.77500E-01	36	60	1
1997.0	-1.71244E+04	-2.91104E+03	35	60	1	2.59982E-01	35	60	1
2002.0	-2.43050E+04	-3.88287E+03	35	60	1	3.46817E-01	35	60	1
2007.0	-3.13280E+04	-4.69827E+03	35	60	1	4.19651E-01	35	60	1
2012.0	-3.76596E+04	-5.31679E+03	35	60	1	4.74898E-01	35	60	1
2017.0	-4.30715E+04	-5.75997E+03	35	60	1	5.14484E-01	35	60	1
2022.0	-4.75651E+04	-6.09905E+03	34	60	1	5.42806E-01	35	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.45548E+01	-6.11886E+01	39	54	1	3.05274E-03	39	54	1
1967.0	-1.58250E+03	-1.06903E+03	39	54	1	5.33347E-02	39	54	1
1972.0	-6.37774E+03	-3.42211E+03	39	54	1	1.72123E-01	38	53	1
1977.0	-1.43943E+04	-6.08219E+03	39	54	1	3.56897E-01	38	53	1
1982.0	-2.44577E+04	-8.29948E+03	39	54	1	5.34101E-01	38	53	1
1987.0	-3.50509E+04	-1.10908E+04	38	55	1	6.72934E-01	38	53	1
1990.0	-4.10923E+04	-1.25890E+04	38	55	1	7.35928E-01	38	53	1
1992.0	-4.06261E+04	-1.24032E+04	38	55	1	5.43292E-01	39	54	1
1997.0	-4.66202E+04	-1.33767E+04	38	55	1	5.56860E-01	39	54	1
2002.0	-5.11264E+04	-1.39941E+04	38	55	1	5.64206E-01	39	54	1
2007.0	-5.44258E+04	-1.44210E+04	38	55	1	5.74472E-01	39	54	1
2012.0	-5.68728E+04	-1.47907E+04	38	55	1	5.86358E-01	39	54	1
2017.0	-5.87498E+04	-1.51290E+04	38	55	1	5.97151E-01	39	54	1
2022.0	-6.02322E+04	-1.54207E+04	38	55	1	6.05706E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	7.46227E-08	-2.37677E-08	61	63	1	1.77630E-12	61	63	1
1967.0	1.06269E-05	-1.12109E-05	60	65	1	7.37408E-10	61	63	1
1972.0	-1.32629E-04	-2.63092E-04	60	65	1	1.48271E-08	61	63	1
1977.0	-2.59596E-03	-1.79226E-03	60	65	1	9.22142E-08	61	63	1
1982.0	-1.36075E-02	-6.61534E-03	60	65	1	3.26328E-07	60	65	1
1987.0	-4.24804E-02	-1.71951E-02	60	65	1	8.48216E-07	60	65	1
1990.0	-7.30238E-02	-2.71952E-02	60	65	1	1.34151E-06	60	65	1
1992.0	-6.95699E-02	-2.75526E-02	60	65	1	1.41756E-06	60	65	1
1997.0	-1.16852E-01	-3.75602E-02	60	65	1	3.18080E-06	59	66	1
2002.0	-2.29029E-01	-8.03541E-02	59	66	1	1.11809E-05	59	66	1
2007.0	-4.09558E-01	-1.94784E-01	59	66	1	2.71033E-05	59	66	1
2012.0	-6.65798E-01	-3.92516E-01	59	66	1	5.46169E-05	59	66	1
2017.0	-9.94279E-01	-6.98690E-01	59	66	1	9.72198E-05	59	66	1
2022.0	-1.38239E+00	-1.13449E+00	59	66	1	1.57860E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.52227E-05	-3.54205E-06	55	22	3	1.41045E-10	55	22	3
1967.0	-6.55961E-02	-1.06949E-02	4	30	5	4.32424E-07	57	15	5
1972.0	-6.14628E+00	-1.82831E+00	4	30	5	3.73793E-05	4	31	5
1977.0	-1.04385E+02	-3.46843E+01	4	30	5	6.95646E-04	4	30	5
1982.0	-6.52168E+02	-2.11832E+02	4	30	5	4.24860E-03	4	30	5
1987.0	-2.21594E+03	-6.77404E+02	4	30	5	1.35863E-02	4	30	5
1990.0	-3.80843E+03	-1.11504E+03	4	30	5	2.42471E-02	24	7	5
1992.0	-5.10953E+03	-1.46103E+03	4	30	5	3.41079E-02	24	7	5
1997.0	-9.30126E+03	-2.46182E+03	4	30	5	6.57260E-02	24	7	5
2002.0	-1.43876E+04	-3.53470E+03	4	30	5	1.03290E-01	24	7	5
2007.0	-1.98025E+04	-4.55446E+03	4	30	5	1.41585E-01	24	7	5
2012.0	-2.49745E+04	-5.44015E+03	4	30	5	1.76681E-01	24	7	5
2017.0	-2.95513E+04	-6.17863E+03	4	30	5	2.06726E-01	24	7	5
2022.0	-3.34308E+04	-6.79510E+03	4	30	5	2.31828E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.12195E-04	-9.98555E-06	9	24	5	5.73893E-11	9	24	5
1967.0	-2.49113E+00	-2.80200E-01	9	24	5	1.61037E-06	9	24	5
1972.0	-3.82207E+02	-3.98595E+01	9	24	5	2.29082E-04	9	24	5
1977.0	-7.05726E+03	-6.50263E+02	9	24	5	3.73722E-03	9	24	5
1982.0	-4.36243E+04	-3.52208E+03	9	24	5	2.02422E-02	9	24	5
1987.0	-1.42256E+05	-1.02387E+04	9	24	5	5.88442E-02	9	24	5
1990.0	-2.37301E+05	-1.60649E+04	9	24	5	9.23289E-02	9	24	5
1992.0	-3.13531E+05	-2.04516E+04	9	24	5	1.17715E-01	9	24	5
1997.0	-5.39226E+05	-3.23904E+04	9	24	5	1.86474E-01	9	24	5
2002.0	-7.87769E+05	-4.42050E+04	9	24	5	2.54534E-01	9	24	5
2007.0	-1.02887E+06	-5.45928E+04	9	24	5	3.17549E-01	9	23	5
2012.0	-1.24100E+06	-6.29658E+04	9	24	5	3.69622E-01	9	23	5
2017.0	-1.41774E+06	-6.95702E+04	9	24	5	4.10607E-01	9	23	5
2022.0	-1.56310E+06	-7.49122E+04	9	24	5	4.43518E-01	9	23	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.57252E-08	-1.13522E-08	64	19	5	6.72663E-12	64	20	5
1967.0	-2.69104E-04	-4.20363E-05	64	19	5	2.07794E-08	64	20	5

1972.0	-1.55303E-02	-1.99331E-03	64	17	5	8.76291E-07	64	20	5
1977.0	-1.61957E-01	-1.95701E-02	64	15	5	7.05170E-06	64	20	5
1982.0	-7.33770E-01	-8.18352E-02	64	15	5	2.50967E-05	64	20	5
1987.0	-2.11441E+00	-2.33745E-01	67	24	3	5.68586E-05	64	20	5
1990.0	-3.53745E+00	-4.12094E-01	67	24	3	8.11140E-05	64	20	5
1992.0	-4.77169E+00	-5.78571E-01	67	24	3	9.84955E-05	64	20	5
1997.0	-1.09271E+01	-1.49977E+00	67	24	3	1.46347E-04	64	20	5
2002.0	-2.53635E+01	-3.90134E+00	67	24	3	2.00873E-04	64	20	5
2007.0	-5.12772E+01	-8.46436E+00	67	24	3	3.04507E-04	67	24	3
2012.0	-8.64041E+01	-1.48208E+01	67	24	3	5.33182E-04	67	24	3
2017.0	-1.24297E+02	-2.17147E+01	67	24	3	7.81191E-04	67	24	3
2022.0	-1.58383E+02	-2.78051E+01	67	24	3	1.00030E-03	67	24	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.00922E-06	-1.68643E-06	43	22	3	1.55306E-10	43	23	3
1967.0	-2.33104E-02	-2.63514E-03	43	22	3	2.35484E-07	40	7	5
1972.0	-1.22602E+00	-1.47404E-01	41	16	3	2.37135E-05	40	7	5
1977.0	-1.28480E+01	-1.58591E+00	40	14	3	3.36478E-04	40	7	5
1982.0	-5.90191E+01	-7.67467E+00	40	14	3	1.78945E-03	40	7	5
1987.0	-1.68294E+02	-2.24248E+01	40	14	3	5.48298E-03	40	7	5
1990.0	-2.71448E+02	-3.64552E+01	40	14	3	9.04991E-03	40	7	5
1992.0	-3.44079E+02	-4.75440E+01	40	14	3	1.19747E-02	40	7	5
1997.0	-5.98013E+02	-8.29630E+01	40	14	3	2.10507E-02	40	7	5
2002.0	-9.14649E+02	-1.26657E+02	40	14	3	3.22188E-02	40	7	5
2007.0	-1.27125E+03	-1.75716E+02	40	14	3	4.46869E-02	40	7	5
2012.0	-1.63600E+03	-2.26139E+02	40	14	3	5.72154E-02	40	7	5
2017.0	-1.98092E+03	-2.74108E+02	40	14	3	6.85977E-02	40	7	5
2022.0	-2.28971E+03	-3.17170E+02	40	14	3	7.81956E-02	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.63178E-25	-1.02579E-25	90	35	3	1.21658E-30	90	36	3
1967.0	-4.15686E-19	-8.72029E-20	90	35	3	9.59793E-25	90	36	3
1972.0	-8.77822E-16	-1.91820E-16	90	35	3	2.04800E-21	90	36	3
1977.0	-1.32998E-13	-2.93156E-14	90	35	3	3.08514E-19	90	36	3
1982.0	-4.57095E-12	-1.00192E-12	90	35	3	1.04725E-17	90	36	3
1987.0	-6.19038E-11	-1.34023E-11	90	35	3	1.39657E-16	90	36	3
1990.0	-2.15957E-10	-4.63324E-11	90	35	3	4.82354E-16	90	36	3
1992.0	-4.47916E-10	-9.55125E-11	90	35	3	9.94291E-16	90	36	3
1997.0	-2.08956E-09	-4.38355E-10	90	35	3	4.55956E-15	90	36	3
2002.0	-7.09839E-09	-1.46349E-09	90	35	3	1.52158E-14	90	36	3
2007.0	-1.90122E-08	-3.85110E-09	90	35	3	4.00220E-14	90	36	3
2012.0	-4.24349E-08	-8.44542E-09	90	35	3	8.77154E-14	90	36	3
2017.0	-8.21548E-08	-1.60665E-08	90	35	3	1.66737E-13	90	36	3
2022.0	-1.42127E-07	-2.73124E-08	90	35	3	2.83175E-13	90	36	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.65955E-09	-1.00439E-09	1	42	5	8.99301E-15	1	42	5
1967.0	-1.82315E-04	-6.47317E-05	1	42	5	5.79588E-10	1	42	5
1972.0	-5.54100E-02	-1.85420E-02	1	42	5	1.66020E-07	1	42	5
1977.0	-1.66025E+00	-5.26755E-01	1	42	5	4.71640E-06	1	42	5
1982.0	-1.45710E+01	-4.41247E+00	1	42	5	3.95079E-05	1	42	5
1987.0	-6.22781E+01	-1.81109E+01	1	42	5	1.62160E-04	1	42	5
1990.0	-1.18728E+02	-3.37858E+01	1	42	5	3.02508E-04	1	42	5
1992.0	-1.69929E+02	-4.77179E+01	1	42	5	4.27523E-04	1	42	5
1997.0	-3.47317E+02	-9.45885E+01	1	42	5	8.47533E-04	1	42	5

2002.0	-5.86374E+02	-1.55449E+02	1	42	5	1.39295E-03	1	42	5
2007.0	-8.67996E+02	-2.24681E+02	1	42	5	2.01334E-03	1	42	5
2012.0	-1.16850E+03	-2.96138E+02	1	42	5	2.65366E-03	1	42	5
2017.0	-1.46740E+03	-3.65127E+02	1	42	5	3.27187E-03	1	42	5
2022.0	-1.75197E+03	-4.29250E+02	1	42	5	3.84646E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.70928E-04	-1.04845E-04	36	60	5	9.06046E-09	36	60	5
1967.0	-1.38571E-01	-6.75898E-02	36	60	5	5.84100E-06	36	60	5
1972.0	-4.39540E+00	-1.88609E+00	36	60	5	1.62993E-04	36	60	5
1977.0	-3.59236E+01	-1.42880E+01	36	60	5	1.23476E-03	36	60	5
1982.0	-1.41771E+02	-5.36272E+01	36	60	5	4.63443E-03	36	60	5
1987.0	-3.60377E+02	-1.31505E+02	36	60	5	1.13646E-02	36	60	5
1990.0	-5.46485E+02	-1.96013E+02	36	60	5	1.69395E-02	36	60	5
1992.0	-6.51159E+02	-2.15086E+02	36	60	5	2.12597E-02	36	60	5
1997.0	-1.01570E+03	-3.25280E+02	36	60	5	3.24669E-02	36	60	5
2002.0	-1.37822E+03	-4.31111E+02	36	60	5	4.33437E-02	36	60	5
2007.0	-1.70571E+03	-5.24748E+02	36	60	5	5.27809E-02	36	60	5
2012.0	-1.97877E+03	-5.99898E+02	36	60	5	6.03463E-02	36	60	5
2017.0	-2.19784E+03	-6.57515E+02	36	60	5	6.61493E-02	36	60	5
2022.0	-2.37308E+03	-7.02350E+02	38	61	5	7.05695E-02	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.79544E-29	-3.79544E-29	91	26	5	6.47845E-33	91	26	5
1967.0	-1.02975E-22	-1.02967E-22	91	26	5	1.75755E-26	91	26	5
1972.0	-4.67546E-19	-4.67197E-19	91	26	5	7.97465E-23	91	26	5
1977.0	-1.17878E-16	-1.17504E-16	91	26	5	2.00570E-20	91	26	5
1982.0	-5.76576E-15	-5.71446E-15	91	26	5	9.75414E-19	91	26	5
1987.0	-1.00293E-13	-9.83781E-14	91	26	5	1.67924E-17	91	26	5
1990.0	-3.92442E-13	-3.81705E-13	91	26	5	6.51545E-17	91	26	5
1992.0	-8.63146E-13	-8.33967E-13	91	26	5	1.43299E-16	91	26	5
1997.0	-4.57689E-12	-4.34630E-12	91	26	5	7.48255E-16	91	26	5
2002.0	-1.69304E-11	-1.58354E-11	91	26	5	2.73091E-15	91	26	5
2007.0	-4.76518E-11	-4.42323E-11	91	26	5	7.62898E-15	91	26	5
2012.0	-1.08028E-10	-1.00768E-10	91	26	5	1.73805E-14	91	26	5
2017.0	-2.05691E-10	-1.96047E-10	91	26	5	3.38152E-14	91	26	5
2022.0	-3.39354E-10	-3.37058E-10	91	26	5	5.81390E-14	91	26	5

IRON

IRON

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 1719.00
 2 317.00
 3 553.00
 4 2449.00
 5 260.00
 6 2840.00
 7 291.00
 8 17000.00
 9 150.00
 10 1000.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.24440E+03	-9.79803E+02	39	54	1	4.88830E-02	39	54	1
1967.0	-3.38306E+04	-2.05482E+04	39	54	1	1.02516E+00	39	54	1
1972.0	-1.70573E+05	-7.89363E+04	39	54	1	3.93819E+00	39	54	1
1977.0	-4.64099E+05	-1.66001E+05	39	54	1	8.28193E+00	39	54	1
1982.0	-9.31986E+05	-2.62748E+05	39	54	1	1.31087E+01	39	54	1
1987.0	-1.56755E+06	-3.56104E+05	39	54	1	1.77663E+01	39	54	1
1990.0	-2.01869E+06	-4.07671E+05	39	54	1	2.03391E+01	39	54	1
1992.0	-2.06965E+06	-3.81473E+05	39	54	1	2.13100E+01	39	54	1
1997.0	-2.73336E+06	-4.20452E+05	39	54	1	2.35138E+01	39	54	1
2002.0	-3.43520E+06	-4.63264E+05	38	55	1	2.51698E+01	39	54	1
2007.0	-4.11294E+06	-5.00135E+05	38	55	1	2.65145E+01	39	54	1
2012.0	-4.73795E+06	-5.30233E+05	38	55	1	2.76818E+01	39	54	1
2017.0	-5.29990E+06	-5.55742E+05	38	55	1	2.87189E+01	39	54	1
2022.0	-5.79817E+06	-5.77758E+05	38	55	1	2.96429E+01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.24928E-02	-2.55958E-03	57	13	5	7.41046E-08	55	22	3
1967.0	-2.34458E+02	-1.56654E+01	57	13	5	2.18553E-04	57	15	5
1972.0	-2.08899E+04	-1.12490E+03	54	11	5	1.16193E-02	53	11	5
1977.0	-3.14110E+05	-1.35253E+04	54	11	5	1.44186E-01	53	11	5
1982.0	-1.85054E+06	-7.18267E+04	48	9	5	7.15363E-01	48	9	5
1987.0	-6.41823E+06	-2.28081E+05	48	9	5	2.27159E+00	48	9	5
1990.0	-1.19098E+07	-3.83149E+05	48	9	5	3.81600E+00	48	9	5
1992.0	-1.72945E+07	-5.16975E+05	48	9	5	5.16679E+00	48	9	5
1997.0	-4.12153E+07	-1.12933E+06	70	36	3	1.29089E+01	70	33	3
2002.0	-8.54897E+07	-2.36549E+06	54	11	5	3.02311E+01	70	33	3
2007.0	-1.50661E+08	-4.54146E+06	54	11	5	5.10225E+01	70	32	3
2012.0	-2.28712E+08	-7.06627E+06	54	11	5	7.04056E+01	70	32	3
2017.0	-3.08208E+08	-9.37674E+06	54	11	5	9.42801E+01	53	11	5
2022.0	-3.79659E+08	-1.11241E+07	54	11	5	1.12996E+02	53	11	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.12659E+01	-1.62722E+01	52	62	1	3.82652E-03	52	61	1
1967.0	-4.40471E+03	-1.09391E+03	52	62	1	1.85395E-01	52	61	1
1972.0	-3.36945E+04	-7.73315E+03	52	62	1	1.10390E+00	52	61	1
1977.0	-1.12124E+05	-2.32137E+04	52	62	1	3.00172E+00	52	61	1
1982.0	-2.50896E+05	-4.59989E+04	52	62	1	5.59909E+00	52	61	1
1987.0	-4.50560E+05	-7.27192E+04	52	62	1	8.51333E+00	52	61	1
1990.0	-5.97120E+05	-8.94670E+04	52	62	1	1.02974E+01	52	61	1
1992.0	-5.80883E+05	-7.90132E+04	52	62	1	1.04460E+01	52	61	1
1997.0	-7.90899E+05	-9.36617E+04	52	62	1	1.25581E+01	52	61	1
2002.0	-1.03712E+06	-1.11751E+05	52	62	1	1.48170E+01	52	61	1
2007.0	-1.28450E+06	-1.27730E+05	52	62	1	1.67203E+01	52	61	1
2012.0	-1.51924E+06	-1.41272E+05	52	62	1	1.83142E+01	52	61	1
2017.0	-1.73614E+06	-1.52819E+05	52	62	1	1.96678E+01	52	61	1
2022.0	-1.93337E+06	-1.62646E+05	52	62	1	2.08160E+01	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.43698E+00	-8.39536E-01	55	66	1	6.94568E-05	55	66	1
1967.0	-2.18087E+02	-1.16740E+02	55	66	1	9.65820E-03	55	66	1
1972.0	-2.91649E+03	-1.15930E+03	55	66	1	9.59118E-02	55	66	1
1977.0	-1.69557E+04	-4.14432E+03	55	66	1	3.42869E-01	55	66	1
1982.0	-6.17544E+04	-9.01345E+03	55	66	1	8.41451E-01	36	60	1
1987.0	-1.60623E+05	-2.37300E+04	36	60	1	2.22351E+00	36	60	1
1990.0	-2.52120E+05	-3.65677E+04	36	60	1	3.42641E+00	36	60	1
1992.0	-3.14636E+05	-4.49105E+04	36	60	1	4.28645E+00	36	60	1
1997.0	-5.18883E+05	-7.08876E+04	36	60	1	6.76724E+00	36	60	1
2002.0	-7.59328E+05	-9.80868E+04	36	60	1	9.36491E+00	36	60	1
2007.0	-1.01131E+06	-1.23419E+05	36	60	1	1.17836E+01	36	60	1
2012.0	-1.25478E+06	-1.45258E+05	36	60	1	1.38687E+01	36	60	1
2017.0	-1.47796E+06	-1.63287E+05	36	60	1	1.55901E+01	36	60	1
2022.0	-1.67644E+06	-1.77973E+05	36	60	1	1.69922E+01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.18170E+03	-9.79803E+02	39	54	1	4.88830E-02	39	54	1
1967.0	-2.92078E+04	-2.05482E+04	39	54	1	1.02516E+00	39	54	1
1972.0	-1.33962E+05	-7.89363E+04	39	54	1	3.93819E+00	39	54	1
1977.0	-3.35018E+05	-1.66001E+05	39	54	1	8.28193E+00	39	54	1
1982.0	-6.19329E+05	-2.62748E+05	39	54	1	1.31087E+01	39	54	1
1987.0	-9.56345E+05	-3.56104E+05	39	54	1	1.77663E+01	39	54	1
1990.0	-1.16941E+06	-4.07671E+05	39	54	1	2.03391E+01	39	54	1
1992.0	-1.17410E+06	-3.81473E+05	39	54	1	2.13100E+01	39	54	1
1997.0	-1.42352E+06	-4.20452E+05	39	54	1	2.35138E+01	39	54	1
2002.0	-1.63864E+06	-4.63264E+05	38	55	1	2.51698E+01	39	54	1
2007.0	-1.81693E+06	-5.00135E+05	38	55	1	2.65145E+01	39	54	1
2012.0	-1.96360E+06	-5.30233E+05	38	55	1	2.76818E+01	39	54	1
2017.0	-2.08531E+06	-5.55742E+05	38	55	1	2.87189E+01	39	54	1
2022.0	-2.18768E+06	-5.77758E+05	38	55	1	2.96429E+01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	3.65502E-05	-1.16414E-05	61	63	1	8.70031E-10	61	63	1
1967.0	5.20491E-03	-5.49109E-03	60	65	1	3.61184E-07	61	63	1
1972.0	-6.49741E-02	-1.28864E-01	60	65	1	7.26247E-06	61	63	1
1977.0	-1.27169E+00	-8.77867E-01	60	65	1	4.51685E-05	61	63	1
1982.0	-6.66616E+00	-3.24032E+00	60	65	1	1.59842E-04	60	65	1
1987.0	-2.08114E+01	-8.42268E+00	60	65	1	4.15482E-04	60	65	1
1990.0	-3.57761E+01	-1.33213E+01	60	65	1	6.57124E-04	60	65	1
1992.0	-3.40870E+01	-1.34967E+01	60	65	1	6.94396E-04	60	65	1
1997.0	-5.72747E+01	-1.84016E+01	60	65	1	1.55817E-03	59	66	1
2002.0	-1.12325E+02	-3.93634E+01	59	66	1	5.47722E-03	59	66	1
2007.0	-2.01043E+02	-9.54237E+01	59	66	1	1.32778E-02	59	66	1
2012.0	-3.27225E+02	-1.92306E+02	59	66	1	2.67586E-02	59	66	1
2017.0	-4.89400E+02	-3.42350E+02	59	66	1	4.76366E-02	59	66	1
2022.0	-6.81583E+02	-5.55970E+02	59	66	1	7.73610E-02	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.65189E-03	-1.86098E-03	55	22	3	7.41046E-08	55	22	3
1967.0	-2.33693E+01	-5.26630E+00	55	19	3	2.18553E-04	57	15	5
1972.0	-1.18361E+03	-2.58474E+02	55	19	3	1.09055E-02	57	15	5
1977.0	-1.22201E+04	-2.45747E+03	55	19	3	9.83207E-02	57	15	5
1982.0	-5.68548E+04	-1.02077E+04	55	19	3	3.78747E-01	57	15	5
1987.0	-2.57388E+05	-3.68048E+04	70	36	3	9.53096E-01	57	15	5
1990.0	-8.32273E+05	-1.89999E+05	70	36	3	1.69517E+00	57	15	5
1992.0	-1.54704E+06	-3.58495E+05	70	36	3	3.23868E+00	70	35	3
1997.0	-5.63161E+06	-1.12933E+06	70	36	3	1.29089E+01	70	33	3
2002.0	-1.31904E+07	-2.14064E+06	70	36	3	3.02311E+01	70	33	3
2007.0	-2.31081E+07	-3.16589E+06	70	31	3	5.10225E+01	70	32	3
2012.0	-3.33884E+07	-4.52830E+06	70	31	3	7.04056E+01	70	32	3
2017.0	-4.22835E+07	-5.52923E+06	70	31	3	8.36481E+01	70	32	3
2022.0	-4.88147E+07	-6.07142E+06	70	31	3	8.99462E+01	70	32	3

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.42251E-02	-2.55958E-03	57	13	5	2.91212E-08	56	13	5
1967.0	-2.08960E+02	-1.56654E+01	57	13	5	1.79002E-04	56	13	5
1972.0	-1.95607E+04	-1.12490E+03	54	11	5	1.16193E-02	53	11	5
1977.0	-2.99915E+05	-1.35253E+04	54	11	5	1.44186E-01	53	11	5
1982.0	-1.78241E+06	-7.18267E+04	48	9	5	7.15363E-01	48	9	5
1987.0	-6.12050E+06	-2.28081E+05	48	9	5	2.27159E+00	48	9	5
1990.0	-1.09884E+07	-3.83149E+05	48	9	5	3.81600E+00	48	9	5
1992.0	-1.55923E+07	-5.16975E+05	48	9	5	5.16679E+00	48	9	5
1997.0	-3.49313E+07	-1.05105E+06	48	9	5	1.05083E+01	48	9	5
2002.0	-7.03433E+07	-2.36549E+06	54	11	5	2.35456E+01	53	11	5
2007.0	-1.23359E+08	-4.54146E+06	54	11	5	4.49212E+01	53	11	5
2012.0	-1.88326E+08	-7.06627E+06	54	11	5	7.03429E+01	53	11	5
2017.0	-2.56161E+08	-9.37674E+06	54	11	5	9.42801E+01	53	11	5
2022.0	-3.18842E+08	-1.11241E+07	54	11	5	1.12996E+02	53	11	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.73407E-05	-5.57053E-06	64	19	5	3.30068E-09	64	20	5
1967.0	-1.32271E-01	-2.06659E-02	64	19	5	1.02154E-05	64	20	5

1972.0	-7.64733E+00	-9.81716E-01	64	17	5	4.31546E-04	64	20	5
1977.0	-7.98871E+01	-9.65302E+00	64	15	5	3.47764E-03	64	20	5
1982.0	-3.64407E+02	-4.04155E+01	64	15	5	1.23994E-02	64	20	5
1987.0	-3.02798E+03	-7.18691E+02	70	29	3	3.39739E-02	70	30	3
1990.0	-2.22408E+04	-6.57503E+03	70	29	3	2.99554E-01	70	30	3
1992.0	-6.46365E+04	-1.90750E+04	70	29	3	8.52302E-01	70	30	3
1997.0	-4.58086E+05	-1.27657E+05	70	29	3	5.37219E+00	70	30	3
2002.0	-1.58172E+06	-4.11870E+05	70	29	3	1.65892E+01	70	30	3
2007.0	-3.54659E+06	-8.67346E+05	70	29	3	3.37938E+01	70	30	3
2012.0	-5.99571E+06	-1.38696E+06	70	29	3	5.26807E+01	70	30	3
2017.0	-8.35907E+06	-1.84366E+06	70	29	3	6.86779E+01	70	30	3
2022.0	-1.01924E+07	-2.15993E+06	70	29	3	7.92686E+01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.88504E-04	-1.57437E-04	43	22	3	1.39171E-08	43	23	3
1967.0	-1.99663E+00	-3.46346E-01	43	22	3	2.63011E-05	43	23	3
1972.0	-1.37951E+02	-1.75921E+01	43	22	3	1.59776E-03	40	7	5
1977.0	-1.89529E+03	-2.13135E+02	42	18	3	3.56432E-02	40	7	5
1982.0	-1.09152E+04	-1.21454E+03	42	18	3	2.77026E-01	40	7	5
1987.0	-3.73094E+04	-4.06903E+03	41	16	3	1.13075E+00	40	7	5
1990.0	-6.68764E+04	-7.30926E+03	41	16	3	2.13308E+00	40	7	5
1992.0	-9.05056E+04	-1.01255E+04	41	16	3	3.05098E+00	40	7	5
1997.0	-1.94306E+05	-2.09931E+04	41	16	3	6.41340E+00	40	7	5
2002.0	-3.74264E+05	-3.93860E+04	41	16	3	1.18597E+01	40	7	5
2007.0	-6.46875E+05	-6.85826E+04	42	18	3	2.02231E+01	40	7	5
2012.0	-1.00175E+06	-1.06805E+05	41	16	3	3.16610E+01	40	7	5
2017.0	-1.40419E+06	-1.52515E+05	41	16	3	4.51957E+01	40	7	5
2022.0	-1.81011E+06	-2.00015E+05	41	16	3	5.91527E+01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.75857E-22	-5.02459E-23	90	35	3	5.95910E-28	90	36	3
1967.0	-2.03633E-16	-4.27193E-17	90	35	3	4.70183E-22	90	36	3
1972.0	-4.30092E-13	-9.39866E-14	90	35	3	1.00345E-18	90	36	3
1977.0	-6.51777E-11	-1.43674E-11	90	35	3	1.51197E-16	90	36	3
1982.0	-2.24066E-09	-4.91174E-10	90	35	3	5.13385E-15	90	36	3
1987.0	-3.03540E-08	-6.57230E-09	90	35	3	6.84837E-14	90	36	3
1990.0	-1.05919E-07	-2.27271E-08	90	35	3	2.36597E-13	90	36	3
1992.0	-2.19788E-07	-4.68791E-08	90	35	3	4.87975E-13	90	36	3
1997.0	-1.03702E-06	-2.18452E-07	90	35	3	2.26930E-12	90	36	3
2002.0	-3.86332E-06	-8.22851E-07	90	35	3	8.47906E-12	90	35	3
2007.0	-1.42084E-05	-3.18877E-06	90	35	3	3.28587E-11	90	35	3
2012.0	-5.41862E-05	-1.27339E-05	90	35	3	1.31217E-10	90	35	3
2017.0	-1.86908E-04	-4.44171E-05	90	35	3	4.57696E-10	90	35	3
2022.0	-5.37378E-04	-1.26338E-04	90	35	3	1.30185E-09	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.58004E-08	-1.35243E-08	1	42	5	1.21093E-13	1	42	5
1967.0	-2.50321E-03	-8.89302E-04	1	42	5	7.96253E-09	1	42	5
1972.0	-7.82155E-01	-2.61997E-01	1	42	5	2.34584E-06	1	42	5
1977.0	-2.43894E+01	-7.75037E+00	1	42	5	6.93945E-05	1	42	5
1982.0	-2.26434E+02	-6.87300E+01	1	42	5	6.15388E-04	1	42	5
1987.0	-1.04385E+03	-3.04545E+02	1	42	5	2.72681E-03	1	42	5
1990.0	-2.10186E+03	-6.00421E+02	1	42	5	5.37599E-03	1	42	5
1992.0	-3.13044E+03	-8.82811E+02	1	42	5	7.90945E-03	1	42	5
1997.0	-7.12862E+03	-1.95171E+03	1	42	5	1.74877E-02	1	42	5

2002.0	-1.34824E+04	-3.59692E+03	1	42	5	3.22314E-02	1	42	5
2007.0	-2.23023E+04	-5.81658E+03	1	42	5	5.21217E-02	1	42	5
2012.0	-3.32860E+04	-8.51148E+03	1	42	5	7.62704E-02	1	42	5
2017.0	-4.58185E+04	-1.15199E+04	1	42	5	1.03228E-01	1	42	5
2022.0	-5.91719E+04	-1.46683E+04	1	42	5	1.31441E-01	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.01427E-02	-2.54429E-03	36	60	5	2.19872E-07	36	60	5
1967.0	-1.16241E+01	-2.63595E+00	38	61	5	1.95829E-04	36	60	5
1972.0	-3.84034E+02	-9.25007E+01	38	61	5	6.21346E-03	36	60	5
1977.0	-3.11024E+03	-7.80494E+02	38	61	5	5.01510E-02	36	60	5
1982.0	-1.23375E+04	-3.17639E+03	38	61	5	1.98437E-01	36	60	5
1987.0	-3.22835E+04	-8.43048E+03	38	61	5	5.15391E-01	36	60	5
1990.0	-5.03073E+04	-1.31958E+04	38	61	5	7.97802E-01	36	60	5
1992.0	-6.22934E+04	-1.63979E+04	38	61	5	1.02674E+00	36	60	5
1997.0	-1.03778E+05	-2.72585E+04	38	61	5	1.68075E+00	36	60	5
2002.0	-1.50814E+05	-3.94441E+04	38	61	5	2.40332E+00	36	60	5
2007.0	-1.99421E+05	-5.18372E+04	38	61	5	3.12202E+00	36	60	5
2012.0	-2.46552E+05	-6.35576E+04	38	61	5	3.78839E+00	36	60	5
2017.0	-2.90531E+05	-7.41557E+04	38	61	5	4.37944E+00	36	60	5
2022.0	-3.30698E+05	-8.35080E+04	38	61	5	4.89157E+00	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.85912E-26	-1.85912E-26	91	26	5	3.17333E-30	91	26	5
1967.0	-5.04455E-20	-5.04414E-20	91	26	5	8.60988E-24	91	26	5
1972.0	-2.29078E-16	-2.28907E-16	91	26	5	3.90725E-20	91	26	5
1977.0	-5.77675E-14	-5.75844E-14	91	26	5	9.82919E-18	91	26	5
1982.0	-2.82631E-12	-2.80117E-12	91	26	5	4.78138E-16	91	26	5
1987.0	-4.91765E-11	-4.82377E-11	91	26	5	8.23382E-15	91	26	5
1990.0	-1.92463E-10	-1.87199E-10	91	26	5	3.19536E-14	91	26	5
1992.0	-4.23422E-10	-4.09113E-10	91	26	5	7.02972E-14	91	26	5
1997.0	-2.25983E-09	-2.14666E-09	91	26	5	3.69567E-13	91	26	5
2002.0	-8.91624E-09	-8.37256E-09	91	26	5	1.44390E-12	91	26	5
2007.0	-3.29195E-08	-3.10263E-08	91	26	5	5.35127E-12	91	26	5
2012.0	-1.27915E-07	-1.21379E-07	91	26	5	2.09355E-11	91	26	5
2017.0	-4.61325E-07	-4.35332E-07	91	26	5	7.50883E-11	91	26	5
2022.0	-1.37640E-06	-1.28436E-06	91	26	5	2.21538E-10	91	26	5

LEAD

LEAD

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 52.20
 2 52.80
 3 36.70
 4 50.10
 5 19.60
 6 30.00
 7 10.80
 8 9.60
 9 10.90
 10 69.80

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.32892E+01	-5.24932E+01	39	54	1	2.61892E-03	39	54	1
1967.0	-2.04937E+03	-1.44357E+03	39	54	1	7.20210E-02	39	54	1
1972.0	-1.10762E+04	-6.48496E+03	39	54	1	3.23540E-01	39	54	1
1977.0	-3.11993E+04	-1.48499E+04	39	54	1	7.40872E-01	39	54	1
1982.0	-6.42392E+04	-2.45252E+04	39	54	1	1.22358E+00	39	54	1
1987.0	-1.10211E+05	-3.38383E+04	39	54	1	1.68822E+00	39	54	1
1990.0	-1.43242E+05	-3.88786E+04	39	54	1	1.93969E+00	39	54	1
1992.0	-1.50440E+05	-3.62808E+04	39	54	1	2.02674E+00	39	54	1
1997.0	-2.01078E+05	-3.98538E+04	39	54	1	2.22882E+00	39	54	1
2002.0	-2.52766E+05	-4.23112E+04	39	54	1	2.36773E+00	39	54	1
2007.0	-3.01711E+05	-4.41398E+04	39	54	1	2.47014E+00	39	54	1
2012.0	-3.45945E+05	-4.63724E+04	38	55	1	2.55623E+00	39	54	1
2017.0	-3.84780E+05	-4.83785E+04	38	55	1	2.63308E+00	39	54	1
2022.0	-4.18349E+05	-5.00667E+04	38	55	1	2.70161E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.69574E-04	-5.60274E-05	57	13	5	1.74722E-09	55	22	3
1967.0	-6.93111E+00	-3.55099E-01	54	11	5	4.78274E-06	57	15	5
1972.0	-6.91830E+02	-2.80100E+01	48	9	5	2.96278E-04	53	11	5
1977.0	-1.15357E+04	-4.75152E+02	9	24	5	4.00517E-03	48	9	5
1982.0	-7.40853E+04	-3.13219E+03	9	24	5	2.14725E-02	48	9	5
1987.0	-2.69881E+05	-1.11482E+04	9	24	5	6.64847E-02	47	9	5
1990.0	-4.90851E+05	-1.97031E+04	9	24	5	1.13238E-01	9	24	5
1992.0	-6.89732E+05	-2.70852E+04	9	24	5	1.55897E-01	9	24	5
1997.0	-1.40949E+06	-5.13479E+04	9	24	5	3.03606E-01	33	8	5
2002.0	-2.46085E+06	-8.22180E+04	9	24	5	5.16568E-01	33	8	5
2007.0	-3.79350E+06	-1.16719E+05	9	24	5	7.92643E-01	33	8	5
2012.0	-5.27570E+06	-1.51457E+05	9	24	5	1.10868E+00	33	8	5
2017.0	-6.75914E+06	-1.83906E+05	9	24	5	1.42374E+00	33	8	5
2022.0	-8.13542E+06	-2.13019E+05	9	23	5	1.70455E+00	33	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.29069E+00	-3.33259E-01	52	62	1	7.83952E-05	52	61	1
1967.0	-9.81883E+01	-2.24218E+01	52	62	1	3.80218E-03	52	61	1
1972.0	-8.52937E+02	-1.58581E+02	52	62	1	2.26533E-02	52	61	1
1977.0	-3.35082E+03	-4.76159E+02	52	62	1	6.16200E-02	52	61	1
1982.0	-8.75886E+03	-1.07258E+03	40	59	1	1.14958E-01	52	61	1
1987.0	-1.77357E+04	-2.09960E+03	40	60	1	1.78857E-01	40	59	1
1990.0	-2.48140E+04	-2.90784E+03	40	60	1	2.57630E-01	37	60	1
1992.0	-2.66355E+04	-3.22898E+03	40	60	1	3.21768E-01	37	60	1
1997.0	-3.87608E+04	-5.07604E+03	37	60	1	5.07249E-01	37	60	1
2002.0	-5.23098E+04	-6.99849E+03	37	60	1	6.99486E-01	37	60	1
2007.0	-6.58598E+04	-8.75346E+03	37	60	1	8.74899E-01	37	60	1
2012.0	-7.86461E+04	-1.02215E+04	37	60	1	1.02163E+00	37	60	1
2017.0	-9.03383E+04	-1.13850E+04	37	60	1	1.13793E+00	37	60	1
2022.0	-1.00848E+05	-1.22899E+04	37	60	1	1.22837E+00	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.97760E-02	-1.71747E-02	55	66	1	1.42090E-06	55	66	1
1967.0	-5.26255E+00	-2.38819E+00	55	66	1	1.97581E-04	55	66	1
1972.0	-1.04095E+02	-2.37162E+01	55	66	1	1.96210E-03	55	66	1
1977.0	-8.58821E+02	-1.53127E+02	38	61	1	1.31553E-02	38	61	1
1982.0	-3.81415E+03	-6.72824E+02	38	61	1	6.00077E-02	36	60	1
1987.0	-1.10004E+04	-1.81980E+03	36	60	1	1.70516E-01	36	60	1
1990.0	-1.79174E+04	-2.90084E+03	36	60	1	2.71810E-01	36	60	1
1992.0	-2.27575E+04	-3.62938E+03	36	60	1	3.46404E-01	36	60	1
1997.0	-3.88407E+04	-5.93651E+03	36	60	1	5.66725E-01	36	60	1
2002.0	-5.77758E+04	-8.40688E+03	36	60	1	8.02653E-01	36	60	1
2007.0	-7.75338E+04	-1.07272E+04	36	60	1	1.02420E+00	36	60	1
2012.0	-9.64292E+04	-1.27169E+04	36	60	1	1.21417E+00	36	60	1
2017.0	-1.13451E+05	-1.43255E+04	36	60	1	1.36775E+00	36	60	1
2022.0	-1.28249E+05	-1.55916E+04	36	60	1	1.48863E+00	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.19687E+01	-5.24932E+01	39	54	1	2.61892E-03	39	54	1
1967.0	-1.94592E+03	-1.44357E+03	39	54	1	7.20210E-02	39	54	1
1972.0	-1.01192E+04	-6.48496E+03	39	54	1	3.23540E-01	39	54	1
1977.0	-2.69896E+04	-1.48499E+04	39	54	1	7.40872E-01	39	54	1
1982.0	-5.16661E+04	-2.45252E+04	39	54	1	1.22358E+00	39	54	1
1987.0	-8.14746E+04	-3.38383E+04	39	54	1	1.68822E+00	39	54	1
1990.0	-1.00510E+05	-3.88786E+04	39	54	1	1.93969E+00	39	54	1
1992.0	-1.01046E+05	-3.62808E+04	39	54	1	2.02674E+00	39	54	1
1997.0	-1.23475E+05	-3.98538E+04	39	54	1	2.22882E+00	39	54	1
2002.0	-1.42678E+05	-4.23112E+04	39	54	1	2.36773E+00	39	54	1
2007.0	-1.58313E+05	-4.41398E+04	39	54	1	2.47014E+00	39	54	1
2012.0	-1.70863E+05	-4.63724E+04	38	55	1	2.55623E+00	39	54	1
2017.0	-1.80981E+05	-4.83785E+04	38	55	1	2.63308E+00	39	54	1
2022.0	-1.89238E+05	-5.00667E+04	38	55	1	2.70161E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	7.47718E-07	-2.38152E-07	61	63	1	1.77985E-11	61	63	1
1967.0	1.06472E-04	-1.12333E-04	60	65	1	7.38893E-09	61	63	1
1972.0	-1.32977E-03	-2.63626E-03	60	65	1	1.48577E-07	61	63	1
1977.0	-2.60243E-02	-1.79597E-02	60	65	1	9.24122E-07	61	63	1
1982.0	-1.36427E-01	-6.62944E-02	60	65	1	3.27023E-06	60	65	1
1987.0	-4.25955E-01	-1.72330E-01	60	65	1	8.50086E-06	60	65	1
1990.0	-7.32292E-01	-2.72568E-01	60	65	1	1.34455E-05	60	65	1
1992.0	-6.97831E-01	-2.76172E-01	60	65	1	1.42089E-05	60	65	1
1997.0	-1.17300E+00	-3.76655E-01	60	65	1	3.18857E-05	59	66	1
2002.0	-2.30095E+00	-8.05522E-01	59	66	1	1.12084E-04	59	66	1
2007.0	-4.11928E+00	-1.95281E+00	59	66	1	2.71725E-04	59	66	1
2012.0	-6.70827E+00	-3.93578E+00	59	66	1	5.47647E-04	59	66	1
2017.0	-1.00423E+01	-7.00755E+00	59	66	1	9.75071E-04	59	66	1
2022.0	-1.40029E+01	-1.13822E+01	59	66	1	1.58378E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.78480E-04	-4.38777E-05	55	22	3	1.74722E-09	55	22	3
1967.0	-5.48206E-01	-1.25965E-01	55	19	3	4.78274E-06	57	15	5
1972.0	-2.86820E+01	-6.12269E+00	55	19	3	2.39404E-04	57	15	5
1977.0	-3.15685E+02	-5.78023E+01	55	19	3	2.16129E-03	57	15	5
1982.0	-1.59070E+03	-2.38827E+02	55	19	3	8.32893E-03	57	15	5
1987.0	-5.54616E+03	-6.66461E+02	4	30	5	2.02765E-02	57	15	5
1990.0	-1.13304E+04	-1.22708E+03	4	30	5	3.80332E-02	24	7	5
1992.0	-1.69393E+04	-1.72914E+03	4	30	5	5.85130E-02	24	7	5
1997.0	-4.20072E+04	-3.45860E+03	4	30	5	1.39788E-01	24	7	5
2002.0	-8.17201E+04	-6.18455E+03	61	24	3	2.67968E-01	24	7	5
2007.0	-1.32247E+05	-1.00064E+04	61	24	3	4.41160E-01	24	7	5
2012.0	-1.88461E+05	-1.40609E+04	61	24	3	6.51222E-01	24	7	5
2017.0	-2.45983E+05	-1.80663E+04	61	24	3	8.83227E-01	24	7	5
2022.0	-3.01666E+05	-2.18597E+04	61	24	3	1.11751E+00	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.38476E-04	-5.60274E-05	57	13	5	6.63112E-10	56	13	5
1967.0	-6.24228E+00	-3.55099E-01	54	11	5	4.07214E-06	56	13	5
1972.0	-6.55047E+02	-2.80100E+01	48	9	5	2.96278E-04	53	11	5
1977.0	-1.11236E+04	-4.75152E+02	9	24	5	4.00517E-03	48	9	5
1982.0	-7.19965E+04	-3.13219E+03	9	24	5	2.14725E-02	48	9	5
1987.0	-2.62731E+05	-1.11482E+04	9	24	5	6.64847E-02	47	9	5
1990.0	-4.76539E+05	-1.97031E+04	9	24	5	1.13238E-01	9	24	5
1992.0	-6.68506E+05	-2.70852E+04	9	24	5	1.55897E-01	9	24	5
1997.0	-1.35658E+06	-5.13479E+04	9	24	5	3.03606E-01	33	8	5
2002.0	-2.35621E+06	-8.22180E+04	9	24	5	5.16568E-01	33	8	5
2007.0	-3.62180E+06	-1.16719E+05	9	24	5	7.92643E-01	33	8	5
2012.0	-5.02911E+06	-1.51457E+05	9	24	5	1.10868E+00	33	8	5
2017.0	-6.43652E+06	-1.83906E+05	9	24	5	1.42374E+00	33	8	5
2022.0	-7.74025E+06	-2.13019E+05	9	23	5	1.70455E+00	33	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.61451E-07	-1.14427E-07	64	19	5	6.77977E-11	64	20	5
1967.0	-2.72720E-03	-4.26282E-04	64	19	5	2.10708E-07	64	20	5

1972.0	-1.58311E-01	-2.03317E-02	64	17	5	8.93599E-06	64	20	5
1977.0	-1.66017E+00	-2.00598E-01	64	15	5	7.22396E-05	64	20	5
1982.0	-7.60765E+00	-8.41827E-01	64	15	5	2.58047E-04	64	20	5
1987.0	-5.10646E+01	-9.56151E+00	70	29	3	6.10269E-04	64	20	5
1990.0	-2.64545E+02	-6.18284E+01	70	29	3	2.50978E-03	70	30	3
1992.0	-6.32177E+02	-1.47740E+02	70	29	3	5.92270E-03	70	30	3
1997.0	-3.03917E+03	-6.74386E+02	70	29	3	2.57879E-02	70	30	3
2002.0	-7.90086E+03	-1.66073E+03	70	29	3	6.16882E-02	70	30	3
2007.0	-1.45523E+04	-2.93823E+03	70	29	3	1.07233E-01	70	30	3
2012.0	-2.19993E+04	-4.32138E+03	70	29	3	1.56047E-01	70	30	3
2017.0	-2.95544E+04	-5.70118E+03	70	29	3	2.04545E-01	70	30	3
2022.0	-3.68200E+04	-7.01831E+03	70	29	3	2.50768E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.20564E-05	-1.38767E-05	43	22	3	1.23817E-09	43	23	3
1967.0	-1.37894E-01	-2.31773E-02	43	22	3	1.78157E-06	43	23	3
1972.0	-7.94302E+00	-9.57553E-01	43	22	3	1.05013E-04	40	7	5
1977.0	-9.48004E+01	-1.05535E+01	42	18	3	1.99535E-03	40	7	5
1982.0	-4.90456E+02	-5.36762E+01	41	16	3	1.34987E-02	40	7	5
1987.0	-1.55266E+03	-1.74898E+02	41	16	3	4.93545E-02	40	7	5
1990.0	-2.71718E+03	-3.01784E+02	41	16	3	8.83612E-02	40	7	5
1992.0	-3.65434E+03	-4.09312E+02	41	16	3	1.22782E-01	40	7	5
1997.0	-7.86754E+03	-8.19966E+02	41	16	3	2.44442E-01	40	7	5
2002.0	-1.50227E+04	-1.53478E+03	42	18	3	4.30116E-01	40	7	5
2007.0	-2.49033E+04	-2.59843E+03	42	18	3	6.80724E-01	40	7	5
2012.0	-3.61253E+04	-3.83830E+03	42	18	3	9.63314E-01	40	7	5
2017.0	-4.70824E+04	-5.06680E+03	42	18	3	1.23427E+00	40	7	5
2022.0	-5.66822E+04	-6.14678E+03	42	18	3	1.46712E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.64389E-24	-1.02803E-24	90	35	3	1.21922E-29	90	36	3
1967.0	-4.16716E-18	-8.74259E-19	90	35	3	9.62218E-24	90	36	3
1972.0	-8.80473E-15	-1.92424E-15	90	35	3	2.05436E-20	90	36	3
1977.0	-1.33498E-12	-2.94312E-13	90	35	3	3.09709E-18	90	36	3
1982.0	-4.59213E-11	-1.00680E-11	90	35	3	1.05227E-16	90	36	3
1987.0	-6.22500E-10	-1.34811E-10	90	35	3	1.40465E-15	90	36	3
1990.0	-2.17295E-09	-4.66343E-10	90	35	3	4.85447E-15	90	36	3
1992.0	-4.50895E-09	-9.61812E-10	90	35	3	1.00114E-14	90	36	3
1997.0	-2.10915E-08	-4.42825E-09	90	35	3	4.60496E-14	90	36	3
2002.0	-7.27095E-08	-1.50516E-08	90	35	3	1.56314E-13	90	36	3
2007.0	-2.05735E-07	-4.23067E-08	90	35	3	4.37957E-13	90	36	3
2012.0	-5.22191E-07	-1.07699E-07	90	35	3	1.10979E-12	90	35	3
2017.0	-1.24461E-06	-2.58211E-07	90	35	3	2.66073E-12	90	35	3
2022.0	-2.78759E-06	-5.78656E-07	90	35	3	5.96277E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.17308E-09	-4.43713E-10	1	42	5	3.97287E-15	1	42	5
1967.0	-8.84483E-05	-3.14914E-05	1	42	5	2.81965E-10	1	42	5
1972.0	-3.02468E-02	-1.01645E-02	1	42	5	9.10096E-08	1	42	5
1977.0	-1.04630E+00	-3.33885E-01	1	42	5	2.98951E-06	1	42	5
1982.0	-1.08264E+01	-3.30190E+00	1	42	5	2.95642E-05	1	42	5
1987.0	-5.52453E+01	-1.61949E+01	1	42	5	1.45004E-04	1	42	5
1990.0	-1.17320E+02	-3.36634E+01	1	42	5	3.01412E-04	1	42	5
1992.0	-1.80278E+02	-5.10515E+01	1	42	5	4.57390E-04	1	42	5
1997.0	-4.36908E+02	-1.19993E+02	1	42	5	1.07517E-03	1	42	5

2002.0	-8.60821E+02	-2.30099E+02	1	42	5	2.06188E-03	1	42	5
2007.0	-1.45797E+03	-3.80500E+02	1	42	5	3.40962E-03	1	42	5
2012.0	-2.19938E+03	-5.62007E+02	1	42	5	5.03608E-03	1	42	5
2017.0	-3.03160E+03	-7.60557E+02	1	42	5	6.81527E-03	1	42	5
2022.0	-3.89661E+03	-9.62387E+02	1	42	5	8.62386E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.52536E-04	-1.58526E-04	36	60	5	1.36995E-08	36	60	5
1967.0	-5.06095E-01	-1.45452E-01	36	60	5	1.25697E-05	36	60	5
1972.0	-1.76192E+01	-5.15986E+00	38	61	5	4.02598E-04	36	60	5
1977.0	-1.52749E+02	-4.63228E+01	38	61	5	3.31871E-03	36	60	5
1982.0	-6.41860E+02	-1.98608E+02	38	61	5	1.34528E-02	36	60	5
1987.0	-1.74784E+03	-5.46002E+02	38	61	5	3.56733E-02	36	60	5
1990.0	-2.76625E+03	-8.66037E+02	38	61	5	5.57527E-02	36	60	5
1992.0	-3.42995E+03	-1.08277E+03	38	61	5	7.21301E-02	36	60	5
1997.0	-5.73637E+03	-1.80531E+03	38	61	5	1.18772E-01	36	60	5
2002.0	-8.28820E+03	-2.59570E+03	38	61	5	1.69674E-01	36	60	5
2007.0	-1.08426E+04	-3.37407E+03	38	61	5	2.19331E-01	36	60	5
2012.0	-1.32017E+04	-4.07715E+03	38	61	5	2.63977E-01	36	60	5
2017.0	-1.52709E+04	-4.67661E+03	38	61	5	3.01935E-01	36	60	5
2022.0	-1.70389E+04	-5.17233E+03	38	61	5	3.33228E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.80377E-28	-3.80377E-28	91	26	5	6.49267E-32	91	26	5
1967.0	-1.03236E-21	-1.03227E-21	91	26	5	1.76199E-25	91	26	5
1972.0	-4.68972E-18	-4.68622E-18	91	26	5	7.99898E-22	91	26	5
1977.0	-1.18320E-15	-1.17945E-15	91	26	5	2.01322E-19	91	26	5
1982.0	-5.79218E-14	-5.74067E-14	91	26	5	9.79889E-18	91	26	5
1987.0	-1.00845E-12	-9.89206E-13	91	26	5	1.68850E-16	91	26	5
1990.0	-3.94827E-12	-3.84033E-12	91	26	5	6.55518E-16	91	26	5
1992.0	-8.63746E-12	-8.39309E-12	91	26	5	1.44237E-15	91	26	5
1997.0	-4.61522E-11	-4.38305E-11	91	26	5	7.51582E-15	91	26	5
2002.0	-1.72426E-10	-1.61372E-10	91	26	5	2.78295E-14	91	26	5
2007.0	-5.06593E-10	-4.71499E-10	91	26	5	8.13220E-14	91	26	5
2012.0	-1.29077E-09	-1.20961E-09	91	26	5	2.08634E-13	91	26	5
2017.0	-3.05059E-09	-2.89784E-09	91	26	5	4.99834E-13	91	26	5
2022.0	-6.78540E-09	-6.52402E-09	91	26	5	1.12533E-12	91	26	5

MANGANESE

MANGANESE

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 221.80
 2 83.20
 3 48.00
 4 102.90
 5 80.00
 6 160.00
 7 55.10
 8 24.40
 9 67.50
 10 76.80

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.80260E+02	-1.48308E+02	39	54	1	7.39918E-03	39	54	1
1967.0	-4.96283E+03	-3.41283E+03	39	54	1	1.70268E-01	39	54	1
1972.0	-2.46049E+04	-1.38054E+04	39	54	1	6.88761E-01	39	54	1
1977.0	-6.59901E+04	-2.96119E+04	39	54	1	1.47736E+00	39	54	1
1982.0	-1.31747E+05	-4.68266E+04	39	54	1	2.33622E+00	39	54	1
1987.0	-2.21225E+05	-6.26686E+04	39	54	1	3.12659E+00	39	54	1
1990.0	-2.84614E+05	-7.09922E+04	39	54	1	3.54187E+00	39	54	1
1992.0	-2.97950E+05	-6.59977E+04	39	54	1	3.68679E+00	39	54	1
1997.0	-3.93923E+05	-7.14899E+04	39	54	1	3.99807E+00	39	54	1
2002.0	-4.91164E+05	-7.72647E+04	38	55	1	4.20687E+00	39	54	1
2007.0	-5.82689E+05	-8.25191E+04	38	55	1	4.36565E+00	39	54	1
2012.0	-6.64970E+05	-8.65783E+04	38	55	1	4.50399E+00	39	54	1
2017.0	-7.36859E+05	-8.99110E+04	38	55	1	4.62907E+00	39	54	1
2022.0	-7.98698E+05	-9.27347E+04	38	55	1	4.74026E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.67408E-03	-1.11125E-04	57	13	5	3.33968E-09	55	22	3
1967.0	-1.45693E+01	-6.82403E-01	57	13	5	9.48793E-06	57	15	5
1972.0	-1.56668E+03	-8.11602E+01	9	24	5	5.46329E-04	53	11	5
1977.0	-2.65848E+04	-1.44409E+03	9	24	5	8.29951E-03	9	24	5
1982.0	-1.67518E+05	-8.68477E+03	9	24	5	4.99134E-02	9	24	5
1987.0	-5.92274E+05	-2.83958E+04	9	24	5	1.63198E-01	9	24	5
1990.0	-1.06373E+06	-4.79638E+04	9	24	5	2.75659E-01	9	24	5
1992.0	-1.48697E+06	-6.41507E+04	9	24	5	3.69239E-01	9	24	5
1997.0	-3.03289E+06	-1.14667E+05	9	24	5	6.60150E-01	9	24	5
2002.0	-5.31791E+06	-1.75314E+05	9	24	5	1.01477E+00	48	9	5
2007.0	-8.23004E+06	-2.40134E+05	9	24	5	1.66987E+00	47	9	5
2012.0	-1.14940E+07	-3.03427E+05	9	24	5	2.40829E+00	47	9	5
2017.0	-1.48224E+07	-3.61849E+05	9	24	5	3.13982E+00	47	9	5
2022.0	-1.80085E+07	-4.14177E+05	9	24	5	3.81942E+00	47	9	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.62612E+00	-6.84076E-01	52	62	1	1.60892E-04	52	61	1
1967.0	-1.98597E+02	-4.60053E+01	52	62	1	7.79903E-03	52	61	1
1972.0	-1.70344E+03	-3.25297E+02	52	62	1	4.64515E-02	52	61	1
1977.0	-6.60460E+03	-9.76612E+02	52	62	1	1.26331E-01	52	61	1
1982.0	-1.71146E+04	-1.93529E+03	52	62	1	2.35663E-01	52	61	1
1987.0	-3.45263E+04	-3.50433E+03	37	60	1	3.58328E-01	52	61	1
1990.0	-4.82799E+04	-5.30886E+03	37	60	1	5.14278E-01	37	60	1
1992.0	-5.17261E+04	-6.34589E+03	37	60	1	6.33939E-01	37	60	1
1997.0	-7.54052E+04	-9.72290E+03	37	60	1	9.71609E-01	37	60	1
2002.0	-1.02045E+04	-1.31117E+04	37	60	1	1.31049E+00	37	60	1
2007.0	-1.28773E+05	-1.61168E+04	37	60	1	1.61086E+00	37	60	1
2012.0	-1.54009E+05	-1.85688E+04	37	60	1	1.85594E+00	37	60	1
2017.0	-1.77017E+05	-2.04776E+04	37	60	1	2.04672E+00	37	60	1
2022.0	-1.97569E+05	-2.19489E+04	37	60	1	2.19378E+00	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.15791E-02	-3.52749E-02	55	66	1	2.91838E-06	55	66	1
1967.0	-1.13439E+01	-4.90509E+00	55	66	1	4.05810E-04	55	66	1
1972.0	-2.32658E+02	-4.87105E+01	55	66	1	4.02994E-03	55	66	1
1977.0	-1.89991E+03	-3.38708E+02	36	60	1	3.17371E-02	36	60	1
1982.0	-8.22748E+03	-1.48391E+03	36	60	1	1.39043E-01	36	60	1
1987.0	-2.31498E+04	-3.99498E+03	36	60	1	3.74331E-01	36	60	1
1990.0	-3.72124E+04	-6.19692E+03	36	60	1	5.80654E-01	36	60	1
1992.0	-4.69260E+04	-7.63077E+03	36	60	1	7.28313E-01	36	60	1
1997.0	-7.87636E+04	-1.20645E+04	36	60	1	1.15173E+00	36	60	1
2002.0	-1.15572E+05	-1.66309E+04	36	60	1	1.58785E+00	36	60	1
2007.0	-1.53371E+05	-2.07741E+04	36	60	1	1.98344E+00	36	60	1
2012.0	-1.89027E+05	-2.42211E+04	36	60	1	2.31255E+00	36	60	1
2017.0	-2.20790E+05	-2.69438E+04	36	60	1	2.57250E+00	36	60	1
2022.0	-2.48159E+05	-2.90579E+04	36	60	1	2.77435E+00	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.77572E+02	-1.48308E+02	39	54	1	7.39918E-03	39	54	1
1967.0	-4.75289E+03	-3.41283E+03	39	54	1	1.70268E-01	39	54	1
1972.0	-2.26688E+04	-1.38054E+04	39	54	1	6.88761E-01	39	54	1
1977.0	-5.74855E+04	-2.96119E+04	39	54	1	1.47736E+00	39	54	1
1982.0	-1.06405E+05	-4.68266E+04	39	54	1	2.33622E+00	39	54	1
1987.0	-1.63548E+05	-6.26686E+04	39	54	1	3.12659E+00	39	54	1
1990.0	-1.99120E+05	-7.09922E+04	39	54	1	3.54187E+00	39	54	1
1992.0	-1.99296E+05	-6.59977E+04	39	54	1	3.68679E+00	39	54	1
1997.0	-2.39752E+05	-7.14899E+04	39	54	1	3.99807E+00	39	54	1
2002.0	-2.73542E+05	-7.72647E+04	38	55	1	4.20687E+00	39	54	1
2007.0	-3.00537E+05	-8.25191E+04	38	55	1	4.36565E+00	39	54	1
2012.0	-3.21920E+05	-8.65783E+04	38	55	1	4.50399E+00	39	54	1
2017.0	-3.39031E+05	-8.99110E+04	38	55	1	4.62907E+00	39	54	1
2022.0	-3.52941E+05	-9.27347E+04	38	55	1	4.74026E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.53573E-06	-4.89139E-07	61	63	1	3.65562E-11	61	63	1
1967.0	2.18689E-04	-2.30720E-04	60	65	1	1.51760E-08	61	63	1
1972.0	-2.73059E-03	-5.41453E-03	60	65	1	3.05154E-07	61	63	1
1977.0	-5.34416E-02	-3.68863E-02	60	65	1	1.89795E-06	61	63	1
1982.0	-2.80147E-01	-1.36155E-01	60	65	1	6.71639E-06	60	65	1
1987.0	-8.74651E-01	-3.53922E-01	60	65	1	1.74586E-05	60	65	1
1990.0	-1.50371E+00	-5.59785E-01	60	65	1	2.76136E-05	60	65	1
1992.0	-1.43297E+00	-5.67193E-01	60	65	1	2.91818E-05	60	65	1
1997.0	-2.40997E+00	-7.73748E-01	60	65	1	6.54943E-05	59	66	1
2002.0	-4.73175E+00	-1.65473E+00	59	66	1	2.30248E-04	59	66	1
2007.0	-8.48137E+00	-4.01179E+00	59	66	1	5.58223E-04	59	66	1
2012.0	-1.38366E+01	-8.08627E+00	59	66	1	1.12517E-03	59	66	1
2017.0	-2.07629E+01	-1.43994E+01	59	66	1	2.00361E-03	59	66	1
2022.0	-2.90317E+01	-2.33925E+01	59	66	1	3.25497E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.43598E-04	-8.38688E-05	55	22	3	3.33968E-09	55	22	3
1967.0	-1.07398E+00	-2.39185E-01	55	19	3	9.48793E-06	57	15	5
1972.0	-5.85842E+01	-1.16852E+01	55	19	3	4.74217E-04	57	15	5
1977.0	-6.74826E+02	-1.10739E+02	55	19	3	4.27880E-03	57	15	5
1982.0	-3.49384E+03	-4.98026E+02	4	30	5	1.64914E-02	57	15	5
1987.0	-1.35462E+04	-1.76961E+03	4	30	5	4.14177E-02	24	7	5
1990.0	-3.18150E+04	-3.11365E+03	4	30	5	8.48816E-02	24	7	5
1992.0	-5.09263E+04	-4.53476E+03	61	24	3	1.27117E-01	24	7	5
1997.0	-1.41723E+05	-1.46231E+04	61	24	3	3.20849E-01	60	25	3
2002.0	-2.88975E+05	-3.03304E+04	61	24	3	6.37121E-01	60	25	3
2007.0	-4.75570E+05	-4.91599E+04	61	24	3	1.00586E+00	60	25	3
2012.0	-6.81488E+05	-6.88873E+04	61	24	3	1.38638E+00	60	25	3
2017.0	-8.91464E+05	-8.81111E+04	61	24	3	1.75398E+00	60	25	3
2022.0	-1.09528E+06	-1.06110E+05	61	24	3	2.09678E+00	60	25	3

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.24322E-03	-1.11125E-04	57	13	5	1.28940E-09	56	13	5
1967.0	-1.32614E+01	-6.82403E-01	57	13	5	7.92302E-06	56	13	5
1972.0	-1.49461E+03	-8.11602E+01	9	24	5	5.46329E-04	53	11	5
1977.0	-2.57487E+04	-1.44409E+03	9	24	5	8.29951E-03	9	24	5
1982.0	-1.63186E+05	-8.68477E+03	9	24	5	4.99134E-02	9	24	5
1987.0	-5.75917E+05	-2.83958E+04	9	24	5	1.63198E-01	9	24	5
1990.0	-1.02614E+06	-4.79638E+04	9	24	5	2.75659E-01	9	24	5
1992.0	-1.42694E+06	-6.41507E+04	9	24	5	3.69239E-01	9	24	5
1997.0	-2.86366E+06	-1.14667E+05	9	24	5	6.60150E-01	9	24	5
2002.0	-4.96691E+06	-1.75314E+05	9	24	5	1.01477E+00	48	9	5
2007.0	-7.64536E+06	-2.40134E+05	9	24	5	1.66987E+00	47	9	5
2012.0	-1.06502E+07	-3.03427E+05	9	24	5	2.40829E+00	47	9	5
2017.0	-1.37145E+07	-3.61849E+05	9	24	5	3.13982E+00	47	9	5
2022.0	-1.66450E+07	-4.14177E+05	9	24	5	3.81942E+00	47	9	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.15086E-06	-2.34516E-07	64	19	5	1.38953E-10	64	20	5
1967.0	-5.57843E-03	-8.71751E-04	64	19	5	4.30908E-07	64	20	5

1972.0	-3.23143E-01	-4.14916E-02	64	17	5	1.82376E-05	64	20	5
1977.0	-3.38196E+00	-4.08647E-01	64	15	5	1.47193E-04	64	20	5
1982.0	-1.56043E+01	-1.71288E+00	64	15	5	5.25275E-04	64	20	5
1987.0	-1.91566E+02	-4.38914E+01	70	29	3	1.87163E-03	70	30	3
1990.0	-1.21773E+03	-3.00092E+02	70	29	3	1.21794E-02	70	30	3
1992.0	-3.01267E+03	-7.20244E+02	70	29	3	2.87947E-02	70	30	3
1997.0	-1.46980E+04	-3.25511E+03	70	29	3	1.23777E-01	70	30	3
2002.0	-3.78748E+04	-7.87860E+03	70	29	3	2.90605E-01	70	30	3
2007.0	-6.88763E+04	-1.37033E+04	70	29	3	4.96338E-01	70	30	3
2012.0	-1.02959E+05	-1.98950E+04	70	29	3	7.13141E-01	70	30	3
2017.0	-1.37257E+05	-2.60501E+04	70	29	3	9.28322E-01	70	30	3
2022.0	-1.70282E+05	-3.19684E+04	70	29	3	1.13536E+00	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.61157E-05	-2.23531E-05	43	22	3	2.00329E-09	43	23	3
1967.0	-2.28370E-01	-3.67604E-02	43	22	3	2.83568E-06	43	23	3
1972.0	-1.31639E+01	-1.52736E+00	43	22	3	1.82013E-04	40	7	5
1977.0	-1.57858E+02	-1.73549E+01	42	18	3	3.36224E-03	40	7	5
1982.0	-8.22958E+02	-9.05962E+01	41	16	3	2.25740E-02	40	7	5
1987.0	-2.61962E+03	-2.96615E+02	41	16	3	8.28102E-02	40	7	5
1990.0	-4.55961E+03	-5.13044E+02	41	16	3	1.48825E-01	40	7	5
1992.0	-6.09335E+03	-6.96162E+02	41	16	3	2.07313E-01	40	7	5
1997.0	-1.28070E+04	-1.39346E+03	41	16	3	4.15663E-01	40	7	5
2002.0	-2.41501E+04	-2.53457E+03	41	16	3	7.43181E-01	40	7	5
2007.0	-4.02295E+04	-4.19481E+03	42	18	3	1.21184E+00	40	7	5
2012.0	-5.93349E+04	-6.24951E+03	42	18	3	1.78209E+00	40	7	5
2017.0	-7.91554E+04	-8.41795E+03	41	16	3	2.37823E+00	40	7	5
2022.0	-9.79224E+04	-1.05787E+04	41	16	3	2.94160E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.15913E-23	-2.11132E-24	90	35	3	2.50399E-29	90	36	3
1967.0	-8.55742E-18	-1.79527E-18	90	35	3	1.97591E-23	90	36	3
1972.0	-1.80773E-14	-3.95054E-15	90	35	3	4.21774E-20	90	36	3
1977.0	-2.74016E-12	-6.04060E-13	90	35	3	6.35678E-18	90	36	3
1982.0	-9.42276E-11	-2.06572E-11	90	35	3	2.15907E-16	90	36	3
1987.0	-1.27689E-09	-2.76500E-10	90	35	3	2.88106E-15	90	36	3
1990.0	-4.45633E-09	-9.56280E-10	90	35	3	9.95491E-15	90	36	3
1992.0	-9.24633E-09	-1.97216E-09	90	35	3	2.05287E-14	90	36	3
1997.0	-4.33124E-08	-9.09686E-09	90	35	3	9.45886E-14	90	36	3
2002.0	-1.51291E-07	-3.14327E-08	90	35	3	3.26093E-13	90	36	3
2007.0	-4.49415E-07	-9.36319E-08	90	35	3	9.65871E-13	90	36	3
2012.0	-1.25644E-06	-2.65548E-07	90	35	3	2.73634E-12	90	35	3
2017.0	-3.36915E-06	-7.19411E-07	90	35	3	7.41318E-12	90	35	3
2022.0	-8.36529E-06	-1.78226E-06	90	35	3	1.83654E-11	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.70328E-09	-1.77731E-09	1	42	5	1.59135E-14	1	42	5
1967.0	-3.35049E-04	-1.19099E-04	1	42	5	1.06637E-09	1	42	5
1972.0	-1.07105E-01	-3.59084E-02	1	42	5	3.21513E-07	1	42	5
1977.0	-3.42765E+00	-1.09052E+00	1	42	5	9.76415E-06	1	42	5
1982.0	-3.26353E+01	-9.91926E+00	1	42	5	8.88141E-05	1	42	5
1987.0	-1.53376E+02	-4.48034E+01	1	42	5	4.01156E-04	1	42	5
1990.0	-3.10947E+02	-8.89161E+01	1	42	5	7.96128E-04	1	42	5
1992.0	-4.64149E+02	-1.31000E+02	1	42	5	1.17368E-03	1	42	5
1997.0	-1.05441E+03	-2.88713E+02	1	42	5	2.58693E-03	1	42	5

2002.0	-1.97053E+03	-5.25317E+02	1	42	5	4.70728E-03	1	42	5
2007.0	-3.20089E+03	-8.33360E+02	1	42	5	7.46763E-03	1	42	5
2012.0	-4.67506E+03	-1.19199E+03	1	42	5	1.06813E-02	1	42	5
2017.0	-6.28876E+03	-1.57459E+03	1	42	5	1.41097E-02	1	42	5
2022.0	-7.93962E+03	-1.95759E+03	1	42	5	1.75418E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.17989E-04	-3.59900E-04	36	60	5	3.11018E-08	36	60	5
1967.0	-9.82484E-01	-3.01267E-01	36	60	5	2.60350E-05	36	60	5
1972.0	-3.37060E+01	-9.67203E+00	38	61	5	8.10307E-04	36	60	5
1977.0	-2.88230E+02	-8.58084E+01	38	61	5	6.56099E-03	36	60	5
1982.0	-1.19368E+03	-3.62646E+02	38	61	5	2.61481E-02	36	60	5
1987.0	-3.20435E+03	-9.82463E+02	38	61	5	6.81683E-02	36	60	5
1990.0	-5.03048E+03	-1.54530E+03	38	61	5	1.05478E-01	36	60	5
1992.0	-6.20110E+03	-1.92208E+03	38	61	5	1.35597E-01	36	60	5
1997.0	-1.02569E+04	-3.16717E+03	38	61	5	2.19973E-01	36	60	5
2002.0	-1.46890E+04	-4.51018E+03	38	61	5	3.10310E-01	36	60	5
2007.0	-1.90810E+04	-5.81710E+03	38	61	5	3.96930E-01	36	60	5
2012.0	-2.31096E+04	-6.98691E+03	38	61	5	4.73666E-01	36	60	5
2017.0	-2.66340E+04	-7.97919E+03	38	61	5	5.38176E-01	36	60	5
2022.0	-2.96504E+04	-8.79927E+03	38	61	5	5.91010E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.81198E-28	-7.81198E-28	91	26	5	1.33343E-31	91	26	5
1967.0	-2.11994E-21	-2.11977E-21	91	26	5	3.61825E-25	91	26	5
1972.0	-9.62852E-18	-9.62133E-18	91	26	5	1.64228E-21	91	26	5
1977.0	-2.42862E-15	-2.42092E-15	91	26	5	4.13231E-19	91	26	5
1982.0	-1.18854E-13	-1.17797E-13	91	26	5	2.01070E-17	91	26	5
1987.0	-2.06863E-12	-2.02914E-12	91	26	5	3.46360E-16	91	26	5
1990.0	-8.09744E-12	-7.87600E-12	91	26	5	1.34438E-15	91	26	5
1992.0	-1.78149E-11	-1.72130E-11	91	26	5	2.95768E-15	91	26	5
1997.0	-9.46994E-11	-8.99386E-11	91	26	5	1.54838E-14	91	26	5
2002.0	-3.56891E-10	-3.34194E-10	91	26	5	5.76337E-14	91	26	5
2007.0	-1.09030E-09	-1.01718E-09	91	26	5	1.75439E-13	91	26	5
2012.0	-3.04582E-09	-2.86368E-09	91	26	5	4.93927E-13	91	26	5
2017.0	-8.18097E-09	-7.75744E-09	91	26	5	1.33804E-12	91	26	5
2022.0	-2.05093E-08	-1.95026E-08	91	26	5	3.36400E-12	91	26	5

NICKEL

NICKEL

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	20.80
2	7.30
4	9.60
5	4.30
6	13.20
7	4.90
8	7.50
10	46.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.65502E+01	-1.36044E+01	39	54	1	6.78730E-04	39	54	1
1967.0	-4.47324E+02	-3.06408E+02	39	54	1	1.52869E-02	39	54	1
1972.0	-2.17655E+03	-1.20921E+03	39	54	1	6.03283E-02	39	54	1
1977.0	-5.73065E+03	-2.52413E+03	39	54	1	1.25931E-01	39	54	1
1982.0	-1.12379E+04	-3.87908E+03	39	54	1	1.93530E-01	39	54	1
1987.0	-1.85489E+04	-5.04501E+03	39	54	1	2.51700E-01	39	54	1
1990.0	-2.36294E+04	-5.62089E+03	39	54	1	2.80432E-01	39	54	1
1992.0	-2.46024E+04	-5.18953E+03	39	54	1	2.89900E-01	39	54	1
1997.0	-3.20919E+04	-5.65161E+03	38	55	1	3.07747E-01	39	54	1
2002.0	-3.95533E+04	-6.12650E+03	38	55	1	3.18077E-01	39	54	1
2007.0	-4.64683E+04	-6.45442E+03	38	55	1	3.25852E-01	39	54	1
2012.0	-5.26070E+04	-6.70151E+03	38	55	1	3.33303E-01	39	54	1
2017.0	-5.79194E+04	-6.90632E+03	38	55	1	3.40579E-01	39	54	1
2022.0	-6.24586E+04	-7.08311E+03	38	55	1	3.47273E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.30959E-04	-9.72194E-06	57	13	5	2.70921E-10	55	22	3
1967.0	-1.14893E+00	-5.93265E-02	57	13	5	8.30447E-07	57	15	5
1972.0	-1.26836E+02	-7.50688E+00	9	24	5	4.31438E-05	9	24	5
1977.0	-2.17670E+03	-1.32145E+02	9	24	5	7.59467E-04	9	24	5
1982.0	-1.36903E+04	-7.82133E+02	9	24	5	4.49510E-03	9	24	5
1987.0	-4.80319E+04	-2.50564E+03	9	24	5	1.44005E-02	9	24	5
1990.0	-8.61421E+04	-4.17555E+03	9	24	5	2.39979E-02	9	24	5
1992.0	-1.20774E+05	-5.53383E+03	9	24	5	3.18516E-02	9	24	5
1997.0	-2.53935E+05	-9.67924E+03	9	24	5	5.57242E-02	9	24	5
2002.0	-4.72122E+05	-1.45672E+04	9	24	5	1.12966E-01	47	9	5
2007.0	-7.79163E+05	-1.98557E+04	9	24	5	2.03099E-01	45	8	5
2012.0	-1.14453E+06	-2.84007E+04	36	7	5	3.09831E-01	45	8	5
2017.0	-1.52058E+06	-3.94028E+04	36	7	5	4.07475E-01	45	8	5
2022.0	-1.86642E+06	-4.84501E+04	36	7	5	4.86010E-01	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.40992E-01	-6.37548E-02	52	62	1	1.49900E-05	52	61	1
1967.0	-1.81496E+01	-4.28442E+00	52	62	1	7.25931E-04	52	61	1
1972.0	-1.53595E+02	-3.02811E+01	52	62	1	4.32123E-03	52	61	1
1977.0	-5.83379E+02	-9.08888E+01	52	62	1	1.17485E-02	52	61	1
1982.0	-1.47833E+03	-1.80092E+02	52	62	1	2.19128E-02	52	61	1
1987.0	-2.92243E+03	-2.98261E+02	37	60	1	3.33175E-02	52	61	1
1990.0	-4.04365E+03	-4.45745E+02	37	60	1	4.45168E-02	35	58	1
1992.0	-4.28110E+03	-5.28070E+02	37	60	1	5.43827E-02	35	58	1
1997.0	-6.15827E+03	-7.90984E+02	37	60	1	8.15287E-02	35	58	1
2002.0	-8.26444E+03	-1.04354E+03	37	60	1	1.08217E-01	35	58	1
2007.0	-1.03691E+04	-1.25675E+03	37	60	1	1.31301E-01	35	58	1
2012.0	-1.23525E+04	-1.42163E+03	37	60	1	1.49631E-01	35	58	1
2017.0	-1.41601E+04	-1.54339E+03	37	60	1	1.63534E-01	35	58	1
2022.0	-1.57735E+04	-1.63344E+03	37	60	1	1.74018E-01	35	58	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.74142E-03	-3.29095E-03	55	66	1	2.72269E-07	55	66	1
1967.0	-1.04954E+00	-4.57618E-01	55	66	1	3.78598E-05	55	66	1
1972.0	-2.11036E+01	-4.54442E+00	55	66	1	3.75971E-04	55	66	1
1977.0	-1.68797E+02	-3.04584E+01	36	60	1	2.85396E-03	36	60	1
1982.0	-7.17433E+02	-1.31458E+02	36	60	1	1.23177E-02	36	60	1
1987.0	-1.98341E+03	-3.47859E+02	36	60	1	3.25945E-02	36	60	1
1990.0	-3.15577E+03	-5.33558E+02	36	60	1	4.99946E-02	36	60	1
1992.0	-3.95472E+03	-6.52054E+02	36	60	1	6.22348E-02	36	60	1
1997.0	-6.53632E+03	-1.01124E+03	36	60	1	9.65377E-02	36	60	1
2002.0	-9.45815E+03	-1.36768E+03	36	60	1	1.30580E-01	36	60	1
2007.0	-1.23966E+04	-1.67769E+03	36	60	1	1.60180E-01	36	60	1
2012.0	-1.51148E+04	-1.92374E+03	36	60	1	1.83672E-01	36	60	1
2017.0	-1.74944E+04	-2.14309E+03	35	60	1	2.01350E-01	36	60	1
2022.0	-1.95163E+04	-2.31560E+03	35	60	1	2.14514E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.63035E+01	-1.36044E+01	39	54	1	6.78730E-04	39	54	1
1967.0	-4.28125E+02	-3.06408E+02	39	54	1	1.52869E-02	39	54	1
1972.0	-2.00185E+03	-1.20921E+03	39	54	1	6.03283E-02	39	54	1
1977.0	-4.97847E+03	-2.52413E+03	39	54	1	1.25931E-01	39	54	1
1982.0	-9.04216E+03	-3.87908E+03	39	54	1	1.93530E-01	39	54	1
1987.0	-1.36430E+04	-5.04501E+03	39	54	1	2.51700E-01	39	54	1
1990.0	-1.64298E+04	-5.62089E+03	39	54	1	2.80432E-01	39	54	1
1992.0	-1.63664E+04	-5.18953E+03	39	54	1	2.89900E-01	39	54	1
1997.0	-1.93971E+04	-5.65161E+03	38	55	1	3.07747E-01	39	54	1
2002.0	-2.18303E+04	-6.12650E+03	38	55	1	3.18077E-01	39	54	1
2007.0	-2.37018E+04	-6.45442E+03	38	55	1	3.25852E-01	39	54	1
2012.0	-2.51384E+04	-6.70151E+03	38	55	1	3.33303E-01	39	54	1
2017.0	-2.62630E+04	-6.90632E+03	38	55	1	3.40579E-01	39	54	1
2022.0	-2.71661E+04	-7.08311E+03	38	55	1	3.47273E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.43276E-07	-4.56339E-08	61	63	1	3.41049E-12	61	63	1
1967.0	2.04037E-05	-2.15248E-05	60	65	1	1.41582E-09	61	63	1
1972.0	-2.54647E-04	-5.05137E-04	60	65	1	2.84681E-08	61	63	1
1977.0	-4.98425E-03	-3.44114E-03	60	65	1	1.77051E-07	61	63	1
1982.0	-2.61264E-02	-1.27014E-02	60	65	1	6.26549E-07	60	65	1
1987.0	-8.15632E-02	-3.30147E-02	60	65	1	1.62858E-06	60	65	1
1990.0	-1.40214E-01	-5.22159E-02	60	65	1	2.57576E-06	60	65	1
1992.0	-1.33595E-01	-5.29038E-02	60	65	1	2.72188E-06	60	65	1
1997.0	-2.24547E-01	-7.21446E-02	60	65	1	6.10833E-06	59	66	1
2002.0	-4.40584E-01	-1.54324E-01	59	66	1	2.14735E-05	59	66	1
2007.0	-7.89012E-01	-3.74124E-01	59	66	1	5.20577E-05	59	66	1
2012.0	-1.28541E+00	-7.54005E-01	59	66	1	1.04917E-04	59	66	1
2017.0	-1.92513E+00	-1.34242E+00	59	66	1	1.86792E-04	59	66	1
2022.0	-2.68563E+00	-2.18029E+00	59	66	1	3.03379E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.82263E-05	-6.80361E-06	55	22	3	2.70921E-10	55	22	3
1967.0	-8.89059E-02	-1.91364E-02	55	19	3	8.30447E-07	57	15	5
1972.0	-4.90183E+00	-9.45834E-01	55	19	3	4.13926E-05	57	15	5
1977.0	-5.70959E+01	-9.04217E+00	55	19	3	3.73148E-04	57	15	5
1982.0	-2.97420E+02	-4.52119E+01	4	30	5	1.43823E-03	57	15	5
1987.0	-1.18100E+03	-1.58006E+02	4	30	5	3.59743E-03	57	15	5
1990.0	-2.86459E+03	-2.74898E+02	4	30	5	7.01110E-03	24	7	5
1992.0	-4.65093E+03	-3.95354E+02	61	24	3	1.03527E-02	24	7	5
1997.0	-1.32295E+04	-1.25488E+03	61	24	3	2.70938E-02	60	25	3
2002.0	-2.71740E+04	-2.57383E+03	61	24	3	5.29878E-02	60	25	3
2007.0	-4.47520E+04	-4.15724E+03	61	24	3	8.32349E-02	60	25	3
2012.0	-6.39238E+04	-5.84793E+03	61	24	3	1.15255E-01	60	25	3
2017.0	-8.30974E+04	-7.53968E+03	61	24	3	1.51201E-01	24	7	5
2022.0	-1.01187E+05	-9.15678E+03	61	24	3	2.03510E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.70201E-05	-9.72194E-06	57	13	5	1.08439E-10	56	13	5
1967.0	-1.04642E+00	-5.93265E-02	57	13	5	6.67315E-07	56	13	5
1972.0	-1.21172E+02	-7.50688E+00	9	24	5	4.31438E-05	9	24	5
1977.0	-2.11034E+03	-1.32145E+02	9	24	5	7.59467E-04	9	24	5
1982.0	-1.33431E+04	-7.82133E+02	9	24	5	4.49510E-03	9	24	5
1987.0	-4.66649E+04	-2.50564E+03	9	24	5	1.44005E-02	9	24	5
1990.0	-8.28099E+04	-4.17555E+03	9	24	5	2.39979E-02	9	24	5
1992.0	-1.15285E+05	-5.53383E+03	9	24	5	3.18516E-02	9	24	5
1997.0	-2.37478E+05	-9.67924E+03	9	24	5	5.57242E-02	9	24	5
2002.0	-4.36627E+05	-1.45672E+04	9	24	5	1.12966E-01	47	9	5
2007.0	-7.18623E+05	-1.98557E+04	9	24	5	2.03099E-01	45	8	5
2012.0	-1.05626E+06	-2.84007E+04	36	7	5	3.09831E-01	45	8	5
2017.0	-1.40484E+06	-3.94028E+04	36	7	5	4.07475E-01	45	8	5
2022.0	-1.72543E+06	-4.84501E+04	36	7	5	4.86010E-01	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.06992E-07	-2.17963E-08	64	19	5	1.29152E-11	64	20	5
1967.0	-5.16684E-04	-8.07103E-05	64	19	5	3.98968E-08	64	20	5

1972.0	-2.98188E-02	-3.82723E-03	64	17	5	1.68251E-06	64	20	5
1977.0	-3.10971E-01	-3.75763E-02	64	15	5	1.35398E-05	64	20	5
1982.0	-1.42942E+00	-1.57154E-01	64	15	5	4.82131E-05	64	20	5
1987.0	-1.75075E+01	-4.04435E+00	70	29	3	1.73598E-04	70	30	3
1990.0	-1.12771E+02	-2.81980E+01	70	29	3	1.15493E-03	70	30	3
1992.0	-2.81971E+02	-6.86737E+01	70	29	3	2.77407E-03	70	30	3
1997.0	-1.41550E+03	-3.22388E+02	70	29	3	1.24221E-02	70	30	3
2002.0	-3.75160E+03	-8.08446E+02	70	29	3	3.02522E-02	70	30	3
2007.0	-6.98034E+03	-1.44310E+03	70	29	3	5.29805E-02	70	30	3
2012.0	-1.05610E+04	-2.11605E+03	70	29	3	7.66800E-02	70	30	3
2017.0	-1.40648E+04	-2.75096E+03	70	29	3	9.87655E-02	70	30	3
2022.0	-1.72338E+04	-3.30771E+03	70	29	3	1.17947E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.60573E-06	-1.38127E-06	43	22	3	1.25785E-10	43	23	3
1967.0	-1.30891E-02	-1.89400E-03	43	22	3	1.48446E-07	43	23	3
1972.0	-7.32626E-01	-7.90775E-02	42	18	3	1.12754E-05	40	7	5
1977.0	-8.95216E+00	-9.60171E-01	42	18	3	1.95650E-04	40	7	5
1982.0	-4.83494E+01	-5.38533E+00	41	16	3	1.30886E-03	40	7	5
1987.0	-1.68512E+02	-1.82841E+01	41	16	3	4.93208E-03	40	7	5
1990.0	-3.54825E+02	-4.04763E+01	43	22	3	9.19083E-03	40	7	5
1992.0	-5.55824E+02	-6.69956E+01	43	22	3	1.34055E-02	40	7	5
1997.0	-1.81231E+03	-2.55500E+02	43	22	3	3.36140E-02	40	7	5
2002.0	-4.56933E+03	-6.26018E+02	43	22	3	7.98321E-02	40	7	5
2007.0	-8.80788E+03	-1.12305E+03	43	22	3	1.58721E-01	40	7	5
2012.0	-1.37826E+04	-1.63308E+03	43	22	3	2.56151E-01	40	7	5
2017.0	-1.85780E+04	-2.10240E+03	42	18	3	3.49654E-01	40	7	5
2022.0	-2.25652E+04	-2.58660E+03	42	18	3	4.24950E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.08130E-24	-1.96951E-25	90	35	3	2.33582E-30	90	36	3
1967.0	-7.98118E-19	-1.67430E-19	90	35	3	1.84280E-24	90	36	3
1972.0	-1.68542E-15	-3.68294E-16	90	35	3	3.93217E-21	90	36	3
1977.0	-2.55357E-13	-5.62860E-14	90	35	3	5.92347E-19	90	36	3
1982.0	-8.77624E-12	-1.92369E-12	90	35	3	2.01073E-17	90	36	3
1987.0	-1.18856E-10	-2.57325E-11	90	35	3	2.68142E-16	90	36	3
1990.0	-4.14649E-10	-8.89615E-11	90	35	3	9.26152E-16	90	36	3
1992.0	-8.60126E-10	-1.83420E-10	90	35	3	1.90938E-15	90	36	3
1997.0	-4.02654E-09	-8.45668E-10	90	35	3	8.79307E-15	90	36	3
2002.0	-1.40670E-08	-2.92721E-09	90	35	3	3.03486E-14	90	36	3
2007.0	-4.19142E-08	-8.79374E-09	90	35	3	9.06151E-14	90	35	3
2012.0	-1.17769E-07	-2.52763E-08	90	35	3	2.60460E-13	90	35	3
2017.0	-3.16174E-07	-6.90578E-08	90	35	3	7.11607E-13	90	35	3
2022.0	-7.80079E-07	-1.70758E-07	90	35	3	1.75958E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.40047E-10	-1.66281E-10	1	42	5	1.48883E-15	1	42	5
1967.0	-3.12643E-05	-1.11126E-05	1	42	5	9.94989E-11	1	42	5
1972.0	-9.95247E-03	-3.33629E-03	1	42	5	2.98721E-08	1	42	5
1977.0	-3.16336E-01	-1.00622E-01	1	42	5	9.00941E-07	1	42	5
1982.0	-2.98092E+00	-9.05720E-01	1	42	5	8.10954E-06	1	42	5
1987.0	-1.38153E+01	-4.03363E+00	1	42	5	3.61159E-05	1	42	5
1990.0	-2.77358E+01	-7.92636E+00	1	42	5	7.09702E-05	1	42	5
1992.0	-4.11155E+01	-1.15965E+01	1	42	5	1.03898E-04	1	42	5
1997.0	-9.17369E+01	-2.50985E+01	1	42	5	2.24888E-04	1	42	5

2002.0	-1.68428E+02	-4.48610E+01	1	42	5	4.01992E-04	1	42	5
2007.0	-2.69203E+02	-7.00305E+01	1	42	5	6.27534E-04	1	42	5
2012.0	-3.87790E+02	-9.88214E+01	1	42	5	8.85527E-04	1	42	5
2017.0	-5.15833E+02	-1.29145E+02	1	42	5	1.15725E-03	1	42	5
2022.0	-6.45476E+02	-1.59217E+02	1	42	5	1.42672E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.42567E-05	-3.05832E-05	36	60	5	2.64294E-09	36	60	5
1967.0	-8.04379E-02	-2.51579E-02	36	60	5	2.17410E-06	36	60	5
1972.0	-2.78326E+00	-7.90036E-01	38	61	5	6.75397E-05	36	60	5
1977.0	-2.37411E+01	-6.99986E+00	38	61	5	5.44301E-04	36	60	5
1982.0	-9.73018E+01	-2.92549E+01	38	61	5	2.14894E-03	36	60	5
1987.0	-2.57232E+02	-7.79265E+01	38	61	5	5.52904E-03	36	60	5
1990.0	-3.99575E+02	-1.21129E+02	38	61	5	8.47674E-03	36	60	5
1992.0	-4.88746E+02	-1.49392E+02	38	61	5	1.08250E-02	36	60	5
1997.0	-7.93603E+02	-2.41030E+02	38	61	5	1.72652E-02	36	60	5
2002.0	-1.11719E+03	-3.36476E+02	38	61	5	2.39607E-02	36	60	5
2007.0	-1.42902E+03	-4.26183E+02	38	61	5	3.01867E-02	36	60	5
2012.0	-1.70807E+03	-5.03858E+02	38	61	5	3.55321E-02	36	60	5
2017.0	-1.94771E+03	-5.67916E+02	38	61	5	3.98945E-02	36	60	5
2022.0	-2.15076E+03	-6.19869E+02	38	61	5	4.33822E-02	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.28725E-29	-7.28724E-29	91	26	5	1.24386E-32	91	26	5
1967.0	-1.97712E-22	-1.97696E-22	91	26	5	3.37450E-26	91	26	5
1972.0	-8.97688E-19	-8.97018E-19	91	26	5	1.53113E-22	91	26	5
1977.0	-2.26325E-16	-2.25608E-16	91	26	5	3.85094E-20	91	26	5
1982.0	-1.10703E-14	-1.09718E-14	91	26	5	1.87280E-18	91	26	5
1987.0	-1.92564E-13	-1.88886E-13	91	26	5	3.22415E-17	91	26	5
1990.0	-7.53498E-13	-7.32883E-13	91	26	5	1.25098E-16	91	26	5
1992.0	-1.65735E-12	-1.60132E-12	91	26	5	2.75152E-16	91	26	5
1997.0	-8.80523E-12	-8.36241E-12	91	26	5	1.43967E-15	91	26	5
2002.0	-3.32011E-11	-3.10911E-11	91	26	5	5.36185E-15	91	26	5
2007.0	-1.01922E-10	-9.51144E-11	91	26	5	1.64049E-14	91	26	5
2012.0	-2.87522E-10	-2.70371E-10	91	26	5	4.66337E-14	91	26	5
2017.0	-7.77299E-10	-7.36366E-10	91	26	5	1.27012E-13	91	26	5
2022.0	-1.93991E-09	-1.84072E-09	91	26	5	3.17505E-13	91	26	5

PHENOL

PHENOL

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	44.30
2	11.00
3	28.30
4	11.70
5	58.00
7	9.40
8	22.50
9	101.00
10	1000.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.26261E+01	-2.68578E+01	39	54	1	1.33995E-03	39	54	1
1967.0	-8.64027E+02	-5.95461E+02	39	54	1	2.97079E-02	39	54	1
1972.0	-4.26984E+03	-2.41407E+03	39	54	1	1.20440E-01	39	54	1
1977.0	-1.16535E+04	-5.32822E+03	39	54	1	2.65829E-01	39	54	1
1982.0	-2.38982E+04	-8.78921E+03	39	54	1	4.38501E-01	39	54	1
1987.0	-4.13358E+04	-1.23223E+04	39	54	1	6.14170E-01	39	54	1
1990.0	-5.41300E+04	-1.43460E+04	39	54	1	7.15733E-01	39	54	1
1992.0	-5.73621E+04	-1.35022E+04	39	54	1	7.54267E-01	39	54	1
1997.0	-7.77500E+04	-1.51466E+04	39	54	1	8.47073E-01	39	54	1
2002.0	-9.89963E+04	-1.63983E+04	39	54	1	9.17650E-01	39	54	1
2007.0	-1.19517E+05	-1.74466E+04	38	55	1	9.72662E-01	39	54	1
2012.0	-1.38343E+05	-1.86203E+04	38	55	1	1.01776E+00	39	54	1
2017.0	-1.55038E+05	-1.95855E+04	38	55	1	1.05601E+00	39	54	1
2022.0	-1.69555E+05	-2.03947E+04	38	55	1	1.08904E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.29070E-04	-1.65914E-05	48	9	5	5.87077E-10	55	22	3
1967.0	-3.05297E+00	-1.69599E-01	48	9	5	1.68913E-06	48	9	5
1972.0	-3.29547E+02	-1.54510E+01	9	24	5	1.46910E-04	48	9	5
1977.0	-5.50013E+03	-2.72397E+02	9	24	5	1.94725E-03	47	9	5
1982.0	-3.49803E+04	-1.63825E+03	9	24	5	1.00278E-02	47	9	5
1987.0	-1.25825E+05	-5.41029E+03	9	24	5	3.14156E-02	47	9	5
1990.0	-2.41636E+05	-9.22904E+03	9	24	5	6.71447E-02	47	9	5
1992.0	-3.69760E+05	-1.24433E+04	9	24	5	1.22668E-01	47	9	5
1997.0	-1.09120E+06	-4.89946E+04	48	9	5	5.29910E-01	47	9	5
2002.0	-2.83874E+06	-1.36032E+05	48	9	5	1.51478E+00	47	9	5
2007.0	-5.00087E+06	-2.56910E+05	48	9	5	3.06461E+00	45	8	5
2012.0	-9.70943E+06	-4.13135E+05	36	7	5	4.73392E+00	45	8	5
2017.0	-1.38234E+07	-5.85479E+05	36	7	5	6.06100E+00	45	8	5
2022.0	-1.72358E+07	-7.08489E+05	36	7	5	6.88301E+00	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.19749E-01	-7.81164E-02	52	62	1	1.83971E-05	52	61	1
1967.0	-2.71713E+01	-5.26980E+00	52	62	1	8.95315E-04	52	61	1
1972.0	-2.26900E+02	-3.73306E+01	52	62	1	5.34510E-03	52	61	1
1977.0	-9.61908E+02	-1.25612E+02	40	59	1	1.45557E-02	52	61	1
1982.0	-2.71594E+03	-3.70570E+02	40	59	1	3.16387E-02	40	59	1
1987.0	-5.87784E+03	-7.64200E+02	40	59	1	6.52463E-02	40	59	1
1990.0	-8.50502E+03	-1.07499E+03	40	60	1	9.62728E-02	37	60	1
1992.0	-9.46948E+03	-1.21570E+03	40	60	1	1.20257E-01	37	60	1
1997.0	-1.43697E+04	-1.90969E+03	37	60	1	1.90836E-01	37	60	1
2002.0	-1.99270E+04	-2.66551E+03	37	60	1	2.66413E-01	37	60	1
2007.0	-2.55640E+03	-3.38300E+03	37	60	1	3.38127E-01	37	60	1
2012.0	-3.09101E+04	-4.01002E+03	37	60	1	4.00799E-01	37	60	1
2017.0	-3.57814E+04	-4.52999E+03	37	60	1	4.52770E-01	37	60	1
2022.0	-4.01243E+04	-4.95056E+03	37	60	1	4.94807E-01	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.11518E-03	-4.01085E-03	55	66	1	3.31827E-07	55	66	1
1967.0	-1.47870E+00	-5.57721E-01	55	66	1	4.61416E-05	55	66	1
1972.0	-3.58312E+01	-6.09732E+00	36	60	1	5.71321E-04	36	60	1
1977.0	-3.19559E+02	-6.04860E+01	36	60	1	5.66756E-03	36	60	1
1982.0	-1.45124E+03	-2.65559E+02	36	60	1	2.48830E-02	36	60	1
1987.0	-4.23048E+03	-7.24465E+02	36	60	1	6.78826E-02	36	60	1
1990.0	-6.93125E+03	-1.13768E+03	36	60	1	1.06601E-01	36	60	1
1992.0	-8.84306E+03	-1.41407E+03	36	60	1	1.34965E-01	36	60	1
1997.0	-1.52636E+04	-2.29522E+03	36	60	1	2.19111E-01	36	60	1
2002.0	-2.29493E+04	-3.25420E+03	36	60	1	3.10698E-01	36	60	1
2007.0	-3.11066E+04	-4.17904E+03	36	60	1	3.99000E-01	36	60	1
2012.0	-3.90346E+04	-4.99977E+03	36	60	1	4.77361E-01	36	60	1
2017.0	-4.62808E+04	-5.69045E+03	36	60	1	5.43304E-01	36	60	1
2022.0	-5.26548E+04	-6.25621E+03	36	60	1	5.97322E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.22990E+01	-2.68578E+01	39	54	1	1.33995E-03	39	54	1
1967.0	-8.37777E+02	-5.95461E+02	39	54	1	2.97079E-02	39	54	1
1972.0	-4.00711E+03	-2.41407E+03	39	54	1	1.20440E-01	39	54	1
1977.0	-1.03720E+04	-5.32822E+03	39	54	1	2.65829E-01	39	54	1
1982.0	-1.97310E+04	-8.78921E+03	39	54	1	4.38501E-01	39	54	1
1987.0	-3.12274E+04	-1.23223E+04	39	54	1	6.14770E-01	39	54	1
1990.0	-3.86936E+04	-1.43460E+04	39	54	1	7.15733E-01	39	54	1
1992.0	-3.90494E+04	-1.35022E+04	39	54	1	7.54267E-01	39	54	1
1997.0	-4.81164E+04	-1.51466E+04	39	54	1	8.47073E-01	39	54	1
2002.0	-5.61195E+04	-1.63983E+04	39	54	1	9.17650E-01	39	54	1
2007.0	-6.28454E+04	-1.74466E+04	38	55	1	9.72662E-01	39	54	1
2012.0	-6.83967E+04	-1.86203E+04	38	55	1	1.01776E+00	39	54	1
2017.0	-7.29734E+04	-1.95855E+04	38	55	1	1.05601E+00	39	54	1
2022.0	-7.67726E+04	-2.03947E+04	38	55	1	1.08904E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.74616E-07	-5.56165E-08	61	63	1	4.15655E-12	61	63	1
1967.0	2.48593E-05	-2.62339E-05	60	65	1	1.72561E-09	61	63	1
1972.0	-3.10994E-04	-6.15692E-04	60	65	1	3.47022E-08	61	63	1
1977.0	-6.08436E-03	-4.19487E-03	60	65	1	2.15886E-07	61	63	1
1982.0	-3.19032E-02	-1.54866E-02	60	65	1	7.63939E-07	60	65	1
1987.0	-9.96444E-02	-4.02645E-02	60	65	1	1.98621E-06	60	65	1
1990.0	-1.71417E-01	-6.37030E-02	60	65	1	3.14240E-06	60	65	1
1992.0	-1.63563E-01	-6.45755E-02	60	65	1	3.32237E-06	60	65	1
1997.0	-2.76931E-01	-8.84102E-02	60	65	1	7.46570E-06	59	66	1
2002.0	-5.48724E-01	-1.88755E-01	59	66	1	2.62644E-05	59	66	1
2007.0	-9.95612E-01	-4.57988E-01	59	66	1	6.37270E-05	59	66	1
2012.0	-1.65377E+00	-9.24285E-01	59	66	1	1.28610E-04	59	66	1
2017.0	-2.54166E+00	-1.64920E+00	59	66	1	2.29479E-04	59	66	1
2022.0	-3.65209E+00	-2.68603E+00	59	66	1	3.73750E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.86872E-05	-1.47432E-05	55	22	3	5.87077E-10	55	22	3
1967.0	-1.82871E-01	-4.34046E-02	55	19	3	1.35792E-06	57	15	5
1972.0	-1.01254E+01	-2.06466E+00	55	19	3	6.84511E-05	57	15	5
1977.0	-1.18832E+02	-1.91655E+01	55	19	3	6.19314E-04	57	15	5
1982.0	-6.25570E+02	-9.37283E+01	4	30	5	2.38742E-03	57	15	5
1987.0	-2.62675E+03	-3.34117E+02	4	30	5	8.39004E-03	24	7	5
1990.0	-7.07119E+03	-5.91200E+02	4	30	5	1.76051E-02	24	7	5
1992.0	-1.24520E+04	-9.72263E+02	61	24	3	2.67991E-02	24	7	5
1997.0	-4.36610E+04	-3.74755E+03	61	24	3	8.72256E-02	60	25	3
2002.0	-1.07238E+05	-9.77763E+03	55	19	3	2.09167E-01	55	22	3
2007.0	-2.02389E+05	-1.89514E+04	55	19	3	3.77006E-01	55	22	3
2012.0	-3.17644E+05	-2.95982E+04	55	19	3	6.65485E-01	24	7	5
2017.0	-4.37873E+05	-4.00135E+04	55	19	3	1.22992E+00	24	7	5
2022.0	-5.50101E+05	-4.90552E+04	55	19	3	1.90933E+00	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.48143E-04	-1.65914E-05	48	9	5	2.07075E-10	56	13	5
1967.0	-2.79906E+00	-1.69599E-01	48	9	5	1.68913E-06	48	9	5
1972.0	-3.15229E+02	-1.54510E+01	9	24	5	1.46910E-04	48	9	5
1977.0	-5.39223E+03	-2.72397E+02	9	24	5	1.94725E-03	47	9	5
1982.0	-3.41086E+04	-1.63825E+03	9	24	5	1.00278E-02	47	9	5
1987.0	-1.22206E+05	-5.41029E+03	9	24	5	3.14156E-02	47	9	5
1990.0	-2.31347E+05	-9.22904E+03	9	24	5	6.71447E-02	47	9	5
1992.0	-3.50878E+05	-1.24433E+04	9	24	5	1.22668E-01	47	9	5
1997.0	-1.01696E+06	-4.89946E+04	48	9	5	5.29910E-01	47	9	5
2002.0	-2.64326E+06	-1.36032E+05	48	9	5	1.51478E+00	47	9	5
2007.0	-5.49293E+06	-2.56910E+05	48	9	5	3.06461E+00	45	8	5
2012.0	-9.19763E+06	-4.13135E+05	36	7	5	4.73392E+00	45	8	5
2017.0	-1.30013E+07	-5.85479E+05	36	7	5	6.06100E+00	45	8	5
2022.0	-1.62209E+07	-7.08489E+05	36	7	5	6.88301E+00	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.32775E-07	-2.70870E-08	64	19	5	1.60463E-11	64	20	5
1967.0	-6.53423E-04	-1.02279E-04	64	19	5	5.05488E-08	64	20	5

1972.0	-3.84185E-02	-4.94064E-03	64	17	5	2.17032E-06	64	20	5
1977.0	-4.07731E-01	-4.92605E-02	64	15	5	1.77178E-05	64	20	5
1982.0	-1.91846E+00	-2.08294E-01	64	15	5	6.37988E-05	64	20	5
1987.0	-3.21506E+01	-7.87305E+00	70	29	3	3.40666E-04	70	30	3
1990.0	-2.24031E+02	-5.69566E+01	70	29	3	2.34873E-03	70	30	3
1992.0	-5.75827E+02	-1.41627E+02	70	29	3	5.76112E-03	70	30	3
1997.0	-3.07984E+03	-7.03927E+02	70	29	3	2.73488E-02	70	30	3
2002.0	-8.74182E+03	-1.88459E+03	70	29	3	7.12059E-02	70	30	3
2007.0	-1.74660E+04	-3.61014E+03	70	29	3	1.34057E-01	70	30	3
2012.0	-2.83032E+04	-5.68517E+03	70	29	3	2.08840E-01	70	30	3
2017.0	-4.01390E+04	-7.91960E+03	70	29	3	2.88991E-01	70	30	3
2022.0	-5.20326E+04	-1.01641E+04	70	29	3	3.69402E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.29067E-05	-6.26453E-06	43	22	3	5.51726E-10	43	23	3
1967.0	-7.03869E-02	-1.22531E-02	43	22	3	9.34019E-07	43	23	3
1972.0	-4.15388E+00	-5.12842E-01	43	22	3	5.25751E-05	40	7	5
1977.0	-4.86599E+01	-5.44575E+00	42	18	3	1.02055E-03	40	7	5
1982.0	-2.44242E+02	-2.66578E+01	42	18	3	6.80191E-03	40	7	5
1987.0	-9.60591E+02	-1.22141E+02	43	22	3	2.44323E-02	40	7	5
1990.0	-2.99410E+03	-5.76473E+02	43	22	3	5.24770E-02	43	23	3
1992.0	-5.85414E+03	-1.11211E+03	43	22	3	1.15991E-01	43	23	3
1997.0	-2.74955E+04	-4.93267E+03	43	22	3	4.83681E-01	43	23	3
2002.0	-7.94964E+04	-1.25998E+04	43	22	3	1.18201E+00	43	23	3
2007.0	-1.61087E+05	-2.28882E+04	43	22	3	2.33216E+00	40	7	5
2012.0	-2.55848E+05	-3.33265E+04	43	22	3	3.95783E+00	40	7	5
2017.0	-3.44077E+05	-4.19491E+04	43	20	3	5.39872E+00	40	7	5
2022.0	-4.12745E+05	-4.89023E+04	43	20	3	6.37166E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.31849E-24	-2.40182E-25	90	35	3	2.84840E-30	90	36	3
1967.0	-9.74236E-19	-2.04430E-19	90	35	3	2.24981E-24	90	36	3
1972.0	-2.06101E-15	-4.50562E-16	90	35	3	4.80972E-21	90	36	3
1977.0	-3.13016E-13	-6.90377E-14	90	35	3	7.26382E-19	90	36	3
1982.0	-1.07888E-11	-2.36669E-12	90	35	3	2.47310E-17	90	36	3
1987.0	-1.46569E-10	-3.17624E-11	90	35	3	3.30872E-16	90	36	3
1990.0	-5.12365E-10	-1.10040E-10	90	35	3	1.14522E-15	90	36	3
1992.0	-1.06469E-09	-2.27303E-10	90	35	3	2.36539E-15	90	36	3
1997.0	-5.06464E-09	-1.06701E-09	90	35	3	1.10871E-14	90	36	3
2002.0	-1.94843E-08	-4.11503E-09	90	35	3	4.25553E-14	90	36	3
2007.0	-7.69420E-08	-1.66713E-08	90	35	3	1.71790E-13	90	35	3
2012.0	-3.17732E-07	-6.99395E-08	90	35	3	7.20692E-13	90	35	3
2017.0	-1.17102E-06	-2.56104E-07	90	35	3	2.63903E-12	90	35	3
2022.0	-3.57414E-06	-7.67530E-07	90	35	3	7.90902E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.28295E-10	-3.50719E-10	1	42	5	3.14023E-15	1	42	5
1967.0	-6.53575E-05	-2.32237E-05	1	42	5	2.07938E-10	1	42	5
1972.0	-2.06258E-02	-6.91129E-03	1	42	5	6.18816E-08	1	42	5
1977.0	-6.52301E-01	-2.07396E-01	1	42	5	1.85696E-06	1	42	5
1982.0	-6.16344E+00	-1.87220E+00	1	42	5	1.67631E-05	1	42	5
1987.0	-2.89318E+01	-8.44823E+00	1	42	5	7.56429E-05	1	42	5
1990.0	-5.88063E+01	-1.68130E+01	1	42	5	1.50538E-04	1	42	5
1992.0	-8.80403E+01	-2.48478E+01	1	42	5	2.22621E-04	1	42	5
1997.0	-2.02231E+02	-5.54007E+01	1	42	5	4.96402E-04	1	42	5

2002.0	-3.84100E+02	-1.02554E+02	1	42	5	9.18973E-04	1	42	5
2007.0	-6.38538E+02	-1.66925E+02	1	42	5	1.49580E-03	1	42	5
2012.0	-9.62656E+02	-2.47528E+02	1	42	5	2.21807E-03	1	42	5
2017.0	-1.34405E+03	-3.41126E+02	1	42	5	3.05679E-03	1	42	5
2022.0	-1.75912E+03	-4.41556E+02	1	42	5	3.95674E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.83549E-04	-7.05067E-05	36	60	5	6.09305E-09	36	60	5
1967.0	-1.84057E-01	-5.79496E-02	36	60	5	5.00790E-06	36	60	5
1972.0	-6.12931E+00	-1.80368E+00	38	61	5	1.53377E-04	36	60	5
1977.0	-5.24240E+01	-1.59609E+01	38	61	5	1.24092E-03	36	60	5
1982.0	-2.21180E+02	-6.87321E+01	38	61	5	5.00292E-03	36	60	5
1987.0	-6.10898E+02	-1.91917E+02	38	61	5	1.33031E-02	36	60	5
1990.0	-9.77892E+02	-3.08253E+02	38	61	5	2.08842E-02	36	60	5
1992.0	-1.22156E+03	-3.89220E+02	38	61	5	2.71374E-02	36	60	5
1997.0	-2.08771E+03	-6.64869E+02	38	61	5	4.52350E-02	36	60	5
2002.0	-3.07935E+03	-9.78356E+02	38	61	5	6.54920E-02	36	60	5
2007.0	-4.10471E+03	-1.29888E+03	38	61	5	8.58033E-02	36	60	5
2012.0	-5.07917E+03	-1.59870E+03	38	61	5	1.04591E-01	36	60	5
2017.0	-5.95343E+03	-1.86212E+03	38	61	5	1.21002E-01	36	60	5
2022.0	-6.71114E+03	-2.08478E+03	38	61	5	1.34846E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.88704E-29	-8.88703E-29	91	26	5	1.51693E-32	91	26	5
1967.0	-2.41382E-22	-2.41362E-22	91	26	5	4.11983E-26	91	26	5
1972.0	-1.09784E-18	-1.09702E-18	91	26	5	1.87253E-22	91	26	5
1977.0	-2.77423E-16	-2.76544E-16	91	26	5	4.72039E-20	91	26	5
1982.0	-1.36066E-14	-1.34858E-14	91	26	5	2.30192E-18	91	26	5
1987.0	-2.37393E-13	-2.32869E-13	91	26	5	3.97491E-17	91	26	5
1990.0	-9.30670E-13	-9.05265E-13	91	26	5	1.54523E-16	91	26	5
1992.0	-2.04995E-12	-1.98082E-12	91	26	5	3.40361E-16	91	26	5
1997.0	-1.09935E-11	-1.04450E-11	91	26	5	1.79821E-15	91	26	5
2002.0	-4.40883E-11	-4.14374E-11	91	26	5	7.14612E-15	91	26	5
2007.0	-1.70014E-10	-1.60594E-10	91	26	5	2.76985E-14	91	26	5
2012.0	-7.05018E-10	-6.70842E-10	91	26	5	1.15707E-13	91	26	5
2017.0	-2.72158E-09	-2.57700E-09	91	26	5	4.44493E-13	91	26	5
2022.0	-8.70412E-09	-8.15921E-09	91	26	5	1.40738E-12	91	26	5

TRICHLOROETHYLENE

TCE

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 300.00
 2 54.00
 3 34.00
 4 1000.00
 5 122.00
 6 47.00
 7 10.00
 8 59.70
 9 230.00
 10 120.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.30164E+02	-1.69733E+02	39	54	1	8.46811E-03	39	54	1
1967.0	-6.84187E+03	-3.50223E+03	39	54	1	1.74729E-01	39	54	1
1972.0	-3.66107E+04	-1.31158E+04	39	54	1	6.54355E-01	39	54	1
1977.0	-1.01692E+05	-2.67367E+04	39	54	1	1.33392E+00	39	54	1
1982.0	-2.03192E+05	-4.09524E+04	39	54	1	2.28313E+00	52	61	1
1987.0	-3.36038E+05	-5.38074E+04	39	54	1	3.47143E+00	52	61	1
1990.0	-4.27687E+05	-6.05837E+04	39	54	1	4.19894E+00	52	61	1
1992.0	-4.22944E+05	-5.63290E+04	39	54	1	4.25911E+00	52	61	1
1997.0	-5.45660E+05	-6.34258E+04	38	55	1	5.11975E+00	52	61	1
2002.0	-6.79257E+05	-6.96195E+04	38	55	1	6.04034E+00	52	61	1
2007.0	-8.09113E+05	-7.44776E+04	38	55	1	6.81644E+00	52	61	1
2012.0	-9.30415E+05	-7.86118E+04	38	55	1	7.46685E+00	52	61	1
2017.0	-1.04207E+06	-8.23423E+04	38	55	1	8.01960E+00	52	61	1
2022.0	-1.14407E+06	-8.57727E+04	38	55	1	8.48869E+00	52	61	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.18775E-02	-1.01750E-03	57	13	5	2.85169E-08	55	22	3
1967.0	-7.89611E+01	-6.21067E+00	57	13	5	8.68958E-05	57	15	5
1972.0	-6.43258E+03	-4.27504E+02	54	11	5	4.33079E-03	57	15	5
1977.0	-9.06895E+04	-5.17972E+03	54	11	5	5.42283E-02	53	11	5
1982.0	-5.14912E+05	-2.46268E+04	48	9	5	2.62060E-01	53	11	5
1987.0	-1.72489E+06	-8.03214E+04	48	9	5	7.99966E-01	48	9	5
1990.0	-3.02759E+06	-1.35717E+05	48	9	5	1.35169E+00	48	9	5
1992.0	-4.17274E+06	-1.81740E+05	48	9	5	1.81636E+00	48	9	5
1997.0	-8.26565E+06	-3.34370E+05	48	9	5	3.34302E+00	48	9	5
2002.0	-1.41886E+07	-5.34705E+05	48	9	5	5.34745E+00	48	9	5
2007.0	-2.16615E+07	-7.57359E+05	48	9	5	7.65970E+00	47	9	5
2012.0	-2.99912E+07	-9.67935E+05	48	9	5	9.89435E+00	47	9	5
2017.0	-3.84239E+07	-1.14733E+06	48	9	5	1.18231E+01	47	9	5
2022.0	-4.63866E+07	-1.29303E+06	48	9	5	1.33999E+01	47	9	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.48038E+01	-6.64162E+00	52	62	1	1.56162E-03	52	61	1
1967.0	-1.76767E+03	-4.46351E+02	52	62	1	7.56305E-02	52	61	1
1972.0	-1.31960E+04	-3.15479E+03	52	62	1	4.50222E-01	52	61	1
1977.0	-4.21144E+04	-9.46928E+03	52	62	1	1.22409E+00	52	61	1
1982.0	-8.93530E+04	-1.87630E+04	52	62	1	2.28313E+00	52	61	1
1987.0	-1.51789E+05	-2.96624E+04	52	62	1	3.47143E+00	52	61	1
1990.0	-1.94964E+05	-3.64947E+04	52	62	1	4.19894E+00	52	61	1
1992.0	-1.79226E+05	-3.22288E+04	52	62	1	4.25911E+00	52	61	1
1997.0	-2.31148E+05	-3.82011E+04	52	62	1	5.11975E+00	52	61	1
2002.0	-2.93624E+05	-4.55777E+04	52	62	1	6.04034E+00	52	61	1
2007.0	-3.55916E+05	-5.20976E+04	52	62	1	6.81644E+00	52	61	1
2012.0	-4.15076E+05	-5.76268E+04	52	62	1	7.46685E+00	52	61	1
2017.0	-4.70417E+05	-6.23447E+04	52	62	1	8.01960E+00	52	61	1
2022.0	-5.21639E+05	-6.63624E+04	52	62	1	8.48869E+00	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.84187E-01	-3.42808E-01	55	66	1	2.83613E-05	55	66	1
1967.0	-8.46756E+01	-4.76685E+01	55	66	1	3.94373E-03	55	66	1
1972.0	-9.76756E+02	-4.73377E+02	55	66	1	3.91637E-02	55	66	1
1977.0	-4.64092E+03	-1.69225E+03	55	66	1	1.40004E-01	55	66	1
1982.0	-1.43636E+04	-3.68047E+03	55	66	1	3.04494E-01	55	66	1
1987.0	-3.36198E+04	-6.12386E+03	55	66	1	5.06642E-01	55	66	1
1990.0	-5.05532E+04	-7.67989E+03	55	66	1	6.35376E-01	55	66	1
1992.0	-6.16556E+04	-8.40775E+03	55	66	1	7.05260E-01	55	66	1
1997.0	-9.68216E+04	-1.12300E+04	36	60	1	1.07206E+00	36	60	1
2002.0	-1.37830E+05	-1.52420E+04	36	60	1	1.45524E+00	36	60	1
2007.0	-1.80586E+05	-1.88555E+04	36	60	1	1.80026E+00	36	60	1
2012.0	-2.22067E+05	-2.19368E+04	35	60	1	2.08961E+00	36	60	1
2017.0	-2.60717E+05	-2.47088E+04	35	60	1	2.32510E+00	36	60	1
2022.0	-2.96016E+05	-2.69551E+04	35	60	1	2.51822E+00	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.04776E+02	-1.69733E+02	39	54	1	8.46811E-03	39	54	1
1967.0	-4.98953E+03	-3.50223E+03	39	54	1	1.74729E-01	39	54	1
1972.0	-2.24379E+04	-1.31158E+04	39	54	1	6.54355E-01	39	54	1
1977.0	-5.49364E+04	-2.67367E+04	39	54	1	1.33392E+00	39	54	1
1982.0	-9.94727E+04	-4.09524E+04	39	54	1	2.04315E+00	39	54	1
1987.0	-1.50621E+05	-5.38074E+04	39	54	1	2.68450E+00	39	54	1
1990.0	-1.82155E+05	-6.05837E+04	39	54	1	3.02258E+00	39	54	1
1992.0	-1.82048E+05	-5.63290E+04	39	54	1	3.14668E+00	39	54	1
1997.0	-2.17667E+05	-6.34258E+04	38	55	1	3.40843E+00	39	54	1
2002.0	-2.47757E+05	-6.96195E+04	38	55	1	3.60389E+00	39	54	1
2007.0	-2.72529E+05	-7.44776E+04	38	55	1	3.77687E+00	39	54	1
2012.0	-2.93139E+05	-7.86118E+04	38	55	1	3.94467E+00	39	54	1
2017.0	-3.10733E+05	-8.23423E+04	38	55	1	4.10791E+00	39	54	1
2022.0	-3.26141E+05	-8.57727E+04	38	55	1	4.26363E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.49245E-05	-4.75353E-06	61	63	1	3.55259E-10	61	63	1
1967.0	2.12537E-03	-2.24217E-03	60	65	1	1.47482E-07	61	63	1
1972.0	-2.65265E-02	-5.26185E-02	60	65	1	2.96544E-06	61	63	1
1977.0	-5.19204E-01	-3.58453E-01	60	65	1	1.84430E-05	61	63	1
1982.0	-2.72157E+00	-1.32308E+00	60	65	1	6.52659E-05	60	65	1
1987.0	-8.49636E+00	-3.43905E+00	60	65	1	1.69645E-04	60	65	1
1990.0	-1.46055E+01	-5.43913E+00	60	65	1	2.68307E-04	60	65	1
1992.0	-1.39151E+01	-5.51066E+00	60	65	1	2.83521E-04	60	65	1
1997.0	-2.33767E+01	-7.51300E+00	60	65	1	6.36202E-04	59	66	1
2002.0	-4.58309E+01	-1.60722E+01	59	66	1	2.23637E-03	59	66	1
2007.0	-8.19869E+01	-3.89610E+01	59	66	1	5.42125E-03	59	66	1
2012.0	-1.33357E+02	-7.85145E+01	59	66	1	1.09250E-02	59	66	1
2017.0	-1.99302E+02	-1.39766E+02	59	66	1	1.94479E-02	59	66	1
2022.0	-2.77347E+02	-2.26961E+02	59	66	1	3.15807E-02	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.95845E-03	-7.16141E-04	55	22	3	2.85169E-08	55	22	3
1967.0	-8.98791E+00	-2.01397E+00	55	19	3	8.68958E-05	57	15	5
1972.0	-4.45752E+02	-9.93367E+01	55	19	3	4.33079E-03	57	15	5
1977.0	-4.45094E+03	-9.47914E+02	55	19	3	3.90287E-02	57	15	5
1982.0	-1.98237E+04	-3.94808E+03	55	19	3	1.50312E-01	57	15	5
1987.0	-5.64469E+04	-1.02906E+04	55	19	3	3.60564E-01	57	15	5
1990.0	-9.47448E+04	-1.60260E+04	55	19	3	5.31810E-01	57	15	5
1992.0	-1.25537E+05	-2.06086E+04	55	19	3	6.62544E-01	57	15	5
1997.0	-2.53307E+05	-3.66483E+04	55	19	3	1.05704E+00	57	15	5
2002.0	-4.51650E+05	-5.90377E+04	55	19	3	1.54049E+00	57	15	5
2007.0	-7.09042E+05	-8.56327E+04	55	19	3	2.06183E+00	57	15	5
2012.0	-9.96702E+05	-1.12776E+05	55	19	3	2.84861E+00	24	7	5
2017.0	-1.28539E+06	-1.37505E+05	55	19	3	4.12422E+00	24	7	5
2022.0	-1.55476E+06	-1.58275E+05	55	19	3	5.49408E+00	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.82846E-03	-1.01750E-03	57	13	5	1.13831E-08	56	13	5
1967.0	-6.95867E+01	-6.21067E+00	57	13	5	7.00102E-05	56	13	5
1972.0	-5.95488E+03	-4.27504E+02	54	11	5	4.32747E-03	56	13	5
1977.0	-8.57417E+04	-5.17972E+03	54	11	5	5.42283E-02	53	11	5
1982.0	-4.91975E+05	-2.46268E+04	48	9	5	2.62060E-01	53	11	5
1987.0	-1.65717E+06	-8.03214E+04	48	9	5	7.99966E-01	48	9	5
1990.0	-2.91216E+06	-1.35717E+05	48	9	5	1.35169E+00	48	9	5
1992.0	-4.01887E+06	-1.81740E+05	48	9	5	1.81636E+00	48	9	5
1997.0	-7.95133E+06	-3.34370E+05	48	9	5	3.34302E+00	48	9	5
2002.0	-1.36238E+07	-5.34705E+05	48	9	5	5.34745E+00	48	9	5
2007.0	-2.07691E+07	-7.57359E+05	48	9	5	7.65970E+00	47	9	5
2012.0	-2.87306E+07	-9.67935E+05	48	9	5	9.89435E+00	47	9	5
2017.0	-3.67924E+07	-1.14733E+06	48	9	5	1.18231E+01	47	9	5
2022.0	-4.44083E+07	-1.29303E+06	48	9	5	1.33999E+01	47	9	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.11479E-05	-2.27107E-06	64	19	5	1.34569E-09	64	20	5
1967.0	-5.38494E-02	-8.41196E-03	64	19	5	4.15820E-06	64	20	5

1972.0	-3.10855E+00	-3.98991E-01	64	17	5	1.75401E-04	64	20	5
1977.0	-3.24254E+01	-3.91811E+00	64	15	5	1.41177E-03	64	20	5
1982.0	-1.46985E+02	-1.63864E+01	64	15	5	5.02519E-03	64	20	5
1987.0	-4.53983E+02	-4.92677E+01	67	24	3	1.14317E-02	64	20	5
1990.0	-9.59657E+02	-1.22657E+02	70	29	3	1.66142E-02	64	20	5
1992.0	-1.62277E+03	-2.57012E+02	70	29	3	2.07669E-02	64	20	5
1997.0	-5.88925E+03	-1.16845E+03	70	29	3	4.57565E-02	70	30	3
2002.0	-1.57826E+04	-3.23305E+03	70	29	3	1.23760E-01	70	30	3
2007.0	-3.19866E+04	-6.48021E+03	70	29	3	2.43682E-01	70	30	3
2012.0	-5.30894E+04	-1.05679E+04	70	29	3	3.92355E-01	70	30	3
2017.0	-7.67500E+04	-1.50605E+04	70	29	3	5.54365E-01	70	30	3
2022.0	-1.00867E+05	-1.96159E+04	70	29	3	7.18085E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.93994E-05	-2.07173E-05	43	22	3	1.83845E-09	43	23	3
1967.0	-3.32633E-01	-5.89547E-02	43	22	3	4.43808E-06	43	23	3
1972.0	-2.88352E+01	-3.87421E+00	43	22	3	2.89285E-04	40	7	5
1977.0	-4.64393E+02	-5.26502E+01	42	18	3	7.82674E-03	40	7	5
1982.0	-2.96668E+03	-3.34894E+02	42	18	3	7.03140E-02	40	7	5
1987.0	-1.08195E+04	-1.19434E+03	42	18	3	3.16262E-01	40	7	5
1990.0	-1.97226E+04	-2.14564E+03	41	16	3	6.21411E-01	40	7	5
1992.0	-2.67121E+04	-3.01185E+03	41	16	3	9.07035E-01	40	7	5
1997.0	-5.51257E+04	-6.21263E+03	41	16	3	1.94565E+00	40	7	5
2002.0	-9.74042E+04	-1.09217E+04	41	16	3	3.46295E+00	40	7	5
2007.0	-1.51325E+05	-1.69621E+04	41	16	3	5.37580E+00	40	7	5
2012.0	-2.10832E+05	-2.37265E+04	41	16	3	7.45409E+00	40	7	5
2017.0	-2.69401E+05	-3.05048E+04	41	16	3	9.43383E+00	40	7	5
2022.0	-3.22675E+05	-3.67914E+04	41	16	3	1.11577E+01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.12636E-22	-2.05159E-23	90	35	3	2.43317E-28	90	36	3
1967.0	-8.31391E-17	-1.74410E-17	90	35	3	1.91963E-22	90	36	3
1972.0	-1.75573E-13	-3.83660E-14	90	35	3	4.09622E-19	90	36	3
1977.0	-2.66018E-11	-5.86365E-12	90	35	3	6.17081E-17	90	36	3
1982.0	-9.14302E-10	-2.00411E-10	90	35	3	2.09478E-15	90	36	3
1987.0	-1.23828E-08	-2.68094E-09	90	35	3	2.79363E-14	90	36	3
1990.0	-4.31998E-08	-9.26844E-09	90	35	3	9.64907E-14	90	36	3
1992.0	-8.96036E-08	-1.91072E-08	90	35	3	1.98906E-13	90	36	3
1997.0	-4.18196E-07	-8.77386E-08	90	35	3	9.12598E-13	90	36	3
2002.0	-1.42536E-06	-2.94064E-07	90	35	3	3.05692E-12	90	36	3
2007.0	-3.86961E-06	-7.86028E-07	90	35	3	8.16412E-12	90	36	3
2012.0	-8.94505E-06	-1.79402E-06	90	35	3	1.86071E-11	90	36	3
2017.0	-1.84952E-05	-3.67311E-06	90	35	3	3.80264E-11	90	36	3
2022.0	-3.52823E-05	-6.94815E-06	90	35	3	7.18015E-11	90	36	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.24498E-09	-2.35915E-09	1	42	5	2.11231E-14	1	42	5
1967.0	-4.36331E-04	-1.55010E-04	1	42	5	1.38792E-09	1	42	5
1972.0	-1.36124E-01	-4.55954E-02	1	42	5	4.08247E-07	1	42	5
1977.0	-4.23476E+00	-1.34558E+00	1	42	5	1.20479E-05	1	42	5
1982.0	-3.92633E+01	-1.19162E+01	1	42	5	1.06694E-04	1	42	5
1987.0	-1.81618E+02	-5.29857E+01	1	42	5	4.74418E-04	1	42	5
1990.0	-3.67858E+02	-1.05096E+02	1	42	5	9.40997E-04	1	42	5
1992.0	-5.51042E+02	-1.55441E+02	1	42	5	1.39266E-03	1	42	5
1997.0	-1.28056E+03	-3.50871E+02	1	42	5	3.14388E-03	1	42	5

2002.0	-2.48539E+03	-6.64016E+02	1	42	5	5.95014E-03	1	42	5
2007.0	-4.22441E+03	-1.10407E+03	1	42	5	9.89345E-03	1	42	5
2012.0	-6.46606E+03	-1.65797E+03	1	42	5	1.48569E-02	1	42	5
2017.0	-9.09601E+03	-2.29444E+03	1	42	5	2.05602E-02	1	42	5
2022.0	-1.19545E+04	-2.97400E+03	1	42	5	2.66497E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.95321E-03	-6.52637E-04	40	62	5	4.22595E-08	36	60	5
1967.0	-3.64088E+00	-8.22094E-01	40	62	5	4.30293E-05	36	60	5
1972.0	-1.20003E+02	-2.61412E+01	38	61	5	1.42906E-03	36	60	5
1977.0	-9.49666E+02	-2.14672E+02	38	61	5	1.15885E-02	36	60	5
1982.0	-3.66539E+03	-8.45257E+02	38	61	5	4.53890E-02	36	60	5
1987.0	-9.35589E+03	-2.17569E+03	38	61	5	1.16212E-01	36	60	5
1990.0	-1.43978E+04	-3.35191E+03	38	61	5	1.78352E-01	36	60	5
1992.0	-1.77754E+04	-4.12371E+03	38	61	5	2.28128E-01	36	60	5
1997.0	-2.92911E+04	-6.74554E+03	38	61	5	3.69795E-01	36	60	5
2002.0	-4.23271E+04	-9.67306E+03	38	61	5	5.25947E-01	36	60	5
2007.0	-5.58319E+04	-1.26509E+04	38	61	5	6.81382E-01	36	60	5
2012.0	-6.91052E+04	-1.55014E+04	38	61	5	8.26834E-01	36	60	5
2017.0	-8.17804E+04	-1.81438E+04	38	61	5	9.58446E-01	36	60	5
2022.0	-9.36931E+04	-2.05558E+04	38	61	5	1.07583E+00	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.59095E-27	-7.59094E-27	91	26	5	1.29570E-30	91	26	5
1967.0	-2.05955E-20	-2.05939E-20	91	26	5	3.51519E-24	91	26	5
1972.0	-9.35137E-17	-9.34439E-17	91	26	5	1.59501E-20	91	26	5
1977.0	-2.35775E-14	-2.35027E-14	91	26	5	4.01172E-18	91	26	5
1982.0	-1.15329E-12	-1.14303E-12	91	26	5	1.95106E-16	91	26	5
1987.0	-2.00619E-11	-1.96788E-11	91	26	5	3.35903E-15	91	26	5
1990.0	-7.85032E-11	-7.63555E-11	91	26	5	1.30334E-14	91	26	5
1992.0	-1.72666E-10	-1.66829E-10	91	26	5	2.86659E-14	91	26	5
1997.0	-9.15796E-10	-8.69666E-10	91	26	5	1.49721E-13	91	26	5
2002.0	-3.39461E-09	-3.17548E-09	91	26	5	5.47630E-13	91	26	5
2007.0	-9.65017E-09	-8.96349E-09	91	26	5	1.54598E-12	91	26	5
2012.0	-2.25495E-08	-2.10621E-08	91	26	5	3.63280E-12	91	26	5
2017.0	-4.58517E-08	-4.36677E-08	91	26	5	7.53202E-12	91	26	5
2022.0	-8.45851E-08	-8.29883E-08	91	26	5	1.43146E-11	91	26	5

TETRACHLOROETHYLENE

TETRACHLOROETHYLENE

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	29.20
2	43.00
3	7.00
4	20.00
5	10.00
6	4.00
7	5.50
8	6.50
9	30.00
10	11.00

BEGINNING OF MULTI-FEATURE SUMMARIES
-----FOURMILE CREEK TOTAL
(CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.31174E+01	-3.62750E+01	39	54	1	1.80979E-03	39	54	1
1967.0	-1.43851E+03	-1.04415E+03	39	54	1	5.20933E-02	39	54	1
1972.0	-7.76192E+03	-4.72744E+03	39	54	1	2.35856E-01	39	54	1
1977.0	-2.16379E+04	-1.07249E+04	39	54	1	5.35075E-01	39	54	1
1982.0	-4.40081E+04	-1.74018E+04	39	54	1	8.68191E-01	39	54	1
1987.0	-7.45474E+04	-2.35028E+04	39	54	1	1.17258E+00	39	54	1
1990.0	-9.61415E+04	-2.66470E+04	39	54	1	1.32945E+00	39	54	1
1992.0	-1.00931E+05	-2.47060E+04	39	54	1	1.38014E+00	39	54	1
1997.0	-1.33466E+05	-2.66466E+04	39	54	1	1.49021E+00	39	54	1
2002.0	-1.65881E+05	-2.78341E+04	39	54	1	1.55760E+00	39	54	1
2007.0	-1.95979E+05	-2.91162E+04	38	55	1	1.60454E+00	39	54	1
2012.0	-2.22721E+05	-3.04586E+04	38	55	1	1.64571E+00	39	54	1
2017.0	-2.45852E+05	-3.15329E+04	38	55	1	1.68470E+00	39	54	1
2022.0	-2.65593E+05	-3.24424E+04	38	55	1	1.72053E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
(CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.35595E-04	-2.12667E-05	57	13	5	7.04210E-10	43	23	3
1967.0	-2.88051E+00	-1.30456E-01	57	13	5	1.81656E-06	57	15	5
1972.0	-3.20912E+02	-1.56414E+01	9	24	5	1.01914E-04	53	11	5
1977.0	-5.79588E+03	-3.13152E+02	9	24	5	1.79976E-03	9	24	5
1982.0	-3.90624E+04	-2.09414E+03	9	24	5	1.20355E-02	9	24	5
1987.0	-1.46116E+05	-7.46579E+03	9	24	5	4.29077E-02	9	24	5
1990.0	-2.68465E+05	-1.31435E+04	9	24	5	7.55387E-02	9	24	5
1992.0	-3.79450E+05	-1.79933E+04	9	24	5	1.03566E-01	9	24	5
1997.0	-7.81913E+05	-3.36317E+04	9	24	5	1.93621E-01	9	24	5
2002.0	-1.36143E+06	-5.28938E+04	9	24	5	3.05222E-01	9	23	5
2007.0	-2.06933E+06	-7.35417E+04	9	24	5	4.32379E-01	9	23	5
2012.0	-2.81771E+06	-9.33009E+04	9	24	5	5.56573E-01	9	23	5
2017.0	-3.52689E+06	-1.10856E+05	9	24	5	6.70705E-01	10	21	5
2022.0	-4.15201E+06	-1.25925E+05	9	24	5	7.76098E-01	10	21	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.15933E-01	-1.32925E-01	52	62	1	3.12609E-05	52	61	1
1967.0	-4.16166E+01	-8.93778E+00	52	62	1	1.51497E-03	52	61	1
1972.0	-4.00328E+02	-6.31909E+01	52	62	1	9.02200E-03	52	61	1
1977.0	-1.73145E+03	-2.71198E+02	40	59	1	2.45347E-02	52	61	1
1982.0	-4.81935E+03	-7.31528E+02	40	59	1	6.24568E-02	40	59	1
1987.0	-1.00897E+04	-1.39873E+03	40	60	1	1.18434E-01	37	60	1
1990.0	-1.42676E+04	-1.89725E+03	40	60	1	1.82131E-01	37	60	1
1992.0	-1.57142E+04	-2.26386E+03	37	60	1	2.26155E-01	37	60	1
1997.0	-2.30475E+04	-3.51116E+03	37	60	1	3.50870E-01	37	60	1
2002.0	-3.10802E+04	-4.76048E+03	37	60	1	4.75801E-01	37	60	1
2007.0	-3.90548E+04	-5.85735E+03	37	60	1	5.85437E-01	37	60	1
2012.0	-4.65476E+04	-6.73577E+03	37	60	1	6.73235E-01	37	60	1
2017.0	-5.33762E+04	-7.40078E+03	37	60	1	7.39704E-01	37	60	1
2022.0	-5.94945E+04	-7.89721E+03	37	60	1	7.89323E-01	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.20621E-02	-6.85615E-03	55	66	1	5.67226E-07	55	66	1
1967.0	-2.46846E+00	-9.53370E-01	55	66	1	7.88746E-05	55	66	1
1972.0	-6.14950E+01	-1.12306E+01	38	61	1	9.64824E-04	38	61	1
1977.0	-5.66158E+02	-1.12002E+02	38	61	1	9.62215E-03	38	61	1
1982.0	-2.60001E+03	-4.86676E+02	38	61	1	4.28310E-02	36	60	1
1987.0	-7.53926E+03	-1.29611E+03	36	60	1	1.21446E-01	36	60	1
1990.0	-1.22498E+04	-2.05746E+03	36	60	1	1.92785E-01	36	60	1
1992.0	-1.55179E+04	-2.56496E+03	36	60	1	2.44810E-01	36	60	1
1997.0	-2.62672E+04	-4.14915E+03	36	60	1	3.96096E-01	36	60	1
2002.0	-3.86727E+04	-5.80059E+03	36	60	1	5.53816E-01	36	60	1
2007.0	-5.13602E+04	-7.30288E+03	36	60	1	6.97252E-01	36	60	1
2012.0	-6.32554E+04	-8.54432E+03	36	60	1	8.15781E-01	36	60	1
2017.0	-7.37667E+04	-9.50793E+03	36	60	1	9.07785E-01	36	60	1
2022.0	-8.27442E+04	-1.02371E+04	36	60	1	9.77404E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.25894E+01	-3.62750E+01	39	54	1	1.80979E-03	39	54	1
1967.0	-1.39442E+03	-1.04415E+03	39	54	1	5.20933E-02	39	54	1
1972.0	-7.30010E+03	-4.72744E+03	39	54	1	2.35856E-01	39	54	1
1977.0	-1.93403E+04	-1.07249E+04	39	54	1	5.35075E-01	39	54	1
1982.0	-3.65887E+04	-1.74018E+04	39	54	1	8.68191E-01	39	54	1
1987.0	-5.69183E+04	-2.35028E+04	39	54	1	1.17258E+00	39	54	1
1990.0	-6.96238E+04	-2.66470E+04	39	54	1	1.32945E+00	39	54	1
1992.0	-6.96982E+04	-2.47060E+04	39	54	1	1.38014E+00	39	54	1
1997.0	-8.41512E+04	-2.66466E+04	39	54	1	1.49021E+00	39	54	1
2002.0	-9.61270E+04	-2.78341E+04	39	54	1	1.55760E+00	39	54	1
2007.0	-1.05562E+05	-2.91162E+04	38	55	1	1.60454E+00	39	54	1
2012.0	-1.12915E+05	-3.04586E+04	38	55	1	1.64571E+00	39	54	1
2017.0	-1.18705E+05	-3.15329E+04	38	55	1	1.68470E+00	39	54	1
2022.0	-1.23349E+05	-3.24424E+04	38	55	1	1.72053E+00	39	54	1

W-FLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	2.98491E-07	-9.50707E-08	61	63	1	7.10519E-12	61	63	1
1967.0	4.25057E-05	-4.48435E-05	60	65	1	2.94965E-09	61	63	1
1972.0	-5.50675E-04	-1.05238E-03	60	65	1	5.93102E-08	61	63	1
1977.0	-1.03863E-02	-7.16928E-03	60	65	1	3.68883E-07	61	63	1
1982.0	-5.44454E-02	-2.64630E-02	60	65	1	1.30539E-06	60	65	1
1987.0	-1.69981E-01	-6.87873E-02	60	65	1	3.39321E-06	60	65	1
1990.0	-2.92223E-01	-1.08796E-01	60	65	1	5.36681E-06	60	65	1
1992.0	-2.78453E-01	-1.10233E-01	60	65	1	5.67143E-06	60	65	1
1997.0	-4.68093E-01	-1.50341E-01	60	65	1	1.27277E-05	59	66	1
2002.0	-9.18484E-01	-3.21552E-01	59	66	1	4.47424E-05	59	66	1
2007.0	-1.64495E+00	-7.79541E-01	59	66	1	1.08470E-04	59	66	1
2012.0	-2.68022E+00	-1.57113E+00	59	66	1	2.18616E-04	59	66	1
2017.0	-4.01503E+00	-2.79737E+00	59	66	1	3.89243E-04	59	66	1
2022.0	-5.60283E+00	-4.54371E+00	59	66	1	6.32238E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.48232E-05	-1.57820E-05	55	22	3	6.28444E-10	55	22	3
1967.0	-2.02575E-01	-4.49658E-02	55	19	3	1.81656E-06	57	15	5
1972.0	-1.11175E+01	-2.20633E+00	55	19	3	9.07826E-05	57	15	5
1977.0	-1.32244E+02	-2.09867E+01	55	19	3	8.19493E-04	57	15	5
1982.0	-7.23220E+02	-1.14929E+02	4	30	5	3.16041E-03	57	15	5
1987.0	-2.73487E+03	-4.47478E+02	4	30	5	1.14192E-02	24	7	5
1990.0	-5.90395E+03	-8.24001E+02	4	30	5	2.40618E-02	24	7	5
1992.0	-9.14748E+03	-1.15937E+03	4	30	5	3.65646E-02	24	7	5
1997.0	-2.43584E+04	-2.30025E+03	4	30	5	8.45375E-02	24	7	5
2002.0	-4.97483E+04	-4.04898E+03	61	24	3	1.56512E-01	24	7	5
2007.0	-8.26511E+04	-6.92377E+03	61	24	3	2.48105E-01	24	7	5
2012.0	-1.18513E+05	-9.97843E+03	61	24	3	3.51728E-01	24	7	5
2017.0	-1.5379E+05	-1.27950E+04	61	24	3	4.58706E-01	24	7	5
2022.0	-1.84071E+05	-1.51288E+04	61	24	3	5.61465E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.40333E-04	-2.12637E-05	57	13	5	2.44547E-10	56	13	5
1967.0	-2.60978E+00	-1.30456E-01	57	13	5	1.50432E-06	56	13	5
1972.0	-3.06214E+02	-1.56414E+01	9	24	5	1.01914E-04	53	11	5
1977.0	-5.62298E+03	-3.13152E+02	9	24	5	1.79976E-03	9	24	5
1982.0	-3.81343E+04	-2.09414E+03	9	24	5	1.20355E-02	9	24	5
1987.0	-1.42730E+05	-7.46579E+03	9	24	5	4.29077E-02	9	24	5
1990.0	-2.61355E+05	-1.31435E+04	9	24	5	7.55387E-02	9	24	5
1992.0	-3.68562E+05	-1.79933E+04	9	24	5	1.03566E-01	9	24	5
1997.0	-7.53103E+05	-3.36317E+04	9	24	5	1.93621E-01	9	24	5
2002.0	-1.30228E+06	-5.28938E+04	9	24	5	3.05222E-01	9	23	5
2007.0	-1.97044E+06	-7.35417E+04	9	24	5	4.32379E-01	9	23	5
2012.0	-2.67519E+06	-7.33009E+04	9	24	5	5.56573E-01	9	23	5
2017.0	-3.34193E+06	-1.10856E+05	9	24	5	6.70705E-01	10	21	5
2022.0	-3.92909E+06	-1.25925E+05	9	24	5	7.76098E-01	10	21	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.23490E-07	-4.55383E-08	64	19	5	2.69823E-11	64	20	5
1967.0	-1.08230E-03	-1.69117E-04	64	19	5	8.35955E-08	64	20	5

1972.0	-6.26391E-02	-8.04210E-03	64	17	5	3.53503E-06	64	20	5
1977.0	-6.55037E-01	-7.91498E-02	64	15	5	2.85121E-05	64	20	5
1982.0	-2.99885E+00	-3.31595E-01	64	15	5	1.01682E-04	64	20	5
1987.0	-2.36129E+01	-4.75763E+00	70	29	3	2.43565E-04	64	20	5
1990.0	-1.32702E+02	-3.17946E+01	70	29	3	1.29514E-03	70	30	3
1992.0	-3.24157E+02	-7.68195E+01	70	29	3	3.08824E-03	70	30	3
1997.0	-1.60952E+03	-3.58722E+02	70	29	3	1.37471E-02	70	30	3
2002.0	-4.29571E+03	-9.02397E+02	70	29	3	3.35626E-02	70	30	3
2007.0	-8.09627E+03	-1.62566E+03	70	29	3	5.93253E-02	70	30	3
2012.0	-1.24439E+04	-2.41901E+03	70	29	3	8.72135E-02	70	30	3
2017.0	-1.68506E+04	-3.20407E+03	70	29	3	1.14626E-01	70	30	3
2022.0	-2.09801E+04	-3.93253E+03	70	29	3	1.39995E-01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.02158E-05	-7.78768E-06	43	22	3	7.04210E-10	43	23	3
1967.0	-6.70698E-02	-1.04497E-02	43	22	3	8.15558E-07	43	23	3
1972.0	-3.51740E+00	-3.90012E-01	43	22	3	5.27811E-05	40	7	5
1977.0	-3.99985E+01	-4.35679E+00	42	18	3	9.02889E-04	40	7	5
1982.0	-2.01866E+02	-2.28836E+01	41	16	3	5.73686E-03	40	7	5
1987.0	-6.27676E+02	-7.28825E+01	41	16	3	2.02379E-02	40	7	5
1990.0	-1.07344E+03	-1.24407E+02	41	16	3	3.57101E-02	40	7	5
1992.0	-1.41619E+03	-1.67173E+02	41	16	3	4.91914E-02	40	7	5
1997.0	-2.84218E+03	-3.24831E+02	41	16	3	9.58554E-02	40	7	5
2002.0	-5.10279E+03	-5.67535E+02	41	16	3	1.65565E-01	40	7	5
2007.0	-8.14008E+03	-8.96585E+02	41	16	3	2.59289E-01	40	7	5
2012.0	-1.15644E+04	-1.27632E+03	41	16	3	3.65181E-01	40	7	5
2017.0	-1.49122E+04	-1.65790E+03	41	16	3	4.65856E-01	40	7	5
2022.0	-1.78689E+04	-2.00501E+03	41	16	3	5.50012E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.25287E-24	-4.10351E-25	90	35	3	4.86670E-30	90	36	3
1967.0	-1.66312E-18	-3.48904E-19	90	35	3	3.84014E-24	90	36	3
1972.0	-3.51300E-15	-7.67701E-16	90	35	3	8.19632E-21	90	36	3
1977.0	-5.32439E-13	-1.17371E-13	90	35	3	1.23516E-18	90	36	3
1982.0	-1.83068E-11	-4.01319E-12	90	35	3	4.19461E-17	90	36	3
1987.0	-2.48041E-10	-5.37089E-11	90	35	3	5.59641E-16	90	36	3
1990.0	-8.65574E-10	-1.85733E-10	90	35	3	1.93352E-15	90	36	3
1992.0	-1.79578E-09	-3.82997E-10	90	35	3	3.98680E-15	90	36	3
1997.0	-8.40105E-09	-1.76381E-09	90	35	3	1.83421E-14	90	36	3
2002.0	-2.90893E-08	-6.02903E-09	90	35	3	6.25917E-14	90	36	3
2007.0	-8.38139E-08	-1.73236E-08	90	35	3	1.79090E-13	90	36	3
2012.0	-2.21134E-07	-4.61022E-08	90	35	3	4.75061E-13	90	35	3
2017.0	-5.54588E-07	-1.16720E-07	90	35	3	1.20274E-12	90	35	3
2022.0	-1.30241E-06	-2.74324E-07	90	35	3	2.82677E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.82925E-10	-2.58475E-10	1	42	5	2.31430E-15	1	42	5
1967.0	-5.33024E-05	-1.89965E-05	1	42	5	1.70088E-10	1	42	5
1972.0	-1.88712E-02	-6.34955E-03	1	42	5	5.68519E-08	1	42	5
1977.0	-6.73491E-01	-2.15205E-01	1	42	5	1.92688E-06	1	42	5
1982.0	-7.13354E+00	-2.17822E+00	1	42	5	1.95032E-05	1	42	5
1987.0	-3.68963E+01	-1.08254E+01	1	42	5	9.69274E-05	1	42	5
1990.0	-7.86302E+01	-2.25762E+01	1	42	5	2.02140E-04	1	42	5
1992.0	-1.20910E+02	-3.42550E+01	1	42	5	3.06904E-04	1	42	5
1997.0	-2.92172E+02	-8.02433E+01	1	42	5	7.18997E-04	1	42	5

2002.0	-5.71317E+02	-1.52646E+02	1	42	5	1.36784E-03	1	42	5
2007.0	-9.57776E+02	-2.49731E+02	1	42	5	2.23781E-03	1	42	5
2012.0	-1.42808E+03	-3.64391E+02	1	42	5	3.26527E-03	1	42	5
2017.0	-1.94487E+03	-4.86968E+02	1	42	5	4.36367E-03	1	42	5
2022.0	-2.47134E+03	-6.08921E+02	1	42	5	5.45649E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.53799E-04	-1.03898E-04	36	60	5	8.97867E-09	36	60	5
1967.0	-2.88305E-01	-9.53385E-02	36	60	5	8.23900E-06	36	60	5
1972.0	-1.03964E+01	-3.22643E+00	38	61	5	2.65177E-04	36	60	5
1977.0	-9.23962E+01	-2.95129E+01	38	61	5	2.19174E-03	36	60	5
1982.0	-3.92235E+02	-1.27124E+02	38	61	5	8.86588E-03	36	60	5
1987.0	-1.06628E+03	-3.47416E+02	38	61	5	2.33513E-02	36	60	5
1990.0	-1.67879E+03	-5.47125E+02	38	61	5	3.62779E-02	36	60	5
1992.0	-2.06730E+03	-6.79932E+02	38	61	5	4.67130E-02	36	60	5
1997.0	-3.40108E+03	-1.11352E+03	38	61	5	7.58742E-02	36	60	5
2002.0	-4.82557E+03	-1.57068E+03	38	61	5	1.06826E-01	36	60	5
2007.0	-6.19930E+03	-2.00379E+03	38	61	5	1.36120E-01	36	60	5
2012.0	-7.41581E+03	-2.37876E+03	38	61	5	1.61586E-01	36	60	5
2017.0	-8.43608E+03	-2.68446E+03	38	61	5	1.82461E-01	36	60	5
2022.0	-9.27089E+03	-2.92667E+03	38	61	5	1.99067E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.51832E-28	-1.51832E-28	91	26	5	2.59162E-32	91	26	5
1967.0	-4.12005E-22	-4.11971E-22	91	26	5	7.03198E-26	91	26	5
1972.0	-1.87112E-18	-1.86972E-18	91	26	5	3.19146E-22	91	26	5
1977.0	-4.71904E-16	-4.70408E-16	91	26	5	8.02949E-20	91	26	5
1982.0	-2.30915E-14	-2.28861E-14	91	26	5	3.90648E-18	91	26	5
1987.0	-4.01845E-13	-3.94174E-13	91	26	5	6.72827E-17	91	26	5
1990.0	-1.57284E-12	-1.52982E-12	91	26	5	2.61130E-16	91	26	5
1992.0	-3.46010E-12	-3.34317E-12	91	26	5	5.74451E-16	91	26	5
1997.0	-1.83788E-11	-1.74542E-11	91	26	5	3.00490E-15	91	26	5
2002.0	-6.88539E-11	-6.44516E-11	91	26	5	1.11150E-14	91	26	5
2007.0	-2.05220E-10	-1.91178E-10	91	26	5	3.29734E-14	91	26	5
2012.0	-5.42370E-10	-5.08970E-10	91	26	5	8.77873E-14	91	26	5
2017.0	-1.35446E-09	-1.28570E-09	91	26	5	2.21764E-13	91	26	5
2022.0	-3.18422E-09	-3.04552E-09	91	26	5	5.25320E-13	91	26	5

TRANS 1-2 DICHLOROETHANE

TRANS 1-2 DICHLOROET

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	2600.00
2	190.00
4	470.00
5	13.00
8	4.30
9	36.00
10	49.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.61709E+03	-1.32305E+03	39	54	1	6.60076E-02	39	54	1
1967.0	-3.71612E+04	-2.49040E+04	39	54	1	1.24248E+00	39	54	1
1972.0	-1.62279E+05	-8.56672E+04	39	54	1	4.27400E+00	39	54	1
1977.0	-3.99930E+05	-1.62031E+05	39	54	1	8.12817E+00	38	53	1
1982.0	-7.53536E+05	-2.32448E+05	39	54	1	1.25942E+01	38	53	1
1987.0	-1.21280E+06	-2.88232E+05	39	54	1	1.63680E+01	38	53	1
1990.0	-1.52831E+06	-3.27909E+05	38	55	1	1.81944E+01	38	53	1
1992.0	-1.59287E+06	-3.26129E+05	38	55	1	1.61601E+01	39	54	1
1997.0	-2.05958E+06	-3.59144E+05	38	55	1	1.68451E+01	39	54	1
2002.0	-2.52332E+06	-3.81385E+05	38	55	1	1.72371E+01	39	54	1
2007.0	-2.95318E+06	-3.96804E+05	38	55	1	1.76099E+01	39	54	1
2012.0	-3.33411E+06	-4.09231E+05	38	55	1	1.80008E+01	39	54	1
2017.0	-3.66209E+06	-4.20072E+05	38	55	1	1.83703E+01	39	54	1
2022.0	-3.93975E+06	-4.29452E+05	38	55	1	1.86896E+01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.16734E-03	-4.75947E-04	57	13	5	1.32610E-08	55	22	3
1967.0	-8.08400E+01	-5.72971E+00	9	24	5	4.06520E-05	57	15	5
1972.0	-1.02211E+04	-8.26607E+02	9	24	5	4.75071E-03	9	24	5
1977.0	-1.80565E+05	-1.37390E+04	9	24	5	7.89616E-02	9	24	5
1982.0	-1.11186E+06	-7.61816E+04	9	24	5	4.37834E-01	9	24	5
1987.0	-3.70683E+06	-2.27770E+05	9	24	5	1.30905E+00	9	24	5
1990.0	-6.30394E+06	-3.64170E+05	9	24	5	2.09297E+00	9	24	5
1992.0	-8.44548E+06	-4.69764E+05	9	24	5	2.70387E+00	9	24	5
1997.0	-1.51193E+07	-7.70113E+05	9	24	5	4.43360E+00	9	24	5
2002.0	-2.30661E+07	-1.08875E+06	9	24	5	6.26906E+00	9	24	5
2007.0	-3.14692E+07	-1.39152E+06	9	24	5	8.12604E+00	9	23	5
2012.0	-3.95602E+07	-1.65627E+06	9	24	5	9.78504E+00	9	23	5
2017.0	-4.68874E+07	-1.88008E+06	9	24	5	1.11971E+01	9	23	5
2022.0	-5.33185E+07	-2.06941E+06	9	24	5	1.23937E+01	9	23	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.18392E+01	-3.12133E+00	52	62	1	7.33888E-04	52	61	1
1967.0	-8.96507E+02	-2.09758E+02	52	62	1	3.55403E-02	52	61	1
1972.0	-7.71443E+03	-1.48251E+03	52	62	1	2.11560E-01	52	61	1
1977.0	-3.01839E+04	-4.44977E+03	52	62	1	5.75186E-01	52	61	1
1982.0	-7.93580E+04	-8.81699E+03	52	62	1	1.09117E+00	35	58	1
1987.0	-1.62891E+05	-2.01702E+04	37	60	1	2.54459E+00	35	58	1
1990.0	-2.30184E+05	-2.91756E+04	37	60	1	3.68047E+00	35	58	1
1992.0	-2.49859E+05	-3.39191E+04	37	60	1	4.41359E+00	35	58	1
1997.0	-3.70691E+05	-4.87768E+04	37	60	1	6.34575E+00	35	58	1
2002.0	-5.08353E+05	-6.23358E+04	37	60	1	8.12944E+00	35	58	1
2007.0	-6.47674E+05	-7.32544E+04	37	60	1	9.57891E+00	35	58	1
2012.0	-7.79354E+05	-8.13766E+04	37	60	1	1.06635E+01	35	58	1
2017.0	-8.98405E+05	-8.72535E+04	37	60	1	1.14492E+01	35	58	1
2022.0	-1.00290E+06	-9.16106E+04	37	60	1	1.20289E+01	35	58	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.88142E-01	-1.61120E-01	55	66	1	1.33298E-05	55	66	1
1967.0	-6.15725E+01	-2.24042E+01	55	66	1	1.85355E-03	55	66	1
1972.0	-1.46056E+03	-2.87478E+02	36	60	1	2.69368E-02	36	60	1
1977.0	-1.21959E+04	-2.62697E+03	36	60	1	2.46148E-01	36	60	1
1982.0	-5.14271E+04	-1.05411E+04	36	60	1	9.87709E-01	36	60	1
1987.0	-1.39502E+05	-2.61586E+04	36	60	1	2.45107E+00	36	60	1
1990.0	-2.19383E+05	-3.87759E+04	36	60	1	3.63332E+00	36	60	1
1992.0	-2.73250E+05	-4.64289E+04	36	60	1	4.43138E+00	36	60	1
1997.0	-4.45063E+05	-6.96913E+04	35	60	1	6.57411E+00	36	60	1
2002.0	-6.36072E+05	-9.48318E+04	35	60	1	8.57848E+00	36	60	1
2007.0	-8.25208E+05	-1.16776E+05	35	60	1	1.04304E+01	35	60	1
2012.0	-9.97798E+05	-1.34137E+05	35	60	1	1.19812E+01	35	60	1
2017.0	-1.14713E+06	-1.47093E+05	35	60	1	1.31384E+01	35	60	1
2022.0	-1.27269E+06	-1.56642E+05	35	60	1	1.39914E+01	35	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.60496E+03	-1.32305E+03	39	54	1	6.60076E-02	39	54	1
1967.0	-3.62031E+04	-2.49040E+04	39	54	1	1.24248E+00	39	54	1
1972.0	-1.53104E+05	-8.56672E+04	39	54	1	4.27400E+00	39	54	1
1977.0	-3.57550E+05	-1.62031E+05	39	54	1	8.12817E+00	38	53	1
1982.0	-6.22750E+05	-2.32448E+05	39	54	1	1.25942E+01	38	53	1
1987.0	-9.10400E+05	-2.88232E+05	39	54	1	1.63680E+01	38	53	1
1990.0	-1.07874E+06	-3.27909E+05	38	55	1	1.81944E+01	38	53	1
1992.0	-1.06975E+06	-3.26129E+05	38	55	1	1.61601E+01	39	54	1
1997.0	-1.24382E+06	-3.59144E+05	38	55	1	1.68451E+01	39	54	1
2002.0	-1.37887E+06	-3.81385E+05	38	55	1	1.72371E+01	39	54	1
2007.0	-1.48026E+06	-3.96804E+05	38	55	1	1.76099E+01	39	54	1
2012.0	-1.55690E+06	-4.09231E+05	38	55	1	1.80008E+01	39	54	1
2017.0	-1.61646E+06	-4.20072E+05	38	55	1	1.83703E+01	39	54	1
2022.0	-1.66403E+06	-4.29452E+05	38	55	1	1.86896E+01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	7.01454E-06	-2.23416E-06	61	63	1	1.66972E-10	61	63	1
1967.0	9.98929E-04	-1.05382E-03	60	65	1	6.93163E-08	61	63	1
1972.0	-1.24671E-02	-2.47307E-02	60	65	1	1.39375E-06	61	63	1
1977.0	-2.44021E-01	-1.68472E-01	60	65	1	8.66813E-06	61	63	1
1982.0	-1.27911E+00	-6.21842E-01	60	65	1	3.06748E-05	60	65	1
1987.0	-3.99316E+00	-1.61634E+00	60	65	1	7.97323E-05	60	65	1
1990.0	-6.86426E+00	-2.55635E+00	60	65	1	1.26102E-04	60	65	1
1992.0	-6.53963E+00	-2.58995E+00	60	65	1	1.33252E-04	60	65	1
1997.0	-1.09846E+01	-3.53074E+00	60	65	1	2.98999E-04	59	66	1
2002.0	-2.15312E+01	-7.55342E+00	59	66	1	1.05102E-03	59	66	1
2007.0	-3.85060E+01	-1.83101E+01	59	66	1	2.54777E-03	59	66	1
2012.0	-6.26053E+01	-3.68976E+01	59	66	1	5.13414E-03	59	66	1
2017.0	-9.35085E+01	-6.56796E+01	59	66	1	9.13904E-03	59	66	1
2022.0	-1.30036E+02	-1.06648E+02	59	66	1	1.48397E-02	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.38842E-03	-3.33021E-04	55	22	3	1.32610E-08	55	22	3
1967.0	-4.60010E+00	-9.36158E-01	55	19	3	4.06520E-05	57	15	5
1972.0	-2.85721E+02	-4.62533E+01	55	19	3	2.02599E-03	57	15	5
1977.0	-3.72953E+03	-7.27134E+02	4	30	5	1.82614E-02	57	15	5
1982.0	-2.05791E+04	-4.53314E+03	4	30	5	9.09187E-02	4	30	5
1987.0	-6.64613E+04	-1.48572E+04	4	30	5	2.97984E-01	4	30	5
1990.0	-1.12928E+05	-2.48609E+04	4	30	5	5.70705E-01	24	7	5
1992.0	-1.50107E+05	-3.29518E+04	4	30	5	8.17610E-01	24	7	5
1997.0	-2.74323E+05	-5.72127E+04	4	30	5	1.65811E+00	24	7	5
2002.0	-4.30138E+05	-8.46884E+04	4	30	5	2.75855E+00	24	7	5
2007.0	-6.03271E+05	-1.12383E+05	4	30	5	4.01470E+00	24	7	5
2012.0	-7.77745E+05	-1.37909E+05	4	30	5	5.31639E+00	24	7	5
2017.0	-9.42093E+05	-1.60313E+05	4	30	5	6.57323E+00	24	7	5
2022.0	-1.09093E+06	-1.79695E+05	4	30	5	7.73189E+00	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.49905E-03	-4.75947E-04	57	13	5	5.30839E-09	56	13	5
1967.0	-7.54818E+01	-5.72971E+00	9	24	5	3.29300E-05	9	24	5
1972.0	-9.89265E+03	-8.26607E+02	9	24	5	4.75071E-03	9	24	5
1977.0	-1.76332E+05	-1.37390E+04	9	24	5	7.89616E-02	9	24	5
1982.0	-1.08866E+06	-7.61816E+04	9	24	5	4.37834E-01	9	24	5
1987.0	-3.63203E+06	-2.27770E+05	9	24	5	1.30905E+00	9	24	5
1990.0	-6.17671E+06	-3.64170E+05	9	24	5	2.09297E+00	9	24	5
1992.0	-8.27661E+06	-4.69764E+05	9	24	5	2.70387E+00	9	24	5
1997.0	-1.48092E+07	-7.70113E+05	9	24	5	4.43360E+00	9	24	5
2002.0	-2.25768E+07	-1.08875E+06	9	24	5	6.26906E+00	9	24	5
2007.0	-3.07783E+07	-1.39152E+06	9	24	5	8.12604E+00	9	23	5
2012.0	-3.86641E+07	-1.65627E+06	9	24	5	9.78504E+00	9	23	5
2017.0	-4.57968E+07	-1.88008E+06	9	24	5	1.11971E+01	9	23	5
2022.0	-5.20511E+07	-2.06941E+06	9	24	5	1.23937E+01	9	23	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.23817E-06	-1.06711E-06	64	19	5	6.32304E-10	64	20	5
1967.0	-2.52959E-02	-3.95143E-03	64	19	5	1.95327E-06	64	20	5

1972.0	-1.45986E+00	-1.87373E-01	64	17	5	8.23721E-05	64	20	5
1977.0	-1.52242E+01	-1.83962E+00	64	15	5	6.62870E-04	64	20	5
1982.0	-6.89759E+01	-7.69266E+00	64	15	5	2.35913E-03	64	20	5
1987.0	-1.98795E+02	-2.19432E+01	67	24	3	5.34638E-03	64	20	5
1990.0	-3.31285E+02	-3.81168E+01	67	24	3	7.63752E-03	64	20	5
1992.0	-4.41168E+02	-5.17767E+01	67	24	3	9.29260E-03	64	20	5
1997.0	-9.11953E+02	-1.09395E+02	67	24	3	1.39236E-02	64	20	5
2002.0	-1.82233E+03	-2.64546E+02	70	29	3	1.92339E-02	64	20	5
2007.0	-3.32244E+03	-5.31670E+02	70	29	3	2.50812E-02	64	20	5
2012.0	-5.37621E+03	-8.99556E+02	70	29	3	3.31087E-02	70	30	3
2017.0	-7.81714E+03	-1.34033E+03	70	29	3	4.90481E-02	70	30	3
2022.0	-1.04746E+04	-1.82937E+03	70	29	3	6.67291E-02	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.74636E-04	-6.32310E-05	43	22	3	5.78139E-09	43	23	3
1967.0	-7.32844E-01	-9.57381E-02	43	22	3	7.52893E-06	43	23	3
1972.0	-4.12984E+01	-4.44638E+00	41	16	3	6.90164E-04	40	7	5
1977.0	-4.88600E+02	-5.45551E+01	41	16	3	1.12064E-02	40	7	5
1982.0	-2.54889E+03	-2.91161E+02	41	16	3	7.04647E-02	40	7	5
1987.0	-8.14238E+03	-9.45286E+02	41	16	3	2.53522E-01	40	7	5
1990.0	-1.39699E+04	-1.62844E+03	41	16	3	4.55011E-01	40	7	5
1992.0	-1.83240E+04	-2.19037E+03	41	16	3	6.32761E-01	40	7	5
1997.0	-3.48335E+04	-4.14081E+03	41	16	3	1.23343E+00	40	7	5
2002.0	-5.73708E+04	-6.76223E+03	41	16	3	2.03468E+00	40	7	5
2007.0	-8.43298E+04	-9.89030E+03	40	14	3	2.96833E+00	40	7	5
2012.0	-1.12959E+05	-1.32776E+04	40	14	3	3.92873E+00	40	7	5
2017.0	-1.40692E+05	-1.66102E+04	40	14	3	4.82001E+00	40	7	5
2022.0	-1.65955E+05	-1.96998E+04	40	14	3	5.59438E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.29388E-23	-9.64238E-24	90	35	3	1.14358E-28	90	36	3
1967.0	-3.90745E-17	-8.19707E-18	90	35	3	9.02206E-23	90	36	3
1972.0	-8.25153E-14	-1.80311E-14	90	35	3	1.92512E-19	90	36	3
1977.0	-1.25018E-11	-2.75567E-12	90	35	3	2.90003E-17	90	36	3
1982.0	-4.29670E-10	-9.41806E-11	90	35	3	9.84420E-16	90	36	3
1987.0	-5.81896E-09	-1.25982E-09	90	35	3	1.31278E-14	90	36	3
1990.0	-2.03000E-08	-4.35526E-09	90	35	3	4.53414E-14	90	36	3
1992.0	-4.21043E-08	-8.97823E-09	90	35	3	9.34639E-14	90	36	3
1997.0	-1.96435E-07	-4.12094E-08	90	35	3	4.28640E-13	90	36	3
2002.0	-6.67734E-07	-1.37682E-07	90	35	3	1.43144E-12	90	36	3
2007.0	-1.79320E-06	-3.63393E-07	90	35	3	3.77625E-12	90	36	3
2012.0	-4.03083E-06	-8.03252E-07	90	35	3	8.34129E-12	90	36	3
2017.0	-7.91344E-06	-1.55184E-06	90	35	3	1.61001E-11	90	36	3
2022.0	-1.39994E-05	-2.70312E-06	90	35	3	2.80153E-11	90	36	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.35689E-08	-2.02330E-08	1	42	5	1.81160E-13	1	42	5
1967.0	-3.70080E-03	-1.31430E-03	1	42	5	1.17678E-08	1	42	5
1972.0	-1.13650E+00	-3.80464E-01	1	42	5	3.40656E-06	1	42	5
1977.0	-3.45269E+01	-1.09612E+01	1	42	5	9.81433E-05	1	42	5
1982.0	-3.08413E+02	-9.34743E+01	1	42	5	8.36941E-04	1	42	5
1987.0	-1.34687E+03	-3.92104E+02	1	42	5	3.51078E-03	1	42	5
1990.0	-2.60551E+03	-7.42337E+02	1	42	5	6.64666E-03	1	42	5
1992.0	-3.76788E+03	-1.05943E+03	1	42	5	9.49182E-03	1	42	5
1997.0	-7.91439E+03	-2.15856E+03	1	42	5	1.93411E-02	1	42	5

2002.0	-1.37435E+04	-3.64928E+03	1	42	5	3.27007E-02	1	42	5
2007.0	-2.09097E+04	-5.42203E+03	1	42	5	4.85862E-02	1	42	5
2012.0	-2.88704E+04	-7.33084E+03	1	42	5	6.56908E-02	1	42	5
2017.0	-3.70693E+04	-9.24277E+03	1	42	5	8.28235E-02	1	42	5
2022.0	-4.50873E+04	-1.10706E+04	1	42	5	9.92022E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.96570E-03	-2.47576E-03	36	60	5	2.13950E-07	36	60	5
1967.0	-4.71831E+00	-1.75854E+00	36	60	5	1.51970E-04	36	60	5
1972.0	-1.56133E+02	-5.14467E+01	36	60	5	4.44596E-03	36	60	5
1977.0	-1.29593E+03	-4.00422E+02	36	60	5	3.46041E-02	36	60	5
1982.0	-5.19005E+03	-1.53639E+03	36	60	5	1.32774E-01	36	60	5
1987.0	-1.34390E+04	-3.97924E+03	38	61	5	3.32677E-01	36	60	5
1990.0	-2.06411E+04	-6.10822E+03	38	61	5	5.02386E-01	36	60	5
1992.0	-2.49966E+04	-7.48180E+03	38	61	5	6.35687E-01	36	60	5
1997.0	-3.99802E+04	-1.18752E+04	38	61	5	9.91804E-01	36	60	5
2002.0	-5.56073E+04	-1.63628E+04	38	61	5	1.35090E+00	36	60	5
2007.0	-7.04474E+04	-2.05121E+04	38	61	5	1.67537E+00	36	60	5
2012.0	-8.35755E+04	-2.40615E+04	38	61	5	1.94695E+00	36	60	5
2017.0	-9.47871E+04	-2.69742E+04	38	61	5	2.16441E+00	36	60	5
2022.0	-1.04294E+05	-2.93425E+04	38	61	5	2.33644E+00	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.56771E-27	-3.56771E-27	91	26	5	6.08974E-31	91	26	5
1967.0	-9.67967E-21	-9.67888E-21	91	26	5	1.65210E-24	91	26	5
1972.0	-4.39493E-17	-4.39165E-17	91	26	5	7.49617E-21	91	26	5
1977.0	-1.10805E-14	-1.10454E-14	91	26	5	1.88536E-18	91	26	5
1982.0	-5.41981E-13	-5.37159E-13	91	26	5	9.16890E-17	91	26	5
1987.0	-9.42758E-12	-9.24755E-12	91	26	5	1.57849E-15	91	26	5
1990.0	-3.68896E-11	-3.58803E-11	91	26	5	6.12453E-15	91	26	5
1992.0	-8.11359E-11	-7.83931E-11	91	26	5	1.34702E-14	91	26	5
1997.0	-4.30246E-10	-4.08570E-10	91	26	5	7.03390E-14	91	26	5
2002.0	-1.59214E-09	-1.48920E-09	91	26	5	2.56821E-13	91	26	5
2007.0	-4.48975E-09	-4.16808E-09	91	26	5	7.18892E-13	91	26	5
2012.0	-1.02393E-08	-9.55381E-09	91	26	5	1.64784E-12	91	26	5
2017.0	-1.97644E-08	-1.88351E-08	91	26	5	3.24877E-12	91	26	5
2022.0	-3.34416E-08	-3.31228E-08	91	26	5	5.71334E-12	91	26	5

TRITIUM

TRITIUM

MASS FLUX UNITS: pc/day
 CONCENTRATION UNITS: pc/ml
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28317 ml/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	220000.00
2	21000.00
3	1050.00
4	20800.00
5	170.00
6	55.20
7	11800.00
8	35.00
9	685.00
10	2360.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.65035E+08	-1.95478E+08	39	54	1	9.75253E+00	39	54	1
1967.0	-2.47991E+09	-1.55456E+09	39	54	1	7.75583E+01	39	54	1
1972.0	-7.64627E+09	-3.98605E+09	39	54	1	1.98867E+02	39	54	1
1977.0	-1.49732E+10	-6.43792E+09	39	54	1	3.21193E+02	39	54	1
1982.0	-2.32496E+10	-8.30702E+09	39	54	1	4.14444E+02	39	54	1
1987.0	-3.14456E+10	-9.53195E+09	39	54	1	4.86137E+02	38	53	1
1990.0	-3.60034E+10	-1.00203E+10	39	54	1	5.17817E+02	38	53	1
1992.0	-3.49335E+10	-8.91190E+09	39	54	1	4.97841E+02	39	54	1
1993.0	-3.57230E+10	-8.86605E+09	39	54	1	4.95833E+02	39	54	1
1994.0	-3.64834E+10	-8.81529E+09	39	54	1	4.93303E+02	39	54	1
1995.0	-3.72139E+10	-8.76348E+09	39	54	1	4.90418E+02	39	54	1
1996.0	-3.78989E+10	-8.70742E+09	39	54	1	4.87285E+02	39	54	1
1997.0	-3.85350E+10	-8.64821E+09	39	54	1	4.83974E+02	39	54	1
1998.0	-3.91203E+10	-8.58644E+09	39	54	1	4.80521E+02	39	54	1
1999.0	-3.96533E+10	-8.52206E+09	39	54	1	4.76921E+02	39	54	1
2000.0	-4.01322E+10	-8.45444E+09	39	54	1	4.73140E+02	39	54	1
2001.0	-4.05560E+10	-8.38257E+09	39	54	1	4.69120E+02	39	54	1
2002.0	-4.09232E+10	-8.30519E+09	39	54	1	4.64792E+02	39	54	1
2003.0	-4.12324E+10	-8.22098E+09	39	54	1	4.60082E+02	39	54	1
2004.0	-4.14825E+10	-8.12872E+09	39	54	1	4.54922E+02	39	54	1
2005.0	-4.16728E+10	-8.02740E+09	39	54	1	4.49253E+02	39	54	1
2006.0	-4.18022E+10	-7.96262E+09	38	55	1	4.43033E+02	39	54	1
2007.0	-4.18705E+10	-7.89125E+09	38	55	1	4.36235E+02	39	54	1
2008.0	-4.18778E+10	-7.81090E+09	38	55	1	4.28850E+02	39	54	1
2009.0	-4.18243E+10	-7.72118E+09	38	55	1	4.20885E+02	39	54	1
2010.0	-4.17107E+10	-7.62179E+09	38	55	1	4.12361E+02	39	54	1
2011.0	-4.15382E+10	-7.51262E+09	38	55	1	4.03314E+02	39	54	1
2012.0	-4.13079E+10	-7.39375E+09	38	55	1	3.93786E+02	39	54	1
2013.0	-4.10218E+10	-7.26540E+09	38	55	1	3.83831E+02	39	54	1
2014.0	-4.06815E+10	-7.12795E+09	38	55	1	3.73504E+02	39	54	1
2015.0	-4.02894E+10	-6.98194E+09	38	55	1	3.62867E+02	39	54	1
2016.0	-3.98476E+10	-6.82802E+09	38	55	1	3.51981E+02	39	54	1
2017.0	-3.93588E+10	-6.66692E+09	38	55	1	3.40907E+02	39	54	1
2018.0	-3.88258E+10	-6.49947E+09	38	55	1	3.29704E+02	39	54	1
2019.0	-3.82511E+10	-6.32654E+09	38	55	1	3.18430E+02	39	54	1
2020.0	-3.76380E+10	-6.14902E+09	38	55	1	3.07138E+02	39	54	1
2021.0	-3.69891E+10	-5.96783E+09	38	55	1	2.95878E+02	39	54	1
2022.0	-3.63076E+10	-5.78385E+09	38	55	1	2.84695E+02	39	54	1

UPPER THREE RUNS CREEK TOTAL
(CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.39055E+05	-3.69568E+04	9	24	5	2.12399E-04	9	24	5
1967.0	-7.81411E+07	-6.98297E+06	9	24	5	4.01328E-02	9	24	5
1972.0	-1.46460E+09	-1.19806E+08	9	24	5	6.88556E-01	9	24	5
1977.0	-9.33799E+09	-7.03587E+08	9	24	5	4.04369E+00	9	24	5
1982.0	-3.18431E+10	-2.21233E+09	9	24	5	1.27148E+01	9	24	5
1987.0	-7.36712E+10	-4.69055E+09	9	24	5	2.69577E+01	9	24	5
1990.0	-1.07638E+11	-6.46598E+09	9	24	5	3.71616E+01	9	24	5
1992.0	-1.32467E+11	-7.67237E+09	9	24	5	4.41606E+01	9	24	5
1993.0	-1.45595E+11	-8.27547E+09	9	24	5	4.76426E+01	9	24	5
1994.0	-1.59000E+11	-8.87124E+09	9	24	5	5.10809E+01	9	24	5
1995.0	-1.72619E+11	-9.45728E+09	9	24	5	5.44559E+01	9	24	5
1996.0	-1.86338E+11	-1.00292E+10	9	24	5	5.77490E+01	9	24	5
1997.0	-2.00062E+11	-1.05840E+10	9	24	5	6.09437E+01	9	24	5
1998.0	-2.13710E+11	-1.11192E+10	9	24	5	6.40260E+01	9	24	5
1999.0	-2.27195E+11	-1.16327E+10	9	24	5	6.69831E+01	9	24	5
2000.0	-2.40439E+11	-1.21226E+10	9	24	5	6.98040E+01	9	24	5
2001.0	-2.53368E+11	-1.25873E+10	9	24	5	7.24797E+01	9	24	5
2002.0	-2.65915E+11	-1.30254E+10	9	24	5	7.50024E+01	9	24	5
2003.0	-2.78015E+11	-1.34359E+10	9	24	5	7.73665E+01	9	24	5
2004.0	-2.89622E+11	-1.38182E+10	9	24	5	7.95684E+01	9	24	5
2005.0	-3.00689E+11	-1.41721E+10	9	24	5	8.16059E+01	9	24	5
2006.0	-3.11181E+11	-1.44973E+10	9	24	5	8.34787E+01	9	24	5
2007.0	-3.21067E+11	-1.47940E+10	9	24	5	8.51877E+01	9	24	5
2008.0	-3.30321E+11	-1.50627E+10	9	24	5	8.67347E+01	9	24	5
2009.0	-3.38922E+11	-1.53036E+10	9	24	5	8.81221E+01	9	24	5
2010.0	-3.46864E+11	-1.55174E+10	9	24	5	8.93529E+01	9	24	5
2011.0	-3.54129E+11	-1.57043E+10	9	24	5	9.04296E+01	9	24	5
2012.0	-3.60710E+11	-1.58649E+10	9	24	5	9.13544E+01	9	24	5
2013.0	-3.66601E+11	-1.59994E+10	9	24	5	9.21289E+01	9	24	5
2014.0	-3.71796E+11	-1.61080E+10	9	24	5	9.27544E+01	9	24	5
2015.0	-3.76292E+11	-1.61908E+10	9	24	5	9.32312E+01	9	24	5
2016.0	-3.80086E+11	-1.62478E+10	9	24	5	9.35763E+01	9	23	5
2017.0	-3.83175E+11	-1.62790E+10	9	24	5	9.38986E+01	9	23	5
2018.0	-3.85559E+11	-1.62844E+10	9	24	5	9.40712E+01	9	23	5
2019.0	-3.87238E+11	-1.62639E+10	9	24	5	9.40940E+01	9	23	5
2020.0	-3.88218E+11	-1.62176E+10	9	24	5	9.39669E+01	9	23	5
2021.0	-3.88501E+11	-1.61457E+10	9	24	5	9.36902E+01	9	23	5
2022.0	-3.88096E+11	-1.60484E+10	9	24	5	9.32650E+01	9	23	5

BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.53506E+06	-5.56538E+05	52	62	1	1.01944E-01	52	61	1
1967.0	-5.05543E+07	-8.80926E+06	52	62	1	1.36768E+00	52	61	1
1972.0	-2.77121E+08	-3.60037E+07	52	62	1	5.02480E+00	52	61	1
1977.0	-8.39301E+08	-9.74051E+07	37	60	1	1.22990E+01	35	58	1
1982.0	-1.79722E+09	-2.43357E+08	37	60	1	3.01725E+01	35	58	1
1987.0	-3.06754E+09	-4.40850E+08	37	60	1	5.42370E+01	35	58	1
1990.0	-3.90934E+09	-5.66538E+08	37	60	1	6.95743E+01	35	58	1
1992.0	-4.03664E+09	-6.14664E+08	37	60	1	7.77439E+01	35	58	1
1993.0	-4.24417E+09	-6.46525E+08	37	60	1	8.17021E+01	35	58	1
1994.0	-4.45381E+09	-6.77346E+08	37	60	1	8.55181E+01	35	58	1
1995.0	-4.66328E+09	-7.06858E+08	37	60	1	8.91584E+01	35	58	1
1996.0	-4.86920E+09	-7.34704E+08	37	60	1	9.25927E+01	35	58	1
1997.0	-5.06951E+09	-7.60705E+08	37	60	1	9.57991E+01	35	58	1
1998.0	-5.26261E+09	-7.84754E+08	37	60	1	9.87636E+01	35	58	1
1999.0	-5.44722E+09	-8.06792E+08	37	60	1	1.01478E+02	35	58	1
2000.0	-5.62236E+09	-8.26801E+08	37	60	1	1.03941E+02	35	58	1
2001.0	-5.78733E+09	-8.44797E+08	37	60	1	1.06153E+02	35	58	1
2002.0	-5.94162E+09	-8.60822E+08	37	60	1	1.08119E+02	35	58	1

2003.0	-6.08487E+09	-8.74937E+08	37	60	1	1.09846E+02	35	58	1
2004.0	-6.21689E+09	-8.87217E+08	37	60	1	1.11345E+02	35	58	1
2005.0	-6.33759E+09	-8.97743E+08	37	60	1	1.12626E+02	35	58	1
2006.0	-6.44692E+09	-9.06600E+08	37	60	1	1.13698E+02	35	58	1
2007.0	-6.54495E+09	-9.13871E+08	37	60	1	1.14572E+02	35	58	1
2008.0	-6.63174E+09	-9.19630E+08	37	60	1	1.15259E+02	35	58	1
2009.0	-6.70741E+09	-9.23948E+08	37	60	1	1.15766E+02	35	58	1
2010.0	-6.77207E+09	-9.26882E+08	37	60	1	1.16103E+02	35	58	1
2011.0	-6.82586E+09	-9.28481E+08	37	60	1	1.16275E+02	35	58	1
2012.0	-6.86893E+09	-9.28782E+08	37	60	1	1.16287E+02	35	58	1
2013.0	-6.90144E+09	-9.27814E+08	37	60	1	1.16144E+02	35	58	1
2014.0	-6.92354E+09	-9.25599E+08	37	60	1	1.15848E+02	35	58	1
2015.0	-6.93540E+09	-9.22151E+08	37	60	1	1.15403E+02	35	58	1
2016.0	-6.93721E+09	-9.17484E+08	37	60	1	1.14809E+02	35	58	1
2017.0	-6.92915E+09	-9.11608E+08	37	60	1	1.14068E+02	35	58	1
2018.0	-6.91145E+09	-9.04535E+08	37	60	1	1.13183E+02	35	58	1
2019.0	-6.88432E+09	-8.96281E+08	37	60	1	1.12154E+02	35	58	1
2020.0	-6.84804E+09	-8.86866E+08	37	60	1	1.10985E+02	35	58	1
2021.0	-6.80286E+09	-8.76316E+08	37	60	1	1.09678E+02	35	58	1
2022.0	-6.74911E+09	-8.64664E+08	37	60	1	1.08238E+02	35	58	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.21881E+05	-5.28006E+04	55	66	1	4.36832E-03	55	66	1
1967.0	-1.09534E+07	-2.32187E+06	36	60	1	2.17560E-01	36	60	1
1972.0	-1.14941E+08	-2.54491E+07	36	60	1	2.38459E+00	36	60	1
1977.0	-5.30473E+08	-1.13470E+08	36	60	1	1.06322E+01	36	60	1
1982.0	-1.48122E+09	-2.97952E+08	36	60	1	2.79182E+01	36	60	1
1987.0	-2.98357E+09	-5.59882E+08	36	60	1	5.24612E+01	36	60	1
1990.0	-4.06641E+09	-7.31901E+08	36	60	1	6.85794E+01	36	60	1
1992.0	-4.64828E+09	-8.14701E+08	36	60	1	7.77586E+01	36	60	1
1993.0	-4.97955E+09	-8.61915E+08	36	60	1	8.22822E+01	36	60	1
1994.0	-5.30877E+09	-9.07679E+08	36	60	1	8.66613E+01	36	60	1
1995.0	-5.63356E+09	-9.51602E+08	36	60	1	9.08555E+01	36	60	1
1996.0	-5.95091E+09	-9.93239E+08	36	60	1	9.48310E+01	36	60	1
1997.0	-6.25870E+09	-1.03233E+09	36	60	1	9.85637E+01	36	60	1
1998.0	-6.55514E+09	-1.06871E+09	36	60	1	1.02037E+02	36	60	1
1999.0	-6.83877E+09	-1.10227E+09	36	60	1	1.05242E+02	36	60	1
2000.0	-7.10839E+09	-1.13297E+09	36	60	1	1.08172E+02	36	60	1
2001.0	-7.36308E+09	-1.16080E+09	36	60	1	1.10829E+02	36	60	1
2002.0	-7.60215E+09	-1.18580E+09	36	60	1	1.13216E+02	36	60	1
2003.0	-7.82514E+09	-1.20804E+09	36	60	1	1.15340E+02	36	60	1
2004.0	-8.03180E+09	-1.22761E+09	36	60	1	1.17209E+02	36	60	1
2005.0	-8.22204E+09	-1.24462E+09	36	60	1	1.18833E+02	36	60	1
2006.0	-8.39589E+09	-1.26098E+09	35	60	1	1.20225E+02	36	60	1
2007.0	-8.55352E+09	-1.27782E+09	35	60	1	1.21394E+02	36	60	1
2008.0	-8.69514E+09	-1.29222E+09	35	60	1	1.22352E+02	36	60	1
2009.0	-8.82106E+09	-1.30428E+09	35	60	1	1.23108E+02	36	60	1
2010.0	-8.93158E+09	-1.31412E+09	35	60	1	1.23672E+02	36	60	1
2011.0	-9.02702E+09	-1.32181E+09	35	60	1	1.24052E+02	36	60	1
2012.0	-9.10769E+09	-1.32745E+09	35	60	1	1.24254E+02	36	60	1
2013.0	-9.17390E+09	-1.33111E+09	35	60	1	1.24282E+02	36	60	1
2014.0	-9.22592E+09	-1.33285E+09	35	60	1	1.24141E+02	36	60	1
2015.0	-9.26401E+09	-1.33272E+09	35	60	1	1.23833E+02	36	60	1
2016.0	-9.28841E+09	-1.33077E+09	35	60	1	1.23361E+02	36	60	1
2017.0	-9.29932E+09	-1.32703E+09	35	60	1	1.22726E+02	36	60	1
2018.0	-9.29696E+09	-1.32152E+09	35	60	1	1.21931E+02	36	60	1
2019.0	-9.28154E+09	-1.31428E+09	35	60	1	1.20976E+02	36	60	1
2020.0	-9.25327E+09	-1.30533E+09	35	60	1	1.19865E+02	36	60	1
2021.0	-9.21240E+09	-1.29470E+09	35	60	1	1.18600E+02	36	60	1
2022.0	-9.15918E+09	-1.28243E+09	35	60	1	1.17184E+02	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.62278E+08	-1.95478E+08	39	54	1	9.75253E+00	39	54	1
1967.0	-2.41840E+09	-1.55456E+09	39	54	1	7.75583E+01	39	54	1
1972.0	-7.25421E+09	-3.98605E+09	39	54	1	1.98867E+02	39	54	1
1977.0	-1.36034E+10	-6.43792E+09	39	54	1	3.21193E+02	39	54	1
1982.0	-1.99711E+10	-8.30702E+09	39	54	1	4.14444E+02	39	54	1
1987.0	-2.53944E+10	-9.53195E+09	39	54	1	4.86137E+02	38	53	1
1990.0	-2.80276E+10	-1.00203E+10	39	54	1	5.17817E+02	38	53	1
1992.0	-2.62485E+10	-8.91190E+09	39	54	1	4.97841E+02	39	54	1
1993.0	-2.64992E+10	-8.86605E+09	39	54	1	4.95833E+02	39	54	1
1994.0	-2.67208E+10	-8.81529E+09	39	54	1	4.93303E+02	39	54	1
1995.0	-2.69170E+10	-8.76348E+09	39	54	1	4.90418E+02	39	54	1
1996.0	-2.70787E+10	-8.70742E+09	39	54	1	4.87285E+02	39	54	1
1997.0	-2.72067E+10	-8.64821E+09	39	54	1	4.83974E+02	39	54	1
1998.0	-2.73025E+10	-8.58644E+09	39	54	1	4.80521E+02	39	54	1
1999.0	-2.73672E+10	-8.52206E+09	39	54	1	4.76921E+02	39	54	1
2000.0	-2.74014E+10	-8.45444E+09	39	54	1	4.73140E+02	39	54	1
2001.0	-2.74055E+10	-8.38257E+09	39	54	1	4.69120E+02	39	54	1
2002.0	-2.73793E+10	-8.30519E+09	39	54	1	4.64792E+02	39	54	1
2003.0	-2.73223E+10	-8.22098E+09	39	54	1	4.60082E+02	39	54	1
2004.0	-2.72337E+10	-8.12872E+09	39	54	1	4.54922E+02	39	54	1
2005.0	-2.71130E+10	-8.02740E+09	39	54	1	4.49253E+02	39	54	1
2006.0	-2.69592E+10	-7.96262E+09	38	55	1	4.43033E+02	39	54	1
2007.0	-2.67719E+10	-7.89125E+09	38	55	1	4.36235E+02	39	54	1
2008.0	-2.65507E+10	-7.81090E+09	38	55	1	4.28850E+02	39	54	1
2009.0	-2.62956E+10	-7.72118E+09	38	55	1	4.20885E+02	39	54	1
2010.0	-2.60069E+10	-7.62179E+09	38	55	1	4.12361E+02	39	54	1
2011.0	-2.56851E+10	-7.51262E+09	38	55	1	4.03314E+02	39	54	1
2012.0	-2.53311E+10	-7.39375E+09	38	55	1	3.93786E+02	39	54	1
2013.0	-2.49462E+10	-7.26540E+09	38	55	1	3.83831E+02	39	54	1
2014.0	-2.45318E+10	-7.12795E+09	38	55	1	3.73504E+02	39	54	1
2015.0	-2.40897E+10	-6.98194E+09	38	55	1	3.62867E+02	39	54	1
2016.0	-2.36217E+10	-6.82802E+09	38	55	1	3.51981E+02	39	54	1
2017.0	-2.31301E+10	-6.66692E+09	38	55	1	3.40907E+02	39	54	1
2018.0	-2.26171E+10	-6.49947E+09	38	55	1	3.29704E+02	39	54	1
2019.0	-2.20850E+10	-6.32654E+09	38	55	1	3.18430E+02	39	54	1
2020.0	-2.15364E+10	-6.14902E+09	38	55	1	3.07138E+02	39	54	1
2021.0	-2.09735E+10	-5.96783E+09	38	55	1	2.95878E+02	39	54	1
2022.0	-2.03990E+10	-5.78385E+09	38	55	1	2.84695E+02	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.79710E+00	-2.48260E+00	60	65	1	1.60581E-07	61	63	1
1967.0	-3.78306E+01	-1.06246E+02	60	65	1	6.10922E-06	61	63	1
1972.0	-1.04486E+03	-9.06908E+02	60	65	1	4.81114E-05	61	63	1
1977.0	-6.21735E+03	-3.59014E+03	60	65	1	1.79929E-04	61	63	1
1982.0	-1.98513E+04	-9.20146E+03	60	65	1	4.53898E-04	60	65	1
1987.0	-4.48514E+04	-1.79422E+04	60	65	1	8.85071E-04	60	65	1
1990.0	-6.57091E+04	-2.43860E+04	60	65	1	1.20294E-03	60	65	1
1992.0	-5.71118E+04	-2.23795E+04	60	65	1	1.15141E-03	60	65	1
1993.0	-5.75078E+04	-2.22311E+04	60	65	1	1.14394E-03	60	65	1
1994.0	-5.95881E+04	-2.23575E+04	60	65	1	1.15053E-03	60	65	1
1995.0	-6.31619E+04	-2.27577E+04	60	65	1	1.17113E-03	60	65	1
1996.0	-6.80142E+04	-2.33925E+04	60	65	1	1.30371E-03	59	66	1
1997.0	-7.39447E+04	-2.42113E+04	60	65	1	1.72720E-03	59	66	1
1998.0	-8.07786E+04	-2.51626E+04	60	65	1	2.20856E-03	59	66	1
1999.0	-8.83713E+04	-2.61998E+04	60	65	1	2.74306E-03	59	66	1
2000.0	-9.66058E+04	-2.72825E+04	60	65	1	3.32687E-03	59	66	1
2001.0	-1.05387E+05	-2.84374E+04	59	66	1	3.95696E-03	59	66	1
2002.0	-1.14637E+05	-3.32813E+04	59	66	1	4.63098E-03	59	66	1
2003.0	-1.24287E+05	-3.84270E+04	59	66	1	5.34698E-03	59	66	1
2004.0	-1.34273E+05	-4.38613E+04	59	66	1	6.10315E-03	59	66	1
2005.0	-1.44537E+05	-4.95710E+04	59	66	1	6.89764E-03	59	66	1
2006.0	-1.55017E+05	-5.55413E+04	59	66	1	7.72841E-03	59	66	1
2007.0	-1.65652E+05	-6.17559E+04	59	66	1	8.59315E-03	59	66	1
2008.0	-1.76380E+05	-6.81958E+04	59	66	1	9.48925E-03	59	66	1

2009.0	-1.87136E+05	-7.48402E+04	59	66	1	1.04138E-02	59	66	1
2010.0	-1.97857E+05	-8.16664E+04	59	66	1	1.13637E-02	59	66	1
2011.0	-2.08479E+05	-8.86502E+04	59	66	1	1.23354E-02	59	66	1
2012.0	-2.18941E+05	-9.57665E+04	59	66	1	1.33256E-02	59	66	1
2013.0	-2.29183E+05	-1.02990E+05	59	66	1	1.43307E-02	59	66	1
2014.0	-2.39150E+05	-1.10294E+05	59	66	1	1.53472E-02	59	66	1
2015.0	-2.48791E+05	-1.17655E+05	59	66	1	1.63714E-02	59	66	1
2016.0	-2.58059E+05	-1.25048E+05	59	66	1	1.74001E-02	59	66	1
2017.0	-2.66912E+05	-1.32449E+05	59	66	1	1.84300E-02	59	66	1
2018.0	-2.75314E+05	-1.39837E+05	59	66	1	1.94580E-02	59	66	1
2019.0	-2.83234E+05	-1.47191E+05	59	66	1	2.04813E-02	59	66	1
2020.0	-2.90648E+05	-1.54491E+05	59	66	1	2.14971E-02	59	66	1
2021.0	-2.97534E+05	-1.61721E+05	59	66	1	2.25031E-02	59	66	1
2022.0	-3.03878E+05	-1.68864E+05	59	66	1	2.34970E-02	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.96213E+03	-1.56826E+03	55	19	3	5.45718E-05	57	15	5
1967.0	-1.55511E+06	-3.32350E+05	4	30	5	7.54644E-03	57	15	5
1972.0	-2.52262E+07	-6.35050E+06	4	30	5	1.27369E-01	4	30	5
1977.0	-1.52353E+08	-4.06118E+07	4	30	5	8.14530E-01	4	30	5
1982.0	-5.38307E+08	-1.37137E+08	4	30	5	2.75048E+00	4	30	5
1987.0	-1.79135E+09	-3.08919E+08	4	30	5	6.59348E+00	24	7	5
1990.0	-3.56902E+09	-4.39306E+08	4	30	5	1.02210E+01	24	7	5
1992.0	-4.94924E+09	-5.31249E+08	4	30	5	1.30019E+01	24	7	5
1993.0	-5.80407E+09	-6.22276E+08	61	24	3	1.44756E+01	24	7	5
1994.0	-6.71768E+09	-7.40786E+08	61	24	3	1.65775E+01	60	25	3
1995.0	-7.67851E+09	-8.65794E+08	61	24	3	1.91633E+01	60	25	3
1996.0	-8.67236E+09	-9.95358E+08	61	24	3	2.18110E+01	60	25	3
1997.0	-9.68630E+09	-1.12766E+09	61	24	3	2.44850E+01	60	25	3
1998.0	-1.07082E+10	-1.26098E+09	61	24	3	2.71529E+01	60	25	3
1999.0	-1.17267E+10	-1.39376E+09	61	24	3	2.97859E+01	60	25	3
2000.0	-1.27318E+10	-1.52460E+09	61	24	3	3.23587E+01	60	25	3
2001.0	-1.37147E+10	-1.65226E+09	61	24	3	3.48495E+01	60	25	3
2002.0	-1.46676E+10	-1.77567E+09	61	24	3	3.72393E+01	60	25	3
2003.0	-1.55841E+10	-1.89389E+09	61	24	3	3.95120E+01	60	25	3
2004.0	-1.64591E+10	-2.00611E+09	61	24	3	4.16536E+01	60	25	3
2005.0	-1.72880E+10	-2.11166E+09	61	24	3	4.36522E+01	60	25	3
2006.0	-1.80671E+10	-2.20993E+09	61	24	3	4.54977E+01	60	25	3
2007.0	-1.87935E+10	-2.30044E+09	61	24	3	4.71817E+01	60	25	3
2008.0	-1.94646E+10	-2.38277E+09	61	24	3	4.86975E+01	60	25	3
2009.0	-2.00784E+10	-2.45661E+09	61	24	3	5.00399E+01	60	25	3
2010.0	-2.06334E+10	-2.52171E+09	61	24	3	5.12054E+01	60	25	3
2011.0	-2.11285E+10	-2.57792E+09	61	24	3	5.21922E+01	60	25	3
2012.0	-2.15628E+10	-2.62516E+09	61	24	3	5.30001E+01	60	25	3
2013.0	-2.19360E+10	-2.66345E+09	61	24	3	5.36302E+01	60	25	3
2014.0	-2.22480E+10	-2.69288E+09	61	24	3	5.40856E+01	60	25	3
2015.0	-2.24993E+10	-2.71360E+09	61	24	3	5.43704E+01	60	25	3
2016.0	-2.26906E+10	-2.72585E+09	61	24	3	5.44904E+01	60	25	3
2017.0	-2.28230E+10	-2.72992E+09	61	24	3	5.44521E+01	60	25	3
2018.0	-2.28978E+10	-2.72616E+09	61	24	3	5.42635E+01	60	25	3
2019.0	-2.29169E+10	-2.71497E+09	61	24	3	5.39331E+01	60	25	3
2020.0	-2.28822E+10	-2.69679E+09	61	24	3	5.34703E+01	60	25	3
2021.0	-2.27962E+10	-2.67101E+09	61	24	3	5.28847E+01	60	25	3
2022.0	-2.26612E+10	-2.64137E+09	61	24	3	5.21864E+01	60	25	3

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.26114E+05	-3.69568E+04	9	24	5	2.12399E-04	9	24	5
1967.0	-7.62649E+07	-6.98297E+06	9	24	5	4.01328E-02	9	24	5
1972.0	-1.43520E+09	-1.19806E+08	9	24	5	6.88556E-01	9	24	5
1977.0	-9.16414E+09	-7.03587E+08	9	24	5	4.04369E+00	9	24	5
1982.0	-3.12383E+10	-2.21233E+09	9	24	5	1.27146E+01	9	24	5
1987.0	-7.16771E+10	-4.69055E+09	9	24	5	2.69577E+01	9	24	5

1990.0	-1.03636E+11	-6.46598E+09	9	24	5	3.71616E+01	9	24	5
1992.0	-1.26855E+11	-7.67237E+09	9	24	5	4.41606E+01	9	24	5
1993.0	-1.38979E+11	-8.27547E+09	9	24	5	4.76426E+01	9	24	5
1994.0	-1.51302E+11	-8.87124E+09	9	24	5	5.10809E+01	9	24	5
1995.0	-1.63774E+11	-9.45728E+09	9	24	5	5.44559E+01	9	24	5
1996.0	-1.76298E+11	-1.00292E+10	9	24	5	5.77490E+01	9	24	5
1997.0	-1.88795E+11	-1.05840E+10	9	24	5	6.09437E+01	9	24	5
1998.0	-2.01198E+11	-1.11192E+10	9	24	5	6.40260E+01	9	24	5
1999.0	-2.13436E+11	-1.16327E+10	9	24	5	6.69831E+01	9	24	5
2000.0	-2.25443E+11	-1.21226E+10	9	24	5	6.98040E+01	9	24	5
2001.0	-2.37157E+11	-1.25873E+10	9	24	5	7.24797E+01	9	24	5
2002.0	-2.48521E+11	-1.30254E+10	9	24	5	7.50024E+01	9	24	5
2003.0	-2.59480E+11	-1.34359E+10	9	24	5	7.73665E+01	9	24	5
2004.0	-2.69939E+11	-1.38182E+10	9	24	5	7.95684E+01	9	24	5
2005.0	-2.80022E+11	-1.41721E+10	9	24	5	8.16059E+01	9	24	5
2006.0	-2.89535E+11	-1.44973E+10	9	24	5	8.34787E+01	9	24	5
2007.0	-2.98506E+11	-1.47940E+10	9	24	5	8.51877E+01	9	24	5
2008.0	-3.06913E+11	-1.50627E+10	9	24	5	8.67347E+01	9	24	5
2009.0	-3.14737E+11	-1.53036E+10	9	24	5	8.81221E+01	9	24	5
2010.0	-3.21974E+11	-1.55174E+10	9	24	5	8.93529E+01	9	24	5
2011.0	-3.28609E+11	-1.57043E+10	9	24	5	9.04296E+01	9	24	5
2012.0	-3.34635E+11	-1.58649E+10	9	24	5	9.13544E+01	9	24	5
2013.0	-3.40047E+11	-1.59994E+10	9	24	5	9.21289E+01	9	24	5
2014.0	-3.44839E+11	-1.61080E+10	9	24	5	9.27544E+01	9	24	5
2015.0	-3.49008E+11	-1.61908E+10	9	24	5	9.32312E+01	9	24	5
2016.0	-3.52549E+11	-1.62478E+10	9	24	5	9.35763E+01	9	23	5
2017.0	-3.55459E+11	-1.62790E+10	9	24	5	9.38986E+01	9	23	5
2018.0	-3.57735E+11	-1.62844E+10	9	24	5	9.40712E+01	9	23	5
2019.0	-3.59377E+11	-1.62639E+10	9	24	5	9.40940E+01	9	23	5
2020.0	-3.60386E+11	-1.62176E+10	9	24	5	9.39669E+01	9	23	5
2021.0	-3.60763E+11	-1.61457E+10	9	24	5	9.36902E+01	9	23	5
2022.0	-3.60513E+11	-1.60484E+10	9	24	5	9.32650E+01	9	23	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.01557E+01	-5.87032E+00	64	19	5	3.01895E-06	64	20	5
1967.0	-5.59131E+03	-6.95423E+02	64	17	5	3.12931E-04	64	20	5
1972.0	-7.23689E+04	-8.55620E+03	64	15	5	3.29391E-03	64	20	5
1977.0	-3.57453E+05	-4.04445E+04	64	15	5	1.34779E-02	64	20	5
1982.0	-2.63367E+06	-4.92755E+05	70	29	3	3.37422E-02	64	20	5
1987.0	-6.43430E+07	-1.57043E+07	70	29	3	6.28811E-01	70	30	3
1990.0	-2.35017E+08	-5.57496E+07	70	29	3	2.17019E+00	70	30	3
1992.0	-4.27894E+08	-9.83240E+07	70	29	3	3.81692E+00	70	30	3
1993.0	-5.54545E+08	-1.25782E+08	70	29	3	4.84523E+00	70	30	3
1994.0	-6.99409E+08	-1.56644E+08	70	29	3	5.98993E+00	70	30	3
1995.0	-8.60911E+08	-1.90446E+08	70	29	3	7.23209E+00	70	30	3
1996.0	-1.03682E+09	-2.26618E+08	70	29	3	8.54992E+00	70	30	3
1997.0	-1.22450E+09	-2.64546E+08	70	29	3	9.92041E+00	70	30	3
1998.0	-1.42112E+09	-3.03599E+08	70	29	3	1.13207E+01	70	30	3
1999.0	-1.62372E+09	-3.43168E+08	70	29	3	1.27289E+01	70	30	3
2000.0	-1.82942E+09	-3.82681E+08	70	29	3	1.41252E+01	70	30	3
2001.0	-2.03547E+09	-4.21626E+08	70	29	3	1.54923E+01	70	30	3
2002.0	-2.23939E+09	-4.59562E+08	70	29	3	1.68154E+01	70	30	3
2003.0	-2.43896E+09	-4.96117E+08	70	29	3	1.80826E+01	70	30	3
2004.0	-2.63228E+09	-5.30989E+08	70	29	3	1.92842E+01	70	30	3
2005.0	-2.81773E+09	-5.63940E+08	70	29	3	2.04131E+01	70	30	3
2006.0	-2.99394E+09	-5.94784E+08	70	29	3	2.14637E+01	70	30	3
2007.0	-3.15983E+09	-6.23381E+08	70	29	3	2.24321E+01	70	30	3
2008.0	-3.31451E+09	-6.49631E+08	70	29	3	2.33157E+01	70	30	3
2009.0	-3.45724E+09	-6.73459E+08	70	29	3	2.41125E+01	70	30	3
2010.0	-3.58751E+09	-6.94818E+08	70	29	3	2.48215E+01	70	30	3
2011.0	-3.70488E+09	-7.13678E+08	70	29	3	2.54422E+01	70	30	3
2012.0	-3.80907E+09	-7.30029E+08	70	29	3	2.59748E+01	70	30	3
2013.0	-3.89990E+09	-7.43873E+08	70	29	3	2.64196E+01	70	30	3
2014.0	-3.97728E+09	-7.55228E+08	70	29	3	2.67777E+01	70	30	3
2015.0	-4.04125E+09	-7.64127E+08	70	29	3	2.70504E+01	70	30	3
2016.0	-4.09190E+09	-7.70614E+08	70	29	3	2.72396E+01	70	30	3
2017.0	-4.12947E+09	-7.74751E+08	70	29	3	2.73477E+01	70	30	3
2018.0	-4.15423E+09	-7.76608E+08	70	29	3	2.73772E+01	70	30	3
2019.0	-4.16657E+09	-7.76273E+08	70	29	3	2.73315E+01	70	30	3

2020.0	-4.16694E+09	-7.73841E+08	70	29	3	2.72140E+01	70	30	3
2021.0	-4.15588E+09	-7.69422E+08	70	29	3	2.70285E+01	70	30	3
2022.0	-4.13396E+09	-7.63133E+08	70	29	3	2.67795E+01	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.93825E+03	-3.84100E+02	43	22	3	3.04895E-05	43	23	3
1967.0	-3.15507E+05	-3.49686E+04	41	16	3	5.54849E-03	40	7	5
1972.0	-4.10481E+06	-4.73565E+05	41	16	3	9.59145E-02	40	7	5
1977.0	-2.11409E+07	-2.48804E+06	41	16	3	5.79232E-01	40	7	5
1982.0	-6.38753E+07	-7.60545E+06	41	16	3	1.93051E+00	40	7	5
1987.0	-1.38419E+08	-1.65116E+07	41	16	3	4.42177E+00	40	7	5
1990.0	-1.98389E+08	-2.34904E+07	41	16	3	6.41254E+00	40	7	5
1992.0	-2.34379E+08	-2.84846E+07	40	14	3	7.88093E+00	40	7	5
1993.0	-2.57224E+08	-3.11978E+07	40	14	3	8.65060E+00	40	7	5
1994.0	-2.80993E+08	-3.39813E+07	40	14	3	9.43883E+00	40	7	5
1995.0	-3.05481E+08	-3.68165E+07	40	14	3	1.02430E+01	40	7	5
1996.0	-3.30603E+08	-3.96953E+07	40	14	3	1.10600E+01	40	7	5
1997.0	-3.56223E+08	-4.26060E+07	40	14	3	1.18864E+01	40	7	5
1998.0	-3.82212E+08	-4.55376E+07	40	14	3	1.27192E+01	40	7	5
1999.0	-4.08427E+08	-4.84787E+07	40	14	3	1.35550E+01	40	7	5
2000.0	-4.34716E+08	-5.14175E+07	40	14	3	1.43899E+01	40	7	5
2001.0	-4.60921E+08	-5.43419E+07	40	14	3	1.52202E+01	40	7	5
2002.0	-4.86879E+08	-5.72394E+07	40	14	3	1.60420E+01	40	7	5
2003.0	-5.12433E+08	-6.00973E+07	40	14	3	1.68508E+01	40	7	5
2004.0	-5.37431E+08	-6.29037E+07	40	14	3	1.76431E+01	40	7	5
2005.0	-5.61731E+08	-6.56466E+07	40	14	3	1.84150E+01	40	7	5
2006.0	-5.85197E+08	-6.83147E+07	40	14	3	1.91630E+01	40	7	5
2007.0	-6.07715E+08	-7.08975E+07	40	14	3	1.98835E+01	40	7	5
2008.0	-6.29179E+08	-7.33849E+07	40	14	3	2.05736E+01	40	7	5
2009.0	-6.49497E+08	-7.57678E+07	40	14	3	2.12300E+01	40	7	5
2010.0	-6.68590E+08	-7.80376E+07	40	14	3	2.18511E+01	40	7	5
2011.0	-6.86395E+08	-8.01868E+07	40	14	3	2.24343E+01	40	7	5
2012.0	-7.02858E+08	-8.22081E+07	40	14	3	2.29777E+01	40	7	5
2013.0	-7.17934E+08	-8.40951E+07	40	14	3	2.34799E+01	40	7	5
2014.0	-7.31591E+08	-8.58420E+07	40	14	3	2.39393E+01	40	7	5
2015.0	-7.43802E+08	-8.74433E+07	40	14	3	2.43550E+01	40	7	5
2016.0	-7.54550E+08	-8.88944E+07	40	14	3	2.47258E+01	40	7	5
2017.0	-7.63824E+08	-9.01910E+07	40	14	3	2.50509E+01	40	7	5
2018.0	-7.71619E+08	-9.13295E+07	40	14	3	2.53298E+01	40	7	5
2019.0	-7.77937E+08	-9.23071E+07	40	14	3	2.55619E+01	40	7	5
2020.0	-7.82788E+08	-9.31214E+07	40	14	3	2.57469E+01	40	7	5
2021.0	-7.86183E+08	-9.37709E+07	40	14	3	2.58845E+01	40	7	5
2022.0	-7.88143E+08	-9.42548E+07	40	14	3	2.59750E+01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.56018E-12	-3.04024E-13	90	35	3	3.43001E-21	90	36	3
1967.0	-1.91938E-09	-4.13091E-10	90	35	3	4.38221E-18	90	36	3
1972.0	-1.42007E-07	-3.08846E-08	90	35	3	3.23833E-16	90	36	3
1977.0	-2.90415E-06	-6.28612E-07	90	35	3	6.56250E-15	90	36	3
1982.0	-2.71919E-05	-5.82893E-06	90	35	3	6.07296E-14	90	36	3
1987.0	-1.49696E-04	-3.17176E-05	90	35	3	3.30090E-13	90	36	3
1990.0	-3.44618E-04	-7.25142E-05	90	35	3	7.54171E-13	90	36	3
1992.0	-5.63527E-04	-1.18151E-04	90	35	3	1.22839E-12	90	36	3
1993.0	-7.09229E-04	-1.48490E-04	90	35	3	1.54303E-12	90	36	3
1994.0	-8.84131E-04	-1.84916E-04	90	35	3	1.92032E-12	90	36	3
1995.0	-1.09267E-03	-2.28399E-04	90	35	3	2.36992E-12	90	36	3
1996.0	-1.133987E-03	-2.80061E-04	90	35	3	2.90302E-12	90	36	3
1997.0	-1.63149E-03	-3.41220E-04	90	35	3	3.53264E-12	90	36	3
1998.0	-1.97420E-03	-4.13432E-04	90	35	3	4.27402E-12	90	36	3
1999.0	-2.37568E-03	-4.98527E-04	90	35	3	5.14499E-12	90	36	3
2000.0	-2.84483E-03	-5.98651E-04	90	35	3	6.16881E-12	90	35	3
2001.0	-3.39186E-03	-7.16292E-04	90	35	3	7.38105E-12	90	35	3

2002.0	-4.02839E-03	-8.54306E-04	90	35	3	8.80322E-12	90	35	3
2003.0	-4.76755E-03	-1.01592E-03	90	35	3	1.04686E-11	90	35	3
2004.0	-5.62390E-03	-1.20472E-03	90	35	3	1.24141E-11	90	35	3
2005.0	-6.61346E-03	-1.42463E-03	90	35	3	1.46802E-11	90	35	3
2006.0	-7.75346E-03	-1.67986E-03	90	35	3	1.73102E-11	90	35	3
2007.0	-9.06221E-03	-1.97485E-03	90	35	3	2.03499E-11	90	35	3
2008.0	-1.05588E-02	-2.31416E-03	90	35	3	2.38463E-11	90	35	3
2009.0	-1.22626E-02	-2.70240E-03	90	35	3	2.78470E-11	90	35	3
2010.0	-1.41933E-02	-3.14412E-03	90	35	3	3.23987E-11	90	35	3
2011.0	-1.63698E-02	-3.64368E-03	90	35	3	3.75465E-11	90	35	3
2012.0	-1.88103E-02	-4.20516E-03	90	35	3	4.33323E-11	90	35	3
2013.0	-2.15317E-02	-4.83221E-03	90	35	3	4.97938E-11	90	35	3
2014.0	-2.45490E-02	-5.52797E-03	90	35	3	5.69632E-11	90	35	3
2015.0	-2.78750E-02	-6.29495E-03	90	35	3	6.48667E-11	90	35	3
2016.0	-3.15199E-02	-7.13499E-03	90	35	3	7.35228E-11	90	35	3
2017.0	-3.54909E-02	-8.04912E-03	90	35	3	8.29426E-11	90	35	3
2018.0	-3.97921E-02	-9.03759E-03	90	35	3	9.31283E-11	90	35	3
2019.0	-4.44241E-02	-1.00998E-02	90	35	3	1.04074E-10	90	35	3
2020.0	-4.93841E-02	-1.12342E-02	90	35	3	1.15764E-10	90	35	3
2021.0	-5.46654E-02	-1.24386E-02	90	35	3	1.28174E-10	90	35	3
2022.0	-6.02582E-02	-1.37097E-02	90	35	3	1.41272E-10	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.25347E+01	-1.10790E+01	1	42	5	9.91980E-08	1	42	5
1967.0	-1.22273E+04	-3.97268E+03	1	42	5	3.55701E-05	1	42	5
1972.0	-3.19845E+05	-1.00227E+05	1	42	5	8.97400E-04	1	42	5
1977.0	-2.64309E+06	-8.01743E+05	1	42	5	7.17856E-03	1	42	5
1982.0	-1.10976E+07	-3.26779E+06	1	42	5	2.92588E-02	1	42	5
1987.0	-3.01655E+07	-8.64594E+06	1	42	5	7.74131E-02	1	42	5
1990.0	-4.73624E+07	-1.33743E+07	1	42	5	1.19750E-01	1	42	5
1992.0	-6.08110E+07	-1.70156E+07	1	42	5	1.52450E-01	1	42	5
1993.0	-6.80936E+07	-1.89684E+07	1	42	5	1.69961E-01	1	42	5
1994.0	-7.56675E+07	-2.09864E+07	1	42	5	1.88056E-01	1	42	5
1995.0	-8.35009E+07	-2.30601E+07	1	42	5	2.06639E-01	1	42	5
1996.0	-9.15418E+07	-2.51754E+07	1	42	5	2.25594E-01	1	42	5
1997.0	-9.97422E+07	-2.73194E+07	1	42	5	2.44806E-01	1	42	5
1998.0	-1.08064E+08	-2.94819E+07	1	42	5	2.64185E-01	1	42	5
1999.0	-1.16461E+08	-3.16505E+07	1	42	5	2.83618E-01	1	42	5
2000.0	-1.24886E+08	-3.38131E+07	1	42	5	3.02996E-01	1	42	5
2001.0	-1.33292E+08	-3.59578E+07	1	42	5	3.22215E-01	1	42	5
2002.0	-1.41637E+08	-3.80736E+07	1	42	5	3.41175E-01	1	42	5
2003.0	-1.49867E+08	-4.01474E+07	1	42	5	3.59759E-01	1	42	5
2004.0	-1.57956E+08	-4.21727E+07	1	42	5	3.77908E-01	1	42	5
2005.0	-1.65866E+08	-4.41406E+07	1	42	5	3.95543E-01	1	42	5
2006.0	-1.73563E+08	-4.60431E+07	1	42	5	4.12590E-01	1	42	5
2007.0	-1.81015E+08	-4.78729E+07	1	42	5	4.28987E-01	1	42	5
2008.0	-1.88195E+08	-4.96238E+07	1	42	5	4.44678E-01	1	42	5
2009.0	-1.95069E+08	-5.12883E+07	1	42	5	4.59593E-01	1	42	5
2010.0	-2.01639E+08	-5.28676E+07	1	42	5	4.73745E-01	1	42	5
2011.0	-2.07874E+08	-5.43551E+07	1	42	5	4.87075E-01	1	42	5
2012.0	-2.13760E+08	-5.57479E+07	1	42	5	4.99557E-01	1	42	5
2013.0	-2.19285E+08	-5.70440E+07	1	42	5	5.11172E-01	1	42	5
2014.0	-2.24438E+08	-5.82417E+07	1	42	5	5.21904E-01	1	42	5
2015.0	-2.29217E+08	-5.93408E+07	1	42	5	5.31753E-01	1	42	5
2016.0	-2.33609E+08	-6.03387E+07	1	42	5	5.40696E-01	1	42	5
2017.0	-2.37609E+08	-6.12348E+07	1	42	5	5.48726E-01	1	42	5
2018.0	-2.41213E+08	-6.20285E+07	1	42	5	5.55839E-01	1	42	5
2019.0	-2.44417E+08	-6.27195E+07	1	42	5	5.62031E-01	1	42	5
2020.0	-2.47218E+08	-6.33075E+07	1	42	5	5.67301E-01	1	42	5
2021.0	-2.49617E+08	-6.37926E+07	1	42	5	5.71647E-01	1	42	5
2022.0	-2.51610E+08	-6.41744E+07	1	42	5	5.75069E-01	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.09434E+04	-8.52648E+03	36	60	5	7.36841E-04	36	60	5
1967.0	-1.15519E+06	-4.26295E+05	36	60	5	3.68397E-02	36	60	5
1972.0	-1.17366E+07	-4.05412E+06	36	60	5	3.50352E-01	36	60	5
1977.0	-5.14390E+07	-1.69397E+07	36	60	5	1.46391E+00	36	60	5
1982.0	-1.37245E+08	-4.36095E+07	36	60	5	3.76871E+00	36	60	5
1987.0	-2.66397E+08	-8.29474E+07	38	61	5	7.11836E+00	36	60	5
1990.0	-3.56277E+08	-1.10911E+08	38	61	5	9.39458E+00	36	60	5
1992.0	-3.96215E+08	-1.25212E+08	38	61	5	1.09787E+01	36	60	5
1993.0	-4.23461E+08	-1.33888E+08	38	61	5	1.17260E+01	36	60	5
1994.0	-4.50121E+08	-1.42324E+08	38	61	5	1.24471E+01	36	60	5
1995.0	-4.76861E+08	-1.50653E+08	38	61	5	1.31362E+01	36	60	5
1996.0	-5.02507E+08	-1.58608E+08	38	61	5	1.37921E+01	36	60	5
1997.0	-5.26918E+08	-1.66157E+08	38	61	5	1.44130E+01	36	60	5
1998.0	-5.50025E+08	-1.73280E+08	38	61	5	1.49973E+01	36	60	5
1999.0	-5.71771E+08	-1.79963E+08	38	61	5	1.55437E+01	36	60	5
2000.0	-5.92117E+08	-1.86196E+08	38	61	5	1.60515E+01	36	60	5
2001.0	-6.11037E+08	-1.91974E+08	38	61	5	1.65202E+01	36	60	5
2002.0	-6.28523E+08	-1.97295E+08	38	61	5	1.69501E+01	36	60	5
2003.0	-6.44577E+08	-2.02160E+08	38	61	5	1.73413E+01	36	60	5
2004.0	-6.59214E+08	-2.06577E+08	38	61	5	1.76946E+01	36	60	5
2005.0	-6.72466E+08	-2.10555E+08	38	61	5	1.80107E+01	36	60	5
2006.0	-6.84339E+08	-2.14100E+08	38	61	5	1.82907E+01	36	60	5
2007.0	-6.94890E+08	-2.17227E+08	38	61	5	1.85356E+01	36	60	5
2008.0	-7.04138E+08	-2.19947E+08	38	61	5	1.87464E+01	36	60	5
2009.0	-7.12120E+08	-2.22270E+08	38	61	5	1.89243E+01	36	60	5
2010.0	-7.18869E+08	-2.24209E+08	38	61	5	1.90702E+01	36	60	5
2011.0	-7.24416E+08	-2.25774E+08	38	61	5	1.91850E+01	36	60	5
2012.0	-7.28790E+08	-2.26976E+08	38	61	5	1.92695E+01	36	60	5
2013.0	-7.32018E+08	-2.27822E+08	38	61	5	1.93245E+01	36	60	5
2014.0	-7.34124E+08	-2.28322E+08	38	61	5	1.93505E+01	36	60	5
2015.0	-7.35129E+08	-2.28482E+08	38	61	5	1.93483E+01	36	60	5
2016.0	-7.35052E+08	-2.28308E+08	38	61	5	1.93181E+01	36	60	5
2017.0	-7.33914E+08	-2.27807E+08	38	61	5	1.92607E+01	36	60	5
2018.0	-7.31732E+08	-2.26985E+08	38	61	5	1.91763E+01	36	60	5
2019.0	-7.28527E+08	-2.25847E+08	38	61	5	1.90656E+01	36	60	5
2020.0	-7.24320E+08	-2.24400E+08	38	61	5	1.89292E+01	36	60	5
2021.0	-7.19134E+08	-2.22652E+08	38	61	5	1.87676E+01	36	60	5
2022.0	-7.12997E+08	-2.20610E+08	38	61	5	1.85815E+01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.15099E-16	-7.14700E-16	91	26	5	1.21992E-22	91	26	5
1967.0	-1.79945E-12	-1.79044E-12	91	26	5	3.05612E-19	91	26	5
1972.0	-1.78476E-10	-1.76426E-10	91	26	5	3.01144E-17	91	26	5
1977.0	-4.45558E-09	-4.36732E-09	91	26	5	7.45467E-16	91	26	5
1982.0	-4.85008E-08	-4.70550E-08	91	26	5	8.03193E-15	91	26	5
1987.0	-2.99895E-07	-2.87650E-07	91	26	5	4.90998E-14	91	26	5
1990.0	-7.29879E-07	-6.95376E-07	91	26	5	1.18696E-13	91	26	5
1992.0	-1.22464E-06	-1.16150E-06	91	26	5	1.99578E-13	91	26	5
1993.0	-1.56079E-06	-1.47734E-06	91	26	5	2.54337E-13	91	26	5
1994.0	-1.96858E-06	-1.85987E-06	91	26	5	3.20746E-13	91	26	5
1995.0	-2.46285E-06	-2.32318E-06	91	26	5	4.00692E-13	91	26	5
1996.0	-3.05433E-06	-2.87722E-06	91	26	5	4.96264E-13	91	26	5
1997.0	-3.75743E-06	-3.53561E-06	91	26	5	6.09839E-13	91	26	5
1998.0	-4.58888E-06	-4.31425E-06	91	26	5	7.44163E-13	91	26	5
1999.0	-5.56800E-06	-5.23160E-06	91	26	5	9.02422E-13	91	26	5
2000.0	-6.71712E-06	-6.30908E-06	91	26	5	1.08831E-12	91	26	5
2001.0	-8.06204E-06	-7.57152E-06	91	26	5	1.30612E-12	91	26	5
2002.0	-9.63239E-06	-9.04743E-06	91	26	5	1.56076E-12	91	26	5
2003.0	-1.14619E-05	-1.07692E-05	91	26	5	1.85783E-12	91	26	5
2004.0	-1.35884E-05	-1.27732E-05	91	26	5	2.20361E-12	91	26	5
2005.0	-1.60541E-05	-1.50999E-05	91	26	5	2.60504E-12	91	26	5
2006.0	-1.89044E-05	-1.77924E-05	91	26	5	3.06963E-12	91	26	5
2007.0	-2.21884E-05	-2.08975E-05	91	26	5	3.60539E-12	91	26	5

2008.0	-2.59571E-05	-2.44635E-05	91	26	5	4.22067E-12	91	26	5
2009.0	-3.02624E-05	-2.85395E-05	91	26	5	4.92397E-12	91	26	5
2010.0	-3.51565E-05	-3.31746E-05	91	26	5	5.72375E-12	91	26	5
2011.0	-4.06895E-05	-3.84162E-05	91	26	5	6.62818E-12	91	26	5
2012.0	-4.69082E-05	-4.43086E-05	91	26	5	7.64494E-12	91	26	5
2013.0	-5.38543E-05	-5.08919E-05	91	26	5	8.78091E-12	91	26	5
2014.0	-6.15627E-05	-5.82001E-05	91	26	5	1.00420E-11	91	26	5
2015.0	-7.00599E-05	-6.62607E-05	91	26	5	1.14330E-11	91	26	5
2016.0	-7.93627E-05	-7.50926E-05	91	26	5	1.29570E-11	91	26	5
2017.0	-8.94766E-05	-8.47062E-05	91	26	5	1.46160E-11	91	26	5
2018.0	-1.00395E-04	-9.51019E-05	91	26	5	1.64100E-11	91	26	5
2019.0	-1.12099E-04	-1.06271E-04	91	26	5	1.83374E-11	91	26	5
2020.0	-1.24556E-04	-1.18192E-04	91	26	5	2.03948E-11	91	26	5
2021.0	-1.37720E-04	-1.30838E-04	91	26	5	2.25772E-11	91	26	5
2022.0	-1.51535E-04	-1.44168E-04	91	26	5	2.48777E-11	91	26	5

URANIUM 234

URANIUM 234

MASS FLUX UNITS: pc/day
 CONCENTRATION UNITS: pc/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	3.20
2	1.60
3	5.80
4	9.90
5	6.30
7	4.20
8	3.50
9	12.00
10	110.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.11217E+00	-2.39532E+00	39	54	1	1.19504E-04	39	54	1
1967.0	-1.03358E+02	-6.15684E+01	39	54	1	3.07169E-03	39	54	1
1972.0	-5.94818E+02	-2.80885E+02	39	54	1	1.40136E-02	39	54	1
1977.0	-1.76633E+03	-6.79043E+02	39	54	1	3.38780E-02	39	54	1
1982.0	-3.78073E+03	-1.20082E+03	39	54	1	5.99099E-02	39	54	1
1987.0	-6.69148E+03	-1.77541E+03	39	54	1	8.85769E-02	39	54	1
1990.0	-8.84799E+03	-2.12084E+03	39	54	1	1.05811E-01	39	54	1
1992.0	-9.18821E+03	-2.01404E+03	39	54	1	1.12509E-01	39	54	1
1997.0	-1.25399E+04	-2.32184E+03	39	54	1	1.29849E-01	39	54	1
2002.0	-1.61715E+04	-2.56566E+03	39	54	1	1.43574E-01	39	54	1
2007.0	-1.97548E+04	-2.75744E+03	39	54	1	1.54311E-01	39	54	1
2012.0	-2.31119E+04	-2.91353E+03	39	54	1	1.63047E-01	39	54	1
2017.0	-2.61614E+04	-3.04605E+03	39	54	1	1.70464E-01	39	54	1
2022.0	-2.88825E+04	-3.16195E+03	39	54	1	1.76951E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.49166E-04	-1.08608E-05	57	13	5	3.31923E-10	55	22	3
1967.0	-1.05182E+00	-6.67795E-02	57	13	5	9.27051E-07	57	15	5
1972.0	-8.94821E+01	-5.13636E+00	54	11	5	5.49697E-05	53	11	5
1977.0	-1.31538E+03	-6.87455E+01	48	9	5	6.84675E-04	48	9	5
1982.0	-7.80535E+03	-3.74639E+02	48	9	5	3.73125E-03	48	9	5
1987.0	-2.76890E+04	-1.17051E+03	48	9	5	1.16577E-02	48	9	5
1990.0	-5.22324E+04	-2.09841E+03	48	9	5	2.10748E-02	47	9	5
1992.0	-7.74029E+04	-3.11993E+03	48	9	5	3.17809E-02	47	9	5
1997.0	-1.99970E+05	-8.64353E+03	48	9	5	9.10416E-02	47	9	5
2002.0	-4.58308E+05	-1.99813E+04	48	9	5	2.17415E-01	47	9	5
2007.0	-8.76827E+05	-3.52364E+04	48	9	5	4.04570E-01	45	8	5
2012.0	-1.40369E+06	-5.39705E+04	36	7	5	6.08248E-01	45	8	5
2017.0	-1.94359E+06	-7.51376E+04	36	7	5	7.73031E-01	45	8	5
2022.0	-2.41214E+06	-9.07031E+04	36	7	5	8.80371E-01	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.50628E-01	-6.58322E-02	52	62	1	1.54847E-05	52	61	1
1967.0	-1.80326E+01	-4.42817E+00	52	62	1	7.50786E-04	52	61	1
1972.0	-1.38739E+02	-3.13146E+01	52	62	1	4.47237E-03	52	61	1
1977.0	-4.67419E+02	-9.40188E+01	52	62	1	1.21642E-02	52	61	1
1982.0	-1.06468E+03	-1.86315E+02	52	62	1	2.26925E-02	52	61	1
1987.0	-1.94988E+03	-2.94541E+02	52	62	1	3.45044E-02	52	61	1
1990.0	-2.61350E+03	-3.62363E+02	52	62	1	4.17343E-02	52	61	1
1992.0	-2.58090E+03	-3.20052E+02	52	62	1	4.23444E-02	52	61	1
1997.0	-3.57317E+03	-3.79438E+02	52	62	1	5.09160E-02	52	61	1
2002.0	-4.73298E+03	-4.52739E+02	52	62	1	6.00802E-02	52	61	1
2007.0	-5.90227E+03	-5.17428E+02	52	62	1	6.77940E-02	52	61	1
2012.0	-7.01393E+03	-6.14456E+02	37	60	1	7.42448E-02	52	61	1
2017.0	-8.04263E+03	-7.07515E+02	37	60	1	7.97157E-02	52	61	1
2022.0	-8.98123E+03	-7.84751E+02	37	60	1	8.43508E-02	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.79274E-03	-3.39380E-03	55	66	1	2.80777E-07	55	66	1
1967.0	-8.58881E-01	-4.71918E-01	55	66	1	3.90429E-05	55	66	1
1972.0	-1.09315E+01	-4.68643E+00	55	66	1	3.87720E-04	55	66	1
1977.0	-6.21339E+01	-1.67532E+01	55	66	1	1.38603E-03	55	66	1
1982.0	-2.31797E+02	-3.64364E+01	55	66	1	3.01448E-03	55	66	1
1987.0	-6.31606E+02	-8.89613E+01	38	61	1	7.87963E-03	36	60	1
1990.0	-1.02212E+03	-1.44092E+02	38	61	1	1.28490E-02	36	60	1
1992.0	-1.29931E+03	-1.81545E+02	38	61	1	1.66455E-02	36	60	1
1997.0	-2.24094E+03	-3.05693E+02	38	61	1	2.84454E-02	36	60	1
2002.0	-3.40809E+03	-4.46628E+02	38	61	1	4.20980E-02	36	60	1
2007.0	-4.68666E+03	-5.87562E+02	38	61	1	5.59969E-02	36	60	1
2012.0	-5.96770E+03	-7.22011E+02	36	60	1	6.89351E-02	36	60	1
2017.0	-7.17484E+03	-8.40671E+02	36	60	1	8.02644E-02	36	60	1
2022.0	-8.26881E+03	-9.40853E+02	36	60	1	8.98295E-02	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.85575E+00	-2.39532E+00	39	54	1	1.19504E-04	39	54	1
1967.0	-8.44666E+01	-6.15684E+01	39	54	1	3.07169E-03	39	54	1
1972.0	-4.45147E+02	-2.80885E+02	39	54	1	1.40136E-02	39	54	1
1977.0	-1.23677E+03	-6.79043E+02	39	54	1	3.38780E-02	39	54	1
1982.0	-2.48423E+03	-1.20082E+03	39	54	1	5.99099E-02	39	54	1
1987.0	-4.10991E+03	-1.77541E+03	39	54	1	8.85769E-02	39	54	1
1990.0	-5.21223E+03	-2.12084E+03	39	54	1	1.05811E-01	39	54	1
1992.0	-5.30786E+03	-2.01404E+03	39	54	1	1.12509E-01	39	54	1
1997.0	-6.72557E+03	-2.32184E+03	39	54	1	1.29849E-01	39	54	1
2002.0	-8.02995E+03	-2.56566E+03	39	54	1	1.43574E-01	39	54	1
2007.0	-9.16502E+03	-2.75744E+03	39	54	1	1.54311E-01	39	54	1
2012.0	-1.01289E+04	-2.91353E+03	39	54	1	1.63047E-01	39	54	1
2017.0	-1.09419E+04	-3.04605E+03	39	54	1	1.70464E-01	39	54	1
2022.0	-1.16297E+04	-3.16195E+03	39	54	1	1.76951E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.47753E-07	-4.70600E-08	61	63	1	3.51707E-12	61	63	1
1967.0	2.10397E-05	-2.21976E-05	60	65	1	1.46008E-09	61	63	1
1972.0	-2.62737E-04	-5.20934E-04	60	65	1	2.93591E-08	61	63	1
1977.0	-5.14202E-03	-3.54887E-03	60	65	1	1.82606E-07	61	63	1
1982.0	-2.69555E-02	-1.30997E-02	60	65	1	6.46197E-07	60	65	1
1987.0	-8.41593E-02	-3.40519E-02	60	65	1	1.67974E-06	60	65	1
1990.0	-1.44687E-01	-5.38586E-02	60	65	1	2.65679E-06	60	65	1
1992.0	-1.37880E-01	-5.45712E-02	60	65	1	2.80766E-06	60	65	1
1997.0	-2.31841E-01	-7.44381E-02	60	65	1	6.30109E-06	59	66	1
2002.0	-4.55042E-01	-1.59193E-01	59	66	1	2.21509E-05	59	66	1
2007.0	-8.15264E-01	-3.85943E-01	59	66	1	5.37023E-05	59	66	1
2012.0	-1.32916E+00	-7.77892E-01	59	66	1	1.08240E-04	59	66	1
2017.0	-1.99276E+00	-1.38514E+00	59	66	1	1.92737E-04	59	66	1
2022.0	-2.78356E+00	-2.25010E+00	59	66	1	3.13092E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.39641E-05	-8.33552E-06	55	22	3	3.31923E-10	55	22	3
1967.0	-1.02852E-01	-2.38182E-02	55	19	3	9.27051E-07	57	15	5
1972.0	-5.12020E+00	-1.15971E+00	55	19	3	4.63527E-05	57	15	5
1977.0	-5.16900E+01	-1.09597E+01	55	19	3	4.18180E-04	57	15	5
1982.0	-2.36065E+02	-4.53199E+01	55	19	3	1.61105E-03	57	15	5
1987.0	-8.83972E+02	-1.21639E+02	55	19	3	4.00756E-03	57	15	5
1990.0	-2.20743E+03	-2.11416E+02	55	19	3	6.58725E-03	57	15	5
1992.0	-3.66189E+03	-3.67751E+02	61	24	3	9.25152E-03	57	15	5
1997.0	-1.11966E+04	-1.21921E+03	61	24	3	2.71069E-02	60	25	3
2002.0	-2.44777E+04	-2.61102E+03	61	24	3	5.57089E-02	60	25	3
2007.0	-4.23518E+04	-4.33814E+03	61	24	3	9.01153E-02	60	25	3
2012.0	-6.26459E+04	-6.15132E+03	61	24	3	1.25366E-01	60	25	3
2017.0	-8.31481E+04	-7.84890E+03	61	24	3	1.77677E-01	24	7	5
2022.0	-1.02105E+05	-9.31094E+03	61	24	3	2.66471E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.11031E-04	-1.08608E-05	57	13	5	1.27157E-10	56	13	5
1967.0	-9.34510E-01	-6.67795E-02	57	13	5	7.80803E-07	56	13	5
1972.0	-8.34128E+01	-5.13636E+00	54	11	5	5.49697E-05	53	11	5
1977.0	-1.25144E+03	-6.87455E+01	48	9	5	6.84675E-04	48	9	5
1982.0	-7.50239E+03	-3.74639E+02	48	9	5	3.73125E-03	48	9	5
1987.0	-2.65517E+04	-1.17051E+03	48	9	5	1.16577E-02	48	9	5
1990.0	-4.93675E+04	-2.09841E+03	48	9	5	2.10748E-02	47	9	5
1992.0	-7.25533E+04	-3.11993E+03	48	9	5	3.17809E-02	47	9	5
1997.0	-1.83990E+05	-8.64353E+03	48	9	5	9.10416E-02	47	9	5
2002.0	-4.21052E+05	-1.99813E+04	48	9	5	2.17415E-01	47	9	5
2007.0	-8.09666E+05	-3.52364E+04	48	9	5	4.04570E-01	45	8	5
2012.0	-1.30241E+06	-5.39705E+04	36	7	5	6.08248E-01	45	8	5
2017.0	-1.80870E+06	-7.51376E+04	36	7	5	7.73031E-01	45	8	5
2022.0	-2.24753E+06	-9.07031E+04	36	7	5	8.80371E-01	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.10823E-07	-5E-08	64	19	5	1.33814E-11	64	20	5
1967.0	-5.37687E-07	-9E-05	64	19	5	4.15377E-08	64	20	5

1972.0	-3.11756E-02	-4.00334E-03	64	17	5	1.75959E-06	64	20	5
1977.0	-3.26560E-01	-3.94584E-02	64	15	5	1.42114E-05	64	20	5
1982.0	-1.50338E+00	-1.65475E-01	64	15	5	5.07366E-05	64	20	5
1987.0	-1.56415E+01	-3.44832E+00	70	29	3	1.46959E-04	70	30	3
1990.0	-9.59611E+01	-2.35062E+01	70	29	3	9.56477E-04	70	30	3
1992.0	-2.37072E+02	-5.66917E+01	70	29	3	2.27406E-03	70	30	3
1997.0	-1.17054E+03	-2.60775E+02	70	29	3	9.96066E-03	70	30	3
2002.0	-3.07029E+03	-6.43649E+02	70	29	3	2.38560E-02	70	30	3
2007.0	-5.68056E+03	-1.13884E+03	70	29	3	4.14307E-02	70	30	3
2012.0	-8.59861E+03	-1.67138E+03	70	29	3	6.01116E-02	70	30	3
2017.0	-1.15259E+04	-2.19497E+03	70	29	3	7.83865E-02	70	30	3
2022.0	-1.42758E+04	-2.68314E+03	70	29	3	9.53977E-02	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.05975E-06	-1.14271E-06	43	22	3	9.99128E-11	43	23	3
1967.0	-1.39241E-02	-2.54485E-03	43	22	3	1.92549E-07	43	23	3
1972.0	-9.17894E-01	-1.20310E-01	43	22	3	1.03116E-05	40	7	5
1977.0	-1.19240E+01	-1.35463E+00	42	18	3	2.28712E-04	40	7	5
1982.0	-6.53935E+01	-7.29973E+00	42	18	3	1.70853E-03	40	7	5
1987.0	-2.37705E+02	-2.43982E+01	42	18	3	6.70547E-03	40	7	5
1990.0	-5.61499E+02	-8.01776E+01	43	22	3	1.27690E-02	40	7	5
1992.0	-9.50690E+02	-1.41253E+02	43	22	3	1.91732E-02	40	7	5
1997.0	-3.61268E+03	-5.76095E+02	43	22	3	5.58594E-02	43	23	3
2002.0	-9.70838E+03	-1.43805E+03	43	22	3	1.47825E-01	40	7	5
2007.0	-1.91287E+04	-2.59098E+03	43	22	3	3.11370E-01	40	7	5
2012.0	-3.00322E+04	-3.76148E+03	43	22	3	5.08650E-01	40	7	5
2017.0	-4.02191E+04	-4.76183E+03	43	20	3	6.84910E-01	40	7	5
2022.0	-4.82334E+04	-5.60880E+03	42	18	3	8.08145E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.11523E-24	-2.03136E-25	90	35	3	2.40915E-30	90	36	3
1967.0	-8.23373E-19	-1.72739E-19	90	35	3	1.90119E-24	90	36	3
1972.0	-1.73950E-15	-3.80152E-16	90	35	3	4.05861E-21	90	36	3
1977.0	-2.63705E-13	-5.81349E-14	90	35	3	6.11771E-19	90	36	3
1982.0	-9.06949E-12	-1.98835E-12	90	35	3	2.07818E-17	90	36	3
1987.0	-1.22921E-10	-2.66187E-11	90	35	3	2.77356E-16	90	36	3
1990.0	-4.29030E-10	-9.20698E-11	90	35	3	9.58435E-16	90	36	3
1992.0	-8.90225E-10	-1.89886E-10	90	35	3	1.97654E-15	90	36	3
1997.0	-4.16890E-09	-8.75555E-10	90	35	3	9.10406E-15	90	36	3
2002.0	-1.45189E-08	-3.01461E-09	90	35	3	3.12798E-14	90	36	3
2007.0	-4.26773E-08	-8.87384E-09	90	35	3	9.15820E-14	90	36	3
2012.0	-1.16999E-07	-2.46581E-08	90	35	3	2.54090E-13	90	35	3
2017.0	-3.06850E-07	-6.53965E-08	90	35	3	6.73879E-13	90	35	3
2022.0	-7.47874E-07	-1.59314E-07	90	35	3	1.64166E-12	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.86736E-11	-2.59558E-11	1	42	5	2.32400E-16	1	42	5
1967.0	-4.96227E-06	-1.76454E-06	1	42	5	1.57991E-11	1	42	5
1972.0	-1.62469E-03	-5.45037E-04	1	42	5	4.88010E-09	1	42	5
1977.0	-5.42079E-02	-1.72657E-02	1	42	5	1.54592E-07	1	42	5
1982.0	-5.51216E-01	-1.67853E-01	1	42	5	1.50290E-06	1	42	5
1987.0	-2.83322E+00	-8.29939E-01	1	42	5	7.43102E-06	1	42	5
1990.0	-6.11063E+00	-1.75321E+00	1	42	5	1.56977E-05	1	42	5
1992.0	-9.52242E+00	-2.69754E+00	1	42	5	2.41683E-05	1	42	5
1997.0	-2.41115E+01	-6.63240E+00	1	42	5	5.94277E-05	1	42	5

2002.0	-4.99758E+01	-1.34010E+01	1	42	5	1.20084E-04	1	42	5
2007.0	-8.93458E+01	-2.34526E+01	1	42	5	2.10156E-04	1	42	5
2012.0	-1.42540E+02	-3.67718E+01	1	42	5	3.29508E-04	1	42	5
2017.0	-2.07497E+02	-5.27654E+01	1	42	5	4.72826E-04	1	42	5
2022.0	-2.79914E+02	-7.02986E+01	1	42	5	6.29939E-04	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.53948E-05	-1.01993E-05	38	61	5	8.33735E-10	36	60	5
1967.0	-5.22361E-02	-1.23378E-02	38	61	5	8.25591E-07	36	60	5
1972.0	-1.72216E+00	-4.27452E-01	38	61	5	2.68100E-05	36	60	5
1977.0	-1.41010E+01	-3.64731E+00	38	61	5	2.20822E-04	36	60	5
1982.0	-5.71543E+01	-1.52382E+01	38	61	5	8.98236E-04	36	60	5
1987.0	-1.53681E+02	-4.18116E+01	38	61	5	2.41186E-03	36	60	5
1990.0	-2.43626E+02	-6.68242E+01	38	61	5	3.81357E-03	36	60	5
1992.0	-3.05128E+02	-8.41982E+01	38	61	5	4.97898E-03	36	60	5
1997.0	-5.21225E+02	-1.44359E+02	38	61	5	8.43139E-03	36	60	5
2002.0	-7.72950E+02	-2.14202E+02	38	61	5	1.24106E-02	36	60	5
2007.0	-1.03840E+03	-2.87142E+02	38	61	5	1.65144E-02	36	60	5
2012.0	-1.29848E+03	-3.57266E+02	38	61	5	2.04276E-02	36	60	5
2017.0	-1.54126E+03	-4.20999E+02	38	61	5	2.39610E-02	36	60	5
2022.0	-1.76132E+03	-4.76951E+02	38	61	5	2.70447E-02	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.51614E-29	-7.51613E-29	91	26	5	1.28293E-32	91	26	5
1967.0	-2.03977E-22	-2.03960E-22	91	26	5	3.48142E-26	91	26	5
1972.0	-9.26517E-19	-9.25825E-19	91	26	5	1.58030E-22	91	26	5
1977.0	-2.33723E-16	-2.32983E-16	91	26	5	3.97682E-20	91	26	5
1982.0	-1.14397E-14	-1.13380E-14	91	26	5	1.93531E-18	91	26	5
1987.0	-1.99135E-13	-1.95335E-13	91	26	5	3.33422E-17	91	26	5
1990.0	-7.79565E-13	-7.58248E-13	91	26	5	1.29428E-16	91	26	5
1992.0	-1.71519E-12	-1.65724E-12	91	26	5	2.84761E-16	91	26	5
1997.0	-9.11679E-12	-8.65841E-12	91	26	5	1.49062E-15	91	26	5
2002.0	-3.42932E-11	-3.21084E-11	91	26	5	5.53728E-15	91	26	5
2007.0	-1.03905E-10	-9.68888E-11	91	26	5	1.67109E-14	91	26	5
2012.0	-2.85000E-10	-2.67784E-10	91	26	5	4.61874E-14	91	26	5
2017.0	-7.47618E-10	-7.09078E-10	91	26	5	1.22305E-13	91	26	5
2022.0	-1.83522E-09	-1.74785E-09	91	26	5	3.01487E-13	91	26	5

URANIUM 235

URANIUM 235

MASS FLUX UNITS: pc/day
 CONCENTRATION UNITS: pc/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 15.00
 2 20.00
 3 12.00
 4 10.00
 9 2.70
 10 6.10

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.09865E+01	-1.76199E+01	39	54	1	8.79069E-04	39	54	1
1967.0	-6.99083E+02	-5.05722E+02	39	54	1	2.52308E-02	39	54	1
1972.0	-3.80862E+03	-2.31371E+03	39	54	1	1.15433E-01	39	54	1
1977.0	-1.07610E+04	-5.33873E+03	39	54	1	2.66354E-01	39	54	1
1982.0	-2.22059E+04	-8.83917E+03	39	54	1	4.40993E-01	39	54	1
1987.0	-3.81641E+04	-1.21947E+04	39	54	1	6.08404E-01	39	54	1
1990.0	-4.96377E+04	-1.40011E+04	39	54	1	6.98528E-01	39	54	1
1992.0	-5.23286E+04	-1.30559E+04	39	54	1	7.29336E-01	39	54	1
1997.0	-7.00104E+04	-1.43172E+04	39	54	1	8.00690E-01	39	54	1
2002.0	-8.79366E+04	-1.51706E+04	39	54	1	8.48948E-01	39	54	1
2007.0	-1.04841E+05	-1.57966E+04	39	54	1	8.84006E-01	39	54	1
2012.0	-1.20055E+05	-1.65105E+04	38	55	1	9.13402E-01	39	54	1
2017.0	-1.33347E+05	-1.72057E+04	38	55	1	9.39723E-01	39	54	1
2022.0	-1.44777E+05	-1.77886E+04	38	55	1	9.63208E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.13252E-04	-1.18581E-05	57	13	5	4.36925E-10	43	23	3
1967.0	-1.81491E+00	-8.50118E-02	48	9	5	1.01207E-06	57	15	5
1972.0	-1.93078E+02	-7.80365E+00	48	9	5	7.77209E-05	48	9	5
1977.0	-3.37212E+03	-1.55390E+02	9	24	5	1.07036E-03	48	9	5
1982.0	-2.23462E+04	-1.04661E+03	9	24	5	6.01510E-03	9	24	5
1987.0	-8.28105E+04	-3.77885E+03	9	24	5	2.17180E-02	9	24	5
1990.0	-1.50654E+05	-6.71377E+03	9	24	5	3.85856E-02	9	24	5
1992.0	-2.10919E+05	-9.25005E+03	9	24	5	5.32415E-02	9	24	5
1997.0	-4.19990E+05	-1.75707E+04	9	24	5	1.01156E-01	9	24	5
2002.0	-7.04395E+05	-2.80611E+04	9	24	5	1.62470E-01	9	23	5
2007.0	-1.04011E+06	-3.95640E+04	9	24	5	2.33524E-01	9	23	5
2012.0	-1.39130E+06	-5.08109E+04	9	24	5	3.04408E-01	9	23	5
2017.0	-1.72600E+06	-6.09730E+04	9	24	5	3.72633E-01	10	21	5
2022.0	-2.02586E+06	-6.97825E+04	9	24	5	4.34461E-01	10	21	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.64875E-01	-6.65873E-02	52	62	1	1.56689E-05	52	61	1
1967.0	-2.12328E+01	-4.48336E+00	52	62	1	7.60667E-04	52	61	1
1972.0	-2.03684E+02	-3.17233E+01	52	62	1	4.53461E-03	52	61	1
1977.0	-8.85279E+02	-1.40621E+02	40	59	1	1.23386E-02	52	61	1
1982.0	-2.49092E+03	-3.90643E+02	40	59	1	3.33525E-02	40	59	1
1987.0	-5.28407E+03	-7.62142E+02	40	60	1	6.48075E-02	40	59	1
1990.0	-7.53155E+03	-1.05230E+03	40	60	1	9.22249E-02	37	60	1
1992.0	-8.33690E+03	-1.16631E+03	40	60	1	1.15265E-01	37	60	1
1997.0	-1.23591E+04	-1.81976E+03	37	60	1	1.81849E-01	37	60	1
2002.0	-1.68048E+04	-2.50827E+03	37	60	1	2.50697E-01	37	60	1
2007.0	-2.12458E+04	-3.13447E+03	37	60	1	3.13287E-01	37	60	1
2012.0	-2.54306E+04	-3.65558E+03	37	60	1	3.65373E-01	37	60	1
2017.0	-2.92471E+04	-4.06583E+03	37	60	1	4.06378E-01	37	60	1
2022.0	-3.26667E+04	-4.38249E+03	37	60	1	4.38029E-01	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.02630E-03	-3.42808E-03	55	66	1	2.83613E-07	55	66	1
1967.0	-1.22241E+00	-4.76685E-01	55	66	1	3.94373E-05	55	66	1
1972.0	-3.02130E+01	-5.44978E+00	38	61	1	4.68194E-04	38	61	1
1977.0	-2.79293E+02	-5.49665E+01	38	61	1	4.72221E-03	38	61	1
1982.0	-1.29557E+03	-2.42671E+02	38	61	1	2.10378E-02	36	60	1
1987.0	-3.80363E+03	-6.57039E+02	38	61	1	6.02758E-02	36	60	1
1990.0	-6.22922E+03	-1.02888E+03	36	60	1	9.64064E-02	36	60	1
1992.0	-7.93096E+03	-1.28945E+03	36	60	1	1.23070E-01	36	60	1
1997.0	-1.35939E+04	-2.11502E+03	36	60	1	2.01909E-01	36	60	1
2002.0	-2.02500E+04	-2.99903E+03	36	60	1	2.86334E-01	36	60	1
2007.0	-2.71806E+04	-3.82797E+03	36	60	1	3.65480E-01	36	60	1
2012.0	-3.37892E+04	-4.53644E+03	36	60	1	4.33123E-01	36	60	1
2017.0	-3.97197E+04	-5.10630E+03	36	60	1	4.87532E-01	36	60	1
2022.0	-4.48513E+04	-5.55196E+03	36	60	1	5.30083E-01	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.07156E+01	-1.76199E+01	39	54	1	8.79069E-04	39	54	1
1967.0	-6.76628E+02	-5.05722E+02	39	54	1	2.52308E-02	39	54	1
1972.0	-3.57472E+03	-2.31371E+03	39	54	1	1.15433E-01	39	54	1
1977.0	-9.59644E+03	-5.33873E+03	39	54	1	2.66354E-01	39	54	1
1982.0	-1.84194E+04	-8.83917E+03	39	54	1	4.40993E-01	39	54	1
1987.0	-2.90763E+04	-1.21947E+04	39	54	1	6.08404E-01	39	54	1
1990.0	-3.58768E+04	-1.40011E+04	39	54	1	6.98528E-01	39	54	1
1992.0	-3.60606E+04	-1.30559E+04	39	54	1	7.29336E-01	39	54	1
1997.0	-4.40572E+04	-1.43172E+04	39	54	1	8.00690E-01	39	54	1
2002.0	-5.08813E+04	-1.51706E+04	39	54	1	8.48948E-01	39	54	1
2007.0	-5.64139E+04	-1.57966E+04	39	54	1	8.84006E-01	39	54	1
2012.0	-6.08334E+04	-1.65105E+04	38	55	1	9.13402E-01	39	54	1
2017.0	-6.43782E+04	-1.72057E+04	38	55	1	9.39723E-01	39	54	1
2022.0	-6.72563E+04	-1.77886E+04	38	55	1	9.63208E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.49245E-07	-4.75354E-08	61	63	1	3.55260E-12	61	63	1
1967.0	2.12505E-05	-2.24219E-05	60	65	1	1.47485E-09	61	63	1
1972.0	-2.65530E-04	-5.26208E-04	60	65	1	2.96571E-08	61	63	1
1977.0	-5.19609E-03	-3.58493E-03	60	65	1	1.84473E-07	61	63	1
1982.0	-2.72412E-02	-1.32335E-02	60	65	1	6.52796E-07	60	65	1
1987.0	-8.50585E-02	-3.44016E-02	60	65	1	1.69699E-06	60	65	1
1990.0	-1.46230E-01	-5.44123E-02	60	65	1	2.68410E-06	60	65	1
1992.0	-1.39352E-01	-5.51321E-02	60	65	1	2.83652E-06	60	65	1
1997.0	-2.34126E-01	-7.51765E-02	60	65	1	6.36446E-06	59	66	1
2002.0	-4.58823E-01	-1.60765E-01	59	66	1	2.23697E-05	59	66	1
2007.0	-8.20365E-01	-3.89714E-01	59	66	1	5.42270E-05	59	66	1
2012.0	-1.33351E+00	-7.85389E-01	59	66	1	1.09283E-04	59	66	1
2017.0	-1.99138E+00	-1.39819E+00	59	66	1	1.94553E-04	59	66	1
2022.0	-2.76889E+00	-2.27073E+00	59	66	1	3.15962E-04	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.96749E-05	-9.82772E-06	55	22	3	3.91342E-10	55	22	3
1967.0	-1.22642E-01	-2.85040E-02	55	19	3	1.01207E-06	57	15	5
1972.0	-6.60768E+00	-1.37621E+00	55	19	3	5.07911E-05	57	15	5
1977.0	-7.64857E+01	-1.29286E+01	55	19	3	4.59051E-04	57	15	5
1982.0	-4.07013E+02	-5.71756E+01	4	30	5	1.76953E-03	57	15	5
1987.0	-1.35887E+03	-2.24535E+02	4	30	5	6.03431E-03	24	7	5
1990.0	-2.40792E+03	-4.16330E+02	4	30	5	1.29333E-02	24	7	5
1992.0	-3.29992E+03	-5.88737E+02	4	30	5	1.98726E-02	24	7	5
1997.0	-6.64038E+03	-1.18378E+03	4	30	5	4.71439E-02	24	7	5
2002.0	-1.14537E+04	-1.98296E+03	4	30	5	8.91887E-02	24	7	5
2007.0	-1.74292E+04	-2.91197E+03	4	30	5	1.43689E-01	24	7	5
2012.0	-2.39508E+04	-3.87198E+03	4	30	5	2.05751E-01	24	7	5
2017.0	-3.03895E+04	-4.78249E+03	4	30	5	2.69466E-01	24	7	5
2022.0	-3.63146E+04	-5.60269E+03	4	30	5	3.29850E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.55080E-04	-1.18581E-05	57	13	5	1.44766E-10	56	13	5
1967.0	-1.64506E+00	-8.50118E-02	48	9	5	9.22083E-07	53	11	5
1972.0	-1.83851E+02	-7.80365E+00	48	9	5	7.77209E-05	48	9	5
1977.0	-3.26547E+03	-1.55390E+02	9	24	5	1.07036E-03	48	9	5
1982.0	-2.17879E+04	-1.04661E+03	9	24	5	6.01510E-03	9	24	5
1987.0	-8.09882E+04	-3.77885E+03	9	24	5	2.17180E-02	9	24	5
1990.0	-1.47466E+05	-6.71377E+03	9	24	5	3.85856E-02	9	24	5
1992.0	-2.06605E+05	-9.25005E+03	9	24	5	5.32415E-02	9	24	5
1997.0	-4.11424E+05	-1.75707E+04	9	24	5	1.01156E-01	9	24	5
2002.0	-6.59717E+05	-2.80611E+04	9	24	5	1.62470E-01	9	23	5
2007.0	-1.01785E+06	-3.95640E+04	9	24	5	2.33524E-01	9	23	5
2012.0	-1.36079E+06	-5.08109E+04	9	24	5	3.04408E-01	9	23	5
2017.0	-1.68739E+06	-6.09730E+04	9	24	5	3.72633E-01	10	21	5
2022.0	-1.97986E+06	-6.97825E+04	9	24	5	4.34461E-01	10	21	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.12459E-07	-2.29262E-08	64	19	5	1.35830E-11	64	20	5
1967.0	-5.48274E-04	-8.57335E-05	64	19	5	4.23757E-08	64	20	5

1972.0	-3.19431E-02	-4.10398E-03	64	17	5	1.80347E-06	64	20	5
1977.0	-3.36143E-01	-4.06147E-02	64	15	5	1.46211E-05	64	20	5
1982.0	-1.53645E+00	-1.70810E-01	64	15	5	5.23317E-05	64	20	5
1987.0	-4.46268E+00	-4.98130E-01	67	24	3	1.19056E-04	64	20	5
1990.0	-7.45491E+00	-8.76307E-01	67	24	3	1.70116E-04	64	20	5
1992.0	-9.94775E+00	-1.21214E+00	67	24	3	2.06648E-04	64	20	5
1997.0	-2.10777E+01	-2.84649E+00	67	24	3	3.05892E-04	64	20	5
2002.0	-4.42554E+01	-6.61918E+00	67	24	3	4.14193E-04	64	20	5
2007.0	-8.36809E+01	-1.34330E+01	67	24	3	5.29499E-04	64	20	5
2012.0	-1.36225E+02	-2.27725E+01	67	24	3	8.19247E-04	67	24	3
2017.0	-1.93235E+02	-3.29349E+01	67	24	3	1.18484E-03	67	24	3
2022.0	-2.46033E+02	-4.21229E+01	67	24	3	1.51538E-03	67	24	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.83847E-05	-4.88790E-06	43	22	3	4.36925E-10	43	23	3
1967.0	-4.66558E-02	-7.76730E-03	43	22	3	5.98696E-07	43	23	3
1972.0	-2.58698E+00	-3.06734E-01	43	22	3	3.53210E-05	40	7	5
1977.0	-2.98264E+01	-3.30776E+00	42	18	3	6.46705E-04	40	7	5
1982.0	-1.49723E+02	-1.66306E+01	41	16	3	4.21945E-03	40	7	5
1987.0	-4.58940E+02	-5.26576E+01	41	16	3	1.49289E-02	40	7	5
1990.0	-7.72842E+02	-8.90756E+01	41	16	3	2.62114E-02	40	7	5
1992.0	-1.00446E+03	-1.18574E+02	41	16	3	3.58727E-02	40	7	5
1997.0	-1.90469E+03	-2.20441E+02	41	16	3	6.74722E-02	40	7	5
2002.0	-3.17995E+03	-3.59693E+02	41	16	3	1.08863E-01	40	7	5
2007.0	-4.74700E+03	-5.29922E+02	41	16	3	1.56981E-01	40	7	5
2012.0	-6.42147E+03	-7.14775E+02	41	16	3	2.05971E-01	40	7	5
2017.0	-8.02355E+03	-8.96755E+02	41	16	3	2.50460E-01	40	7	5
2022.0	-9.44293E+03	-1.06368E+03	41	16	3	2.87980E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.12663E-24	-2.05220E-25	90	35	3	2.43383E-30	90	36	3
1967.0	-8.32021E-19	-1.74565E-19	90	35	3	1.92124E-24	90	36	3
1972.0	-1.75857E-15	-3.84362E-16	90	35	3	4.10338E-21	90	36	3
1977.0	-2.66760E-13	-5.88175E-14	90	35	3	6.18919E-19	90	36	3
1982.0	-9.18126E-12	-2.01326E-12	90	35	3	2.10407E-17	90	36	3
1987.0	-1.24535E-10	-2.69747E-11	90	35	3	2.81043E-16	90	36	3
1990.0	-4.34868E-10	-9.33465E-11	90	35	3	9.71645E-16	90	36	3
1992.0	-9.02537E-10	-1.92558E-10	90	35	3	2.00420E-15	90	36	3
1997.0	-4.21705E-09	-8.85191E-10	90	35	3	9.20570E-15	90	36	3
2002.0	-1.43472E-08	-2.95988E-09	90	35	3	3.07679E-14	90	36	3
2007.0	-3.84809E-08	-7.79987E-09	90	35	3	8.10438E-14	90	36	3
2012.0	-8.59950E-08	-1.71266E-08	90	35	3	1.77846E-13	90	36	3
2017.0	-1.66663E-07	-3.26160E-08	90	35	3	3.38425E-13	90	36	3
2022.0	-2.88570E-07	-5.54917E-08	90	35	3	5.75243E-13	90	36	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-3.46700E-10	-1.31195E-10	1	42	5	1.17468E-15	1	42	5
1967.0	-2.68045E-05	-9.55019E-06	1	42	5	8.55095E-11	1	42	5
1972.0	-9.41487E-03	-3.16675E-03	1	42	5	2.83541E-08	1	42	5
1977.0	-3.34533E-01	-1.06863E-01	1	42	5	9.56816E-07	1	42	5
1982.0	-3.54570E+00	-1.08248E+00	1	42	5	9.69219E-06	1	42	5
1987.0	-1.84425E+01	-5.41103E+00	1	42	5	4.84487E-05	1	42	5
1990.0	-3.95088E+01	-1.13451E+01	1	42	5	1.01580E-04	1	42	5
1992.0	-6.09977E+01	-1.72848E+01	1	42	5	1.54862E-04	1	42	5
1997.0	-1.49059E+02	-4.09551E+01	1	42	5	3.66966E-04	1	42	5

2002.0	-2.94938E+02	-7.88505E+01	1	42	5	7.06566E-04	1	42	5
2007.0	-5.00225E+02	-1.30534E+02	1	42	5	1.16970E-03	1	42	5
2012.0	-7.54128E+02	-1.92616E+02	1	42	5	1.72601E-03	1	42	5
2017.0	-1.03745E+03	-2.60060E+02	1	42	5	2.33037E-03	1	42	5
2022.0	-1.32998E+03	-3.28095E+02	1	42	5	2.94002E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.40610E-04	-5.40142E-05	36	60	5	4.66780E-09	36	60	5
1967.0	-1.55802E-01	-4.95832E-02	36	60	5	4.28490E-06	36	60	5
1972.0	-5.51119E+00	-1.69739E+00	38	61	5	1.37295E-04	36	60	5
1977.0	-4.86839E+01	-1.54442E+01	38	61	5	1.13522E-03	36	60	5
1982.0	-2.07488E+02	-6.68763E+01	38	61	5	4.61726E-03	36	60	5
1987.0	-5.69924E+02	-1.84916E+02	38	61	5	1.22744E-02	36	60	5
1990.0	-9.04675E+02	-2.93829E+02	38	61	5	1.92010E-02	36	60	5
1992.0	-1.12147E+03	-3.67603E+02	38	61	5	2.48514E-02	36	60	5
1997.0	-1.87510E+03	-6.12505E+02	38	61	5	4.09115E-02	36	60	5
2002.0	-2.70283E+03	-8.78659E+02	38	61	5	5.83700E-02	36	60	5
2007.0	-3.52377E+03	-1.13870E+03	38	61	5	7.53150E-02	36	60	5
2012.0	-4.27162E+03	-1.37106E+03	38	61	5	9.04423E-02	36	60	5
2017.0	-4.91588E+03	-1.56639E+03	38	61	5	1.03182E-01	36	60	5
2022.0	-5.45500E+03	-1.72530E+03	38	61	5	1.13568E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.59330E-29	-7.59329E-29	91	26	5	1.29610E-32	91	26	5
1967.0	-2.06128E-22	-2.06112E-22	91	26	5	3.51814E-26	91	26	5
1972.0	-9.36697E-19	-9.35999E-19	91	26	5	1.59767E-22	91	26	5
1977.0	-2.36429E-16	-2.35680E-16	91	26	5	4.02287E-20	91	26	5
1982.0	-1.15802E-14	-1.14773E-14	91	26	5	1.95908E-18	91	26	5
1987.0	-2.01735E-13	-1.97887E-13	91	26	5	3.37779E-17	91	26	5
1990.0	-7.90114E-13	-7.68521E-13	91	26	5	1.31181E-16	91	26	5
1992.0	-1.73888E-12	-1.68016E-12	91	26	5	2.88700E-16	91	26	5
1997.0	-9.23493E-12	-8.77014E-12	91	26	5	1.50986E-15	91	26	5
2002.0	-3.42131E-11	-3.20021E-11	91	26	5	5.51895E-15	91	26	5
2007.0	-9.64364E-11	-8.95173E-11	91	26	5	1.54395E-14	91	26	5
2012.0	-2.18924E-10	-2.04196E-10	91	26	5	3.52197E-14	91	26	5
2017.0	-4.17362E-10	-3.97701E-10	91	26	5	6.85974E-14	91	26	5
2022.0	-6.89309E-10	-6.84346E-10	91	26	5	1.18043E-13	91	26	5

URANIUM 238

URANIUM 238

MASS FLUX UNITS: pc/day
 CONCENTRATION UNITS: pc/lit@
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:

PARCEL NUMBER	START CONC
1	0.12
2	0.24
3	0.92
4	1.60
5	0.27
7	0.90
8	0.39
9	2.20
10	21.00

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.63830E-01	-1.90311E-01	39	54	1	9.49474E-06	39	54	1
1967.0	-1.13884E+01	-6.32310E+00	39	54	1	3.15464E-04	39	54	1
1972.0	-7.35360E+01	-3.31027E+01	39	54	1	1.65152E-03	39	54	1
1977.0	-2.30604E+02	-8.66544E+01	39	54	1	4.32326E-03	39	54	1
1982.0	-5.08104E+02	-1.60935E+02	39	54	1	8.02921E-03	39	54	1
1987.0	-9.15490E+02	-2.45616E+02	39	54	1	1.22540E-02	39	54	1
1990.0	-1.22030E+03	-2.97475E+02	39	54	1	1.48413E-02	39	54	1
1992.0	-1.26426E+03	-2.83696E+02	39	54	1	1.58480E-02	39	54	1
1997.0	-1.73940E+03	-3.31351E+02	39	54	1	1.85308E-02	39	54	1
2002.0	-2.26032E+03	-3.69406E+02	39	54	1	2.06720E-02	39	54	1
2007.0	-2.77809E+03	-3.99146E+02	39	54	1	2.23369E-02	39	54	1
2012.0	-3.26630E+03	-4.23174E+02	39	54	1	2.36816E-02	39	54	1
2017.0	-3.71263E+03	-4.43542E+02	39	54	1	2.48217E-02	39	54	1
2022.0	-4.11347E+03	-4.61421E+02	39	54	1	2.58224E-02	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.37508E-05	-1.75277E-06	57	13	5	5.34860E-11	55	22	3
1967.0	-1.62131E-01	-1.07758E-02	57	13	5	1.49613E-07	57	15	5
1972.0	-1.32360E+01	-8.27201E-01	54	11	5	8.84410E-06	53	11	5
1977.0	-1.89494E+02	-1.10084E+01	48	9	5	1.09639E-04	48	9	5
1982.0	-1.11674E+03	-6.00651E+01	48	9	5	5.98222E-04	48	9	5
1987.0	-4.01029E+03	-1.88470E+02	48	9	5	1.87708E-03	48	9	5
1990.0	-7.74694E+03	-3.43241E+02	48	9	5	3.44417E-03	47	9	5
1992.0	-1.17336E+04	-5.20163E+02	48	9	5	5.29795E-03	47	9	5
1997.0	-3.23050E+04	-1.51577E+03	48	9	5	1.60012E-02	47	9	5
2002.0	-7.75733E+04	-3.59958E+03	48	9	5	3.93072E-02	47	9	5
2007.0	-1.52242E+05	-6.40863E+03	48	9	5	7.41569E-02	45	8	5
2012.0	-2.46757E+05	-9.86536E+03	36	7	5	1.11935E-01	45	8	5
2017.0	-3.43369E+05	-1.37891E+04	36	7	5	1.42221E-01	45	8	5
2022.0	-4.26335E+05	-1.66441E+04	36	7	5	1.61540E-01	45	8	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.04614E-02	-1.06393E-02	52	62	1	2.50250E-06	52	61	1
1967.0	-2.90335E+00	-7.15635E-01	52	62	1	1.21333E-04	52	61	1
1972.0	-2.21832E+01	-5.06068E+00	52	62	1	7.22760E-04	52	61	1
1977.0	-7.39051E+01	-1.51941E+01	52	62	1	1.96579E-03	52	61	1
1982.0	-1.66138E+02	-3.01098E+01	52	62	1	3.66719E-03	52	61	1
1987.0	-3.00460E+02	-4.75997E+01	52	62	1	5.57604E-03	52	61	1
1990.0	-4.00059E+02	-5.85603E+01	52	62	1	6.74442E-03	52	61	1
1992.0	-3.90390E+02	-5.17224E+01	52	62	1	6.84297E-03	52	61	1
1997.0	-5.34929E+02	-6.13193E+01	52	62	1	8.22811E-03	52	61	1
2002.0	-7.04494E+02	-7.31651E+01	52	62	1	9.70903E-03	52	61	1
2007.0	-8.75247E+02	-8.36194E+01	52	62	1	1.09556E-02	52	61	1
2012.0	-1.03768E+03	-9.24669E+01	52	62	1	1.19981E-02	52	61	1
2017.0	-1.18850E+03	-1.01439E+02	37	60	1	1.28822E-02	52	61	1
2022.0	-1.32686E+03	-1.13213E+02	37	60	1	1.36313E-02	52	61	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.34051E-04	-5.48492E-04	55	66	1	4.53781E-08	55	66	1
1967.0	-1.35390E-01	-7.62696E-02	55	66	1	6.30997E-06	55	66	1
1972.0	-1.61010E+00	-7.57403E-01	55	66	1	6.26618E-05	55	66	1
1977.0	-8.47776E+00	-2.70759E+00	55	66	1	2.24006E-04	55	66	1
1982.0	-3.04758E+01	-5.88872E+00	55	66	1	4.87188E-04	55	66	1
1987.0	-8.26710E+01	-1.20606E+01	38	61	1	1.03613E-03	38	61	1
1990.0	-1.34418E+02	-1.99035E+01	38	61	1	1.70992E-03	38	61	1
1992.0	-1.71489E+02	-2.53375E+01	38	61	1	2.22450E-03	38	61	1
1997.0	-2.98865E+02	-4.35499E+01	38	61	1	3.82429E-03	38	61	1
2002.0	-4.59786E+02	-6.45761E+01	38	61	1	5.67138E-03	38	61	1
2007.0	-6.38853E+02	-8.58760E+01	38	61	1	7.55845E-03	36	60	1
2012.0	-8.20648E+02	-1.05444E+02	38	61	1	9.46110E-03	36	60	1
2017.0	-9.93889E+02	-1.22234E+02	38	61	1	1.11520E-02	36	60	1
2022.0	-1.15238E+03	-1.36095E+02	38	61	1	1.25928E-02	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.22435E-01	-1.90311E-01	39	54	1	9.49474E-06	39	54	1
1967.0	-8.34964E+00	-6.32310E+00	39	54	1	3.15464E-04	39	54	1
1972.0	-4.97427E+01	-3.31027E+01	39	54	1	1.65152E-03	39	54	1
1977.0	-1.48220E+02	-8.66544E+01	39	54	1	4.32326E-03	39	54	1
1982.0	-3.11486E+02	-1.60935E+02	39	54	1	8.02921E-03	39	54	1
1987.0	-5.32345E+02	-2.45616E+02	39	54	1	1.22540E-02	39	54	1
1990.0	-6.85804E+02	-2.97475E+02	39	54	1	1.48413E-02	39	54	1
1992.0	-7.02361E+02	-2.83696E+02	39	54	1	1.58480E-02	39	54	1
1997.0	-9.05573E+02	-3.31351E+02	39	54	1	1.85308E-02	39	54	1
2002.0	-1.09597E+03	-3.69406E+02	39	54	1	2.06720E-02	39	54	1
2007.0	-1.26386E+03	-3.99146E+02	39	54	1	2.23369E-02	39	54	1
2012.0	-1.40776E+03	-4.23174E+02	39	54	1	2.36816E-02	39	54	1
2017.0	-1.52992E+03	-4.43542E+02	39	54	1	2.48217E-02	39	54	1
2022.0	-1.63379E+03	-4.61421E+02	39	54	1	2.58224E-02	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	2.38792E-08	-7.60566E-09	61	63	1	5.68416E-13	61	63	1
1967.0	3.40036E-06	-3.58749E-06	60	65	1	2.35973E-10	61	63	1
1972.0	-4.24621E-05	-8.41913E-05	60	65	1	4.74490E-09	61	63	1
1977.0	-8.31027E-04	-5.73554E-04	60	65	1	2.95119E-08	61	63	1
1982.0	-4.35640E-03	-2.11713E-03	60	65	1	1.04436E-07	60	65	1
1987.0	-1.36012E-02	-5.50330E-03	60	65	1	2.71472E-07	60	65	1
1990.0	-2.33820E-02	-8.70419E-03	60	65	1	4.29369E-07	60	65	1
1992.0	-2.22798E-02	-8.81905E-03	60	65	1	4.53735E-07	60	65	1
1997.0	-3.74364E-02	-1.20253E-02	60	65	1	1.01815E-06	59	66	1
2002.0	-7.33996E-02	-2.57204E-02	59	66	1	3.57887E-06	59	66	1
2007.0	-1.31317E-01	-6.23506E-02	59	66	1	8.67581E-06	59	66	1
2012.0	-2.13638E-01	-1.25656E-01	59	66	1	1.74844E-05	59	66	1
2017.0	-3.19382E-01	-2.23701E-01	59	66	1	3.11271E-05	59	66	1
2022.0	-4.44628E-01	-3.63299E-01	59	66	1	5.05517E-05	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.47245E-06	-1.34319E-06	55	22	3	5.34860E-11	55	22	3
1967.0	-1.65122E-02	-3.83698E-03	55	19	3	1.49613E-07	57	15	5
1972.0	-8.12838E-01	-1.86859E-01	55	19	3	7.48022E-06	57	15	5
1977.0	-8.06788E+00	-1.76614E+00	55	19	3	6.74824E-05	57	15	5
1982.0	-3.63038E+01	-7.30443E+00	55	19	3	2.59997E-04	57	15	5
1987.0	-1.44717E+02	-1.97604E+01	55	19	3	6.52758E-04	57	15	5
1990.0	-3.87179E+02	-4.00912E+01	61	24	3	1.09585E-03	57	15	5
1992.0	-6.57129E+02	-7.60013E+01	61	24	3	1.80810E-03	60	25	3
1997.0	-2.05144E+03	-2.51086E+02	61	24	3	5.57698E-03	60	25	3
2002.0	-4.45921E+03	-5.31498E+02	61	24	3	1.13240E-02	60	25	3
2007.0	-7.62205E+03	-8.71928E+02	61	24	3	1.80943E-02	60	25	3
2012.0	-1.11339E+04	-1.22219E+03	61	24	3	2.49040E-02	60	25	3
2017.0	-1.46058E+04	-1.54393E+03	61	24	3	3.10338E-02	60	25	3
2022.0	-1.77371E+04	-1.81525E+03	61	24	3	4.68371E-02	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.76477E-05	-1.75277E-06	57	13	5	2.05046E-11	56	13	5
1967.0	-1.43400E-01	-1.07758E-02	57	13	5	1.25910E-07	56	13	5
1972.0	-1.22760E+01	-8.27201E-01	54	11	5	8.84410E-06	53	11	5
1977.0	-1.79511E+02	-1.10084E+01	48	9	5	1.09639E-04	48	9	5
1982.0	-1.06991E+03	-6.00651E+01	48	9	5	5.98222E-04	48	9	5
1987.0	-3.82415E+03	-1.88470E+02	48	9	5	1.87708E-03	48	9	5
1990.0	-7.24474E+03	-3.43241E+02	48	9	5	3.44417E-03	47	9	5
1992.0	-1.08614E+04	-5.20163E+02	48	9	5	5.29795E-03	47	9	5
1997.0	-2.93525E+04	-1.51577E+03	48	9	5	1.60012E-02	47	9	5
2002.0	-7.06883E+04	-3.59958E+03	48	9	5	3.93072E-02	47	9	5
2007.0	-1.39915E+05	-6.40863E+03	48	9	5	7.41569E-02	45	8	5
2012.0	-2.28322E+05	-9.86536E+03	36	7	5	1.11935E-01	45	8	5
2017.0	-3.19025E+05	-1.37891E+04	36	7	5	1.42221E-01	45	8	5
2022.0	-3.96891E+05	-1.66441E+04	36	7	5	1.61540E-01	45	8	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.79094E-08	-3.64971E-09	64	19	5	2.16247E-12	64	20	5
1967.0	-8.68844E-05	-1.35788E-05	64	19	5	6.71198E-09	64	20	5

1972.0	-5.03721E-03	-6.46835E-04	64	17	5	2.84305E-07	64	20	5
1977.0	-5.27597E-02	-6.37498E-03	64	15	5	2.29604E-06	64	20	5
1982.0	-2.43776E-01	-2.67338E-02	64	15	5	8.19752E-06	64	20	5
1987.0	-3.09727E+00	-7.15037E-01	70	29	3	3.05008E-05	70	30	3
1990.0	-1.98473E+01	-4.89981E+00	70	29	3	1.98809E-04	70	30	3
1992.0	-4.91859E+01	-1.17651E+01	70	29	3	4.70106E-04	70	30	3
1997.0	-2.40424E+02	-5.31502E+01	70	29	3	2.01797E-03	70	30	3
2002.0	-6.19400E+02	-1.28189E+02	70	29	3	4.71330E-03	70	30	3
2007.0	-1.12206E+03	-2.21013E+02	70	29	3	7.96146E-03	70	30	3
2012.0	-1.66171E+03	-3.15940E+02	70	29	3	1.12330E-02	70	30	3
2017.0	-2.18057E+03	-4.04567E+02	70	29	3	1.42629E-02	70	30	3
2022.0	-2.64645E+03	-4.82848E+02	70	29	3	1.69275E-02	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.12737E-07	-1.74379E-07	43	22	3	1.52154E-11	43	23	3
1967.0	-2.13147E-03	-3.95074E-04	43	22	3	2.98505E-08	43	23	3
1972.0	-1.42150E-01	-1.88643E-02	43	22	3	1.55998E-06	40	7	5
1977.0	-1.86269E+00	-2.12350E-01	42	18	3	3.53484E-05	40	7	5
1982.0	-1.02796E+01	-1.15114E+00	42	18	3	2.67241E-04	40	7	5
1987.0	-3.83255E+01	-3.99719E+00	43	22	3	1.05740E-03	40	7	5
1990.0	-9.51734E+01	-1.44859E+01	43	22	3	2.03385E-03	40	7	5
1992.0	-1.65859E+02	-2.60513E+01	43	22	3	3.09758E-03	40	7	5
1997.0	-6.60630E+02	-1.08392E+02	43	22	3	1.05371E-02	43	23	3
2002.0	-1.80644E+03	-2.72071E+02	43	22	3	2.64303E-02	40	7	5
2007.0	-3.58297E+03	-4.91128E+02	43	22	3	5.68171E-02	40	7	5
2012.0	-5.63962E+03	-7.13414E+02	43	22	3	9.35490E-02	40	7	5
2017.0	-7.55754E+03	-9.01642E+02	43	20	3	1.26221E-01	40	7	5
2022.0	-9.05999E+03	-1.05587E+03	42	18	3	1.48767E-01	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.80238E-25	-3.28299E-26	90	35	3	3.89357E-31	90	36	3
1967.0	-1.33069E-19	-2.79171E-20	90	35	3	3.07260E-25	90	36	3
1972.0	-2.81128E-16	-6.14377E-17	90	35	3	6.55926E-22	90	36	3
1977.0	-4.26179E-14	-9.39527E-15	90	35	3	9.88694E-20	90	36	3
1982.0	-1.46572E-12	-3.21336E-13	90	35	3	3.35854E-18	90	36	3
1987.0	-1.98649E-11	-4.30177E-12	90	35	3	4.48226E-17	90	36	3
1990.0	-6.93334E-11	-1.48789E-11	90	35	3	1.54887E-16	90	36	3
1992.0	-1.43859E-10	-3.06850E-11	90	35	3	3.19403E-16	90	36	3
1997.0	-6.73030E-10	-1.41348E-10	90	35	3	1.46969E-15	90	36	3
2002.0	-2.32651E-09	-4.82980E-10	90	35	3	5.01015E-15	90	36	3
2007.0	-6.64393E-09	-1.38087E-09	90	35	3	1.42363E-14	90	36	3
2012.0	-1.70986E-08	-3.60831E-09	90	35	3	3.71819E-14	90	35	3
2017.0	-4.10857E-08	-8.82176E-09	90	35	3	9.09039E-14	90	35	3
2022.0	-9.15046E-08	-1.98078E-08	90	35	3	2.04109E-13	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.93635E-12	-1.11206E-12	1	42	5	9.95706E-18	1	42	5
1967.0	-2.39604E-07	-8.54719E-08	1	42	5	7.65289E-13	1	42	5
1972.0	-9.04606E-05	-3.04760E-05	1	42	5	2.72873E-10	1	42	5
1977.0	-3.55386E-03	-1.13768E-03	1	42	5	1.01864E-08	1	42	5
1982.0	-4.28020E-02	-1.31036E-02	1	42	5	1.17326E-07	1	42	5
1987.0	-2.56923E-01	-7.56421E-02	1	42	5	6.77276E-07	1	42	5
1990.0	-6.00300E-01	-1.73043E-01	1	42	5	1.54937E-06	1	42	5
1992.0	-9.80472E-01	-2.78983E-01	1	42	5	2.49952E-06	1	42	5
1997.0	-2.73259E+00	-7.54520E-01	1	42	5	6.76066E-06	1	42	5

2002.0	-6.07413E+00	-1.63454E+00	1	42	5	1.46468E-05	1	42	5
2007.0	-1.14337E+01	-3.01296E+00	1	42	5	2.69987E-05	1	42	5
2012.0	-1.89705E+01	-4.91695E+00	1	42	5	4.40602E-05	1	42	5
2017.0	-2.84536E+01	-7.27556E+00	1	42	5	6.51955E-05	1	42	5
2022.0	-3.92369E+01	-9.91321E+00	1	42	5	8.88313E-05	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-6.74394E-06	-1.51628E-06	40	62	5	1.03711E-10	36	60	5
1967.0	-7.94932E-03	-1.85307E-03	38	61	5	1.12453E-07	36	60	5
1972.0	-2.62251E-01	-6.41066E-02	38	61	5	3.73477E-06	36	60	5
1977.0	-2.14298E+00	-5.46011E-01	38	61	5	3.10743E-05	36	60	5
1982.0	-8.68126E+00	-2.28297E+00	38	61	5	1.27501E-04	36	60	5
1987.0	-2.33757E+01	-6.28322E+00	38	61	5	3.45499E-04	36	60	5
1990.0	-3.71141E+01	-1.00669E+01	38	61	5	5.49378E-04	36	60	5
1992.0	-4.65844E+01	-1.27055E+01	38	61	5	7.19864E-04	36	60	5
1997.0	-7.98630E+01	-2.18881E+01	38	61	5	1.23011E-03	36	60	5
2002.0	-1.18843E+02	-3.26217E+01	38	61	5	1.82506E-03	36	60	5
2007.0	-1.60141E+02	-4.38952E+01	38	61	5	2.44472E-03	36	60	5
2012.0	-2.00788E+02	-5.47887E+01	38	61	5	3.04060E-03	36	60	5
2017.0	-2.38881E+02	-6.47317E+01	38	61	5	3.58241E-03	36	60	5
2022.0	-2.73522E+02	-7.34902E+01	38	61	5	4.05774E-03	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.21473E-29	-1.21473E-29	91	26	5	2.07342E-33	91	26	5
1967.0	-3.29657E-23	-3.29630E-23	91	26	5	5.62649E-27	91	26	5
1972.0	-1.49738E-19	-1.49626E-19	91	26	5	2.55399E-23	91	26	5
1977.0	-3.77725E-17	-3.76528E-17	91	26	5	6.42703E-21	91	26	5
1982.0	-1.84877E-15	-1.83233E-15	91	26	5	3.12765E-19	91	26	5
1987.0	-3.21818E-14	-3.15676E-14	91	26	5	5.38836E-18	91	26	5
1990.0	-1.25982E-13	-1.22538E-13	91	26	5	2.09163E-17	91	26	5
1992.0	-2.77181E-13	-2.67816E-13	91	26	5	4.60184E-17	91	26	5
1997.0	-1.47269E-12	-1.39862E-12	91	26	5	2.40784E-16	91	26	5
2002.0	-5.51708E-12	-5.16426E-12	91	26	5	8.90606E-16	91	26	5
2007.0	-1.63891E-11	-1.52633E-11	91	26	5	2.63253E-15	91	26	5
2012.0	-4.26209E-11	-3.99539E-11	91	26	5	6.89125E-15	91	26	5
2017.0	-1.02480E-10	-9.71524E-11	91	26	5	1.67573E-14	91	26	5
2022.0	-2.27663E-10	-2.17873E-10	91	26	5	3.75809E-14	91	26	5

CHLOROETHANE (VINYL CHLORIDE)

VINYL CHLORIDE

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 92.70

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.31692E+01	-4.36321E+01	39	54	1	2.17684E-03	39	54	1
1967.0	-1.13090E+03	-7.62296E+02	39	54	1	3.80315E-02	39	54	1
1972.0	-4.62022E+03	-2.44014E+03	39	54	1	1.22736E-01	38	53	1
1977.0	-1.08632E+04	-4.33659E+03	39	54	1	2.54492E-01	38	53	1
1982.0	-1.98707E+04	-5.91668E+03	39	54	1	3.80842E-01	38	53	1
1987.0	-3.13998E+04	-7.90670E+03	38	55	1	4.79816E-01	38	53	1
1990.0	-3.92618E+04	-8.97395E+03	38	55	1	5.24710E-01	38	53	1
1992.0	-4.12069E+04	-8.84101E+03	38	55	1	3.87120E-01	39	54	1
1997.0	-5.30231E+04	-9.53310E+03	38	55	1	3.96653E-01	39	54	1
2002.0	-6.46277E+04	-9.97065E+03	38	55	1	4.01716E-01	39	54	1
2007.0	-7.53331E+04	-1.02718E+04	38	55	1	4.08831E-01	39	54	1
2012.0	-8.47498E+04	-1.05317E+04	38	55	1	4.17074E-01	39	54	1
2017.0	-9.27560E+04	-1.07687E+04	38	55	1	4.24514E-01	39	54	1
2022.0	-9.94136E+04	-1.09721E+04	38	55	1	4.30342E-01	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.58013E-05	-7.12047E-06	9	24	5	1.09527E-10	43	23	3
1967.0	-1.58510E+00	-1.99803E-01	9	24	5	1.14832E-06	9	24	5
1972.0	-2.58830E+02	-2.84223E+01	9	24	5	1.63350E-04	9	24	5
1977.0	-4.88904E+03	-4.63628E+02	9	24	5	2.66458E-03	9	24	5
1982.0	-3.02622E+04	-2.51024E+03	9	24	5	1.44270E-02	9	24	5
1987.0	-9.86606E+04	-7.29037E+03	9	24	5	4.18995E-02	9	24	5
1990.0	-1.64220E+05	-1.14278E+04	9	24	5	6.56784E-02	9	24	5
1992.0	-2.16489E+05	-1.45360E+04	9	24	5	8.36662E-02	9	24	5
1997.0	-3.69183E+05	-2.29559E+04	9	24	5	1.32159E-01	9	24	5
2002.0	-5.33062E+05	-3.12079E+04	9	24	5	1.79696E-01	9	24	5
2007.0	-6.87037E+05	-3.83587E+04	9	24	5	2.22920E-01	9	23	5
2012.0	-8.17702E+05	-4.40047E+04	9	24	5	2.57929E-01	9	23	5
2017.0	-9.22671E+05	-4.83511E+04	9	24	5	2.84731E-01	9	23	5
2022.0	-1.00650E+06	-5.17918E+04	9	24	5	3.05700E-01	9	23	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.43038E-03	-3.37014E-03	40	59	1	2.87737E-07	40	59	1
1967.0	-1.72386E+00	-6.02173E-01	40	59	1	5.21902E-05	39	59	1
1972.0	-3.96751E+01	-8.95713E+00	37	60	1	1.35435E-03	35	58	1
1977.0	-2.78790E+02	-6.94374E+01	37	60	1	9.90876E-03	35	58	1
1982.0	-1.02874E+03	-2.46892E+02	37	60	1	3.49075E-02	35	58	1
1987.0	-2.58332E+03	-5.58479E+02	37	60	1	7.95701E-02	35	58	1
1990.0	-3.96116E+03	-7.90906E+02	37	60	1	1.13535E-01	35	58	1
1992.0	-4.77480E+03	-9.07824E+02	37	60	1	1.34975E-01	35	58	1
1997.0	-7.68138E+03	-1.26788E+03	37	60	1	1.90123E-01	35	58	1
2002.0	-1.09933E+04	-1.58104E+03	37	60	1	2.39093E-01	35	58	1
2007.0	-1.43857E+04	-1.82083E+03	37	60	1	2.77207E-01	35	58	1
2012.0	-1.75961E+04	-2.11595E+03	33	58	1	3.04428E-01	35	58	1
2017.0	-2.04631E+04	-2.36267E+03	33	58	1	3.23346E-01	35	58	1
2022.0	-2.29217E+04	-2.54241E+03	33	58	1	3.36977E-01	35	58	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.73701E-04	-1.46131E-04	38	61	1	1.25542E-08	38	61	1
1967.0	-7.34453E-01	-2.19172E-01	36	60	1	2.05364E-05	36	60	1
1972.0	-3.28531E+01	-9.33740E+00	36	60	1	8.74918E-04	36	60	1
1977.0	-3.20921E+02	-8.25902E+01	36	60	1	7.73873E-03	36	60	1
1982.0	-1.40439E+03	-3.20559E+02	36	60	1	3.00365E-02	36	60	1
1987.0	-3.82891E+03	-7.70047E+02	36	60	1	7.21538E-02	36	60	1
1990.0	-6.00869E+03	-1.12037E+03	36	60	1	1.04979E-01	36	60	1
1992.0	-7.47369E+03	-1.35687E+03	35	60	1	1.26552E-01	36	60	1
1997.0	-1.21158E+04	-2.07551E+03	35	60	1	1.85361E-01	35	60	1
2002.0	-1.72044E+04	-2.76818E+03	35	60	1	2.47254E-01	35	60	1
2007.0	-2.21759E+04	-3.34914E+03	35	60	1	2.99147E-01	35	60	1
2012.0	-2.66507E+04	-3.78953E+03	35	60	1	3.38482E-01	35	60	1
2017.0	-3.04667E+04	-4.10468E+03	35	60	1	3.66633E-01	35	60	1
2022.0	-3.36254E+04	-4.34669E+03	34	60	1	3.86737E-01	35	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.31633E+01	-4.36321E+01	39	54	1	2.17684E-03	39	54	1
1967.0	-1.12844E+03	-7.62296E+02	39	54	1	3.80315E-02	39	54	1
1972.0	-4.54769E+03	-2.44014E+03	39	54	1	1.22736E-01	38	53	1
1977.0	-1.02635E+04	-4.33659E+03	39	54	1	2.54492E-01	38	53	1
1982.0	-1.74376E+04	-5.91668E+03	39	54	1	3.80842E-01	38	53	1
1987.0	-2.49876E+04	-7.90670E+03	38	55	1	4.79816E-01	38	53	1
1990.0	-2.92920E+04	-8.97395E+03	38	55	1	5.24710E-01	38	53	1
1992.0	-2.89584E+04	-8.84101E+03	38	55	1	3.87120E-01	39	54	1
1997.0	-3.32259E+04	-9.53310E+03	38	55	1	3.96653E-01	39	54	1
2002.0	-3.64300E+04	-9.97065E+03	38	55	1	4.01716E-01	39	54	1
2007.0	-3.87715E+04	-1.02718E+04	38	55	1	4.08831E-01	39	54	1
2012.0	-4.05030E+04	-1.05317E+04	38	55	1	4.17074E-01	39	54	1
2017.0	-4.18262E+04	-1.07687E+04	38	55	1	4.24514E-01	39	54	1
2022.0	-4.28665E+04	-1.09721E+04	38	55	1	4.30342E-01	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.06824E-19	-3.58741E-20	61	63	1	2.68109E-24	61	63	1
1967.0	-2.00889E-14	-3.45193E-15	61	63	1	2.57983E-19	61	63	1
1972.0	-9.83366E-12	-1.64646E-12	61	63	1	1.23050E-16	61	63	1
1977.0	-4.92939E-10	-8.06797E-11	61	63	1	6.02967E-15	61	63	1
1982.0	-7.21705E-09	-1.17178E-09	62	62	1	8.68539E-14	61	63	1
1987.0	-5.00603E-08	-8.19379E-09	62	62	1	5.96206E-13	61	63	1
1990.0	-1.25117E-07	-2.05740E-08	62	62	1	1.48418E-12	61	63	1
1992.0	-1.73347E-07	-2.71095E-08	61	63	1	2.14754E-12	61	63	1
1997.0	-4.93106E-07	-7.69041E-08	62	62	1	6.09062E-12	61	63	1
2002.0	-1.15898E-06	-1.82424E-07	61	63	1	1.44545E-11	61	63	1
2007.0	-2.28814E-06	-3.63539E-07	61	63	1	2.88055E-11	61	63	1
2012.0	-3.94419E-06	-6.32071E-07	61	63	1	5.00831E-11	61	63	1
2017.0	-6.11668E-06	-9.94356E-07	60	65	1	7.82517E-11	61	63	1
2022.0	-8.73084E-06	-1.44579E-06	60	65	1	1.12352E-10	61	63	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.16032E-07	-2.23298E-07	4	30	5	5.65723E-12	4	31	5
1967.0	-1.52248E-02	-7.62626E-03	4	30	5	1.67896E-07	4	31	5
1972.0	-2.84468E+00	-1.30371E+00	4	30	5	2.66540E-05	4	31	5
1977.0	-5.94997E+01	-2.47306E+01	4	30	5	4.96009E-04	4	30	5
1982.0	-4.00589E+02	-1.51004E+02	4	30	5	3.02861E-03	4	30	5
1987.0	-1.40336E+03	-4.82596E+02	4	30	5	9.67917E-03	4	30	5
1990.0	-2.42826E+03	-7.93877E+02	4	30	5	1.71823E-02	24	7	5
1992.0	-3.27077E+03	-1.03964E+03	4	30	5	2.41171E-02	24	7	5
1997.0	-5.90163E+03	-1.74851E+03	4	30	5	4.61214E-02	24	7	5
2002.0	-8.96193E+03	-2.50412E+03	4	30	5	7.16974E-02	24	7	5
2007.0	-1.20853E+04	-3.21648E+03	4	30	5	9.69132E-02	24	7	5
2012.0	-1.49736E+04	-3.82844E+03	4	30	5	1.18940E-01	24	7	5
2017.0	-1.74882E+04	-4.33219E+03	4	30	5	1.36638E-01	24	7	5
2022.0	-1.96278E+04	-4.74771E+03	4	30	5	1.50428E-01	24	7	5

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.97222E-05	-7.12047E-06	9	24	5	4.09230E-11	9	24	5
1967.0	-1.55384E+00	-1.99803E-01	9	24	5	1.14832E-06	9	24	5
1972.0	-2.55182E+02	-2.84223E+01	9	24	5	1.63350E-04	9	24	5
1977.0	-4.82170E+03	-4.63628E+02	9	24	5	2.66458E-03	9	24	5
1982.0	-2.98285E+04	-2.51024E+03	9	24	5	1.44270E-02	9	24	5
1987.0	-9.71713E+04	-7.29037E+03	9	24	5	4.18995E-02	9	24	5
1990.0	-1.61661E+05	-1.14278E+04	9	24	5	6.56784E-02	9	24	5
1992.0	-2.13058E+05	-1.45360E+04	9	24	5	8.36662E-02	9	24	5
1997.0	-3.63028E+05	-2.29559E+04	9	24	5	1.32159E-01	9	24	5
2002.0	-5.23748E+05	-3.12079E+04	9	24	5	1.79696E-01	9	24	5
2007.0	-6.74505E+05	-3.83587E+04	9	24	5	2.22920E-01	9	23	5
2012.0	-8.02196E+05	-4.40047E+04	9	24	5	2.57929E-01	9	23	5
2017.0	-9.04575E+05	-4.83511E+04	9	24	5	2.84731E-01	9	23	5
2022.0	-9.86203E+05	-5.17918E+04	9	24	5	3.05700E-01	9	23	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.61795E-15	-3.72792E-16	64	19	5	2.21419E-19	64	20	5
1967.0	-1.74001E-10	-3.08092E-11	64	19	5	1.54781E-14	64	20	5

1972.0	-6.76560E-08	-9.46594E-09	64	17	5	4.35305E-12	64	20	5
1977.0	-2.59524E-06	-3.25565E-07	64	15	5	1.23301E-10	64	20	5
1982.0	-3.01381E-05	-3.59464E-06	67	24	3	1.04889E-09	64	20	5
1987.0	-1.75307E-04	-2.49798E-05	67	24	3	4.41943E-09	64	20	5
1990.0	-4.04252E-04	-6.20966E-05	67	24	3	8.39140E-09	64	20	5
1992.0	-6.34574E-04	-1.01242E-04	67	24	3	1.19721E-08	64	20	5
1997.0	-1.65997E-03	-2.83370E-04	67	24	3	2.44243E-08	64	20	5
2002.0	-3.48616E-03	-6.21881E-04	67	24	3	4.11742E-08	64	20	5
2007.0	-6.27619E-03	-1.15291E-03	67	24	3	6.04393E-08	64	20	5
2012.0	-1.00736E-02	-1.88372E-03	67	24	3	8.03127E-08	64	20	5
2017.0	-1.47816E-02	-2.78953E-03	67	24	3	1.00354E-07	67	24	3
2022.0	-2.01894E-02	-3.82291E-03	67	24	3	1.37530E-07	67	24	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.66307E-06	-1.18802E-06	43	22	3	1.09527E-10	43	23	3
1967.0	-1.60395E-02	-1.77671E-03	41	16	3	1.66643E-07	40	7	5
1972.0	-8.03035E-01	-1.00380E-01	41	16	3	1.63739E-05	40	7	5
1977.0	-7.84275E+00	-1.06104E+00	40	14	3	2.20058E-04	40	7	5
1982.0	-3.30709E+01	-4.84358E+00	40	14	3	1.07211E-03	40	7	5
1987.0	-8.59637E+01	-1.31646E+01	40	14	3	2.93229E-03	40	7	5
1990.0	-1.31029E+02	-2.04179E+01	40	14	3	4.48870E-03	40	7	5
1992.0	-1.60613E+02	-2.57658E+01	40	14	3	5.63959E-03	40	7	5
1997.0	-2.53423E+02	-4.13702E+01	40	14	3	8.67961E-03	40	7	5
2002.0	-3.51718E+02	-5.79990E+01	40	14	3	1.15992E-02	40	7	5
2007.0	-4.46445E+02	-7.40704E+01	40	14	3	1.41132E-02	40	7	5
2012.0	-5.32326E+02	-8.86354E+01	40	14	3	1.61332E-02	40	7	5
2017.0	-6.07978E+02	-1.01437E+02	40	14	3	1.77429E-02	40	7	5
2022.0	-6.73840E+02	-1.12552E+02	40	14	3	1.90540E-02	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.50099E-35	-3.98315E-36	90	35	3	4.10256E-41	90	35	3
1967.0	-3.66697E-28	-1.00247E-28	90	35	3	1.03320E-33	90	34	3
1972.0	-8.13191E-24	-2.19081E-24	90	35	3	2.25648E-29	90	35	3
1977.0	-7.05613E-21	-1.85430E-21	90	35	3	1.90989E-26	90	35	3
1982.0	-9.32769E-19	-2.38227E-19	90	35	3	2.45369E-24	90	35	3
1987.0	-3.67128E-17	-9.10383E-18	90	35	3	9.37674E-23	90	35	3
1990.0	-2.19275E-16	-5.34277E-17	90	35	3	5.50293E-22	90	35	3
1992.0	-6.28312E-16	-1.51397E-16	90	35	3	1.55998E-21	90	35	3
1997.0	-5.94697E-15	-1.39425E-15	90	35	3	1.43667E-20	90	35	3
2002.0	-3.64013E-14	-8.30960E-15	90	35	3	8.56262E-20	90	35	3
2007.0	-1.59550E-13	-3.55150E-14	90	35	3	3.65964E-19	90	35	3
2012.0	-5.38422E-13	-1.17052E-13	90	35	3	1.20617E-18	90	35	3
2017.0	-1.47605E-12	-3.13851E-13	90	35	3	3.23408E-18	90	35	3
2022.0	-3.42335E-12	-7.12800E-13	90	35	3	7.34506E-18	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.89646E-09	-7.16208E-10	1	42	5	6.41271E-15	1	42	5
1967.0	-1.30005E-04	-4.61587E-05	1	42	5	4.13291E-10	1	42	5
1972.0	-3.95113E-02	-1.32218E-02	1	42	5	1.18384E-07	1	42	5
1977.0	-1.18382E+00	-3.75597E-01	1	42	5	3.36298E-06	1	42	5
1982.0	-1.03881E+01	-3.14576E+00	1	42	5	2.81662E-05	1	42	5
1987.0	-4.43817E+01	-1.29064E+01	1	42	5	1.15560E-04	1	42	5
1990.0	-8.45734E+01	-2.40662E+01	1	42	5	2.15482E-04	1	42	5
1992.0	-1.21000E+02	-3.39770E+01	1	42	5	3.04414E-04	1	42	5
1997.0	-2.46986E+02	-6.72600E+01	1	42	5	6.02664E-04	1	42	5

2002.0	-4.16226E+02	-1.10330E+02	1	42	5	9.88646E-04	1	42	5
2007.0	-6.14755E+02	-1.59101E+02	1	42	5	1.42569E-03	1	42	5
2012.0	-8.25526E+02	-2.09161E+02	1	42	5	1.87427E-03	1	42	5
2017.0	-1.03401E+03	-2.57194E+02	1	42	5	2.30469E-03	1	42	5
2022.0	-1.23142E+03	-3.01570E+02	1	42	5	2.70234E-03	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.13633E-04	-7.42696E-05	36	60	5	6.41823E-09	36	60	5
1967.0	-8.79259E-02	-4.73514E-02	36	60	5	4.09203E-06	36	60	5
1972.0	-2.77793E+00	-1.31362E+00	36	60	5	1.13521E-04	36	60	5
1977.0	-2.28558E+01	-9.92967E+00	36	60	5	8.58113E-04	36	60	5
1982.0	-9.06600E+01	-3.72296E+01	36	60	5	3.21736E-03	36	60	5
1987.0	-2.30743E+02	-9.11957E+01	36	60	5	7.88112E-03	36	60	5
1990.0	-3.49538E+02	-1.35818E+02	36	60	5	1.17374E-02	36	60	5
1992.0	-4.14637E+02	-1.48950E+02	36	60	5	1.47226E-02	36	60	5
1997.0	-6.42260E+02	-2.24769E+02	36	60	5	2.24347E-02	36	60	5
2002.0	-8.63567E+02	-2.97092E+02	36	60	5	2.98695E-02	36	60	5
2007.0	-1.05786E+03	-3.60547E+02	36	60	5	3.62650E-02	36	60	5
2012.0	-1.21307E+03	-4.10867E+02	36	60	5	4.13308E-02	36	60	5
2017.0	-1.33057E+03	-4.48827E+02	36	60	5	4.51542E-02	36	60	5
2022.0	-1.41825E+03	-4.77168E+02	36	60	5	4.80104E-02	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.44083E-39	-1.44083E-39	91	26	5	2.45935E-43	91	26	5
1967.0	-9.50978E-32	-9.50934E-32	91	26	5	1.62316E-35	91	26	5
1972.0	-3.93054E-27	-3.92943E-27	91	26	5	6.70721E-31	91	26	5
1977.0	-5.33937E-24	-5.33268E-24	91	26	5	9.10246E-28	91	26	5
1982.0	-9.84462E-22	-9.80696E-22	91	26	5	1.67397E-25	91	26	5
1987.0	-4.97825E-20	-4.93367E-20	91	26	5	8.42142E-24	91	26	5
1990.0	-3.35385E-19	-3.30839E-19	91	26	5	5.64719E-23	91	26	5
1992.0	-1.02458E-18	-1.00673E-18	91	26	5	1.72985E-22	91	26	5
1997.0	-1.12228E-17	-1.08982E-17	91	26	5	1.87623E-21	91	26	5
2002.0	-7.66209E-17	-7.33788E-17	91	26	5	1.26546E-20	91	26	5
2007.0	-3.64625E-16	-3.44370E-16	91	26	5	5.93954E-20	91	26	5
2012.0	-1.30311E-15	-1.21702E-15	91	26	5	2.09911E-19	91	26	5
2017.0	-3.69490E-15	-3.43294E-15	91	26	5	5.92131E-19	91	26	5
2022.0	-8.65832E-15	-8.07856E-15	91	26	5	1.39347E-18	91	26	5

ZINC

ZINC

MASS FLUX UNITS: ug/day
 CONCENTRATION UNITS: ug/liter
 MASS FLUX FROM FTWORK MULTIPLIED BY: 28.317 liters/ft**3

PARCEL DATA:
 PARCEL NUMBER START CONC

 1 77.10
 2 77.10
 3 77.10
 4 77.10
 5 140.80
 6 41.60
 7 50.60
 8 77.70
 9 87.10
 10 64.30

 BEGINNING OF MULTI-FEATURE SUMMARIES

FOURMILE CREEK TOTAL
 (CREEK, WETLANDS, H- AND F-EFFLUENT DITCHES)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.32892E+01	-7.72798E+01	39	54	1	3.85554E-03	39	54	1
1967.0	-3.04119E+03	-2.13775E+03	39	54	1	1.06654E-01	39	54	1
1972.0	-1.65893E+04	-9.70116E+03	39	54	1	4.83998E-01	39	54	1
1977.0	-4.71769E+04	-2.24891E+04	39	54	1	1.12200E+00	39	54	1
1982.0	-9.80301E+04	-3.76295E+04	39	54	1	1.87737E+00	39	54	1
1987.0	-1.69631E+05	-5.25859E+04	39	54	1	2.62356E+00	39	54	1
1990.0	-2.21540E+05	-6.08560E+04	39	54	1	3.03616E+00	39	54	1
1992.0	-2.33196E+05	-5.69686E+04	39	54	1	3.18241E+00	39	54	1
1997.0	-3.13708E+05	-6.31467E+04	39	54	1	3.53148E+00	39	54	1
2002.0	-3.96588E+05	-6.75436E+04	39	54	1	3.77974E+00	39	54	1
2007.0	-4.75646E+05	-7.08472E+04	39	54	1	3.96473E+00	39	54	1
2012.0	-5.47516E+05	-7.36908E+04	38	55	1	4.11787E+00	39	54	1
2017.0	-6.10900E+05	-7.71410E+04	38	55	1	4.25204E+00	39	54	1
2022.0	-6.65866E+05	-8.00330E+04	38	55	1	4.37045E+00	39	54	1

UPPER THREE RUNS CREEK TOTAL
 (CREEK, WETLANDS, CROUCH, UNNAMED-WEST BRANCH, MCQUEEN)

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.44535E-03	-8.91930E-05	57	13	5	2.87593E-09	55	22	3
1967.0	-1.14959E+01	-5.96568E-01	54	11	5	7.61206E-06	57	15	5
1972.0	-1.13083E+03	-5.15649E+01	48	9	5	5.13564E-04	48	9	5
1977.0	-1.86523E+04	-7.21572E+02	48	9	5	7.18655E-03	48	9	5
1982.0	-1.19253E+05	-4.69005E+03	9	24	5	3.80007E-02	47	9	5
1987.0	-4.37106E+05	-1.68777E+04	9	24	5	1.16677E-01	47	9	5
1990.0	-8.08345E+05	-3.00394E+04	9	24	5	1.94054E-01	47	9	5
1992.0	-1.15343E+06	-4.14860E+04	9	24	5	2.61672E-01	47	9	5
1997.0	-2.48016E+06	-7.95093E+04	9	24	5	5.16369E-01	47	9	5
2002.0	-4.53972E+06	-1.28486E+05	9	24	5	9.36956E-01	47	9	5
2007.0	-7.23083E+06	-1.83727E+05	9	24	5	1.50167E+00	47	9	5
2012.0	-1.02656E+07	-2.39754E+05	9	24	5	2.11632E+00	47	9	5
2017.0	-1.33332E+07	-2.92476E+05	9	24	5	2.69829E+00	47	9	5
2022.0	-1.62110E+07	-3.40676E+05	9	23	5	3.20856E+00	47	9	5

 BEGINNING OF SINGLE-FEATURE SUMMARIES

FOURMILE CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.00262E+00	-5.13162E-01	52	62	1	1.20737E-04	52	61	1
1967.0	-1.51990E+02	-3.45404E+01	52	62	1	5.85897E-03	52	61	1
1972.0	-1.31786E+03	-2.44354E+02	52	62	1	3.49190E-02	52	61	1
1977.0	-5.18180E+03	-7.33801E+02	52	62	1	9.50012E-02	52	61	1
1982.0	-1.35971E+04	-1.69908E+03	40	59	1	1.77249E-01	52	61	1
1987.0	-2.76823E+04	-3.37073E+03	40	59	1	2.87788E-01	40	59	1
1990.0	-3.88631E+04	-4.69662E+03	40	60	1	3.93978E-01	37	60	1
1992.0	-4.18105E+04	-5.24323E+03	40	60	1	4.94087E-01	37	60	1
1997.0	-6.11375E+04	-7.87417E+03	37	60	1	7.86866E-01	37	60	1
2002.0	-8.28125E+04	-1.09606E+04	37	60	1	1.09549E+00	37	60	1
2007.0	-1.04545E+05	-1.38280E+04	37	60	1	1.38209E+00	37	60	1
2012.0	-1.25078E+05	-1.62695E+04	37	60	1	1.62612E+00	37	60	1
2017.0	-1.43862E+05	-1.82368E+04	37	60	1	1.82275E+00	37	60	1
2022.0	-1.60750E+05	-1.97867E+04	37	60	1	1.97767E+00	37	60	1

FOURMILE CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-4.57868E-02	-2.64305E-02	55	66	1	2.18666E-06	55	66	1
1967.0	-8.02946E+00	-3.67524E+00	55	66	1	3.04062E-04	55	66	1
1972.0	-1.56998E+02	-3.64973E+01	55	66	1	3.01951E-03	55	66	1
1977.0	-1.29317E+03	-2.29744E+02	38	61	1	1.97374E-02	38	61	1
1982.0	-5.77164E+03	-1.02070E+03	38	61	1	8.96751E-02	36	60	1
1987.0	-1.67669E+04	-2.79269E+03	38	61	1	2.56897E-01	36	60	1
1990.0	-2.74382E+04	-4.39383E+03	36	60	1	4.11703E-01	36	60	1
1992.0	-3.49529E+04	-5.51711E+03	36	60	1	5.26577E-01	36	60	1
1997.0	-6.00884E+04	-9.10613E+03	36	60	1	8.69311E-01	36	60	1
2002.0	-8.99778E+04	-1.30087E+04	36	60	1	1.24201E+00	36	60	1
2007.0	-1.21460E+05	-1.67343E+04	36	60	1	1.59773E+00	36	60	1
2012.0	-1.51826E+05	-1.99833E+04	36	60	1	1.90793E+00	36	60	1
2017.0	-1.79388E+05	-2.26534E+04	36	60	1	2.16287E+00	36	60	1
2022.0	-2.03493E+05	-2.47847E+04	36	60	1	2.36636E+00	36	60	1

F-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-9.12408E+01	-7.72798E+01	39	54	1	3.85554E-03	39	54	1
1967.0	-2.88117E+03	-2.13775E+03	39	54	1	1.06654E-01	39	54	1
1972.0	-1.51144E+04	-9.70116E+03	39	54	1	4.83998E-01	39	54	1
1977.0	-4.07019E+04	-2.24891E+04	39	54	1	1.12200E+00	39	54	1
1982.0	-7.86611E+04	-3.76295E+04	39	54	1	1.87737E+00	39	54	1
1987.0	-1.25181E+05	-5.25859E+04	39	54	1	2.62356E+00	39	54	1
1990.0	-1.55238E+05	-6.08560E+04	39	54	1	3.03616E+00	39	54	1
1992.0	-1.56432E+05	-5.69686E+04	39	54	1	3.18241E+00	39	54	1
1997.0	-1.92480E+05	-6.31467E+04	39	54	1	3.53148E+00	39	54	1
2002.0	-2.23794E+05	-6.75436E+04	39	54	1	3.77974E+00	39	54	1
2007.0	-2.49635E+05	-7.08472E+04	39	54	1	3.96473E+00	39	54	1
2012.0	-2.70601E+05	-7.36908E+04	38	55	1	4.11787E+00	39	54	1
2017.0	-2.87634E+05	-7.71410E+04	38	55	1	4.25204E+00	39	54	1
2022.0	-3.01601E+05	-8.00330E+04	38	55	1	4.37045E+00	39	54	1

H-EFFLUENT

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	1.15068E-06	-3.66498E-07	61	63	1	2.73905E-11	61	63	1
1967.0	1.63846E-04	-1.72873E-04	60	65	1	1.13710E-08	61	63	1
1972.0	-2.04689E-03	-4.05704E-03	60	65	1	2.28653E-07	61	63	1
1977.0	-4.00565E-02	-2.76393E-02	60	65	1	1.42223E-06	61	63	1
1982.0	-2.09996E-01	-1.02027E-01	60	65	1	5.03288E-06	60	65	1
1987.0	-6.55700E-01	-2.65224E-01	60	65	1	1.30832E-05	60	65	1
1990.0	-1.12747E+00	-4.19526E-01	60	65	1	2.06948E-05	60	65	1
1992.0	-1.07479E+00	-4.25128E-01	60	65	1	2.18726E-05	60	65	1
1997.0	-1.81066E+00	-5.80479E-01	60	65	1	4.91049E-05	59	66	1
2002.0	-3.56335E+00	-1.24087E+00	59	66	1	1.72660E-04	59	66	1
2007.0	-6.40709E+00	-3.00900E+00	59	66	1	4.18689E-04	59	66	1
2012.0	-1.05016E+01	-6.06694E+00	59	66	1	8.44189E-04	59	66	1
2017.0	-1.58582E+01	-1.08091E+01	59	66	1	1.50404E-03	59	66	1
2022.0	-2.23367E+01	-1.75713E+01	59	66	1	2.44497E-03	59	66	1

UPPER THREE RUNS CREEK WETLANDS

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-2.92267E-04	-7.22227E-05	55	22	3	2.87593E-09	55	22	3
1967.0	-8.94727E-01	-2.08455E-01	55	19	3	7.61206E-06	57	15	5
1972.0	-4.65463E+01	-1.00846E+01	55	19	3	3.81522E-04	57	15	5
1977.0	-5.08010E+02	-9.48581E+01	55	19	3	3.44565E-03	57	15	5
1982.0	-2.55007E+03	-3.90895E+02	55	19	3	1.32814E-02	57	15	5
1987.0	-1.05938E+04	-1.04772E+03	55	19	3	3.35730E-02	57	15	5
1990.0	-2.75224E+04	-2.22703E+03	61	24	3	5.97380E-02	24	7	5
1992.0	-4.62220E+04	-4.23329E+03	61	24	3	1.00101E-01	60	25	3
1997.0	-1.40823E+05	-1.40375E+04	61	24	3	3.08538E-01	60	25	3
2002.0	-3.02684E+05	-2.99239E+04	61	24	3	6.29094E-01	60	25	3
2007.0	-5.14431E+05	-4.97318E+04	61	24	3	1.01676E+00	60	25	3
2012.0	-7.50626E+05	-7.10295E+04	61	24	3	1.42524E+00	60	25	3
2017.0	-9.89291E+05	-9.18533E+04	61	24	3	1.81845E+00	60	25	3
2022.0	-1.21520E+06	-1.10918E+05	61	24	3	2.17393E+00	60	25	3

UPPER THREE RUNS CREEK

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.06471E-03	-8.91930E-05	57	13	5	1.07504E-09	56	13	5
1967.0	-1.03542E+01	-5.96568E-01	54	11	5	6.59720E-06	56	13	5
1972.0	-1.06987E+03	-5.15649E+01	48	9	5	5.13564E-04	48	9	5
1977.0	-1.79726E+04	-7.21572E+02	48	9	5	7.18655E-03	48	9	5
1982.0	-1.15821E+05	-4.69005E+03	9	24	5	3.80007E-02	47	9	5
1987.0	-4.23613E+05	-1.68777E+04	9	24	5	1.16677E-01	47	9	5
1990.0	-7.74984E+05	-3.00394E+04	9	24	5	1.94056E-01	47	9	5
1992.0	-1.09810E+06	-4.14860E+04	9	24	5	2.61672E-01	47	9	5
1997.0	-2.31195E+06	-7.95093E+04	9	24	5	5.16369E-01	47	9	5
2002.0	-4.17437E+06	-1.28486E+05	9	24	5	9.36956E-01	47	9	5
2007.0	-6.60411E+06	-1.83727E+05	9	24	5	1.50167E+00	47	9	5
2012.0	-9.34532E+06	-2.39754E+05	9	24	5	2.11632E+00	47	9	5
2017.0	-1.21154E+07	-2.92476E+05	9	24	5	2.69829E+00	47	9	5
2022.0	-1.47112E+07	-3.40676E+05	9	23	5	3.20856E+00	47	9	5

CROUCH BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.65762E-07	-1.76476E-07	64	19	5	1.04558E-10	64	20	5
1967.0	-4.21423E-03	-6.58867E-04	64	19	5	3.25665E-07	64	20	5

1972.0	-2.45142E-01	-3.14901E-02	64	17	5	1.38390E-05	64	20	5
1977.0	-2.57580E+00	-3.11227E-01	64	15	5	1.12057E-04	64	20	5
1982.0	-1.19678E+01	-1.30784E+00	64	15	5	4.00943E-04	64	20	5
1987.0	-1.73322E+02	-4.13349E+01	70	29	3	1.77797E-03	70	30	3
1990.0	-1.15694E+03	-2.91149E+02	70	29	3	1.19316E-02	70	30	3
1992.0	-2.91460E+03	-7.11309E+02	70	29	3	2.87459E-02	70	30	3
1997.0	-1.48040E+04	-3.36720E+03	70	29	3	1.29857E-01	70	30	3
2002.0	-3.97450E+04	-8.55081E+03	70	29	3	3.20612E-01	70	30	3
2007.0	-7.51934E+04	-1.55478E+04	70	29	3	5.72954E-01	70	30	3
2012.0	-1.16144E+05	-2.33641E+04	70	29	3	8.51723E-01	70	30	3
2017.0	-1.58446E+05	-3.12835E+04	70	29	3	1.13256E+00	70	30	3
2022.0	-1.99317E+05	-3.88602E+04	70	29	3	1.40049E+00	70	30	3

UNNAMED-WEST BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.75064E-05	-2.36370E-05	43	22	3	2.09933E-09	43	23	3
1967.0	-2.42753E-01	-4.16733E-02	43	22	3	3.19190E-06	43	23	3
1972.0	-1.41712E+01	-1.73950E+00	43	22	3	1.82096E-04	40	7	5
1977.0	-1.69119E+02	-1.89204E+01	42	18	3	3.52788E-03	40	7	5
1982.0	-8.70447E+02	-9.52671E+01	42	18	3	2.39657E-02	40	7	5
1987.0	-2.72601E+03	-3.07484E+02	41	16	3	8.73674E-02	40	7	5
1990.0	-4.68174E+03	-5.27447E+02	41	16	3	1.55791E-01	40	7	5
1992.0	-6.19040E+03	-7.10983E+02	41	16	3	2.15620E-01	40	7	5
1997.0	-1.25866E+04	-1.39001E+03	41	16	3	4.22872E-01	40	7	5
2002.0	-2.29247E+04	-2.45049E+03	41	16	3	7.32437E-01	40	7	5
2007.0	-3.70940E+04	-3.92330E+03	41	16	3	1.15276E+00	40	7	5
2012.0	-5.34844E+04	-5.68190E+03	41	16	3	1.64180E+00	40	7	5
2017.0	-7.00588E+04	-7.52669E+03	41	16	3	2.13255E+00	40	7	5
2022.0	-8.53090E+04	-9.28829E+03	41	16	3	2.57659E+00	40	7	5

MCQUEEN BRANCH

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-8.68598E-24	-1.58216E-24	90	35	3	1.87640E-29	90	36	3
1967.0	-6.41405E-18	-1.34569E-18	90	35	3	1.48106E-23	90	36	3
1972.0	-1.35548E-14	-2.96250E-15	90	35	3	3.16276E-20	90	36	3
1977.0	-2.05574E-12	-4.53243E-13	90	35	3	4.76944E-18	90	36	3
1982.0	-7.07368E-11	-1.55101E-11	90	35	3	1.62100E-16	90	36	3
1987.0	-9.59228E-10	-2.07756E-10	90	35	3	2.16462E-15	90	36	3
1990.0	-3.34922E-09	-7.18872E-10	90	35	3	7.48293E-15	90	36	3
1992.0	-6.95215E-09	-1.48323E-09	90	35	3	1.54380E-14	90	36	3
1997.0	-3.27166E-08	-6.87876E-09	90	35	3	7.15059E-14	90	36	3
2002.0	-1.17866E-07	-2.46490E-08	90	35	3	2.55329E-13	90	36	3
2007.0	-3.88346E-07	-8.25069E-08	90	35	3	8.50193E-13	90	35	3
2012.0	-1.28995E-06	-2.80138E-07	90	35	3	2.88668E-12	90	35	3
2017.0	-4.08437E-06	-8.91960E-07	90	35	3	9.19121E-12	90	35	3
2022.0	-1.14154E-05	-2.46700E-06	90	35	3	2.54212E-11	90	35	3

SPECIFIED HEAD: WEST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-1.73100E-09	-6.54729E-10	1	42	5	5.86224E-15	1	42	5
1967.0	-1.30446E-04	-4.64431E-05	1	42	5	4.15838E-10	1	42	5
1972.0	-4.46294E-02	-1.49974E-02	1	42	5	1.34282E-07	1	42	5
1977.0	-1.54757E+00	-4.93852E-01	1	42	5	4.42180E-06	1	42	5
1982.0	-1.60935E+01	-4.90867E+00	1	42	5	4.39508E-05	1	42	5
1987.0	-8.27253E+01	-2.42546E+01	1	42	5	2.17169E-04	1	42	5
1990.0	-1.76580E+02	-5.06790E+01	1	42	5	4.53764E-04	1	42	5
1992.0	-2.72312E+02	-7.71343E+01	1	42	5	6.91077E-04	1	42	5
1997.0	-6.65944E+02	-1.82961E+02	1	42	5	1.63937E-03	1	42	5

2002.0	-1.32341E+03	-3.53902E+02	1	42	5	3.17126E-03	1	42	5
2007.0	-2.25895E+03	-5.89832E+02	1	42	5	5.28541E-03	1	42	5
2012.0	-3.43117E+03	-8.77241E+02	1	42	5	7.86085E-03	1	42	5
2017.0	-4.75773E+03	-1.19428E+03	1	42	5	1.07019E-02	1	42	5
2022.0	-6.14631E+03	-1.51891E+03	1	42	5	1.36108E-02	1	42	5

SPECIFIED HEAD: SOUTH BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-7.22653E-04	-2.44712E-04	36	60	5	2.11476E-08	36	60	5
1967.0	-8.00898E-01	-2.25470E-01	36	60	5	1.94847E-05	36	60	5
1972.0	-2.76631E+01	-8.07771E+00	38	61	5	6.23367E-04	36	60	5
1977.0	-2.39273E+02	-7.23572E+01	38	61	5	5.14320E-03	36	60	5
1982.0	-1.00779E+03	-3.11179E+02	38	61	5	2.09199E-02	36	60	5
1987.0	-2.75904E+03	-8.60814E+02	38	61	5	5.57703E-02	36	60	5
1990.0	-4.38451E+03	-1.37169E+03	38	61	5	8.74957E-02	36	60	5
1992.0	-5.45424E+03	-1.72077E+03	38	61	5	1.13514E-01	36	60	5
1997.0	-9.19232E+03	-2.89356E+03	38	61	5	1.88255E-01	36	60	5
2002.0	-1.33791E+04	-4.19403E+03	38	61	5	2.70785E-01	36	60	5
2007.0	-1.76194E+04	-5.49166E+03	38	61	5	3.52258E-01	36	60	5
2012.0	-2.15792E+04	-6.67873E+03	38	61	5	4.26393E-01	36	60	5
2017.0	-2.50862E+04	-7.70245E+03	38	61	5	4.90143E-01	36	60	5
2022.0	-2.81041E+04	-8.55663E+03	38	61	5	5.43219E-01	36	60	5

SPECIFIED HEAD: EAST BOUNDARY

YEAR	SUM MASS FLUX	MAX MASS FLUX	COL	ROW	LAY	MAX CONC	COL	ROW	LAY
1962.0	-5.85412E-28	-5.85412E-28	91	26	5	9.99242E-32	91	26	5
1967.0	-1.58902E-21	-1.58889E-21	91	26	5	2.71210E-25	91	26	5
1972.0	-7.21987E-18	-7.21449E-18	91	26	5	1.23145E-21	91	26	5
1977.0	-1.82200E-15	-1.81623E-15	91	26	5	3.10016E-19	91	26	5
1982.0	-8.92207E-14	-8.84275E-14	91	26	5	1.50939E-17	91	26	5
1987.0	-1.55390E-12	-1.52425E-12	91	26	5	2.60179E-16	91	26	5
1990.0	-6.08514E-12	-5.91882E-12	91	26	5	1.01030E-15	91	26	5
1992.0	-1.33922E-11	-1.29399E-11	91	26	5	2.22344E-15	91	26	5
1997.0	-7.13792E-11	-6.77991E-11	91	26	5	1.16722E-14	91	26	5
2002.0	-2.74440E-10	-2.57300E-10	91	26	5	4.43728E-14	91	26	5
2007.0	-9.10764E-10	-8.53729E-10	91	26	5	1.47247E-13	91	26	5
2012.0	-3.01032E-09	-2.84609E-09	91	26	5	4.90893E-13	91	26	5
2017.0	-9.72976E-09	-9.21468E-09	91	26	5	1.58939E-12	91	26	5
2022.0	-2.80133E-08	-2.63865E-08	91	26	5	4.55140E-12	91	26	5

END

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